UNIVERSITY OF CAMBRIDGE
University Information Services

Workstrand 1 Services Review (including Desktop)

End Stage Report

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PART ONE: SUMMARY

1.1. PURPOSE

The Workstrand End Stage Report is to capture the progress against the agreed terms of reference, to make recommendations with respect to the medium term objectives on this area for the UIS, and the organisational requirements in order to deliver these objectives.

The Workstrand will assess how best to enable user communities to discover our services, from the UIS, the collegiate university, external service provision, third party software, and 'cloud'. The services must be straight forward and reliable, with a single location to find all services.

The Interim Leadership Team will use the information in the Workstrand End Stage Report as an input to the organisational design work that will result in recommendations to be taken to the Information Steering Committee.

1.2. EXECUTIVE SUMMARY

The scope of Workstrand 1 is to "*Review the high-level needs of main user communities: University IT Community, Research Community, Administration & Reporting and Teaching & Learning Community to develop a services led strategy for providing Information Services to the University".*

The focus of Workstrand 1 has been to review the services provided, and to improve the range of services available and the presentation of the information about the services from a user perspective.

The Workstrand has engaged our user groups to gain an understanding of the requirements of the Services we currently deliver, and those that should be delivered from UIS, including the options for providing a range of desktop services for staff and students.

To simplify what could be a very complex arrangement, the work focused on the specific communities, whilst engaging with the other communities that may use the same services.

The Services Workstrand has been divided into three sub-strands, Services Portfolio and Catalogue, Engagement, and Desktop strategy. These sub-strands have worked under independent leadership, but under the governance of the Workstrand 1 steering group, chaired by the Director of UIS.

Sub-strand One: Services Portfolio and Catalogue

The scope of the Services Portfolio and Catalogue sub-strand was to identify the set of user communities which represent the complete set of roles and activities of the users of the University IT services together with a sample of the services that two user communities, students and research, currently utilise. Meetings and interviews have been held with a diverse range of users across the collegiate University, including students, academics, and staff. It became evident in the early stages of engagement with users that it was difficult for them to find out what services were available from UIS.

The feedback stated that the UIS website was not intuitive and was not clear in regard to what services UIS offered, including the detail of how to request a service and the costing model. As a result, users would often rely on word of mouth or speak to their local computer officers for advice. A new well-structured UIS website would enable users to better understand the services provided by UIS, and how the services that are available could benefit their particular user community.

It is proposed to build on the high quality services previously provided by the now merged UCS, MISD, and HPC teams, by introducing a new service orientated approach to UIS services, that takes account of the University's culture and organisation. As a starting point, UIS should understand the current services that are provided including analysis of service quality, to ensure that we catalogue and present quality products and services. A process for new services should be introduced that ensures focus on meeting all aspects of user needs.

From a user's perspective a high level description, for example research, may not cover all the user's needs. Users may want to look across all services, and we should enable them to view an initial shortened filtered list of services appropriate to the various roles that they hold within the University, with the ability to customise their search capability to all areas of the Service Catalogue.

A programme of work is planned that will:

- produce a clear definition of the user communities served by UIS
- develop a UIS Service Portfolio and Service Catalogue
- create a new web site for increased visibility of the IT services available
- identify the roles (service ownership from concept to retirement) and organisational structure required to maintain and support the continued development of the Service Portfolio and Service Catalogue
- create role descriptors which support the Service Management roles to be carried out

The overall vision of this sub-strand is:

- to enable the user communities within the University to identify more readily the IT services which are most relevant to them, to make this easier with one location to find all services, and to obtain maximum benefit from the use of these services.
- to enable UIS to have a clearer understanding of how the services that they are providing support the requirements of the user communities within the University, and how these can be improved.

Sub-strand Two: Engagement

Two of the nine principles[1] governing the *Review of IT Infrastructure and Support* emphasise the importance of understanding the needs of users and employing it to drive the design and delivery of services; engagement is the core activity that facilitates such understanding.

An appropriate engagement strategy will also ensure the continued relevance of UIS to the University's mission, give increased understanding of current and evolving requirements and actively involve our users in the management and development of a range of services that underpin, support and enhance their teaching, research and administration.

Significant, but currently unquantified and largely uncoordinated, amounts of effort are devoted throughout UIS to engaging with various groups of users, stakeholders and institutions in a wide variety of contexts. The intelligence generated often remains with the contact and is rarely made available to inform others interacting with the same group(s) or planning a similar or related service or initiative.

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[1] A2: "As a leading University, in the UK and the world, we should expect the quality of our information services and systems to be commensurate with our standing. The strategy for the management and delivery of those services must be driven by the needs of our users for support of their teaching, research and administration." and A6 "The governance and organisation of information services and systems should be driven by a strategy that is based on a clear understanding of user needs. The strategy needs to respond to and exploit the opportunities provided by technological developments."

A programme of work is planned that will lead to the development and adoption of a coordinated, efficient and effective engagement strategy, reaching out to all user communities, recording and sharing interactions, informing institutional and UIS planning and service management processes and supported by appropriate systems including the comprehensive, inclusive service catalogue that will be an output of sub-strand one of the Workstrand.

The overall goal of the engagement strategy is to provide a systematic framework for institutions to:

- Understand and influence UIS strategy and priorities
- Contribute ideas and services for the benefit of the whole University community
- Be well informed regarding new services and developments
- To have a clearly identified escalation point for persistent issues

Sub-strand Three: Desktop Services Strategy and Services

Recommendation C4 of the *Review of IT Infrastructure and Support* states: *"There should be a central service that offers an affordable but flexible, supported "desktop" service to Schools, Departments and Institutions, accessible by mobile devices, and supporting a range of operating systems."*

A Desktop strategy is therefore required that recognises the varying needs of the different user communities whilst leveraging the benefits of a common approach and interoperability across devices. It should add value to the universities teaching, research and administration activities.

The UIS has inherited three significantly sized Desktop Services that are entirely disparate in design and operation. They are primarily targeted at different user communities.

Service Name	Service Description	Service Provider
Managed Cluster Service (MCS)	A Managed Desktop for Computer Rooms (PC Labs) and other multi-user locations. Includes Windows, Linux and Mac versions and extensive software focussed on teaching and learning.	UCS Desktop Services
Administrative Desktop	A Managed Windows Desktop for staff, with an administrative & business focus. Includes Exchange mail, shared mailboxes and calendaring, along with business applications.	MISD Desktop Services
Institution Support Service Desktop	A Managed Desktop for Institution Support Clients intended for use by academic and administrative staff.	UCS Institution Support

Additionally, there are a number of Desktop Services available to Institutions and run by other groups within the University, such as the Clinical School Computing Service (CSCS).

A programme of work is planned that will:

- identify the detailed requirements of the future "Desktop" and create the new service(s)
- continue to develop the current UIS Desktop Services in parallel
- engage with other Desktop Services providers within the University with the intention of developing a University wide strategy for end user computing provision
- rationalise support provision into a unified approach
- reach a point of convergence within three years

PART TWO: SUB-STRAND REPORTS

2.1 SUB-STRAND ONE: SERVICE PORTFOLIO AND SERVICE CATALOGUE

2.1.1 Review of the Terms of Reference

The overall objectives are to create:

   i.   a Service Portfolio which creates a common approach to defining UIS services that attracts the attention of customers by describing the value of the services and delivery from UIS

   ii. a Service Catalogue which creates a common approach to defining specific and individual services which may include clusters into a group of integrated services

   iii. a high level road map for improvements and additions to the Service Catalogue, defining timescales, additional capabilities and resources, and estimates of potential costs

The objectives for the end of July were to establish:

   i.   templates for the Service Portfolio and Service Catalogue that are suitable for a range of services

   ii. completed templates for a Service Portfolio and a Service Catalogue entry

   iii. a list of the User Communities served by UIS

   iv. a list of up to twenty key services for the Service Catalogue

   v.   a structured design of the services for presentation on the UIS web site

   vi. a presentation on the Service Portfolio, the Service Catalogue, their contents and maintenance

2.1.2 Progress and Findings

User Communities

The approaches to the division of the members of the university community into distinct User Communities can be categorised as follows:

   • who they are, for example, students, staff
   • what they are interested in doing, for example, teaching and learning, research, administration
   • the types of service, for example, infrastructure services, support services

Analysis of the web sites of comparable higher education organisations shows that no single approach is seen as correct, with most organisations preferring to present a multiple approach which covers at least who a person is, and what they do. For example, Oxford presents services for teaching, research, administration, students, staff and infrastructure.

It is recommended that Cambridge adopt a similar approach, i.e. we adopt multiple methods of classification.

Services in the Service Catalogue should be accessible via multiple routes, based, for example on who a person is: e.g. student, staff; on what they do: e.g. research, administration; the types of service: e.g. infrastructure, support; and the institutions they are in: e.g. Department of Chemistry. Many of the individual services will be referenced from many or most of the high level User Communities.

The design of the structure of the User Community Service Catalogues should enable the possibility of future User Communities based on the Schools, Faculties and Departments within the university. Also the Service Portfolio should be should be open to being extended from a UIS Service Portfolio to a University of Cambridge Service Portfolio which would include services provided by individual colleges or departments.

The recommended set of user communities is described in Annex 3.4.

The twenty services for which detailed Service Portfolio entries will be prepared are listed in Annex 3.5. The services will support the Student and Research user communities.

The following flowchart describes a potential UIS Service delivery model; service level agreements and operational level agreements are being considered. A decision is required for the professional methodology to be adopted to manage the service, for example the widely adopted IT infrastructure library (ITIL framework). At this stage of the review ITIL terminology is being used as an example:
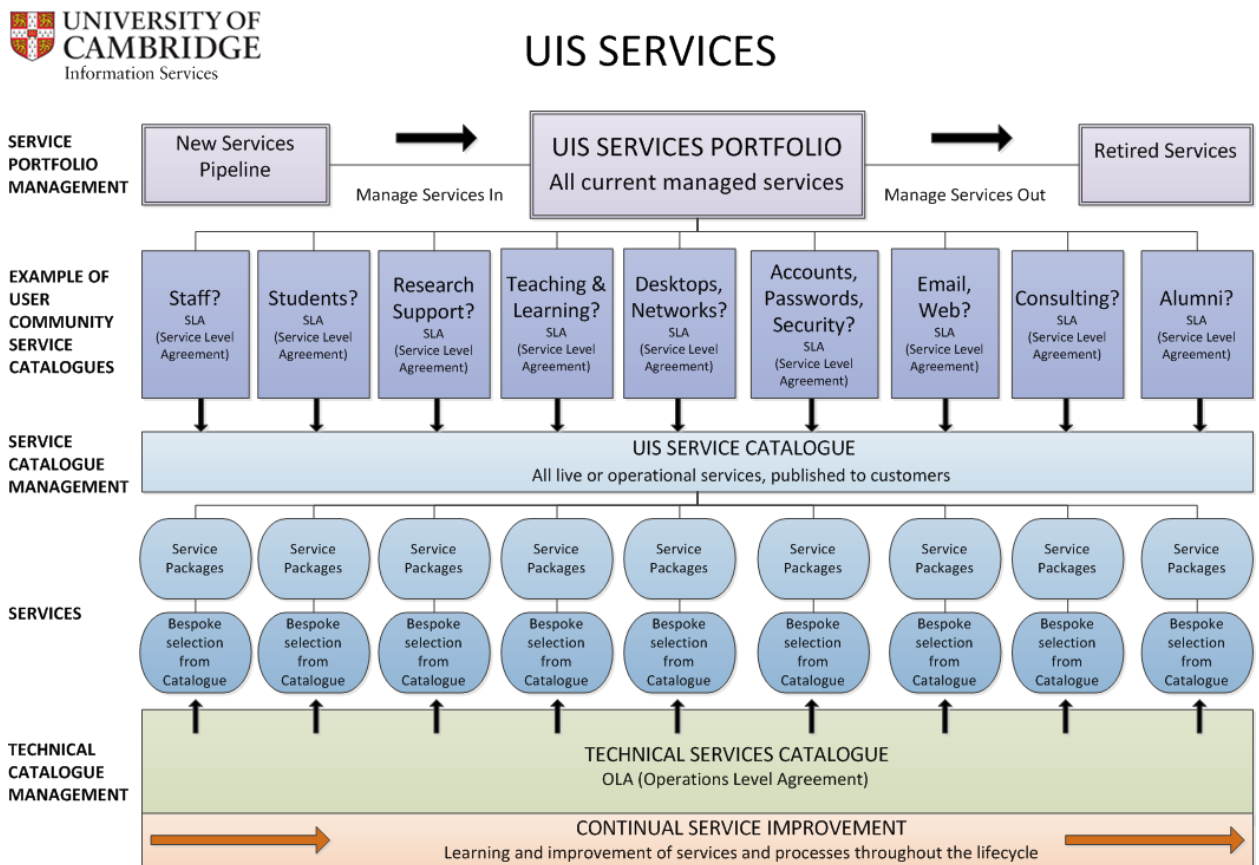
Service Portfolio

The content proposed for the Service Portfolio will be that shown in the Service Catalogue, together with the additional fields shown in Annex 1, with a description of each field. A completed Service Portfolio template is included as an example.

<u>Service Catalogue</u>

The proposed content of the Service Catalogue is shown in Annex 1.

2.1.3 Plan for Future Work

<u>Outcomes for the area</u>

From interviews with both UIS staff and the wider user community including engagement meetings with IT officers and Schools, there has been clear feedback that the new UIS organisation should focus on delivering on the needs of the various user communities across the University. This will need to be done following an open, well communicated model, following professional best practice standards. The adoption of a new service management framework will better position the organisation to develop a wide ranging portfolio of services, which in the near future could include external services from the cloud, and other high quality services from the colleges and departments.

Taking this work forward will involve the UIS putting in place a Service Portfolio and Service Catalogue, with a clear definition of the user communities served. There needs to be a greater clarity and awareness within UIS of its IT Service Management Strategy.

Increased visibility of IT services to the user communities will be achieved via an improved website for the publication of existing and new services, with full details about the service, with options for adoption, costing models and service level agreements. The strategy is to gain greater take-up of UIS services by user communities, to enable those user communities to maximise the benefits they attain from using IT services.

<u>Objectives for the next two to three years</u>

The objectives can be subdivided as follows:

- Short term (up to 3 months):

  - A prototype web presentation of the Service Portfolio and Service Catalogue for the Student and Research user communities: Feedback on this prototype will be obtained before continuing and completing the development of the online presentation of the Service Portfolio and Service Catalogue.

  - Full Service Portfolio and Service Catalogue details for the twenty services listed in Annex 3.

  - A report on the potential service provision opportunities including opportunities for improving existing services; gaps between the current services and opportunities for creating new services; additional capabilities and resources required to develop and support new services; and metrics to provide management information to measure the benefits of the services.

  - A documented approach for obtaining benchmark data for academic institutions offering the similar services as provided by UIS.

- Medium term (3 months to 12 months)

  - Populate the complete UIS Service Portfolio, i.e. a full set of services and their details.

- Establish a Service Portfolio Management process to maintain and develop the Service Portfolio, with a Service Catalogue Management process to maintain and develop the Service Catalogue.

- Establish a Service Request process to request services from the Service Catalogue. Develop process policies and process definitions to support the Service Portfolio Management, Service Catalogue Management, and Service Request processes.

- Complete the production of online presentation of the Service Catalogue details, to the agreed user communities. Development of a database to support the development and maintenance of the Service Portfolio and Service Catalogue information.

- Produce an IT Service Management Strategy and review the IT Service Management capabilities within UIS; design a Target Operating Model to support the IT Service Management Strategy; establish other supporting processes, for example, Institution Relationship Management, Service Level Management, and develop their policies and processes; produce a Configuration Management Strategy to define the contents and the relationships within the scope of the Configuration Management System; start to populate the contents and the relationships of the Configuration Management System.

- Identify the critical success factors for each user community, as well as the Key Performance Indicators (KPIs) which shows whether individual services are meeting needs. There needs to be a documented process for defining each required Service Portfolio entry and metrics for all initiatives undertaken in future, for example, relating to the Service Portfolio. A fully populated Service Portfolio will be used as the basis for deciding which services to offer. Initially the Service Portfolio may only be 10% populated, but overtime this would increase to 100% population, i.e. every service is documented in the Service Portfolio.

- Long Term (longer than 12 months)

  - Integrate Service Portfolio Management and Service Catalogue Management processes with other ITIL based processes to be developed and deployed across UIS.

  - Continue to develop and populate the contents and relationships of the Configuration Management System.

  - Automate IT Service Management (ITSM) processes with technology solutions. Service desk software, software for managing and reporting on service level targets and software to support the service portfolio and catalogue management.

2.1.4 Organisational Recommendations

Any new UIS Service Management process will require an organisation structure to support the services provided. Roles will need to be established within a role description family, which identifies the service management roles to be carried out.

Service ownership and the role of the service owner (from inception of a service to retirement), including the publishing of information according to the University's standards, would be assigned to the responsible service area.

It is important to note that this sub-strand work will continue until the end of September 2014, when a comprehensive set of requirements and recommendations will be published.

It is recommended that a UIS Services Group is created, that has responsibility for the delivery of services from the UIS Portfolio. Each service should have a clear owner with a defined role of service manager; this should include responsibility for the commissioning of services internally and externally, Catalogue and Portfolio design and maintenance, website etc.

2.1.5 Risks and Issues

The following are the potential areas of risk:

- there may not be buy-in across the University
- securing the resources required to deliver the service
- failure to manage consistency the introduction of new services, and current services within the Catalogue, which would reduce its value
- internal uncertainty over the UIS 'drivers' to complete this work
- lack of UIS management commitment to progress the IT Service Management work within UIS due to other conflicting priorities
- overall business technology strategy and vision is not in place
- if the future target operating model is unclear, for example, the extent to which services will be provided from external sources

2.1.6 Review of Team Performance

There has been a high degree of co-operation from all UIS staff and other member of the University who have been contacted or interviewed as part of the Service Review: Service Portfolio and Service Catalogue.

A full list of personnel interviewed as part of this Workstrand is included in Annex 3.9.

2.2 SUB-STRAND TWO: ENGAGEMENT

2.2.1 Review of the Terms of Reference

The Terms of Reference defined the desired outcome for the engagement component of the Workstrand as follows:

"An **Engagement Strategy** that defines the mechanisms for engaging with the various customer groups to discuss and understand the services required customer groups to discuss and understand the services required, now and in the future, and enables us to work with our customers as we plan for the development of current and new services. This activity should build upon the existing customer relationships and where necessary propose changes as appropriate, and define the responsibilities within UIS for maintaining and developing these relationships.

What's involved in achieving this and the effort required:

This will require meeting with our various customer groups and University committees to understand the correct channels for engagement, the target audiences, the frequency and the methodology for agreeing priorities, user needs, funding etc. This may be facilitated by additional resources, but because of the seniority of the customers we need to see, we should use UIS permanent staff for these meetings. A contract business analyst/project manager would be a good additional resource, plus administration resource to pull information together for presentation, cataloguing and arranging the administration of this activity."

Along with the following initial milestone that would represent useful progress and which can be completed with available resource by the end of July 2014:

"A high level picture of the engagement strategy and the customers to be involved."

2.2.2 Progress and Findings

Significant effort is already invested across UIS in engaging with various stakeholders and user communities. Work is underway to quantify and catalogue all existing HPCS, MISD and UCS engagement activities with the four user communities defined in the terms of reference. Senior managers have been asked to list their regular interactions and those of their staff, recording the following data for each engagement:

Engagement attribute	Example data
User community	Admin & reporting, research, IT practitioners etc.
Individual/institution/group	V-C, Jesus College, Business Systems Committee etc.
Objective	Governance, project management, liaison, strategic etc.
Mechanism	Formal meeting, seminar, conference, telephone, email
Frequency	Termly/fortnightly/ad hoc
UIS contact	Individual or group in UIS responsible
Time spent (average per month)	Hours - for current resource allocation estimate

This is a time-consuming exercise as almost all UIS colleagues are involved in engagement activities; it is anticipated that this initial phase of data gathering will be complete by the end of September.

Phase two of the engagement strategy project will involve analysis of the current engagement activity data and will take place in October and November; a calendar view of existing regular interactions will be constructed to enable pan-UIS coordination of scheduling and content.

Initial workstrand discussions identified four main UIS user communities: teaching & learning, research, administration & reporting and IT practitioners. Subsequent feedback, in the context of appropriate access points to the service catalogue, has added a number of other dimensions: staff, students, visitors, colleges, departments, schools, applicants, alumni etc. Analysis of current engagement activities will further assist in the definition of appropriate user communities which will in turn be fed back into the entry points and packages of services within the service catalogue.

Gaps and overlaps in existing engagement activities will be identified and used to inform the third stage of the process, the design of an efficient and effective engagement strategy to ensure that regular, responsive, recorded, representative interactions take place for all significant groups of users. Having identified the relevant classes and groups of users, consultation will take place to establish appropriate media and mechanisms for the various operational and strategic dialogues that are required[2]. It is anticipated that this process will be complete early in 2015.

During the third phase of work, requirements for management information, institutional intelligence and customer relationship management systems to support the engagement process will be drawn up[3]. It is envisaged that these will provide self-service reporting for individuals and institutions along with the ability to give advance warning of issues, report on developing trends and levels of usage, thereby providing a sound basis for termly discussions with institutions. The comprehensive, inclusive service catalogue will also provide a productive focus for regular institutional meetings regarding operational and strategic requirements. A more holistic view of the service pipeline including those reaching end of life combined with those that are in planning will enable improved coordination and local decision-making.

2.2.3 Plan for Future Work

There is significant scope for the UIS engagement function to contribute to the development of the pan-Cambridge IT practitioner community envisaged by Workstrand 2 as much of the interaction will be with institutional IT staff[4]. Further work should be undertaken to assess the feasibility and requirements associated with this additional responsibility.

In addition to the engagement activity within the collegiate University, the UIS should investigate extending its framework both locally with community outreach and business support, nationally in the context of JISC, UCISA, RUGIT, other HEIs and internationally with EUNIS, EDUCAUSE and in partnership with other pre-eminent educational and research institutions.

2.2.4 Organisational Recommendations

The overall objective is to develop optimal structures and processes within a strategic framework to promote UIS engagement with communities and institutions, involving the construction of a comprehensive programme of activities, data capture and documentation to ensure regular, appropriate communication and consultation with the collegiate university and thereby delivering a detailed knowledge of requirements, issues and opportunities.

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[2] This process is already underway; a number of face-to-face meetings with Schools' IT coordinators and academic leads (giving rise to proposals for context, frequency and focus of engagements) and IT practitioners (under the auspices of Workstrand 2) have taken place.
[3] A number of University institutions already make use of customer relationship management (CRM) systems; UIS is well placed to benefit from their experience.
[4] This activity formed a major part of the UCS Institution Strategy Team's work in addition to a range of mainly reactive engagement responsibilities.

Meetings with Schools and IT practitioners have shown a strong interest in an institutional partnership style of working with a dedicated UIS 'account manager' as named contact responsible for managing the relationship with an institution or group of institutions. Analysis of the time currently spent across the UIS in engagement activities will provide an indication of the existing level of resourcing, and a metric as to the level of coverage and frequency achieved. In addition, it will enable identification of staff whose current role involves a significant engagement component and who might form part of an institutional engagement team. Close integration with UIS' service management and project planning and coordination functions will be an essential factor in successful pan-Cambridge engagement.

It is reasonable to assume that to move from the present more narrowly focussed, reactive engagement model to one that is proactive, regular, coordinated and comprehensive will require a significantly larger, dedicated institutional engagement team. The team would also be responsible for the production and maintenance of a UIS annual strategic delivery plan and a quarterly customer service review. Team members would combine technical expertise and an understanding of current IT management practice with strong interpersonal skills. Benchmarks for resourcing can be sought amongst comparable universities in the UK and US, and in other public and private sector organisations as appropriate. Discussions to date indicate that, to be able to undertake the scale of programme that will be required to engage with the more that 200 institutions that comprise the collegiate University, and to interface effectively with UIS service and project management functions, will require a team of eight to twelve individuals[5].

Systems to enable the sharing of engagement data and institutional intelligence to support and inform pan-UIS activities while providing also providing metrics for the effectiveness of the engagement strategy will be essential to the success of the initiative; these may be commercial systems or in-house developments or a combination of both depending on the requirements identified. Investment will be required in selection, purchase, support, development and maintenance of such systems.

2.2.5 Risks and Issues

Without regular, representative dialogue with service users, be they staff, students, visitors or institutions, UIS will become increasingly detached from the collegiate university's requirements and less and less relevant to supporting its core academic mission of undertaking teaching and research of the highest quality.

In the light of the *Review of IT Infrastructure and Support,* expectations have been raised that UIS will offer more user-focussed services; if the engagement strategy fails to enable this shift or is perceived to deliver it too slowly there is a significant risk that users will become frustrated and unsupportive. Similarly there is an expectation that UIS planning and prioritisation will be more transparent and accountable, which again depends largely on the engagement strategy. Effective engagement as envisaged requires a substantial team with an appropriate combination of technical and interpersonal skills, supported by functional systems. If adequate resources are not allocated it will be impossible to work proactively and the quality of service to users and institutions will suffer.

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[5] Feedback from colleagues with commercial experience alongside previous UCS Institution Strategy activity suggests that if UIS desires to establish proactive, termly, pan-Cambridge engagement at institutional level with senior managers (academic and administrative), IT practitioners and appropriate committees then an allocation of twenty institutions is a feasible quota per individual team member. The team could be reduced if UIS is prepared to accept the institutional approximation offered by the School IT coordination mechanism; workstrand discussions indicate that institutions would each prefer to develop the relationship with UIS that was appropriate for them and make use of School coordination as a complimentary channel. A substantial team would also enable significant effort to be devoted to IT practitioner community development as envisaged by Workstrand 2, including the career pathway and role description work recommended by Workstrand 3.

2.2.6 Review of Team Performance

Very useful input and feedback regarding current activities has been provided by the Business Improvement & Institution Strategy Teams along with the departmental and college volunteers on Workstrand 2. Valuable administrative support was provided by Louise Marks and Vinu Gopakumar. Ed Webster helped with the design of document templates and with Paul Calleja has engaged in a number of constructive discussions.

2.3 SUBSTRAND THREE: DESKTOP SERVICES STRATEGY AND SERVICES

It is worth noting that no options are being ruled in or out at this stage and that future "desktop" service(s) could include public or private cloud (i.e. University-based) "managed desktop" services within the Desktop Service Catalogue.

2.3.1 Review of the Terms of Reference

We were asked to create a Desktop Services Strategy and define a range of services available from the UIS for Desktop provision ranging from software only services to a fully managed desktop including hardware provision, office/administration applications and helpdesk services.

What's involved in achieving this and the effort required:

i.   understand what is generally assumed by the term "Desktop" and therefore what "in-scope" is.
ii. Identify, catalogue and compare existing "Desktop" services in use across the university.
iii. identify the key requirements for the future "Supported Desktop Service".
iv. consider the options available to rationalise current approaches into an integrated and consistent future approach(s).
v.   consider options for a new approach(s) to provide a "Supported Desktop Service".
vi. define the risks, benefits, complexity, relative costs and priority of the options considered.
vii. develop proposals on how to migrate from "as is" to "to be".

Along with the following initial milestone that would represent useful progress and which can be completed with available resource by the end of July 2014:

"A high level description of the Desktop Services strategy and the participants to be involved in developing the future Desktop."

2.3.2 Progress and Findings

A plan for further work has been completed. The work to date has therefore focused on approach and not design and has not as yet engaged formally with Desktop Services providers or consumers outside the UIS.

In mid-July, PTS consulting offered to assist with the production of a Project Initiation Document (PID) as a means of capturing and ordering the many steps involved in moving from our current state to the desired new state. This work was not charged for and performed by the PTS team already engaged to assist WS1 with the development of the Service Catalogue.

The WS1 Desktop volunteers have met three times during the initial phase and have:

- gained a good overview of the three Desktop Services currently offered by UIS
- endorsed the high level Strategy outlined in this document
- assisted with developing the PID
- developed a "strawman" of future principles
- considered options for organisational change within UIS

2.3.3 Plan for Future Work

The next step is split into five phases:
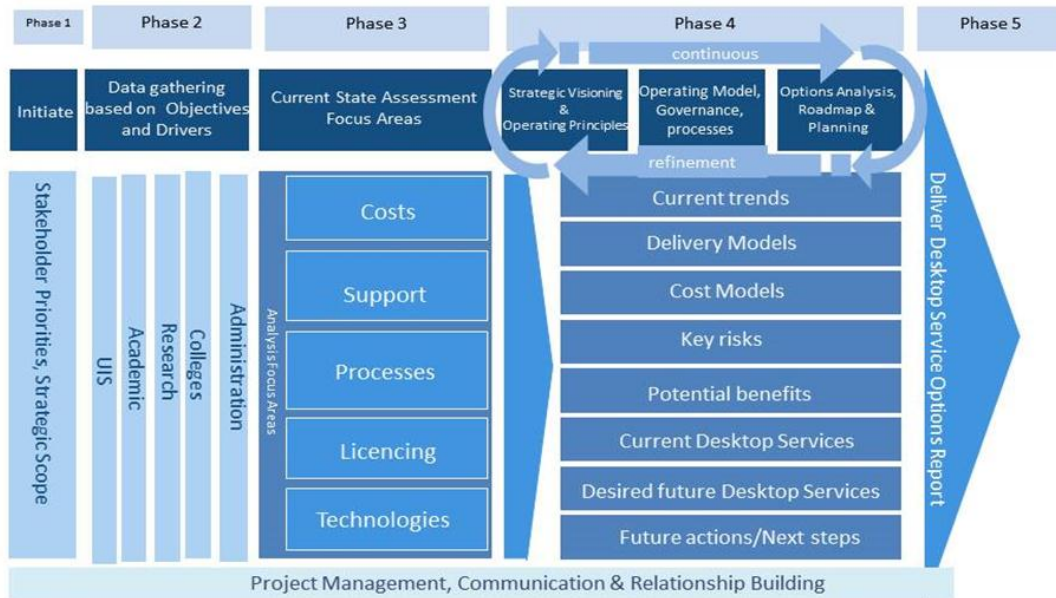
Figure 1: Desktop Strategy Project stages

It is envisaged that these five phases will take four months to complete and deliver a strategic implementation roadmap and options appraisal document (it is assumed that phases 2 and 3 will happen concurrently).

Once complete, it is intended that we will be able to develop the new Desktop Service(s) in parallel to evolving the existing services. It is envisaged that the existing services will converge or be replaced by the new service in around three years. A key performance indicator will be the level of adoption achieved by the new service.
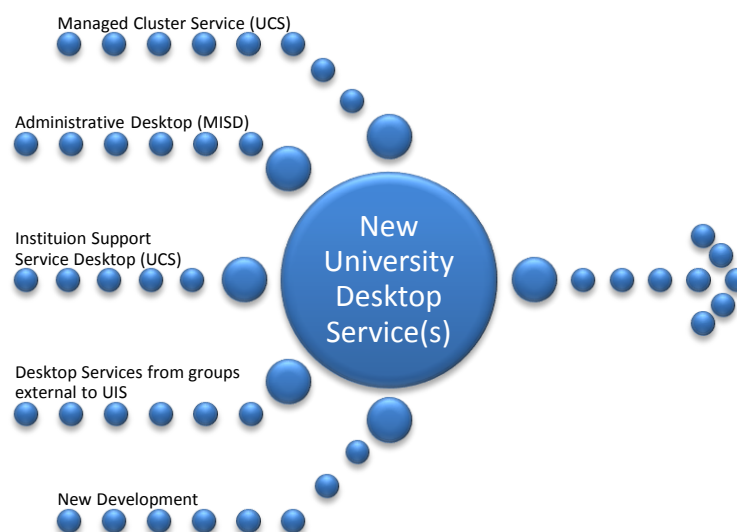
<u>Future Principles "Strawman"</u>

The working group has developed a future principles "strawman" to aid phase 2 (data gathering) as it is often more productive in identifying requirements to ask the question "what do you think of this?" as opposed to "what do you want?"

We therefore propose that the future "Desktop" service will:

- be configurable to meet the needs of students, academics and administration staff

- be accessible on a wide range of different types of device, from small mobile devices through to conference room display screens, reducing the need for the user to reconfigure applications or screens

- have inbuilt security features which provide adequate protection in a BYOD context

- permission applications appropriately, by role, institution and user

- allow institutions (and potentially individual users) to add additional optional applications and services that would be hosted on centralised virtualised platforms, and so accessible in an integrated manner on their devices

- incorporate a range of other optional services, including provision of hardware (for those who do not choose BYOD), and support services

- leverage where appropriate the features of mobile devices, including telephony integration, location awareness, mapping etc.

- capture appropriate usage and service information to enable management, billing and progressive improvement of the facilities offered.

2.3.4 Organisational Recommendations

The overall objective is to develop optimal structures and processes within a strategic framework to encourage a collaborative approach, reduce duplication of effort and maximise opportunities for the future.

The Workstrand leads recommend that:

- an organisational entity is required that contains staff responsible for both the development of the new Desktop environment and the maintenance and support of the three current UIS offerings

- this entity should combine Windows, Mac and Linux skill sets in addition to specialists in mobile device access

- this group should not be concerned with infrastructure services (i.e. underlying storage platforms, virtual server farms etc.); these systems should be decoupled from Desktop provision and provided by infrastructure experts within appropriately constituted entities

- a Desktop Services Manager should be appointed and given responsibility for developing the new whilst maintaining the current Desktop Services

2.3.5 Risks and Issues

The following high level risks and issues have been identified:

- the *Review of IT Infrastructure and Support* is non explicit about what is meant by the term "Desktop". This will lead to confusion and or misunderstanding as this work evolves unless we communicate effectively the scope of the work planned

- agreeing a uniform charging model and subsequent funding source is core to developing a strategic Desktop strategy

- past experience shows that a future Desktop Service will fail to be adopted unless it is able to offer significant benefit over current services for less cost to the client Institution. There is a significant risk that a future offering may end up more expensive if the deliverables and Service Level Agreement are not well defined from the outset.

- currently, the Desktop development teams work closely with end users through the support process. Rationalising our approach to the support process must therefore be approached with care

- currently, our services are focussed at specific user communities. There is a risk that unification may lead to a less focussed approach and therefore deliver a less suitable solution.

2.3.6 Review of Team Performance

Very useful input and feedback regarding current activities has been provided by the WS1 Desktop volunteers aided by Roger Hutchinson of PTS consulting. Valuable administrative support was provided by Stacey Meade.

2.3.7 Update on Current Position (November 2014)

In the four months since July 31st our understanding of the requirements for the future "Desktop" have become clearer and as a result the proposed "next steps" have taken a slightly different path from those proposed. We have recognised "Desktop" should be broadened to encompass "End User Compute" and that a suitable service can be created from commodity building blocks. The UIS has therefore formed an End User Compute Working Group (EUCWG) consisting of staff from each of the areas currently involved with Desktop delivery. The group's remit is to specify the necessary building blocks and then identify suitable options from both enterprise and open source solutions. The EUCWG intends to develop a number of costed options before undertaking broader consultation and seeking ISC endorsement early in 2015.

PART THREE: ANNEXES

3.1 Comments on Sub-Strand One: Service Portfolio and Service Catalogue

Comments received from within UIS and the broader University:

Extract from a feedback e-mail from James Matheson dated 2 September 2014

3) How does the existing Software Sales function fit into the proposed Services Catalogue framework? It seems to me that Software Sales is the current solution to some of the things that the catalogue is intended to provide in that it encourages the purchase of certain products over others, attempts to get economies of scale, etc. It does however also illustrate some of the potential difficulties: it's not always the cheapest or fastest source; it's not easy for it to identify new products or retire old ones; and in many cases it doesn't provide an easy to use interface for departments trying to manage licences, i.e. there's not the value add that one would hope for over an external supplier. Might a case study be built round this?

Answer: There are a number of complex service scenarios that we, as a team, will need to address. We will hold meetings with both internal and external stakeholders to analyse carefully and agree the best approach, before deployment into the Service Catalogue.

Extract from a feedback e-mail from Alan Blackwell dated 15 September 2014

I have now reviewed the full set of workstrand reports, and have two areas of feedback: user engagement and support for innovation

1. User Engagement

I was pleased to see that all of the workstrand reports have given serious consideration to user needs. However, my greatest concern is that I would have liked to see more direct mechanisms for engagement of UIS activity with the end-users of software, both in terms of structural processes, and in terms of resources allocated.

Although the workstrand reports refer to the key recommendation of the IT review that processes should be driven by the needs of users, I felt that a number of the proposed new structures might have the unintended consequence of distancing UIS staff, and developers in particular, from learning directly about user needs.

Much of the characterisation of user needs in the draft reports is in terms of different "user communities". It is certainly useful to distinguish between different classes of user needs, but not easy to engage with a "community" in the abstract. I agree that survey mechanisms will be useful to monitor uptake of the Service Portfolio and Service Catalogue, but believe that these arms-length tools must be supplemented with more direct opportunities for end-users to influence the development of those services.

The most effective way to achieve user-centred approaches of the kind recommended in the IT review is to create opportunities for direct contact between technical service providers and end-users. It seems that the proposed use of the ITIL Service Management Framework, although providing efficiency improvements, might also have the unintended consequence of distancing providers from end-users, by giving a structural emphasis to reporting and statistical control rather than dialogue comparing specific needs and service features.

Answer: The UIS engagement model is intended to facilitate the approach for user-centric collaboration. This approach will be embedded across the UIS. The work to create the Services Portfolio and Catalogue includes the ability for all members of the user and IT community to register a profile on the new services interface, to offer expertise, knowledge transfer, and support for existing, upcoming new services, and projects.

The UIS Development Division will be adopting methodologies to support the inclusion of users throughout the build stage and deployment of all new developments.

FEEDBACK FROM THE UIS WORKSTRANDS SURVEY: AUGUST/SEPTEMBER 2014

Q1 Do you have any comments or suggestions on Workstrand 1: Services Review (including Desktop)?

1. This applies to workstrand 1 but pervades others as well. We have to think very carefully about how to apply ITIL and construct a service catalogue - making the process too extensive or complex will mean the entries are less likely to be filled in correctly and also users are unlikely to read long entries: they will only persist with using it if it helps them in short order. The service catalogue needs to be integrated into the new website, and creation both will take a considerable amount of careful work. There are no figures for expected manpower requirements but when there are this should be added in.

Answer: The adoption of an ITIL framework will not be rushed. It is important that we consult extensively, both internally and externally, to understand and agree on the viability, maintenance, usability, and value to the customers. We will first build a comprehensive portfolio of services that the UIS and partner organisations supply. When all services have been identified we will, over a period of time, create the user community service catalogues.

2. This report is a more a proposal on how to produce recommendations, than recommendations as such, but it reads as if it is more definitive than it is. That should be stated explicitly. We have considerable experience with information classification and searching, and it is far better to classify information by area (such as 'courses'), with a simple but intelligent text search (or 'help system'). Note that the software does not matter, but the effort putting into maintaining links and help menus does, but that it is repaid 3:1 in saved effort. The desktop analysis is reasonable, but omits several important aspects, perhaps because (despite appearances), no current or potential users have been asked about it. The current ones are not satisfactory, not least because they tend to adopt a 'take it or leave it' approach. The MCS fails particularly badly in this respect.

Answer: We will work with stakeholders and members of the UIS to establish the IT service requirements that the user community need, and then look at all the options to create a first class service for our customers/users.

3. Page 30 has two outcomes listed on it. Only outcome 1 has resources posted against it. Outcome 2 (the services catalogue) will require manpower to create and to maintain. Websites don't happen by magic!

Answer: At this stage we are working on the user requirements. When solutions are identified it is likely that additional investment will be required to build the on-line solution, to ensure UIS is able to keep a business as usual service running through the transition process.

4. The report was very easy to follow and I would happily support the recommendations. In terms of the detail:

a) While a catalogue would help UIS in general is there not a risk of users trying to select their own solution rather than approaching UIS with the problem? Surely the sub-strand

two recommendations should mean that sub strand 1 is less relevant? But I guess any clue to what may be possible is helpful?

b) Have you yet defined our stakeholders, customers, users and others? If not then should this not be documented and circulated first? I can't see any of ours listed even as examples. I can see that you are listing engagement activities but what about groups where there may not be any? The people involved seem to be different from those in

Workstrand 2.

c) Institutional partnership was model that HR moved over to fairly recently with the introduction of HRBMs and they may be able to share their experiences.

d) The help desks also have a part to play in feeding back institutional issues/ concerns and we actively review significant issues by reporter/ school each week which also builds a profile of what are current topics of concern. We have also used survey monkey 6 monthly to solicit feedback from the Schools. We review this feedback in the regular 'issue review' meeting. Many service enhancements have been incorporated from these routes which provide regular information with little overhead. We have also taken reports of the Schools issue to meetings with the school office and asked them to rate the priority of requests. This helped with buy in and commitment.

Answer: As expected, there are cross over points between the workstrand reports, as the provision of services will involve delivery across the divisions of the UIS. We will develop a programme of work that ensures all areas are included in the build, management, and delivery of the services. Support for users looking to take up services from the UIS catalogues is a key component of the service provision; we will do this by identifying owners for all the services. This should enable a two way conversation to take place with users that express an interest in a particular service. The engagement teams will assist users in identifying potential services and setting up introductions to service owners.

5. Comment applies to WS1, 2, 3, 4, 7. There is potential for overlap/duplication and, quite possibly, conflict here with University IT Community (however that is to be defined and it's more than Computer Officers). The strands need to make sure they are working together. Some strands appear to be more aware than others. Quite a lot of fluff and flannel... Hope you can define what you mean by a "single point of access" to services (plural). I hope it does not mean web front-end only. I wish you joy of the catalogue - cataloguing is a complex process if you are not to omit/gloss over the fact that services cannot necessarily be put in one pigeonhole (category). My overall impression is that you are in danger of losing flexibility and applying an unwarranted rigidity to structure/services etc.

Answer: The catalogue will be developed iteratively and all members of UIS will be given the opportunity to provide their requirements and feedback, alongside the usability perspective from the user/customer side. The intention is to work together to implement the recommendations of the workstrand reports, this will enable us to correct any inconsistencies, duplication, and identify unforeseen gaps.

6. Desktop convergence seems too slow. The longer it takes the higher the ongoing support costs. Essentially there are three underlying hardware types desktop PC, Mac & Laptop. Standardising on the hardware and OS (including antivirus, office suite) for new deployments can be done in a few months and start to deliver value.

Answer: The desktop analysis is on-going, and we expect the final report to be circulated for comment in Spring 2015.

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7. The various sections of the report categorise the service user groups. Section 6.2 details a Student Service Catalogue a Research Service Catalogue and A User Community Catalogue at Level 1 At level 2 this is broken down further. The bit which is foggy is the Services for Administration and Services for Administrators....what's the difference. Also, the engagement strategy section talks about a much more granular categorisation: ' Subsequent feedback, in the context of appropriate access points to the service catalogue, have added a number of other dimensions: staff, students, visitors, colleges, departments, schools, applicants, alumni'. Shouldn't Section 6.2 be structured along similar lines? - if not, will it make a service harder to find? In many cases users of a service need to deal with a specific event e.g. new staff member joins. That could be multiple people in different roles. In practice that is how they currently engage with many services.

Answer: The user community catalogues are currently configured to assist in prototyping the concept of an on-line catalogue. When the project gets underway, we will meet with users to ensure we catalogue our services in a logical and usable configuration. The on-line catalogue is one of several ways UIS will engage with users; the two engagement divisions will ensure there is the opportunity for face-to-face discussions.

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8. Page 8 Portfolio & Catalogue General comment: I think the portfolio parameterization and example MCS portfolio miss the point. The portfolio should contain umbrella higher-level collections of services, not simply additional information about specific services. I think the portfolio needs rethinking from scratch.

Answer: The portfolio that is being demonstrated is a prototype for illustration purposes, to assist users in understanding the concept of a portfolio and catalogue. The project will develop the portfolio and Catalogue according to recommended standards and best practice.

Page 16 (Engagement risks & issues) This misses a very serious risk that the engagement will suffer from over-sensitivity to "he who shouts loudest" and will not be truly representative. Mitigating against this is difficult and needs planning. There is no such caution or planning in the document.

Answer: The project team have taken note of this point.

Page 18 Figure 1 Does "Academic" mean "Teaching & Learning"? In what way is Research (explicitly listed) not academic?

Answer: The project team will ensure that there is clarity within the community groupings.

Page 21 (catalogue) User Communities Served: This should include an explanation for why any restrictions exist. It should also give a list of standard expressions to be used. "All staff", "all core University and College staff", "all staff engaged in academic, non-administrative duties", "all staff in the wider University including Colleges, Theological Federation, embedded commercial laboratories, the University Press and Cambridge Assessment", etc. The categorization of staff is *hard* and clear examples are needed. Ditto for students (students registered for a degree, students registered for an accredited course, full-time students, all students...) Service Hours: There's more to this than "available". Many services are supported 9-5 but are left running 24h/day. We need to distinguish "ordinarily available" from "supported". UCS used to have the concepts of "attended running" and "unattended running".

Answer: Naming conventions are very important; we will ensure correct and consistent terminology is used.

Page 22 (catalogue) Should the catalogue have a link to the service's primary on-line documentation? For web-delivered services should the catalogue have a link to the service itself? IT Supporting Services: I'm unclear as to what this means and how it is different from "IT Required Services". Surely it should list the services that this service supports, so "IT Supported Services" or "Services that Require this Service"?

Answer: Access via links to services will be available. We will design the service catalogue structures, making clear that the high level service has a number of supporting services, also known as "fulfilment services"

Page 22 (portfolio) Value proposition: "Academic" should be split into "Teaching", "Learning", "Research". Business case: Why do we have links to the b/c for inclusion in the portfolio but not to the b/c for the service itself? The latter is far more important, surely? Risks: Giving a single example will bias the nature of the catalogue entries going forwards. Add more such as "insufficient resource to develop", "dependency on external platforms' facilities" etc.

Answer: The project team have taken note of these points. Categories of information to be included in the Portfolio and Catalogue will be decided during the project.

Page 23 (portfolio) Offerings and packages: How is this different from the "Options" section in the catalogue entry? Costs: This belongs in the service catalogue. Page 23 (Service catalogue MCS example) Service Description: As an example test this is poorly worded as it needs to be far briefer. At a minimum all information repeated below should be struck out to guide the sort of language going forwards. Strike "is for the use of all staff and students of Cambridge University". This repeats (and is less accurate than) the "User Communities Served" below. Edit "...to your DS files..." No other part of this document addresses the reader personally. Decide on a voice and stick to it. Edit "The Computing Service" to "The University Information Service". Service manager: Does not include the email address. Options: This is incorrect, surely? There are options to take the Linux platform or the Mac platform instead of PCs. There are certain software licences that sites can buy into or not. Service Reviews: I would include links to the various reports online.

Answer: *The project team have taken note of these points.*

Page 25 Risks: Include "late arriving teaching requirements" and "late arriving fault reports for applications".

Answer: *The project team have taken notes of these points.*

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9. It is unfortunate that this is one of the least developed areas. Without the service catalogue it will be hard to organise the UIS into a coherent structure.

Answer: We will first need to document and allocate all our services into the internal Service Portfolio. The Portfolio is the initial stage before the Service Catalogues are created. Work on the Portfolio is expected to commence in January 2015.

3.2 Service Portfolio and Service Catalogue Details

SERVICE PORTFOLIO

The following additional information should be recorded for each entry in the Service Portfolio.

Full Definition of Service: the full definition of the service as contained in the Service Definition Document.

Supplier: the name of the supplier of the service e.g. UIS, a Cambridge College or Department, an external third party.

Current Status: Pipeline/Catalogue/Retired: an indicator of whether this service is only in the pipeline, or is live and operational and in the Service Catalogue, or is retired.

Position in Lifecycle: a series of dates to indicate the position of the service in its lifecycle for example:

Date first included in Service Pipeline	The date at which the service was first included in the Service Pipeline i.e. when the service was chartered e.g. January 2010
Date first included in Service Catalogue	The date at which the service was first included in the service Catalogue i.e. when the service first became operational e.g. July 2010
Duration of service provision	The period for which the service is guaranteed to be provided e.g. at least until December 2017, unlimited
Retired Date	If known, the date at which the service was/will be retired e.g. December 2017

Roadmap: if known, a description of the major potential changes in the provision of the service e.g. major upgrade in Dec 2014, review of service provision in July 2015.

Opportunities: the User Communities to whom the service could be provided.

Value Proposition: some representation of the value the service provides to the User Communities. eg. financial, productivity & efficiency, reputation, statutory & regulatory, intangible (eg responsible partner in the wider Cambridge community). Reputation should be subdivided into Academic, Up-to-date technology (hardware or software), Relationship with industry, Links to university mission and goals e.g. accessibility, inclusivity. A single service could provide value in a number of different areas.

Business Case: a link to the business case which was written to justify the inclusion of this service in the Service Portfolio.

Priority: for new services, the priority in which the service should be developed (priority calculated from impact e.g. the numbers within the user communities who will benefit and the timescale in which the service will be required).

Risks: the risks related to the service provision e.g. insufficient take-up from the User Communities.

Offerings and packages: the levels of service to be provided and the packages in which the service may be provided.

Investment required: for new services, the resources required e.g. financial, time, effort, h/w, s/w etc.

Costs: centrally funded or cost recovery

SERVICE PORTFOLIO: MANAGED CLUSTER SERVICE DETAILS

Full definition of service: the Service Definition Document can be viewed here:
A link to the MCS Service definition Document

Supplier: UIS

Status: Pipeline/Catalogue/Retired: Service Catalogue

Position in Lifecycle: a series of dates to indicate the position of the service in its lifecycle, for example:

Date first included in Service Pipeline	Not available
Date first included in Service Catalogue	Not available
Duration of service provision	Unlimited
Retired Date	Unknown

Road Map: not applicable

Opportunities: student and academic staff user communities

Value Proposition: the perceived value of the service to the user communities is recorded below:

Category	*Satisfied*
Financial	
Productivity and Efficiency	Yes
Statutory	
Regulatory	
Reputation: Academic	Yes
Reputation: Up-to-date hardware and software	
Reputation: Links with industry	
University Mission (e.g. accessibility, inclusivity)	Yes
Intangible	

Business Case: unavailable

Priority: not applicable

Risks: obsolescence of hardware and software, resourcing new developments

Offerings and packages: offered as a package with DS-Filestore, DS-Print, DS-Files, DS-Web

Investment required: not applicable

Costs: cost recovery

<u>SERVICE CATALOGUE</u>

The following information should be recorded for each entry in the Service Catalogue:

Service Name/Id: a name or identifier for the service.

Service Description: a detailed description of what the service provides e.g. development, support and maintenance of the ……

Service Manager: the person within UIS who is seen as the manager accountable and responsible for the provision of the service- the 'go-to' person for all issues regarding the service. This information should include the e-mail address.

User Communities Served: the User Communities to whom the service is provided.

User Community Contact: Responsible Officer key contacts within the User Communities who use the service, who should be contacted regarding the non-operational issues e.g. charges for the service or when new requirements are planned.

User Community Contact: Technical Officer Key contacts within the User Communities who use the service, who should be contacted regarding operational issues e.g. when notification about loss of service or escalation is required.

Operational Priority: Tier 1–4. A measure of the importance of the service to the user communities re recovery after failure, for allocation of resource to address issues etc.

Options: Where appropriate, the options available for this service e.g. a range of network bandwidths.

Service Hours: A statement of the hours during which the service is available.

Service Offering: A statement of the quality of service that UIS will aim to provide, including any limitations or obligations on the user community e.g. not exceeding a specified level of utilisation.

Service Support: How support for the service is provided. The contact information and details of the support should be provided.   If the service is supported through a service desk, this should link to the full details of the levels and hours of service provided.

Service Reports: The regular reporting interval for the service including information on the number of users of the services. This information should be dynamic and the frequency will depend on the particular service, e.g. daily reporting is available for the network service, while reporting at weekly and monthly intervals is also available.

Service Reviews: The regular period for reviews of the service (typically 6-monthly or yearly), and the month and year when the next service review will occur.

Planned upgrades: The interval or frequency at which upgrades to the service will be made e.g. error corrections every three months, facilities upgrades every six months. This should link to the Release Policy or Release Schedule for the service.

IT Supporting Services: The IT Services supporting this service e.g. applications, operating systems, specific hardware and software.

IT Required Services: The IT Services that are required for this service to be effective e.g. network services.

IT Related Services: the IT Services that are other users of the defined service also use.

Basis of charging: if appropriate, the basis on which the user community will be charged for the service e.g. charge by user, by desktop, Price on Application (POA).

SERVICE CATALOGUE: MANAGED CLUSTER SERVICE DETAILS

Service Name/Id: MCS

Service Description: the Managed Cluster Service (MCS) is for the use of all staff and students of Cambridge University, and provides networked PCs (Windows/Linux) and Apple Macintosh computers running a wide range of software, together with printers and scanners. The MCS machines provide access to the Desktop Services central filestore (known as DS-Filestore), and to central printing facilities (DS-Print); both of these can also be accessed from users' own machines elsewhere on the network. There is also a remote login service to Linux, giving access to your DS files and to appropriate Linux applications. There is in general no access to MCS Windows or Macintosh applications from outside the MCS rooms.
The Computing Service runs a number of public rooms (Managed Clusters), and many Colleges and Departments also have similar rooms for the use of their own members. Some rooms offer all three platforms (Windows, Macintosh, Linux), and others only one or two.

Service Manager: Brian Simpson

User Communities Served: students, academic staff

User Community Contact - Responsible Officer: the Responsible Officer (ro) contacts within each MCS institution can be viewed here:
http://www.ucs.cam.ac.uk/support/mcs-support/suppproc/instcontacts

User Community Contact - Technical Officer: the Technical Officer (to) contacts within each MCS institution can be viewed here:
http://www.ucs.cam.ac.uk/support/mcs-support/suppproc/instcontacts

Operational Priority: Tier 2

Options: not applicable

Service Hours: 24 hours a day, seven days a week, subject to occasional downtime for scheduled work. Some of the public rooms are Teaching Rooms and reserved for courses at certain times.

Service Offering: not applicable

Service Support: full details of the support provided for this service can be viewed here:
A link to the Service Desk details, giving hours of support, how to contact the desk, the role of the desk etc.

Service Reports: an annual report is published and can be viewed here:
A link to the most recent MCS Annual Report

Service Reviews: the service is reviewed every six-months and the findings are presented at the MCS Forum for customers and some users. The software provided as part of the service is reviewed annually.

Planned upgrades: as necessary, the software of the Managed Cluster Service is upgraded during the summer vacation.

The hardware provided in the Training rooms is upgraded on a 4-yearly cycle. The hardware in the Titan Rooms was upgraded in 2013. The hardware in the Phoenix Rooms will be upgraded in 2014.

IT Supporting Services: the IT Services supporting this service e.g. applications, operating systems, specific hardware and software.

IT Required Services: Network Service, UIS Password Management Service, University Card Service

IT Related Services: DS-Filestore, DS-Print, DS-Files, DS-Web

Basis of charging: charge per workstation to the customer. The current MCS charges can be viewed here: http://www.ucs.cam.ac.uk/support/mcs-support/mcsadmin/mcscharges/2014-2015charges

3.3 User Communities

The following is the proposed structure of the University of Cambridge UIS Service Portfolio and Service Catalogue:
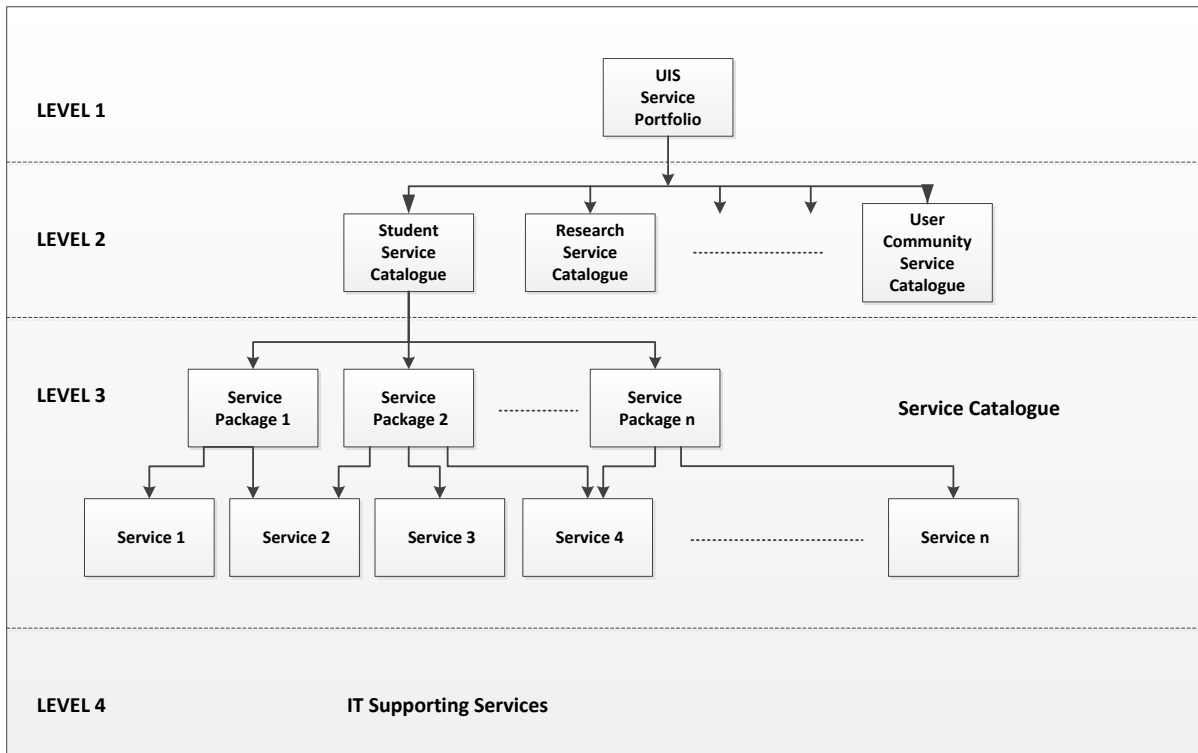

Figure 1: Structure of USI Service Portfolio and Service Catalogue

Within the structure given above, Level 2 represents the User Community Service Catalogues, i.e. groups of services which are seen as most relevant to a particular user community.
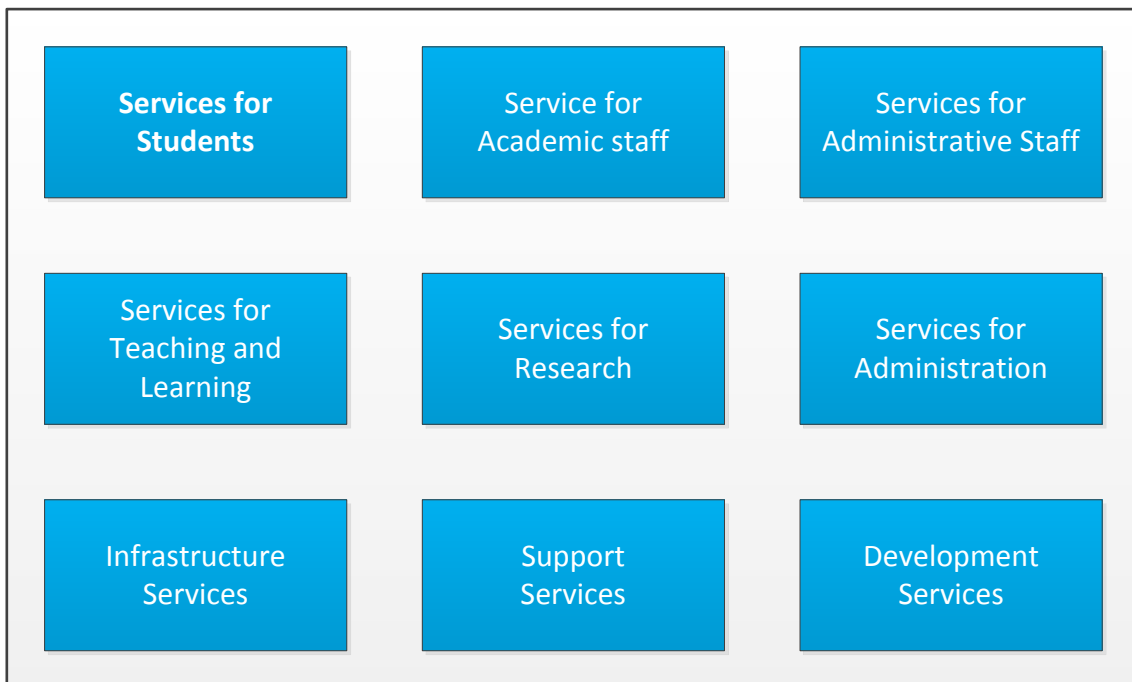
Figure 2: Proposed User Communities

The User Communities have been chosen to represent who the person is viz. student, academic, or administrative staff; what they are interested in viz. teaching and learning, research, administration; and the types of service viz. infrastructure, support, development.

An individual service in the Service Catalogue may be represented in a number of User Community Service Catalogues, as it is relevant to that User Community.

Although a particular service may not be included in a specific User Community Service Catalogue, this does not imply ineligibility of the service to that User Community.

3.4 Service Catalogue Development

As part of the next phase of work we will be looking in detail at 20 services which support the Student & Research User Communities. Below we provide a list of student services proposed for detailed consideration; those for research are to be agreed.

Student service	Brief description of service
Cambridge University Email (Hermes – University email system)	Access to University email via mobile devices, any standard mail program or via a web browser
Connecting to the University Network	Wired and wireless connection to the internet, University, colleges and departments networks
Digital (Virtual) Learning Environment (University Moodle)	An integrated teaching & learning platform to enhance the learning experience across departments and colleges
Google Apps for Education (Calendar)	Keep track of appointments and share your calendar with others
Password Management	Change the password used to access any systems managed by UIS
Student Administration Services (CamSIS)	Access to CamSIS, the official repository of student records enabling you to manage your course option/exam enrolments, view your exam results and provide notification of changes to personal details
Student Computing Platform (Managed Cluster Service – MCS)	"Ready-to-use" computers in most colleges and departments with access to personal productivity software, hundreds of relevant and supported apps, providing secure access to a student's data files and the ability to create websites, print and access certain services on mobile devices
Student Computing Support Services (Helpdesk / Service Desk)	Assistance with anti-virus software maintenance, guidance on repairs / replacements, discounts on new systems and access to specialist support
Training (Face-to-face and on-line)	Free of charge access to a wide range of courses to help you get the most out of IT – from creating documents, spreadsheets and presentations, through creating websites to advanced statistical analysis techniques
Video & Audio Publishing	Tools and support to enable sharing of audio and video content on the intranet

3.5 Organisational Recommendations: Service Portfolio and Service Catalogue

SUMMARY TABLE 1A

Outcome Number	Outcome	Objectives
1	**Service Portfolio** Put in place a Service Portfolio to enable the UIS to manage the commissioning of new services, the maintenance of existing services, and a process for retiring services.	To show the value UIS services bring to the University overall.
		To provide greater clarity and awareness within UIS of our services.
		Ensure service ownership is understood, including roles to support each service.
2	**Service Catalogue** Put in place a clear definition of the user communities served, via an improved website for the publication of existing and new services.	A media for communication of services to users.
		To provide users, in whatever role they hold, the facility to find out about services relevant to them.
		To create a service orientated structure focussed on the customer and user.
		Plan to create a University-wide catalogue of services.

SUMMARY TABLE 1B

Outcome Number	Entity	Sub Entities (if any)	Resources Required (FTE)	Comments
1	New UIS Service Management Group		TBD	The services sub-strand work will continue and is expected to deliver its final findings and organisational recommendations, at the end of September 2014

3.6 Organisational Recommendations: Engagement

SUMMARY TABLE 1A

Outcome Number	Outcome	Objectives
1	Regular consultation with all institutions comprising the collegiate university	Consult with user constituencies regarding preferred mechanisms for communication and utilise as appropriate
		Establish account management role for all collegiate university institutions
		Increase awareness of UIS, service catalogue and promote institutional discussion of packages
2	UIS service provision and strategy informed by user feedback and requirements	Capture trends, recurring issues and particular requirements
		Enable relevant, responsive current and planned UIS services
		Share service data and institutional intelligence using appropriate systems
3	Increased benefits through adoption of services from inclusive catalogue	Achieve greater return on collegiate university's IT investment
		Ensure minimum standards of service are met across the collegiate university
		Enable institutional IT practitioners to focus more on local requirements and participate fully in professional development

SUMMARY TABLE 1B

Outcome Number	Entity	Sub Entities (if any)	Resources Required (FTE)	Comments
1, 2, 3	Institutional Engagement Team		8-12	Resource requirements and current allocations will be clarified by engagement data gathering and by comparison with other appropriate organisations
2	UIS development expertise/Institutional Engagement Team			Includes a new project to select and deploy systems to support the engagement strategy

3.7 Organisational Recommendations: Desktop Services Strategy and Services

SUMMARY TABLE 1A

Outcome Number	Outcome	Objectives
1	Continue to develop the current UIS Desktop Services in line with the emerging Desktop Strategy and unify the associated support provision.	Develop the three current UIS Desktop services in line with the Desktop strategy and in a manner that will lead to convergence of provision in around three years. In line with recommendations made in Workstrand 6, standardise and unify our Desktop Support function across all existing services.
2	Engage with other Desktop Services providers within the University.	In the context of the overall Desktop strategy, we should build strategic alliances and partnerships with other Desktop Service providers to encourage collaboration.
3	Develop and formalise the strategic implementation roadmap. Once agreed, design, procure and build the new "Desktop" service(s).	Identify the requirements of the University and present a paper at the January 2015 ISC where we would seek endorsement for a strategic implementation roadmap. Develop a phased programme of work that will ultimately deliver the new Desktop service(s). The service(s) offered to Institutions should be unified into a single offering of multiple components in around three years.

SUMMARY TABLE 1B

Outcome Number	Entity	Sub Entities (if any)	Resources Required (FTE)	Comments
1 & 3	Desktop Services Group	• WS1 – Desktop • Consultants	TBC (8-16)	Engagement of consultant support essential to meet proposed timescales. The Desktop Services Group is likely to be an amalgamation of the current Desktop Services teams. Additionally to include dedicated Mac and Linux expertise but to decouple from the provision of underlying infrastructure services. The size of the group will depend on where related functions will be performed (for example, printing, Exchange, administration, service management etc.).

3.8 Interviewees and Workstrand Members

The following staff and students were interviewed as part of this Workstrand:

Department/Division/ College	Name	Role
UIS	Claire Bartlet	Technical User Support Manager
UIS	Andrew Cox	Head of Student Systems
UIS	Paul Calleja	Director, High Performance Computing Facility
UIS	Bob Dowling	Head of Online Services Division
UIS	Chris Edwards	Deputy Director
UIS	Dawn Edwards	Assistant Director, Research Systems
UIS	Michelle Finnegan	Assistant Director
UIS	Paul Hawkins	Business Analyst, CHRIS
UIS	Ronald Haynes	Computer Officer, Institution Strategy
UIS	Richard Hey	Head of User Services Division
UIS	Jon Holgate	Head of Network Division
UIS	Steve Kearsey	Deputy Director
UIS	Julian King	Unix Support Manager
UIS	Neil King	Live Operations Manager, Student Systems
UIS	Shaun Lindsay	Chief Database Administrator
UIS	Nick McLaren	
UIS	Nick Mattin	Head of Service Development
UIS	Richard Mee	Head of Institution Strategy and Media Services
UIS	Mark Neal	System Administrator, PC Support
UIS	Andy Richardson	Operations Support Manager
UIS	Sue Rogers	Specialist Services Manager
UIS	Brian Simpson	Desktop Services Manager
UIS	Linda Spinks	Business Change Manager, Student Systems
UIS	Louise Tunstall	Service Manager
UIS	Vince Woodley	Deputy Head of User Services
Students		
	Fabio Fiorelli	Postgraduate Student
	Johannes Ruckstuhl	Undergraduate Student
	Connor Willmington-Holmes	Undergraduate Student
	Kate Murphy	Undergraduate Student
Departments		
English	Jennifer Pollard	Computer Officer
English	Helen Murphy	Assistant Librarian

Faculties		
Education	Jay Pema	Computer Officer
MML	Mel Leggatt	Computer Officer
Law	Andrew Gerrard	Computer Officer
Law	Daniel Bates	IT Teaching and Development Officer
Schools		
Clinical Medicine	William Mair	Educational Technologist
Clinical Medicine	Mike Mulvihill	Web Developer
Clinical Medicine	Martin Keen	Business Development Manager
Clinical Medicine	Mark Thornton	Database Developer
Physical Sciences	Richard Ordish	Computer Officer for Teaching & Administration
Physical Sciences	Richard King	Computer Officer
Physical Sciences	Cormack O'Connell	Senior Systems & Network Administrator
Colleges		
Clare College	Jason Randall	IT Manager (and Chair of CITMG)
Clare College	Ian Elliott	Computer Officer
Fitzwilliam College	Susan Park	IT Manager
Murray Edwards College	Andy Semark	IT Manager
Pembroke College	Alan Rogers	IT Director
Trinity College	George Townsend	Computer Manager
Trinity College	Tracy Cullen	Computer Officer
Trinity College	Bryan Carpenter	Computer Officer
Independent Institutions/Other		
University Library	John Norman	
University Library	Paul Jervis-Heath	
Academic Division	Alice Benton	Head of Educational and Student Policy

The following UIS staff are members of the Workstrand 1 team:
Clare Bartlet
Nick Cole
Simon Edwards
Monica Gonzalez
Robin Goodall
Paul Hawkins
Ronald Haynes
Tara Jeffery
Dean Johnson
Andrew Judd
Julian King
Nick Maclaren
Paul Mazumdar
David McBride
Mark Neal
Debbie Salmon
Helen Sargan
Brian Simpson
Rob Smith
Linda Spinks
Louise Tunstall
Sam Wenham