

General Statement Regarding Approach To Technology.

In selecting and integrating technologies to meet the requirements of the 4 work streams Connecting Bristol has employed a set of base principles. These principles have guided our work in producing this bid and will continue to remain in place throughout the full lifecycle of the products and service produced. Their purpose is to ensure that the following key requirements are met:

Technology Maintenance

Products and services will be designed to be manageable by a team with core technical skills. The requisite skills to perform day to day maintenance tasks on these elements should be both readily available within the local area and well documented. This documentation outlines both the core skills required and any specific implementation details of products and services produced by Connecting Bristol. Contracts with partner organizations will require that Connecting Bristol retains ownership of all source code produced to ensure that investment continues to return value, even in the situation where applications outlive the lifespan or interest of partner organizations. The path of choice has

Scalability

Our approach to scalability is two-fold designed to ensure service continuity and growth. New services will be introduced to users in a phased approach, as opposed to en-masse, thus allowing growth to be monitored and provisioned for accordingly. Technology choice decisions have been driven by a requirement to conform to open standards, where suitable, thus giving the best chance possible that data and hardware will be compatible with future systems beyond the Q12. These mechanisms are designed to ensure service continuity by protecting against denial of service, ensuring load scalability and future proofing.

Security

A key requirement in the formulation of work streams has been adherence to all established security standards and industry best practices. This requirement has also been placed on all products and services produced in these work streams. Our approach is designed to ensure adherence to legal and legislative requirements whilst not inhibiting aggressive development and deployment timescales. Additionally, we require that the attitude towards security employed at all stages by Connecting Bristol and partners promotes gaining and maintaining user confidence. We recognize that

an openness in both our methodology and technologies used will increase trust in our work.

Connecting Bristol will outline a set of security policies and standards which will guide contractual obligations with partner organizations. Primary areas of focus for our security reviews will be confidentiality, integrity and availability, working in combination with the requirements for scalability and usability. Connecting Bristol has identified a number of preferred secure hosting locations within the city, accessible to the outlined broadband infrastructure, should our partners be unable to meet requirements.

Interoperability

Connecting Bristol's bid aims to guide the way for other regions across the country to tap in to the benefit of becoming digitally connected centres. To further this aim products produced in all work packages will be supported by documented and repeatable processes to replicate their deployment both within the city and further afield. All backend systems have been selected, where applicable, to conform to open standards including but not limited to HTML, CSS, H.323, RSS, SQL and open mapping formats. We promote compatibility with legacy systems and recognize that the value of this investment will continue to return over time if, as these products and services also become legacy, interoperability with them is as frictionless as feasibly possible.

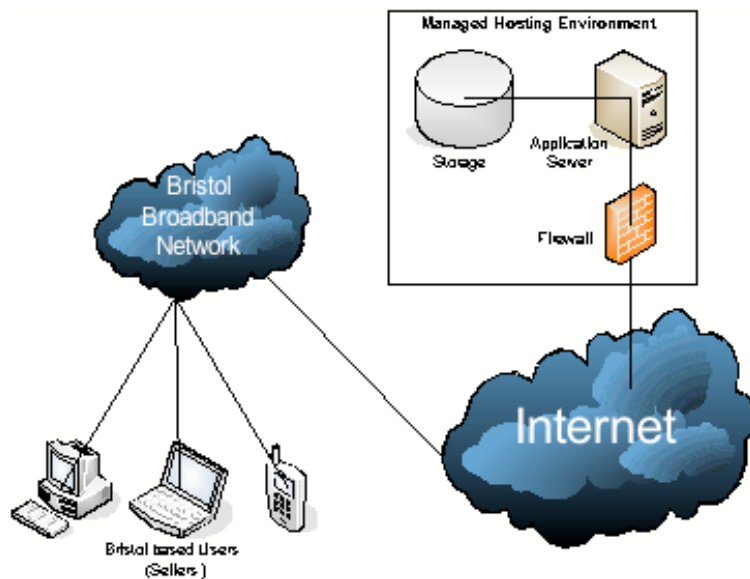
Value for money

Connecting Bristol's approach to technology selection has been to promote reuse where possible; the development of new technologies is sanctioned only where a clear business case has been identified. Open source software is the default choice throughout our bid as it enables strong, industry standard products and services to be developed within aggressive timescales and budgets. In addition to this the technical skills required of human resources are industry standard, reducing dependency on more expensive specialist consultancy.

Applications

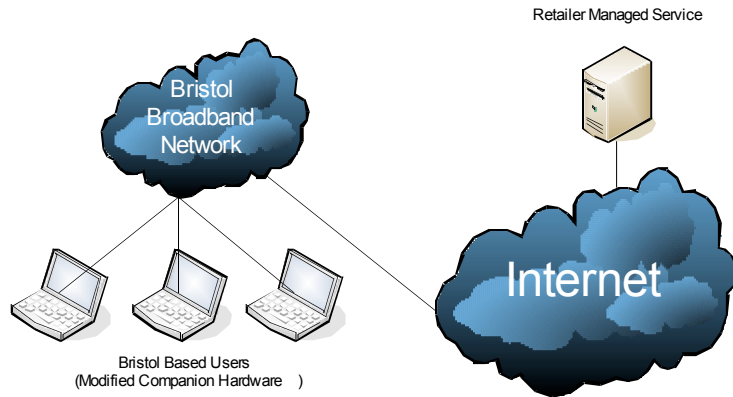
People's Map – Manageability

The People's Map is a prime example of Connecting Bristol's dedication to creating products and services that will exhibit world class manageability. The application will be developed using 100% open source software and standards by a Bristol based team working in close partnership with the target community. All source code and documentation will be released under the GPL to enable further development of the product, outside the scope of this project. The skills required to administer the application are readily available in Bristol's employment market. The product will be managed under contract by the development team until Q12.



The Companion – Security

The Companion utilizes modified off the shelf laptop hardware, a barcode scanner designed for elderly citizens and print based catalogues from which to make purchases. Orders are securely transported to the retailer where existing business processes will be triggered. A key focus of developing this product has been in understanding how to develop trust amongst the user base. User studies have shown that a valid technique for achieving this is integration with existing known processes such as print base materials. The Companion is still currently under development and testing.

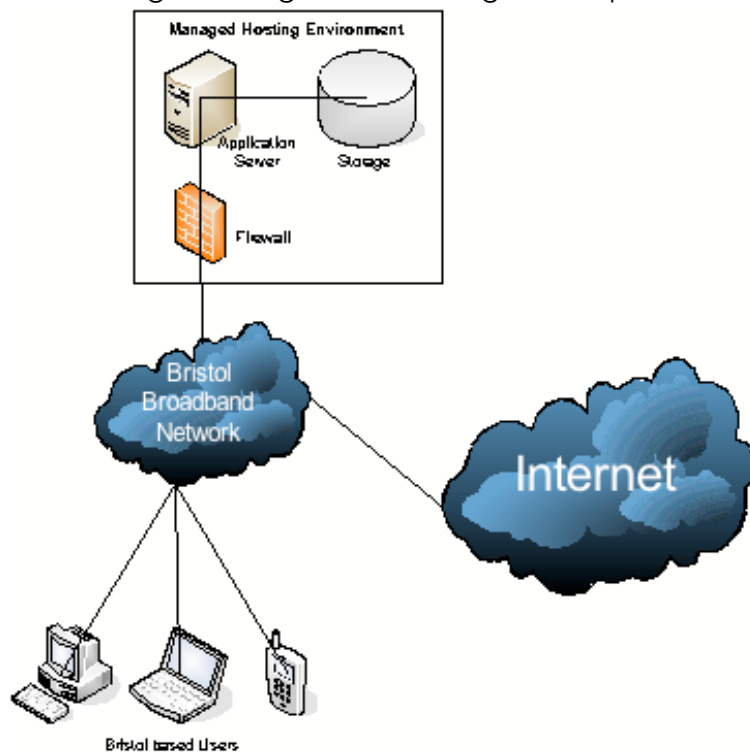


How to Henbury – Scalability

The “How to Henbury” application has been designed by e-government specialist Delib who will also take on the tasks of development and management. Delib are well regarded for their ability to produce highly functional web applications through extensive consultation with customers and end-users. As part of their agreement with Connecting Bristol the “How to Henbury” application will be produced entirely using open source software tools. Open source principles have been proven to enable high scalability both in terms of data throughput and the ability to cost effectively deploy subsequent instances of applications. Henbury has been initially identified as a suitable neighbourhood to pilot this application due to its good existing connectivity. This environment will enable all loads to be monitored from an early stage and hardware provisions allocated accordingly as projected usage increases.

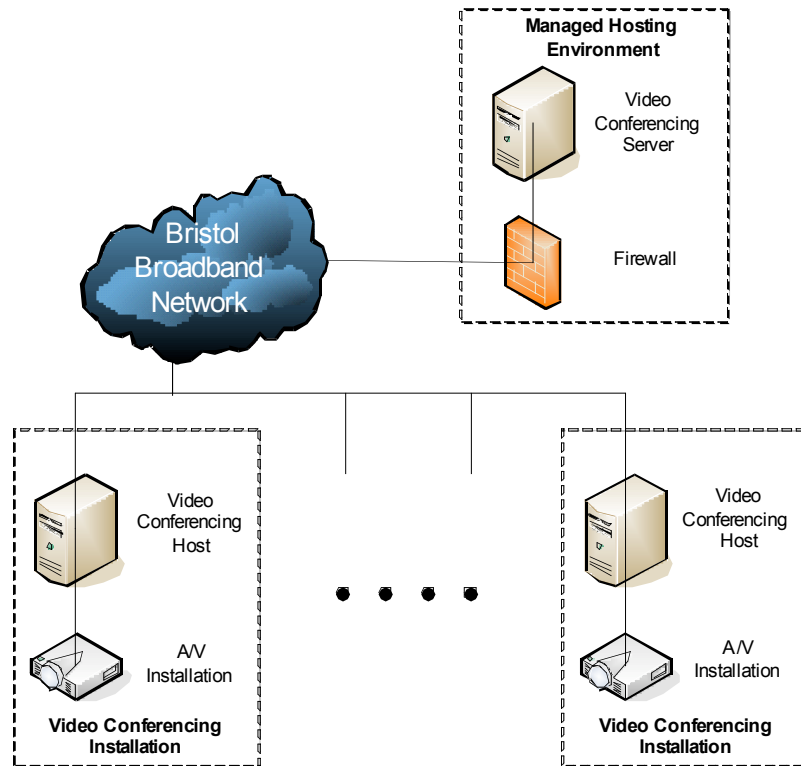
The “How to Henbury” application will be built to all current HTML & CSS web standards and also incorporate RSS to enable interoperability with other applications. All back-end data storage will be specified to conform to leading open standards,

maximizing the range of future migration options.



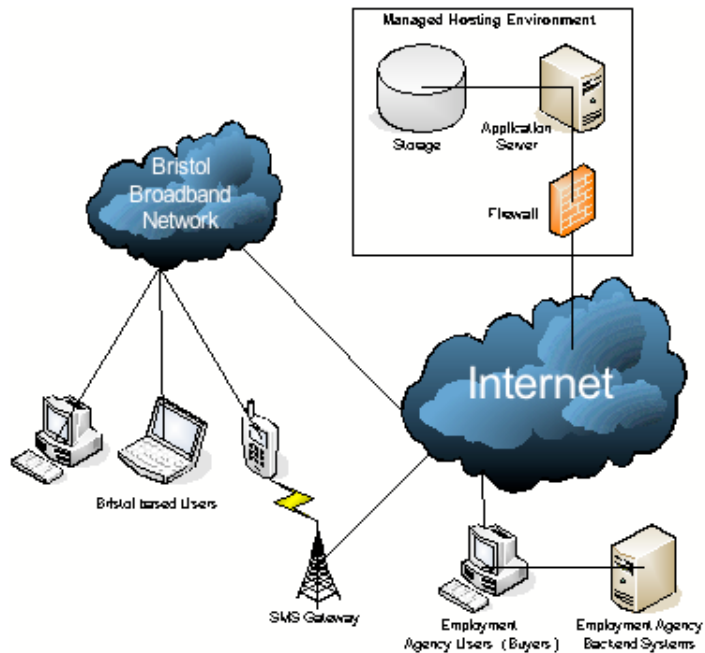
Local Flexible Working & Video Conferencing – Interoperability

This work package will result in the delivery of a complete video conferencing infrastructure, dependant on the broadband infrastructure produced in work package 1. The video conferencing infrastructure will be constructed through a combination of purchased commercial products and open source tools configured specifically for purpose that conform to the H.323 standard. Connecting Bristol will initially see the deployment of 6 video conference locations around the city that will communicate via a centrally managed hub. H.323 is an open specification with open source implementations of the underlying protocols; it supports industry standard levels of encryption and interoperability with other leading products, notably Access Grid and NetMeeting. As an open specification there are no IP limitations in the use of H.323.



Slivers of Time – Scalability

The Slivers of Time application has been developed with an explicit requirement of handling high volumes of transactions. The application utilizes SMS push technologies to eliminate the need for users to poll the service for updates, thus reducing load, hardware provisioning requirements and ultimately investment. It will be supplied by Slivers of Time Ltd. (SOTL) free of charge prior to July 2008 after which date there will be a 2.5% charge per transaction. SOTL will undertake all management of the application including hardware provisioning, administration and upgrades. Participating employment agencies will interface their backend payroll systems directly with reports generated by the SOT application.



Showcase

Connecting Bristol will generate and capture a wealth of data, results, information and content throughout its lifecycle. We have outlined the desired properties of a world class showcase portal to disseminate our findings with the aim of maximizing ROI within the 3 sectors of Bristol , the region and globally.

Technology is on the brink of a major new chapter in its history of presenting new opportunities for accessing information. Connecting Bristol will realize this potential in enabling users from all 3 sectors to navigate the wealth of generated content in a highly personalized manner. Personal pathways will enable democratized access to this content; these pathways will be generated by an advanced algorithm that guides users on a personal tour. This algorithm takes as inputs both the user's own preferences and the behaviour of the broader user community to make recommended content suggestions. As a result, recommendations are more accurate, access is more frictionless and the potential value of the content will be fully realised.