

CBC's Digital Infrastructure

Evolving to meet the needs of an Agile Council

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What has been done to date.

Preliminary but necessary work has been accomplished ...

- Upgrade of the WAN network to provide adequate connectivity.
- Installation of Single Sign On Software to link to cloud services.
- Upgrade of the Existing Citrix Environment to reduce downtime and outages
- Upgrade of the network to support WiFi
- Upgrade of key hosted systems
- Change of laptop configurations to open up working environment
- Upgrade of mobile telephony to bring in smartphones and productivity apps
- Thorough professional review of Citrix, CBC Data Centres
- Deployment of mobile device management and security (MDM)

Tender for Cloud Data Centre Hosting.

Tender for Application provisioning.

Why Change

The IT Infrastructure at CBC

- ... Works ... usually
- ... Provides Good Services ... most of the time

But it is

- ... Rigid and Inflexible
- ... Impossibly Slow to Change to meet new demands
- ... Out of Sync with the demands for Mobility, Cloud Services
- ... Cumbersome and Expensive to Maintain

CBC IT is focused on supporting Hardware and Software rather than adding value through change and Business Transformation !

Deconstructing the Desktop

The CBC Virtualised Desktop is a 'one size fits all affair'.

The same provision is made for all users, regardless that each group of users has individual needs.

Everyone suffers from services that must meet the needs of everyone else.

Lowest Common Denominator.

ICT suffers from the burden of maintaining a heavy infrastructure, even for those who don't need or use it. (Between you and your desktop is a £2m stack of technology, eight layers deep that needs care, feeding and lots of attention.)

CBC Desktop Services were designed for an era when Council staff were herded together into a closed environment and a security door was closed behind them.

Virtualisation is good. But not always!

Deconstructing the Networks

The CBC Networks were designed to connect buildings where all staff worked inside, data was locked up with them.

But now we work every day in collaboration with countless individuals who are not our staff, who are not in our buildings and who use data and services from a wide array of providers who are definitely not within our secure firewalls

... And even our users are frequently not in our buildings.

Our services and customers live in the real world beyond our firewalls!

Our IT doesn't live where our users do! Our IT lives in our private enclosures.

The Plan to Evolve CBC IT

Recreate IT to match the real, present time needs of CBC.

... Flexible and Mobile, not tied to our buildings.

... Flexible and Mobile, not tied to a desktop.

... Available how and when it is needed, not tied to other users' requirements.

... Cost effective and Agile!

... Light weight, just enough to do our business.

... Democratic – each IT user consumes what they want and need to do their job.

Future Scape

Focus on Individual User and Service needs

Flexible equipment with the ability to work anywhere at any time, securely.

Access to documents and information without the CBC network.

Access to the applications and business process you need, when you need.

Faster response to system upgrades and business change.

Less impact from service disruptions.

For IT Personnel:

... A Simplified Infrastructure and the ability to move up the food chain to support real business requirements.

Desktops

Move to Intelligent devices – PCs, Laptops and Tablets.

... Power closer to the user,

... Less dependence on the Office Network,

... Greater freedom to set up and to use the device that a user wants to use.

... Focus on what the user needs rather than what IT has available.

... Native operating system – Microsoft or Apple ... Plus

... Office 365 Applications

... Microsoft Cloud Exchange Email

... User Specific Apps

Mobile

To date, mobile working has been about technology ...

- Laptops – Configurations changed to reduce ‘lockdown’ and to open up broader use.
- Tablets – Introduced and Effective
- Smartphones – Upgraded for access to additional productivity apps.

Going forward, the emphasis will be on Apps that can enhance internal and external productivity.

- Housing First Touch
- Adult Services Mobile First Apps
- iDox Accolaid and Uniform Apps
- ? Central Bedfordshire App Development



Applications

Supplier Supported Applications

... Where possible, Supplier Hosted, where not ...

... CBC supported hosting in the Cloud

... Move toward use of Apps rather than Applications

... Move toward providing real remote working rather than the legacy office applications tagging along with the users in the field.

Servers

Server and Data Hosting

... Professional Studies have shown the CBC data centres to be 'almost adequate' if less than optimal in architecture and support.

... Rather than invest another £1.5m in rebuilding the existing data centres we'll move the services to the Cloud.

... Tenders for formal Cloud Managed Services were expensive, so we'll move our services one application at a time to the Cloud, into new managed centres and with experienced support.

... Greater security, flexible capacity, investment avoidance ... But not fully managed services, yet.

Telephony

Upgraded Telephony Services

... Mobile services without contracts, pay only for the data, voice used.

... Managed Infrastructure.

... Access to very good grade smart phones for all authorised staff.

... Access to tablets for authorised services

... Up Grade of Contact Centre technology including voice services, email handling, on line Chat and workforce management.

Storage

Move to Full Cloud Services for Documents

- ... Highly Secure document management available to any device at any time.
- ... Avoid SAN replacement investment £600k, replace existing document systems.
- ... Faster more agile adjustment to business needs.
- ... Integration to line of business applications such as iDox.
- ... Unlimited Storage
- ... Integration to next generation Apps and mobile working, O365

Collaboration

Cloud Documents == Collaboration

... The move to Cloud Documents brings the ability to collaborate on document sharing and authoring with both internal and external users.

... External secure Document Sharing, Children's Services, Court Bundling

... Easy forms, photo capture, scanning and sharing

... User controlled storage administration without the need for IT intervention.

Authentication - SSO

Sign On Once

... Cloud based authentication system allows a user to sign on once and to access all services provided by CBC without logging on a second time (almost).

... Allows easy access to Office 365, Document Collaboration, Comensura, SAP, SRM and other Internet based applications.

... Elimination of the need to change passwords on a periodic basis or to have different passwords for different systems.

Council Information Management

How to handle information from a wide range of business Units

Information Commissioners Office requires

- Inventory of all Information Assets
- Ownership of each Information Repository
- Management of Information

Business Requires

- Efficiency in Information Management
- Easy Access
- Reuse and Analysis

Individual Line of Business Information or Council Information?

Digital for Residents

Extending Digital to our Residents

... As before, emphasise the services available from our vendor community to enhance our services to our Residents.

... IEG4 == Revs & Bens

... White Space == Waste Management

... First Touch == Housing

... iDox and CBC == external regulatory services

... Idox + Box == Planning

Active Infrastructure Work Streams

<u>Infrastructure</u>	
Server Hosting	Soft migration of existing services in the two CBC data centres to the cloud.
Desktop Intelligent Clients	Prototype New Generation Desktop, Windows 10, Microsoft Updates.
Desktop End of Life Hardware	End user terminals, thin client, PCs and laptops are now 7 years or more old.
Office 365	ICT services as a fully cloud based desktop with Office 365 and Outlook.
Storage	Extend the now successful pilot of Box cloud storage across the enterprise.
Stored IQ File Analysis	Deploy Stored IQ to analyse and rationalise the 10 tb shared file systems in use.
Single Sign On	Extend the now successful trial of Okta SSO beyond the use of Box.
Telephony Delivery	Continuation of the existing telephony roll out project and related services.
Mobile Working	Continuation of the existing rollout and upgrade of laptops and iPads.
PSN Compliance Upgrades	Series of network upgrades to bring the full CBC network into compliance with PSN.
LAN Edge Switch Upgrades	The majority of all LAN Edge Switches are between 7 and 12 years of age.
Citrix Stabilisation	Engineering work to continue the upgrade and rectification of the existing Citrix.
SAP Compliance Work	Provide minimum services to bring the existing SAP installation into compliance.

The above Work List is for activities within ICT being handled as internal developments, Proofs of Concept. As and when confirmed, the technologies will be integrated into wider Council Operations.