

# snapshot

## introduction

Welcome to "Snapshot", the IT service desk's occasional internal newsletter. This side contains snippets about things we've done in 2010. On the other side, there's more in depth coverage of the Cardiff office fit out and our infrastructure design capability – a great up-sell opportunity for many of our projects that could help us to win more deals and make more money.

## highlights

2010

Jan

Feb

Mar

Apr

May

June

July

Aug

Sept

Oct

Nov

Dec

Bristol core switches replaced to improve everyone's connection speed (and reliability) to the central file system.

"Heather" and "Percy" remote working solutions released giving staff the ability to work from home and improving laptop user connection.

January 2010

"Tracy", our iPhone solution, released to first four users.

"Dick" solution released to enable people to "hot-desk" more easily between offices.

April 2010

New Bristol server room infrastructure commissioned and file servers moved across.

June 2010

Heather v3 and Percy v3 released making full use of new higher speed links.

October 2010

Bristol, Cardiff and London WAN connections upgraded to 25Mbps, over 10 times faster than the old links.

Abu Dhabi WAN link commissioned.

75% of Bristol servers now moved across to new infrastructure.

BCM pilot rolled out to Manchester office.

August 2010

Just one server remaining to move to new infrastructure.

Powerwise pilot commenced reducing our power consumption, enabling home workers to remotely start their PCs and virus scans to be run overnight.

Adobe CS5 rolled out giving Cardiff, London and Bristol offices access to a central pool of remote graphics systems which run seamlessly alongside other desktop applications.

December 2010 into January 2011

Cardiff office opened delivering ultra-high speed connectivity to every desktop from high availability, low power consumption new IT core infrastructure. The transition was completed with no unplanned reduction in availability.

November 2010

## three important things

The three most important things for IT Systems are...

**Availability** – They must work! "Availability" is the measure of systems not being broken down when people need them.

**Performance** – they must be the correct capacity to do the job that's asked of them. As an architectural practice, we have lots of very large drawings so we always have to think about scale, both in terms of storage space and interconnection speeds.

**Usability** – at the end of the day, if a system doesn't do what people want or is too cumbersome then people won't use it.

The new infrastructure in Bristol and Cardiff has dramatically increased availability as well as improving performance and reducing operating costs. In January 2010, we experienced a whopping 35 incidents on the old servers! In contrast, the new servers in Cardiff and Bristol have delivered 100% availability since their installation.

# treglown court: a blueprint for IT projects

# focus

## A successful project

The new Cardiff office gave the IT service desk an opportunity to use its skills and experience on a new- build project.

Staff moved out of the old office on Friday and were working on an entirely new IT infrastructure in the new office the following Monday.

The final design will serve as a blueprint for our other offices in future.

*“Staff moved out of the old office on Friday and were working on an entirely new IT infrastructure in the new office the following Monday”*

## Early involvement

The key to the success of the Treglown Court infrastructure was as much to do with the project processes and approach as it was to do with the technical design.

We were determined that the solution must be driven by the needs of the business so we put a lot of effort into drawing up a good IT project brief to start with and getting involved with the architectural team as early as possible.

## Common business requirements

The configurable meeting room arrangement in the Cardiff office is an example where the same business requirements drove both the building design and the IT infrastructure design. The resultant IT design includes a single switch that reflects the state of the removable wall. With the switch in the “wall in place” position, the two computer points and floor-boxes are each configured to drive their own local display; with the switch in the “wall removed” position, a single computer broadcasts the same thing to all displays and the OHP.

To retrospectively install a solution like this would be costly and disruptive so involving the IT team early in the design saved money as well as delivering an optimal solution.

## Server room design

Another area of close collaboration between the IT- and architect- teams was in the design of the server room. We designed the layout of the server rack to make most efficient use of its specific environment and minimise the amount of cooling we needed. By knowing how the overall building would be used, it meant that we could size the systems and specify how much heat the IT systems would generate.

The Server room power consumption was optimised by designing a “virtualised” environment where many server functions run on the same physical hardware. To ensure that the systems deliver very high availability, all components of the infrastructure have been designed with redundancy and automatic failover.

## Microwave communication link

External communication (data and telephony) to the building is delivered via a fast microwave link to a dish on the roof. We were able to commission and test this at the old Cardiff office then simply redirect the signal to the new office on “move day.”

This meant that the changeover went really smoothly... quite a rare occurrence where external communication links are involved!

## A great up-sell opportunity

The experience we gained from the Cardiff office project could be very relevant to many of our architectural projects of the future as the “technological infrastructure” of buildings increasingly becomes an integral part of the design. The days of leaving a few ducts for dropping Cat5 cables into as an afterthought at the end of the project will rapidly disappear as things such as building-wide messaging systems, web enabled appliances and sophisticated environmental control systems become more prevalent.

*“We have a unique in-house capability to design and implement business-driven IT infrastructure alongside other aspects of architectural design”*



Next time you are tendering for a building, remember that we have a unique in-house capability to design and implement business-driven IT infrastructure alongside other aspects of architectural design. Our customers can benefit from an integrated approach to building- and IT infrastructure- design (and we can benefit from a unique proposition and an additional revenue stream).