

CASE STUDY



South Norfolk seeks counsel from Keysource for new Disaster Recovery facility

Keysource computer room design and build services employed in public sector to ensure continuity of online services to 114,000 local people.

Although a relative newcomer to networked IT, South Norfolk Council takes a progressive attitude towards the subject. Having implemented email access for its staff just over five years ago, the Council now provides remote and wireless access for staff and is in the early stages of planning the deployment of wireless hotspots throughout the district.

At the same time, South Norfolk Council's computer room has grown well beyond its humble beginnings as a small data closet. The facility, which now houses over 50 servers plus associated communications and storage equipment, is also at the heart of much of the Council's service provision to the 114,000 citizens who live in the area.

As Colin Wilson, IT Project Manager at South Norfolk Council puts it; "IT investment has risen dramatically over the last five years. Citizens expect to be able to obtain information from the Council online as well as communicate about diverse subjects ranging from planning and development to housing benefit and environmental services. So in every sense, IT is mission critical as well as being central to our objective to raise our standards from good to excellent."

"We treat it all very seriously because if the system is down there are potentially a whole range of consequences. On the one hand someone may suffer the inconvenience of not being able to submit a planning application online, while on the other the next person might not receive a benefits payment which in turn could affect their ability to pay a utilities bill or even feed their family. So we need to be absolutely sure of what we call 'continuity of services'."

The challenge

To design and build a complete data centre to provide Disaster Recovery facilities and improve continuity of online services.

The solution

- 40kW APC Silcon UPS
- CRAC units
- Fully integrated and automated security access and monitoring system
- Environmental monitoring
- FM 200 fire suppression system

The customer says



"Keysource provide good value for money. I'm delighted that we've ended up with the facility that we wanted within the budget that we had allocated – with no compromises!"

Colin Wilson

Colin Wilson, Project Manager, South Norfolk Council





Building improved service continuity

Up until one year ago Colin Wilson had been in a European project management role for Dupont, a global leader in innovation and manufacturing. On joining South Norfolk Council he was handed several major projects by the Head of e-Government, one of which was to increase the resilience of the IT infrastructure, and therefore the continuity of services, by implementing a new and purpose-built Disaster Recovery (DR) facility.

According to Wilson he was given a budget to work within, but a free rein beyond that. However, the organisation has rules regarding financial governance in addition to being under the watchful eye of the Audit Commission. It was therefore clear that amongst other objectives, Wilson would need to demonstrate real value for money with the new facility.

He identified a building to house the new facility on the Council's Long Stratton campus and then set about finding a partner for the project. This being his first experience of building a data centre, Wilson quickly decided that it was in the interests of South Norfolk Council to bring in a partner that could add value by bringing essential know-how to the table. His first step was to do some desk research.

Finding an ideal partner in Keysource

"I found Keysource via their website." Says Wilson. "The company's excellent credentials were supported by testimonials from some large, household names. But I was just as interested in the fact that Keysource provide a turnkey computer room

design and build service and that they already had experience working with public sector organisations."

"The company was very responsive and they were quickly able to turn around a layout for the room so that we could see how the space within the facility could be utilised. This was very useful to us in writing a specification for the tender. We had decided to take the opportunity presented by this new facility to do some consolidation of the servers. We're also planning the introduction of a SAN, so we wanted to ensure that we got the physical layer sorted out, with sufficient power and cooling to support a high density load. Additionally we wanted to build in a good amount of autonomy, around 30 minutes runtime was suggested."

"I was pleased that after all their valuable advice at the planning stage, Keysource also proved that they are able to deliver good value by making a successful bid for the work through the tender process. And I'm delighted that we've ended up with the facility that we wanted within the budget that we had allocated – with no compromises!"

Room for growth

"Our new DR facility incorporates a raised access floor and houses 8x equipment racks, 2x floor standing computer room air conditioning (CRAC) units plus a 40kW APC Silicon uninterruptible power supply (UPS). The facility is fairly tight on headroom, but Keysource designed it so that it could accommodate both the raised floor and full height racks from Dell and HP. The racks are set out in a hot aisle/cool aisle arrangement to optimise airflow through the room."

"Since the room is designed to be unmanned for the majority of time, it

also incorporates controlled access and an intruder alarm. The room also benefits from environmental monitoring and an FM200 waterless fire suppression system. All of which means that it fulfils the specification that we set, that is that it would be able to protect itself from environmental events and intrusion."

Wilson concludes "Keysource worked within our budget to provide the right design to meet our needs. We now have a DR facility which will eventually mirror our main data centre with synchronous replication, we also have first rate datacentre capacity which we are considering making available to other organisations in the area."

Pictures:

1. South Norfolk Council headquarters.
2. Cold aisle with 19" Dell server racks.
3. N + 1 air conditioning system with caged condenser units.
4. Dual 16 Amp under-floor commando sockets.
5. FM200 fire suppression system.
6. APC Silicon 40kW UPS with external bypass.



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