



4D Data Centres Ltd

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Secure Data Centre Services

Keeping your Business Warm in the Big Freeze

4D Data Centre's Matt Harris describes how 4D has kept its clients' businesses up and running during the Big Freeze of January 2010.

For many people, unknowingly, their first lessons in business continuity planning will be through the Scouts or Girls Guides, whose motto is "Be Prepared". Like many companies that regularly review their risk register, we put in place a comprehensive range of business continuity planning scenarios throughout 2009 to deal with everything from third party industrial disputes, to the Swine Flu H1N1 virus mutating into a more virulent form.

Needless to say, extreme weather conditions is one of the key sections in our scenario portfolio and whilst many of the mitigating actions within the scenario are blindingly obvious, it is surprising just how many are ignored by some businesses until a severe disruption occurs to get serious – or in the case of the Big Freeze of January 2010, the snow came to stay.

Within two days of the January Big Freeze starting, the Daily Mail was estimating the cost to business in the UK at over £14 billion. Whilst this number is inevitably somewhat speculative, there is undoubtedly a huge cost to both big business and SME's that a prolonged cold-snap will have on day-to-day operation and sales.

Here are some of the things taken from our 'Heavy Snow' scenario:

- **Ensure continued availability of key staff to keep the business open.** Many businesses that rely on technical specialists draw upon these individuals from quite a wide catchment area. Commutes of an hour or more are not uncommon. That's fine when the trains are running or the roads are not iced-up but when the transport system comes to a halt, it shouldn't mean your business does as well. In some cases, where a physical presence, say, at an operations centre is imperative, then at least a proportion of the mission critical team should be living within a 10 to 15 minute travelling distance to the business. For many businesses however, a physical presence of specialists, whilst desirable is not essential for business continuity purposes if remote working can be put into action.
- **Put in place remote working arrangements in advance.** Many businesses now enable technical and other staff to access workplace computers and data through a Virtual Private Network (VPN) facility. Two things need to be validated before the business continuity arrangements are invoked: First, that the access arrangements are robust and reliable and people know how to use them. This can only be assured if you have periodic walk throughs and testing with the staff involved. Secondly, remote working facilities are only available if the infrastructure supporting them is also up and running. If the servers supporting the VPN are located at the company's own premises, something goes wrong and nobody can physically get in to fix the problem, business will be out of action for the duration of the crisis. Externally located fail over (disaster recovery) facilities have to be in place with dedicated remote hands support to put things right if the server or network fails.

- **Little things matter.** From an operational point of view, there should be a checklist of single points of failure. Most businesses focus on the big things that can go wrong, for example power supply or data loss but in the case of a prolonged period of sub-zero temperatures, it is the little things that can become business critical. For example, at 4D, as soon as it starts snowing, the front line support team have a checklist of tasks to be carried out within defined time limits. These include ensuring snow and ice is not allowed to accumulate on things such as computer room AC condenser units or power generator exhaust pipes. Whilst most businesses build redundancy into critical parts of its infrastructure, one thing that is often a single point of failure is the central heating plant. In many businesses, most people, other than the facilities manager, won't even know where the boiler is located. Whilst going for N+1 on a central heating boiler may be a possibility, a cheaper alternative will be a stock of electric heaters as a fall back for the staff that can make it into the business. But don't wait until the next big freeze. Stocks of electric heaters had pretty much sold out across the UK by the fourth day after the start of the January 2010 cold snap.
- **Prepare for lock-down.** As with 4D's scenario for H1N1 mutation, extreme weather conditions could mean that staff cannot travel to or leave the data centre. Maintaining a stock of a week's non-perishable food and other provisions along with some folding beds and sleeping bags for use if it becomes essential for key staff to remain on site may prove to be a business saving investment.

Details of mitigating actions will vary from business to business but the crucial thing is to remember the Scouts motto. Plan in advance, document the plans, have multiple copies readily available in paper form and make sure that all items of necessary kit are held on site well before you need to invoke your contingency arrangements.

4D Data Centres is a privately owned, independent colocation provider based just inside the M25, South West London. Matt Harris was in the Scouts and can still remember how to tie a Fishermans Knot to this day.