

# Achieving the right mix of technology is the way to eliminate downtime

Given the competitive pressures in retail, no store operator can afford to have even a single branch going off line.

The costs are staggering. One estimate is that for every minute of downtime, retailers wave goodbye to £3,000, while Gartner analysts calculate that the average business loses £3,570 per minute when its networks are not working.

When hit by the collapse of its entire network, an organisation can be seriously damaged below the profit line. And for retailers, the harm extends to their reputation with consumers, who are likely to take their custom elsewhere if they cannot buy anything or at least browse online with their smart devices.

However, solutions are at hand, provided retailers avoid rickety technology that will not withstand the disasters that can strike any business.

For example, the installation of dual DSL landlines for the transmission of a store's data is often touted as a solution, but is not reliable in reality. If bad weather, flooding or fire hit the neighbourhood, both DSL lines will fail, as they will almost certainly be routed through the same exchange. A digger accidentally cutting cables is also likely to take out both lines at once.

The use of different landline carriers as backup offers no greater protection, while 3G and 4G mobile technology, although superficially attractive, is still insufficiently robust.

The hard-and-fast solution is to ensure that true alternative path backup technology is in place which will automatically operate when the chief terrestrial facilities go down, whatever the cause. By having independent broadband paths at every site, a retailer can boost network availability to near-100 per cent levels.

Truly independent backup can be achieved by partnering

low-cost broadband with wireless connectivity. In practice this means having an open mind about technology and using a range of solutions to create a hybrid WAN (Wide Area Network) including wireless and satellite. A managed services provider with established expertise in this field will select the right mix of technologies to ensure a fast and highly resilient backup system.

Failures in the network can be detected instantaneously by routers, so that traffic is automatically re-directed through the wireless connection in seconds.

Active monitoring of this type is crucial, as enterprise-level networks now have so many potential weak-points, including switches, point-of-sale equipment, laptops, desktops and even personal devices.

Networks of large retail organisations are also likely to be geographically dispersed, making satellite a commercially attractive form of failover, delivering high-speed broadband access automatically if landline broadband goes down. A satellite solution gives blanket coverage, operates from a simple roof-top antenna and routes all traffic according to the client's policies that are prepared in advance. Once terrestrial services are restored, traffic will automatically be re-routed through the primary connection.

The objective of providing the kinds of genuinely disparate backup technology solutions outlined above, is to achieve maximum availability at the lowest cost so that critical applications remain functioning no matter what. In an era of Cloud-based applications there can hardly be a more important aim.

The range of threats to a large retail organisation's network requires a range of responses. Truly reliable business continuity in the multi-channel era will only come from the expert deployment of this broad suite of technologies that is now available.

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