

IT, business continuity and disaster recovery

Jason Connolly, Next Generation IT director, examines the options available to businesses



Business continuity is a hot topic. We are finally seeing an increase in business activity, but budgets are still squeezed, and organisations' focus is on supporting growing business, and improving the performance and flexibility of live systems. But external pressures, particularly increased regulatory scrutiny, are simultaneously increasing focus on

procedures, IT governance and security and particularly business continuity arrangements.

The problem with tape backups

Traditional tape backups are cost effective, but are ultimately the least reliable in terms of recovery time and data loss for disaster recovery. Backups are usually only taken each night, and in the event of a disaster, a second set of equipment must be procured before the lengthy restore process begins. In practice, this means that systems can take days to be recovered, and all changes or additions to the data, including e-mails and files, since the last good backup will be lost.

Replication to a disaster recovery site

This technology overcomes many of the shortcomings of backup tapes by copying the live data across a private link to a business recovery site. Typically, a duplicate of the IT infrastructure is setup at the DR site in case of invocation, and the data is replicated directly onto the DR hardware, so the systems are ready to go in the event of a disaster.

In our experience, this type of replication works well providing a fast failover of less than an hour, and very little or no data loss. This scenario has been common among many financial institutions, but is very expensive. It requires a complete duplicate set of hardware and licences on the DR site, plus the rental of seats at the DR facility and charges for the hosting of DR equipment, power usage and private circuit.

Virtual disaster recovery

Many organisations cannot afford to purchase a duplicate set of hardware and software, but local regulatory requirements mean that finance businesses still need some type of off-site recovery plan. To enable local businesses to comply with this requirement in a cost-effective manner, we offer a virtual DR recovery service where we provide space on NGIT's hosted system for backup images. The client's system is backed up to portable hard drives so that in the unlikely event of a disaster, data can be restored from the backup tape in a timely manner. This is a fraction of the cost of purchasing a duplicate of server hardware and software for DR.

Cloud-based systems

A growing number of businesses are outsourcing their IT to local cloud providers. In this case businesses need only an internet connection and PCs, laptops or tablet devices to connect, and need no server equipment in their office. This provides a great deal of mobility, and in the event of a power cut, fire or water leak, their staff can continue to work freely from home, cafe with wi-fi, or temporary office.

This effectively moves the issue to the cloud service providers, who invest heavily in creating a safe, secure, and resilient environment in which to host the equipment. For instance, NGIT's 'Office Anywhere' service is hosted in a Guernsey-based datacentre with multiple generators, internet connections, power feeds, advanced fire detection, fire suppression, environmental monitoring, flood prevention, CCTV, security guard and 24/7 monitoring.

Business recovery suites

Demand for business recovery suites has increased and we have invested in a 5,000sq ft business recovery facility in St Peter Port, with smaller ready-to-move in suites in the event of a disaster. This allows a company to have a base for key staff with other staff members accessing the DR systems remotely from any internet-connected PC.

Highly available systems

In our experience, 99% of all disasters are as a result of hardware failure. The best solution is usually to create a highly available infrastructure in the live environment. This is the ultimate in business continuity, providing a clustered live system with two active-active nodes. Either of the two nodes can fail, and the second will continue operating almost seamlessly to the end user, who can continue working with no loss of data.

This type of system has the added advantages of load balancing of resources across the duplicate systems, providing improved performance and flexibility, in addition to business continuity.

Focusing your investment

As most disaster recovery events relate to the failure of IT hardware rather than more serious disasters, focusing investment in the live systems provides the best value for money, enabling the budget for DR systems to be used in the live environment to increase performance and resilience.

The key balance is to maximise the performance, flexibility and reliability of the system, while providing the best value for capex and minimising ongoing support costs.