INFRASTRUCTURE AS A SERVICE

Jason Connolly from Next Generation IT introduces the next evolution of cloud computing

Cloud computing has proved very popular with start-up and small businesses. Paying a monthly fee for all elements of IT helps with cash flow, allowing small businesses to keep expenses to a minimum, and provides a highly scalable system that can quickly grow with their business. Also smaller businesses generally need not employ specialist IT staff, instead partnering with IT service providers to buy in a complete end-to-end service.

In this way, Desktop as a Service (DaaS) suits small businesses providing flexibility to work from the office, at home or anywhere, but without needing onsite servers or in-house expertise. Backups, disaster recovery, antivirus, integration with mobile devices and remote access are all included in the service.

But DaaS can be expensive and inflexible for larger organisations. When an organisation is large enough to employ its own IT staff, it needs to retain control over its IT systems. Plus the complexity of larger businesses will lead to more customised and complex IT systems. Recognising this need, service providers have evolved their services to provide Infrastructure as a Service.

IaaS builds on the established cloud platform to provide a more scalable and controllable service. More recently, local businesses have provided IaaS in Channel Islands data centres and we are seeing a rapid uptake of this service.

What is Infrastructure-as-a-Service (IaaS)?

IaaS provides an end-to-end service in-cluding all elements of the back-end IT infrastructure on which businesses run their own dedicated virtual server environment, including:

Environment
Purpose-built data centre with multiple power supplies, generator and UPS cover, fire suppression, advanced fire detection, lightning and flood protection, multiple data feeds, physical access controls, intruder alarms, security guards and CCTV.

Systems
Enterprise grade clustered servers, storage area networks, resilient communications equipment, industry leading firewalls/security measures and multiple IP feeds.

Communications
Local fibre connections from client office to the data centre ensure low latency, guaranteed bandwidth, highest performance and reliability.

Service
A complete service incorporating all elements of infrastructure support and monitoring. In most cases service providers are ISAE or ISO certified with robust procedures to continuously monitor, maintain and update environment and systems.

Benefits of Infrastructure as a Service:
For larger organisations, Infrastructure as a Service provides advantages over an on-premise IT system and provides the following benefits:

Performance
Better scalability and flexibility

Can take advantage of highest performing equipment and IP feeds Great for local businesses with local fibre connections to Guernsey data centre

Risk
It reduces risks associated with hardware failure and increases security; guards against environmental issues, such as power outages; service can include back-up to a duplicate system at a second data centre; disaster recovery is simple, for example working from home or an internet cafe; and retaining more control for an in-house IT team.

Financial
Spreads cost of IT infrastructure and avoids large capital purchases; no need to buy and run servers on local site; no need for computer room and expensive air conditioning; can take advantage of service provider licensing (monthly fee as opposed to purchase).

Service
No need to support IT infrastructure in-house, for instance no need for tape back-ups

Continuous monitoring of systems and 24/7 support of infrastructure and environment

Lots of local expertise in the Channel Islands to support systems

Available from local service providers, IaaS spreads the cost of the supply of IT hardware, software and maintenance, ensures a consistently high-level of service and support and provides access to advanced services usually only available to larger enterprises.