

# How converged infrastructure can help your business

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Technology might be the lifeblood of modern business operations, but there is just one problem – the demand for new software and services creates huge pressure on hardware resources. To meet these requirements, many businesses simply throw more money at more tin.

While additional servers, storage and network capacity can provide a short-term answer, it restricts long-term flexibility and provides a poor solution to the future challenges that most organisations will face. To really future proof the business, smart IT leaders are considering how a move to a converged infrastructure can create a platform for the efficient use of technology resources.

Researcher IDC estimates that the popularity of convergence is such that global spending on the approach will reach \$17.8bn in 2016. But what is converged infrastructure, and how can it produce benefits for your business, both now and in the future?

## What is converged infrastructure?

To gain an understanding of the business need for converged infrastructure, it makes sense to consider the traditional method of provisioning IT. Different vendors sell different products to businesses as solutions to the technology challenges an organisation faces.

In most enterprises, IT managers for particular areas – such as servers, storage and networks – are responsible for buying spot solutions from vendors. And what can often emerge at the end-user's business is a collection of disparate elements from a broad range of suppliers that are purchased to meet specific organisational objectives.

Senior technology executives must then take the strain and integrate these various infrastructural elements. It can be a time-consuming and thankless task. "Given the way that IT infrastructure develops, these companies are working on a project by project basis," says Steve Lewis, technology sales director for HDS across UK and Ireland.

"This leads to lots of different solutions and silos, which means that the customer ends up with a fairly complex infrastructure that's actually quite costly to run." Lewis quotes estimates from researcher IDC, which suggests most organisations spend about 80 per cent of their IT budgets today simply keeping the lights on.

## How can my business benefit from a converged approach?

There must be a better way to run technology, especially in the digitally enabled era of on-demand IT. The answer, suggests Lewis, is converged infrastructure. By creating an integrated approach to systems deployment, CIOs and their business peers can reduce the strain and create a consistent platform for business growth.

"The customer can now push back on a vendor of their choice and ask them to do the integration work and make sure all the different elements work together," says Lewis. "Instead of going to different vendors for servers, storage and networking, they can go to one supplier who provides all the various elements as an integrated solution."

A combined approach to technology, and a move away from stovepipes of information, is not the only benefit of a converged infrastructure. By working with a single supplier, customers also have access to a one-stop-shop for support services across the various infrastructure elements.

Bespoke approaches that draw on a variety of vendors require a high degree of maintenance. In the short-term, converged infrastructure can be deployed quickly because the supplier will have already undertaken much of the integration work. In the long-term, convergence helps reduce complexity, as a single supplier is responsible for IT testing, configuration and updates.

## What is the HDS approach to converged infrastructure?

Many vendors and suppliers now offer a single stack to help IT managers deal with the complexity of managing modern infrastructure. HDS offers a converged platform, known as the Unified Compute Platform (UCP). The approach uses Hitachi servers and storage, and draws on best-in-class resources for other elements, including either Cisco or Brocade for networking, and Brocade for the fibre channel storage area network.

HDS brings all those elements together and focuses on created validated approaches for four different types of stack: VMware, Hyper-V, Oracle and SAP HANA. For VMware and Hyper-V stacks, HDS has developed specialist orchestration, known as UCP Director.

The software makes it easier for end-users to provision and use IT resources. All services can be provisioned through either VMware's management portal vCenter or System Center Virtual Machine Manager, depending on the preferences of the IT organisation.

"The administrator doesn't need to know anything about the tools running beneath that system," says Lewis. "A business can provision a service, including the virtual processing, storage and networking through a single interface. And that is a real benefit for customers."

HDS also has a long-term heritage in terms of the development of mainframe technology. Part of that development process includes Logical Partitioning (LPAR), which HDS includes within its unified compute stack. LPAR allows end-users to bring together a range of blades to create a single and more powerful processing unit, which is great for dealing with big Oracles databases and heavy SAP HANA workloads.

## What is the future of converged infrastructure?

IDC expects adoption to increase, with almost half of businesses (44 per cent) expecting to move towards a converged infrastructure through 2016. The reason for such growth is simple – convergence provides a cost effective and efficient way to deal with the complexity of managing and deploying IT resources. More crucially, a converged stack provides a future proofed platform for the digital transformation.

"Most customers today want to move towards the benefits of cloud computing – and most of that relates to flexibility, agility and cost effectiveness of on-demand IT," says Lewis. "A converged infrastructure stack is a key building block in terms of creating those multi-tenanted and virtual data centres of the future. "

Convergence is not just a method for dealing with changing infrastructure and cloud computing demands. Lewis says HDS developments, in particular, provide a method to help customers deal with continued

developments around the leading edge of technology, such as social innovation and the Internet of Things.

"We're working very closely with our partners within the bigger Hitachi group and we're looking at creating specific vertical solutions that we can bring to market," says Lewis. "And the engine for those solutions is invariably going to be converged infrastructure. From our point of view, converged infrastructure is a strategic building block towards the future of enterprise IT."

## References

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