Software defined infrastructure – the catalyst and the platform for tomorrow's storage architectures



Software defined infrastructure will become the standard for future storage technology deployments.

Software defined is not a theory, it is practice build on a set of products and solutions which will deliver greater asset utilisation and resource management, better data management, more resilient environments and more flexible and agile storage.

SDI is both catalyst and platform. It is coming about at a time when IT is changing radically and SDI is helping drive that change. As investment cases shift from infrastructure to outcomes, the infrastructure portion must simplify. This simplification frees up resources and effort.

But despite the label of software defined, the right hardware remains a key component of delivering the benefits of these new types of environments.

At a recent CBR Dining Club hosted by Hitachi Data Systems and held at the iconic Churchill Cabinet War rooms in the heart of London's Whitehall, the discussion centred around the benefits, the challenges and the opportunities of SDI.

Graeme Down, technical manager for HDS, detailed the products and solutions available from HDS based on its SDI portfolio announced in April this year.

This rapid move into SDI by Hitachi began with the launch of enterprise level product functionality for mid tier environments through the availability of its Hitachi Storage Virtualisation Operating System (which had been used for the high end Hitachi Virtual Storage

Platform) and which was now been extended to the mid range hardware platforms including to the Hitachi Unified Compute Platform.

Further additions in the VSP family, the G200, 400, 600 and 800 extend the options for virtualisation.

What the VSP offers is less complexity, greater agility and reduced operating cost through the capability to automate services such as high availability, tiering and storage virtualization.

Higher utilisation through management of assets is delivered through simplified administration. And at the application level and server virtualisation layers VSP provides faster deployment through built in integration with enterprise apps and virtualisation software.

Application environment provision and protection is automated thanks to the Hitachi Hyper Scale Out Platform.

Software defined infrastructure starts with automation. Much of the time spent on storage provision is on repetitive tasks. Expensive people doing necessary but low level tasks.

Hitachi Automation Director provides best-practice-based service templates for application-specific provisioning of storage resources to databases, applications and VDI environments.

Hitachi Infrastructure Director, is a storage configuration and management application, which streamlines management operations for the new models in the VSP family.

Hitachi Data Instance Director simplifies data protection through automation and orchestration of Hitachi storage-based snapshot, clone and replication technologies, in addition to live backup, continuous data protection and archive capabilities.

Successful migration is the key to Software Defined Infrastructure. Steven Lewis, CTO at Hitachi said:

"Consolidation is facilitated by the ability to virtualise, just as has been seen in the server market. NAS is everywhere but control is not at the levels it should be. Users need policies to automate the management of the data, to tier it properly so it sits on the most cost effective storage platform with automated services for back up and recovery based on the importance of the data. By automating as many processes as possible based on policy driven storage management users can rapidly realise the benefits of Software Defined Infrastructure."



