

Nominee: Safran Power UK/ Scale Computing

Supporting Vendor: Scale Computing

Nomination title: Safran Power UK's agile working with HC³

I: Business need: agile storage infrastructure

Safran Power UK, a specialist in aerospace power generation, has transformed the way it manages terabytes of data across its key US and UK sites. By implementing a virtualised infrastructure based on Scale Computing's HC3 product, which includes server, storage and virtualisation all in one appliance. The firm now has a highly available, flexible and scalable storage platform that is easy to use and is on course to cut system management costs.

A 600-strong, fast growth company, Safran Power UK became part of French parent Safran Corporation in 2013. Its design and testing work is leading-edge but was producing ever-growing amounts of critical data on an ageing system also having to handle standard company data. By using the HC3 platform, the company's IT team has achieved a step change away from tape storage to an easier-to-use, agile virtual storage infrastructure.

Background

Facing constant pressures for more agile business systems, the UK IT team, led by engineering & IT infrastructure manager Leonard Powers, took the opportunity afforded by its server lease expiry to audit its storage set-up and plan for high availability environments and scalable storage with reduced running costs.

Safran Power UK's storage infrastructure already handled tens of millions of PDFs, programming and multi-rich files across 750 workstations, 17 physical servers and 35 virtual machines. Running manual tape back-ups was time-consuming and outdated while only several days' data was typically retrievable.

For the IT department, a truly flexible infrastructure also meant the ability to split system data into smaller segments and carry out server updates by individual department; previous maintenance of the main UK cluster generally required weekend shut-downs.

Virtualised server and storage infrastructure

The IT audit review ruled out the main virtualisation vendors' options: one supplier's offer to match the existing storage set-up would demand excessive server space and separate infrastructure investments to add capacity; another provider offered promising storage expansion possibilities but the required system management would be too complex and licensing costs prohibitive.

The firm then examined Scale Computing's HC³ - a high-performing, virtualisation platform as an appliance, which combines servers, storage, and virtualisation infrastructure. Its converged design makes deployment of a highly available, scalable infrastructure as simple as looking after a single server. Through a web browser, in-house teams add additional compute or storage nodes to deploy

clusters within minutes, transforming its virtual machine environments as well as storage and back-up options.

The system was successfully implemented, equipping Safran Power UK with a low-risk and flexible approach to setting up and managing its huge data needs through a flexible virtualised infrastructure – an innovation that many observers might have assumed was beyond a mid-size UK firm.

II: Challenges overcome

The project's biggest challenge was overcoming internal perceptions. As Leonard Powers at Safran Power UK explained: "It was difficult for some people to grasp the capabilities of a relatively new brand but after demonstrations and testing, the IT team are genuinely taken aback at how easy HC³ is to use."

III: Innovative programme aspects

- IT department adds capacity flexibly – despite 'Terabyte' environments
- Agile operations based on improved application availability
- Repeat investments in added storage capacity and associated licensing averted
- 'Step change' virtualised infrastructure – for a mid-size firm with limited IT resource
- Transformed company colleagues' view of virtualisation, storage infrastructures and back-up

IV: Benefits: agile business operations

The HC³ platform is enabling the company to achieve agile business operations and risk-free expansion through four main operational benefits:

Flexibility

The new HC³ virtual infrastructure is revolutionising Safran Power UK's storage abilities and virtual machine management. Leonard Powers explains: "Servers, virtual machines and applications can be deployed in minutes and avoid the need for licensing hypervisors, purchasing a SAN, or buying physical servers that you'd normally encounter."

Scalability

The HC³ optimal infrastructure provides fully scalable storage options. Some 230TB of back-ups now take up only 3TB of disk space due to D2D backup and deduping implementation. The IT department recently implemented a virtual server and doubled available space, enabling designers to complete a critical task. Despite soaring system data, HC³'s elasticity means this is no longer a concern and IT can ultimately remove all physical servers.

Availability

The firm is successfully running its core in-house software applications for file data storage in virtualised environments. Since HC³'s converged design ensures applications and data fail over between system nodes, system availability is improved. The company is now planning to implement new customer databases to provide a portal for future customer purchases.

The IT team is better placed to plan for disaster recovery (DR); especially as it can now 'ring-fence' infrastructure areas for maintenance. 'Locked up' data is more accessible too: IT can roll back 30-40 days to retrieve deleted files as opposed to a couple of days' worth previously.

HC³ gives Safran Power UK the ability to deploy a new server in 30 minutes as opposed to 1.5-2 hours that it used to take in their original environment. Safran Power UK has been able to go into production with HC³ confidently with very little training (1 day) due to the ease of use. After only a day of training they were able to start building out and testing their new environment. With VMware there would have been at least a week's formal training plus the support of a storage expert before they could even start building out their new environment. HC³ has saved time and money due to its ease of use.

Reduced costs

The HC³ system is set to reduce system management costs. This is because the cost includes all system updates while the platform has much lower maintenance needs. Two key examples show the massive cost benefits:

First, Leonard Powers' team no longer needs to factor in repeat capacity purchases, maintenance and licensing. Scale Computing's analysis also indicates that some virtualisation platforms licensing costs grow to over 150% of the original system cost – these charges are eliminated with an HC3 platform, as it does not require additional licensing fees.

Secondly, the company's change to online back-up has slashed maintenance times. In the case of back-ups, where IT staff once struggled to keep up with managing tape drives, they are now achieving doing full back-up across the 35 servers every night. Of a nine strong UK IT team, only two people are now needed for infrastructure management.

V: Conclusion

Safran Power UK has a fully virtualised infrastructure to underpin truly agile business operations.

Why nominee should win:

Summary:

- Virtualisation - availability, scalability and flexibility
- Availability - HC³ has transformed Safran Power UK's business applications' availability
- Flexibility - Flexible addition of storage and compute capacity, avoiding costly infrastructure add-ons and licensing
- Scalability - Virtual servers and capacity now added in minutes
- Business agility - Fast-growing firm achieves virtual infrastructure and agile business systems
- Reduced running costs - HC³ cuts running costs by up to 75 per cent