



# RICHARD WARLEY

Outsourcing and managed services provider Savvis has deployed an array of virtualisation technologies to address growing customer demand for powerful and flexible server, storage, hosting and managed security infrastructures. *Adam Lawrence* finds out how the company pioneered this strategy

**A**voiding commoditisation is a major challenge for lots of businesses. When your product becomes a commodity – that is, when your offering is essentially the same as that of your competitors – then price becomes the only consistent differentiator. There are lots of markets and sectors that have become commoditised, and there are lots of companies within them that make a good living. But in general, offering a product or service that is qualitatively better than that of the competition, and thus able to command a premium price, is a more desirable business model than trying to survive as a lowest-cost operator.

Outsourcing and managed services provider Savvis is a good example of this model. Rather than simply selling capacity, Savvis' business model involves the use of advanced technology to deliver a more attractive outsourcing proposition to its customers, who include major financial institutions.

"Savvis was formed because of a specific set of problems related to managing IT infrastructure: expense, under-use, management difficulties and

unreliability," says Richard Warley, the company's MD of services in EMEA. "Our rationale is to solve those problems."

In a traditional outsourcing environment, the service provider effectively mimics an in-house data centre, allocating an appropriate number of servers for the customer's exclusive use. But this model, as Warley points out, does not address the fundamental issues of IT management. Both in terms of capacity and flexibility, dedicated servers make for an inefficient option. Sharing servers between customers, though, has in the past been an undesirable solution, seen as insecure.

"Utility computing is being able to call off capacity in the quantities you need to meet immediate business requirements," says Warley. "It's about flexibility of supply – you don't pay for what you don't use." Savvis' offering comprises two distinct flavours – network and hosting services.

The key to this offering is what the company terms a 'virtualised utility platform'. Using BladeFrame technology, developed by Egenera and marketed in EMEA by Fujitsu Siemens Computers, Savvis can share resources between its customers, improving utilisation and therefore cost-effectiveness. But from the customer's perspective, there are no compromises, whether of performance or security, from the adoption of virtualisation.

This is crucial for corporate efficiency. "IT infrastructure is expensive: any kind of server hardware or storage costs a great deal of money. Businesses spend tens of millions a year on IT equipment, and it's vital that they get the best performance for that investment," says Warley.

“Virtualisation gives huge benefits, and it’s not just about the financial advantages of sharing the cost of the box. Take load balancers, for example: if you have your own dedicated machines, you might buy a new box, put it into your rack, cable it up and wait between four to six weeks for it to start working. That’s not the case in a virtualised environment – we can literally have a new customer up and running within hours.”

Another key advantage of BladeFrame technology lies in backup. Because the identity of the server doesn’t lie within the individual frame, one redundant blade can be used to backup 23 separate blades – vastly more cost-effective than the one-to-one relationship that might be necessary otherwise.

“Infrastructure is under-used,” says Warley. “Surveys show that in a traditional data centre environment utilisation averages 40-50 per cent. Essentially you’re buying a piece of equipment but not using it all the time – a lot of its capacity is being

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left idle. In the virtualised world, with us as a service provider you’re dealing with a pool of resources that you can reallocate if they’re not being used – for example changing the use of a particular BladeFrame from day to night. One good example might be in investment banking – the server could be running a



trading application during day and batch applications such as settlement at night.”

When client/server technology took over from mainframe computing, it seemed to be a great leap forward in terms of making computing power available around enterprises. But recently the limitations of client/server have become clear. Mainframe was expensive, and only available to larger organisations, but it was highly reliable. Client/server, by comparison, seemed cheap and flexible, and users could get going quickly, but the larger a network became, the greater the problems of management. “You could quickly get to the stage where it was literally unmanageable,” says Warley. “Client/server can look like a Frankenstein environment – you don’t know who’s doing what.”

Virtualisation offers, potentially, the best of both worlds. “With the new virtualised world you have flexibility but from a management perspective it looks more like a mainframe – you have big boxes and single units to manage,” says Warley. “There’s a high level of standardisation of equipment, which is highly desirable: variation adds complexity and complexity adds cost. In a client/server environment you can have ‘four nines’ availability, but when you string together lots of equipment, availability goes down very quickly. Carrier class equipment has more inbuilt resilience – it fails less frequently. So a technology solution that allows easy access to equipment of this kind offers a better solution for user companies.”

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said they had it, but didn’t,” says Warley. “It’s an interesting dynamic for the big hardware providers – if you look at their revenue streams, you say ‘look, people are effectively buying twice as much as they need to – why don’t you come up with a clever way to fix it and reduce your revenue?’ There’s a lot of people talking the talk, but not many walking the walk.”

“We looked at all the ‘big name’ hardware vendors and I travelled to a couple of sites myself to see what they had,” says Savvis CTO Bryan Doerr. “What we found was that nothing in their current product set had the kind of virtualisation in practice we were looking for. And I haven’t seen a lot of change in that since then.”

Capacity on this virtualised utility services platform extends to all Savvis data centres worldwide.

Early adoption is paying off. Savvis reports that each year, more revenues and profits are generated from utility hosting contracts with business and government customers ranging from start-up entrepreneurs to the largest enterprises in the world, enabling Savvis to compete and win against traditional hosting providers and outsourcers.

Incorporating the BladeFrame technology into its utility computing platform has helped Savvis design next-generation computing architectures that are stateless, SAN-integrated and hot-swappable, reducing complexity and enabling the next wave of virtualisation technology.





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The Savvis model also enables clients to take advantage of shared hardware failover, eliminating the need to over-provision servers for high availability. According to Doerr, the most significant contribution BladeFrame has made to Savvis’ success is the freedom to innovate. “Initially, BladeFrame technology helped us design a product offering unparalleled in the industry. Egenera continues to be a key technology partner, helping keep us in an enviable competitive position.”

More than half of the virtual servers in the Savvis environment run Microsoft Windows along with a variety of other Microsoft technologies and mission-critical applications including Microsoft Internet Information Server, Microsoft SQL Server, Microsoft Exchange and Microsoft SharePoint Server. Combining Savvis’ Operational Support System (OSS), Egenera PAN Manager software and golden images of Microsoft Windows Server 2003 enables Savvis to provision Windows servers in minutes on a completely automated basis.

Recently, EasyBroker of the UK migrated its traditionally hosted Windows 2000 servers to virtualised Egenera servers running Windows 2003 in Savvis’ utility hosting environment. EasyBroker is using Savvis to provide server and storage hosting, leased line and Internet access. The migration was completed in a single weekend, while previously it would have taken two weeks just to install servers in the hosted datacentre. The move to Savvis’ virtualised infrastructure has also allowed the company to add and remove servers more quickly than in the past: Whenever EasyBroker requires a new blade, Savvis allocates virtual resources configured with an image of the Windows 2003 operating system. Hosting allows EasyBroker to add several new applications each year. Servers can also be taken offline when functionality is no longer required. [F](#)