FIRST STEPS TO THE CLOUD

Rebecca Lambert speaks to Ian Carlson at Microsoft to find out more about his company's private cloud offerings and how they are helping businesses get used to the new IT delivery and consumption models of cloud computing

Businesses are expected to take advantage of hybrid cloud models where they can use both public and private cloud to meet their needs

The cloud is shifting the way we think about computing. Offering unbounded scalability on a pay-per-use basis, for many businesses cloud computing means increased business agility, accelerated time-to-market, less upfront, capital expense and reduced IT overheads. But how should they take advantage of the cloud? Should they be using a public, private or hybrid environment? In previous issues of *Speak* we have explained what public cloud computing is all about and how customers are benefiting from the Windows Azure Platform. Here, Rebecca Lambert speaks to Ian Carlson, senior product manager in Microsoft's Windows Server and Virtualisation Product Management team, to find out why customers may choose a private cloud computing model and how Microsoft is helping them to build out a dedicated cloud environment to transform the way they manage their IT.

What are the main differences between public and private cloud computing?
At Microsoft, we view cloud computing as a new model to deliver and use IT services – one that helps to increase the focus of IT on what really matters to the business, resulting in increased business agility and improved IT economies. That being said, we describe the cloud by its core attributes; first is pooled resources, which is taking all of your compute, network and storage and building a shared pool. Second, it provides self-service capabilities, allowing people to access the IT resources they need, reducing the burden on the IT department. Third is the ability to be elastic, which is to scale up or down dynamically as resource needs change. Fourth is the ability to have a usage-based system, where the people using IT resources are paying only for what they use, when they need it. We feel this definition covers all the cloud computing delivery models, and private cloud has all the same benefits and attributes, with the additional control and customisation of resources that are dedicated to an individual customer. In comparison, a public cloud offering is built on IT resources shared by multiple organisations.

Why would some customers choose private over public cloud?
One of the factors that may govern a company's use of private over public is the desire to have some additional control and customisation of their cloud resources. Some examples include data sovereignty and regulations. Certain governments don't allow data to exist outside their countries, and with some public cloud offerings that may not be possible. In these cases, private clouds run by individual companies or hosted by a service provider can help meet these needs.

What benefits does a private cloud infrastructure specifically offer to retailers?
One scenario that highlights the value to retailers is around application elasticity. Retail companies often have high seasonal demand for their products and services. Through efficient resource pooling, which is a core tenant of cloud computing, corporate IT can scale based on that seasonal demand across a larger set of resources, and release them back into the pool for the next seasonal demand. The usage-based model is also applicable here, as it can help provide a better view into the true profitability of individual stores, or seasonal events.

What developments is Microsoft making in the private cloud computing space?
With the upcoming release of System Center 2012 we are bringing to market enhancements across the Microsoft private cloud solution, including new capabilities at the base layer for building IT resource pools across multiple hypervisors, as well as new models of self service that are tied into a structured set of IT processes. At the application layer, we have made investments in providing deep application insight, all the way to the code itself, which allows for faster time to resolution when applications are not performing as expected. We also just introduced an early pre-release of Windows Server 8, which will bring a broad range of new technologies for private cloud, including new enhancements in virtualisation, management and storage.

How will the release of System Center 2012 enhance the current Microsoft private cloud programmes and offerings?
We will be updating all of the Microsoft private cloud offerings to include the new System Center 2012 functionality. For example, the Microsoft Private Cloud Fast Track programme, which represents joint solutions from Microsoft and the key server providers, will be updated in the first half of 2012.

Once businesses are comfortable with a private cloud computing model, how easy is it for them to migrate to a public cloud infrastructure?
The ability to operate in a hybrid model is central to our approach to cloud computing. It is important for a business to get comfortable with the new IT delivery and consumption models of cloud computing. Implementing a private cloud is a great step towards public cloud computing. Getting the new processes in place, setting up the SLAs for self service, and transitioning to a usage-based model make for an easier transition to leveraging public cloud resources when that makes sense. At Microsoft, we believe that our customers will live in a hybrid model of cloud computing, where they will choose the combination of private and public cloud infrastructure that best fits their particular business. To enable this hybrid model, we have focused on providing a common set of identity, management, development and virtualisation technologies that span our private and public cloud offerings.

How will the role of cloud computing (both private and public) evolve over the years?
Applications will continue to evolve into full services that can be developed and used through the new cloud computing models, where private or public become deployment decisions based on business needs. Getting started with building a Microsoft private cloud provides a great foundation for getting your business into cloud computing. With the common management processes, identity, development frameworks and infrastructure solutions you are best positioned to take advantage of the new functionality that cloud computing models will continue to deliver both with private and public cloud offerings.

Private cloud: A perspective from BEDIN Shop Systems

Private cloud computing ultimately offers businesses the ability to manage their in-house IT resource in a more agile, flexible and efficient manner. While we have chosen to offer our retail solution suite aKite on a software as a service model built using Windows Azure, we are also aware that retailers still want to run some mission-critical solutions in house. For this reason, aKite comes with the ability to integrate with any ERP system or application on premise, allowing retailers to manage their operations in both a private and public environment. The advantage here is that they can gradually make the transition to the cloud on their terms while still benefiting from the innate scalability, flexibility and cost-effectiveness of the cloud computing model. As companies get used to this new way of managing IT, I believe the distinctions between public and private cloud will blur.

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