# CONNECTING WITH THE CLOUD

Private cloud deployments, where organisations create internal cloud resources for use solely by their own users are increasing.

ADOPTION OF CLOUD COMPUTING IN THE MIDDLE EAST IS FINALLY TAKING OFF, AS ORGANISATIONS LOOK TO PRIVATE CLOUD PROJECTS BASED ON THE FOUNDATIONS OF VIRTUALISED INFRASTRUCTURE TO DELIVER MORE FLEXIBLE AND MORE EFFICIENT COMPUTING RESOURCES TO THEIR BUSINESS USERS

BY KERI ALLAN

Abraham: Cost and scalability benefits are driving private cloud adoption.

W hen it comes to cloud technology, the landscape is changing across the Middle East. Organisations all over the GCC are seeing the significant inroads cloud is making globally, and are beginning to embrace it, with analysts expecting heavy uptake to take place over the next four years.

"Private cloud solutions will show strong growth driven by the benefits of cost and scalability," says Rajesh Abraham, director, Product Development, eHosting DataFort. "According to industry research, in 2013, cloud services in MENA are expected to grow rapidly in some countries, specifically Saudi Arabia (43%) and UAE (40%)."

For many enterprises, the solutions they're focusing on are around private cloud; in part due to a lack of public cloud providers but also security and data privacy concerns. Plus, with the fact that many enterprises in the Middle East have already embraced IT infrastructure virtualisation, they are well positioned to deploy private cloud.

"Companies are increasingly aware that private cloud technology goes beyond virtualisation, hence the adoption is starting to increase rapidly. The uptake of private cloud in the Middle East is 'patchy' however, which means that in each industry – such as oil and gas, healthcare, or finance - there are some organisations completely adopting private cloud technology, while others are still evaluating whether it is the best fit for them," notes Kevin Harris, enterprise technologist, Cloud Computing, at Dell EMEA Emerging Markets.

"This growing interest in cloud, especially private cloud, has contributed to the large-scale adoption of virtualisation we've seen across the UAE," adds Sony John, research manager for IT services at IDC Middle East, Africa, and Turkey. "However, only a handful of organisations have gone the full distance in terms of converting these highly virtualised environments to fully-fledged private cloud deployments. This is due to a variety of factors, including general misconceptions around the two concepts, and a lack of clarity on the benefits of going for a fully automated, fully metered private cloud."

Indeed there is some confusion as to what exactly a private cloud solution is, as Meera Kaul, managing director of Optimus highlights. Here she explains what a true private cloud environment should entail.

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Virtualisation is not private cloud, and uptake is not clear, says Kaul.

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Rao: Solutions to help companies roll out private cloud are coming to the fore.

"There is no actual data [on private cloud uptake] except claims by vendors that they have sold cloud solutions into the regional market. These are mostly instances of on-premise implementations of virtualised environments," she says.

"A virtual environment is not a cloud implementation unless it caters to a resource orchestration and automation layer on top of the virtualised environment. Most times, instances of cloud washing are claimed as instances of private cloud. However, these are mostly just highly architected virtualised environments that are not essentially cloud as they only cater to one specific characteristic of a private cloud infrastructure, vis scalability and high levels of utilisation.

"Self-provisioning by users, infinite capacity on demand, shared resources and pooled capacity and ability to pay for use with no commitment may not be present. In absence of these features, these deployments may not be classified as private cloud environments," she states.

Vendors will always aim to offer a variety of solutions in order to meet wider industry needs, so what are some of the main private cloud solutions on the market right now?

"GBM offers a private cloud solution based on IBM Smart-Cloud Foundation, which is a family of technologies designed to help organisations quickly adopt private cloud," says Pappu Rao TS & technical support services director, Gulf Business Machines.

"It enables virtualisation, consolidation, automation and management of service delivery. IBM dynamic scheduling and provisioning capabilities can deploy dozens of virtual machines in a few minutes. GBM also offers a private cloud solution based on VM-

## THREE STEPS TO SECURING YOUR CLOUD

**1. Define a cloud strategy with security in mind**
Identify the different workloads and how they need to interact. Which models are appropriate based on their security and trust requirements and the systems they need to interface to?

**2. Identify the security measures needed**
Using a framework allows teams to capture the measures that are needed in areas such as governance, architecture, applications and assurance.

**3. Enabling security for the cloud**
Understand the upfront set of assurance measures you will want to take, and assess that the applications, infrastructure and other elements meet your security requirements, as well as operational security measures.

Source: IBM

ware vCloud Suite. VMware vCloud Director leverages vSphere technology to deliver cloud computing. It supports a multi-tenant environment and provides a self-service portal to provision virtual resources including server, storage and networking."

eHosting DataFort's (eHDF) managed private cloud solutions are targeted towards medium to large enterprises looking at enhanced and dynamic utilisation of existing infrastructure/applications in terms of scalability, elasticity and faster time to market.

"In addition to facilitating shared resources and reduced investments on hardware, the services will allow companies to buy capacity-based options rather than making purchases based on set specifications — a key imperative for growing businesses as they move online and require rapid provisioning," says Abraham. "eHDF is responsible for implementing the first private cloud in the UAE to EMCOR Facilities Services, an integrated facilities management service, operation and maintenance solution provider in the Middle East, North Africa, and South Asia region. At present eHDF is hosting its main business application

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suite, the Oracle JD EnterpriseOne, which being a Tier-1 application required a competent technology delivery platform."

"EFS was looking to migrate to a model where investment was required only in core infrastructure, while the rest was shifted to a lease model. This strategy was essential as it allowed EFS to focus on future investments in people, processes and applications. In the project, one of the most important elements EFS benefited from was the service provider's strategy to deploy a qualified team for the project. EFS was able to consolidate infrastructure, integrate all disparate systems and create a centralised infrastructure model that embraces service oriented architecture, coupled with governance models and industry best practices, all encapsulated into a new high availability data centre to ensure business continuity of information technology," Abraham continues.

"In addition EFS has seen benefits including standardised business processes, data loss prevention, organisational wide
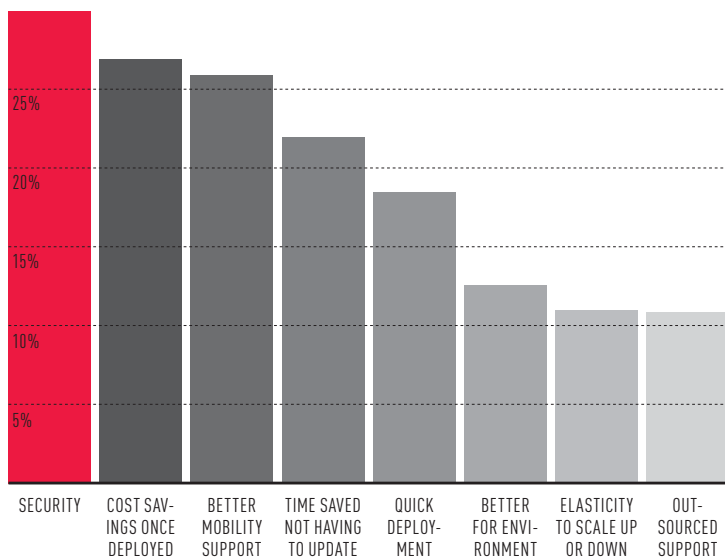
security, pro-activeness to client requirements and agile solutions, meeting SLA and compliance requirements, and automated backup to ensure data resiliency and redundancy."

Clearly a private cloud solution offers many benefits. It provides organisations with greater control and security, and at the same time gives them the required agility to manage changing business needs.

"Benefits Dell customers have seen include faster deployment, reduced risk and lower cost of ownership," notes Harris.

A private cloud solution also allows departments within an organisation or a group company in a conglomerate to provision IT computing as a self-service and charge for actual consumption. Here, the IT department managing the infrastructure realises benefits as well, including those of standardisation, governance and productivity.

"From an infrastructure perspective, private cloud is transforming dedicated and segregated IT computing power in an organisation into a standardised and shared pool of IT computing resources. This transformation is helping to create more efficient and effective utilisation practices," notes Rao. "It also increases flexibility, allowing IT teams to cater to dynamic, new workloads. Additionally, the benefits are coming from quick deployment of the underlying IT infrastructure at a fraction of the cost."

Although benefits to private cloud adoption are clear, vendors are continuing to work on the introduction of new technologies to enhance the performance, security and manageability of private cloud. They're also offering different solutions to suit different customer needs. For example, many are now offering more flexibility in creating an infrastructure to exceed the cost effectively of a virtualised infrastructure through higher workload density and greater resource utilisation. Then there's the introduction of hourly metering and charging of the resources, which helps users to pay only for the duration of the usage.

"Vendors are now focusing on delivering customised solutions where the key differentiator is the continued abstraction of computing resources from infrastructure and the machines (virtual or otherwise) used to deliver those resources. Only by delivering this abstraction can customers achieve the benefits of private cloud — including improved agility and responsiveness, reduced total cost of ownership, and increased business alignment and focus," Kaul concludes. ■

## BENEFITS OF CLOUD

A survey of 700 IT professionals conducted by Toluna and Qumu identified the following benefits of cloud computing:

| SECURITY | COST SAVINGS ONCE DEPLOYED | BETTER MOBILITY SUPPORT | TIME SAVED NOT HAVING TO UPDATE | QUICK DEPLOYMENT | BETTER FOR ENVIRONMENT | ELASTICITY TO SCALE UP OR DOWN | OUTSOURCED SUPPORT |

(Chart y-axis: 5%, 10%, 15%, 20%, 25%)