

Heads in the cloud



► (left to right) Fadi Kanafani at NetApp; Mohammed Abukhater, FireEye; Ossama Eldeeb, VMware and Ray Kafity, Attivo Networks.

Adoption of a cloud infrastructure provides an affordable, efficient and agile environment for business processes, turning data from a burden into an asset, and more and more organisations in the region are making the transition. By Pippa Sanderson.

According to Gartner, the public cloud services market in the Middle East and North Africa (MENA) region is projected to grow 22.2 per cent in 2017 to \$1.2billion, up from \$956 million in 2016. In addition, the fifth annual Cisco Global Cloud Index (2014–19) forecasts that Middle East and Africa cloud traffic will more than quadruple by the end of 2019. Not only that, by 2019, a total of 83 per cent of all MEA datacentre traffic will come from the cloud. From a regional perspective, the report found that the MEA is expected to have the highest cloud traffic growth rate of 41 per cent by 2019.

Cloud computing is quickly becoming the standard way for technology companies to access IT infrastructure, software and hardware resources. The

technology enables companies to be able to use applications and other resources managed by third-party companies that are stored in high-end server computers and networks. “Cloud adoption, in general, has definitely seen an increased uptake in the Middle East as more businesses are gaining confidence in both the security and reliability of the cloud,” says Shadi Salama, Channel Leader – Middle East, Cisco.

According to Jeroen Schlosser, Managing Director of Equinix MENA, “Every cloud journey is unique. From scoping out the initial requirements, all the way to managing the mix of applications and services on which the business depends. Today, businesses can be found at every stage of this journey, with some just getting started and others completely invested.”

Cloud computing can be undertaken in three main ways: private, public and hybrid.

- **Private cloud:** Private cloud resources are shared among internal departments and users, allowing them to self-provision and scale hardware or software resources as needed. Private clouds are not ‘open to the public’ and are protected within a closed environment.
- **Public cloud:** A public cloud is an on-demand IT service in which computing resources are delivered over the Internet by an external cloud service provider. These resources, including Software as a Service (SaaS), Platform as a Service (PaaS)

and Infrastructure as a Service (IaaS) are shared among the service providers' customers.

- **Hybrid cloud:** Hybrid clouds combine public and private clouds to deliver a specific IT service or services. Organisations may want to run an application entirely or partially in the public cloud, but keep their sensitive data in a more secure private cloud. Or they may run an application internally, but 'burst' it out automatically to a public cloud during peak demand periods when more computing power is needed.

There's also multi-cloud, which describes public and/or private cloud

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► Sachin Bhardwaj, eHosting DataFort.

services used to deliver a single enterprise service, such as big data analysis or applications with multiple interactive components.

There are advantages and disadvantages with each approach. For example: the private cloud is customisable, has excellent network performance and is secure while, on the negative side, it can be expensive. Shadi Salama from Cisco says: "At scale, a private cloud offers the efficiency and agility of a public cloud without the loss of control."

And what of the public cloud? Samih Moussly, Channel & Alliance Manager, MENA at ServiceNow, adds, "The public cloud is easy to deploy and can be rapidly scaled as per business and budget requirements. The pay-as-you-go model is budget friendly and converts CapEx to more manageable OpEx as the management, upgrade and security of the cloud are all responsibilities of the service providers, which also eases the workload on the in-house IT team." Sachin Bhardwaj, Director Marketing & Business Development, eHosting DataFort, agrees. "The popularity of the pay-as-you-go model in the Middle East is one of the drivers towards cloud adoption."

As rosy as this all seems, however, there are disadvantages. "The one drawback of the public cloud," says Samih Moussly at ServiceNow, "is privacy and compliance. For Middle East organisations, particularly those in sectors where data privacy is of utmost importance such as the financial, healthcare and government sectors, regulations might restrict the use of public cloud services. Another, albeit lesser concern around the public cloud is the possibility of latency and congestion in remote areas, which could lead to degradation of performance." Fadi Kanafani, Regional Director for the Middle East and Africa at NetApp, adds: "Public cloud resources are agile but data is not. Moving data is time consuming and can require significant bandwidth, which

can be expensive. Additionally, the data formats and services used by the public cloud provider might be incompatible with those deployed at the customer's on-premises storage."

Hybrid cloud: the best or worst of both worlds?

On the positive side of hybrid cloud



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computing, sensitive information can be stored in the private cloud, while non-sensitive information can reside in the public cloud. The hybrid cloud is flexible, scalable, cheaper than the private cloud and has better security than the public cloud. On the negative side, the hybrid cloud is more expensive than the public cloud and less secure than the private cloud. Maintenance and operation can be a challenge and, if not deployed correctly, services can experience poor performance. Shadi Salama from Cisco says: "The hybrid cloud is expected to become the norm for most enterprises. It has the advantage of moderate initial investment while having the opportunity to use SaaS, PaaS or IaaS on demand. It offers more control, where the risks are directly related to how the user is using it."

"By using a hybrid cloud approach," adds Jeroen Schlosser at Equinix, "companies can maintain control of an internally managed private cloud while relying on the public cloud as needed. For instance, during peak periods, individual applications, or portions of applications, can be migrated to the public cloud. This will also be beneficial during predictable outages: hurricane warnings, scheduled maintenance windows and rolling brown/blackouts, for example." And Fadi Kanafani at NetApp adds: "The ideal hybrid cloud is an IT environment where everything can be managed under a single canopy and data can flow freely to where it's needed the most."

The challenges to cloud adoption

There are several challenges currently facing the channel, including security, compliance and data sovereignty, cloud management, costs, education and staff with the right skill set.

Security: "There is still this misconception that the cloud isn't as secure as an on-premises solution," says Samih Moussly at ServiceNow. "The truth is that the cloud is probably more secure

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► Jeroen Schlosser, Equinix MENA.

than most organisations for the simple fact that cloud service providers cannot afford to have their systems breached; the loss of revenue, not to mention damage, to their brand would be catastrophic. As a result, these providers invest heavily in security and have robust, highly skilled security teams with best-in-breed security solutions." Ray Kafity, Vice President, Middle East, Turkey & Africa (META) at Attivo Networks adds: "Businesses are adopting cloud computing at an

increasing pace and some of the greatest benefits include being relieved of some security responsibilities, such as managing the physical security of datacentres. Unfortunately, the same threats that plague on-premises devices and systems are just as problematic in the cloud. Cloud service providers offer a range of security controls to help protect the confidentiality, integrity and availability of applications, data and devices. This shared security model is necessary, but it is not sufficient to address sophisticated, advanced, persistent threats. There are also significant limitations in the choices of detection technology that can detect the lateral movement of threats within a cloud environment. This can result in increased dwell time available to attackers, providing the necessary time for attackers to plot out their attacks and complete their breaches, all too often unnoticed. A lack of in-network threat visibility, along with the inability to maintain regulatory compliance when using the cloud and the difficulty in monitoring workloads across clouds, are among the major challenges that highly influence the rate of cloud adoption."

Security breaches are typically at 'joints' formed during the integration of different services, or at end-points within the business, such as machinery, computers and smartphones for example. "If the customer is not able or aware enough to fully secure all possible joints and end-points, this could provide the entry point for attacks that can have significant impact on the business and its future," says Mohammed Abukhater, Regional Director for the Middle East and Africa at FireEye. "It is crucial for organisations and individuals adopting a cloud infrastructure to identify all the security threats, understand them and lay out a strong security foundation before implementation."

Compliance and data sovereignty:

Samih Moussly at ServiceNow believes that "partners can play a vital role by



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helping enterprises with data profiling to determine exactly what data needs to stay on-premises and what data can potentially be moved to the cloud. Cloud solution providers are also now capable of offering solutions for decrypting data before it leaves a customer's premises, giving the organisation full control to decide, based on the data classification assessment, what is to remain in its datacentre and what can be put in the cloud."

Cloud management: Samih Moussly at ServiceNow adds: "One of the big reasons organisations choose to move to the cloud is to take advantage of the elasticity and scalability it offers. That being said, provisioning cloud resources too quickly can lead to virtual machine (VM) sprawl,

unmanaged resources and out of control costs, which can be counterproductive. Here again, partners can step in and add value by offering enterprises cloud management solutions." Fadi Kanafani at NetApp adds: "Channel partners can manage the technology in a better way if they automate processes rather than manually managing them. This will reduce the time and resource allocation required to ensure effective data management."

Costs: Some of the challenges faced by channel partners in the region include the cost of infrastructure. "The initial costs of setting up are sometimes high due to the investment required in building the right infrastructure to serve the market," says Fadi Kanafani at NetApp.

Education: Another challenge is keeping up with changes in the latest technology, stiff competition from other partners and tight customer budgets. "Partners need to educate customers that cloud solutions, combined with business mobility, will be the

biggest differentiator for their business," says Ossama Eldeeb, Senior Manager, MENA Partner Organization, VMware. Dr Hichem Maya, Head of Industries, SAP MENA echoes this sentiment: "The main challenge for the Middle East is educating customers on how cloud solutions can help to drive innovation, optimise costs, simplify IT infrastructure and free up IT staff to bring products to market faster."

Skill set: According to Vibhu Kapoor, Director – Alliances & Channel Ecosystem, India, Middle East & Africa at Infor, "The biggest obstacle that the cloud industry is facing is the availability of skilled resources who can undertake the

deployment of applications on the cloud. The cloud comes with its own nuances and intricacies that only a trained and experienced consultant can appreciate. For example, the architecture of a cloud solution is different from that of an

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on-premises version." Jeroen Schlosser at Equinix concurs: "Channel partners who will flourish in the changing market are those that will embrace the cloud by pivoting from an outdated resell model to embrace a new role as active, strategic advisers to their customers. This means channel providers need to focus on staffing their organisations with highly experienced cloud experts, who are uniquely qualified to offer the consultative services end users will increasingly expect

from the channel. Now more than ever, it's important for channel providers to establish strong and successful relationships with vendors."

Training and development

Although channel partners are aware of the various cloud solutions available to them, training and development remains vital because of the rapid pace at which the industry and technology is changing. Vibhu Kapoor at Infor, says: "Ongoing training and education to improve channel partners' knowledge is more important than ever." A sentiment echoed by Fadi Kanafani at NetApp, who adds: "In our ever-evolving world, our channel partners are sometimes faced with solving new and complex customer IT challenges. As a result, partners are reinventing themselves and looking for effective ways of addressing client requests."

Reinvention seems to be key; for example, Jeroen Schlosser at Equinix says: "Channel partners are seeing their businesses disrupted as cloud computing takes much of the installation expertise required out of setting up the solution. In the same way that newspaper companies used to make money with their classifieds sections, channel partners need to reinvent themselves to meet market needs." In addition, Ossama Eldeeb at VMware sees partner/vendor alignment as important. "There is an urgent need for partners to align with the right vendors to upskill and be trained on the latest cloud and software-defined solutions."

Becoming a solution specialist is also important. According to Dr Hichem Maya at SAP: "Partners who are specialised in the latest cloud business solutions will rise to the top in a highly competitive channel market. For example, demand by employers for cloud skills have grown by 165 per cent in the Kingdom of Saudi Arabia and by 160 per cent in the UAE since 2014, according to the recent report, *Workforce 2020*, by Oxford Economics."



► Dr Hichem Maya, SAP MENA.

Leveraging opportunities

Industry experts agree that, to leverage cloud opportunities in the current market, the channel must keep abreast of changes in the technological landscape and customer movement to the cloud, whether it's PaaS, IaaS or SaaS. Vibhu Kapoor at Infor says: "They need to find their domain and capabilities, and build a cloud practice internally. There are currently opportunities in the market, so being close to the customer is extremely important. Educating their customer base on the benefits of moving to the cloud is another way to create opportunities. Lastly, the channel should choose a world-class vendor that has cloud solutions and partner with it."

Jeroen Schlosser at Equinix adds: "One of the most popular ways to leverage the cloud, SaaS can serve as a delivery model for an endless array of business applications. Cloud-based disaster recovery is another advantage of using the cloud

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during those critical moments, which also gives you the ability to store your business continuity plans off-site, so you can access them from anywhere in the event of an emergency. File storage is another great gateway into cloud computing, as most of us have been exposed to a cloud-based file storage environment already."

Fadi Kanafani at NetApp agrees: "Storage is undergoing its most exciting transformation yet, driven by the disruptive forces of flash and cloud. In 2017, we expect to see products and solutions respond to the market needs for simplicity, easier management, better economic returns and a need to integrate data management across the hybrid cloud. In the Middle East, cloud is driving significant IT infrastructure spending in enterprises and government departments. As the private sector is embracing digital transformation, governments are also launching initiatives such as e-learning, healthcare and smart technologies." And the concluding comment from Jeroen Schlosser at Equinix, which sums up cloud computing nicely: "One thing is clear; the cloud isn't a destination. It's a journey on which technology and market conditions are constantly changing." ■