THE CASE FOR
CLOUD

Cloud service providers in the region are positioning themselves to take advantage of growing appetite of cloud services from ME enterprises.

A key player is Amazon Web Services or AWS, which has an increasing number of partners and customers in the region.

AWS launched its first service, the Amazon Simple Storage Service (Amazon S3), in March 2006. This was quickly followed by Amazon Elastic Compute Cloud (Amazon EC2), and the company has been continually adding services and features ever since.

AWS has more than 90 services that range from storage to compute, networking, database, analytics, application services, deployment, management, developer, mobile, IoT, AI

and Machine Learning, security to enterprise applications.

One of the fundamental characteristics of AWS is its rapid pace of innovation, which continues to accelerate, says Michael Needham, head of solutions architecture, Russia, Middle East, and Africa, Amazon Web Services. "To give you some figures, in 2011, we released over 80 significant services and features; in 2012, nearly 160; in 2013, 280, in 2014, 516, in 2015, we launched 722. In 2016, we launched 1,017 new services and features. As of April 1st, we have launched 236 new features and services in 2017."

Yvolv was launched last year in the UAE, a joint venture between Alibaba Cloud and local conglomerate Meeras.

Yvolv's datacentre is one of 13 global Alibaba locations, and the UAE facility (availability zone) is deployed in a 19,332 ft² facility with N+1 standby power and cooling redundancy,
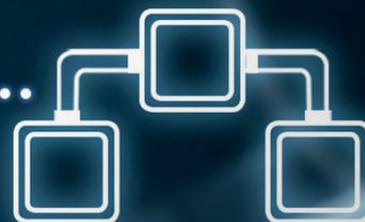
REGIONAL ORGANISATIONS ARE INCREASINGLY LEVERAGING THE CLOUD TO EVOLVE THEIR OWN DIGITAL TRANSFORMATION JOURNEYS

explains Clinton O' Leary, director of business development and marketing at Yvolv. The Alibaba Cloud platform is further secured in a caged facility with strict access control policies.

Alibaba also has network redundancy across two PoP's in the UAE able to meet many of the compliance and certification global standards.

eHosting DataFort (eHDF), one of the pioneers of managed hosting and cloud infrastructure services in the Gulf region, offers a network of data centres across the region delivering, among others, dual-feed internet connectivity (Du and Etisalat), redundant power systems, environmental control, as well as space flexibility.

Recently, eHDF enhanced it data centre Infrastructure that included the deployment of Cisco Application-Centric Infrastructure (ACI) to deliver faster and more agile services, while reducing administrative complexity and Infrastructure costs. eHDF has also laid overhead cable trays for data cables in two layers - one for copper and another for the fibre optic cable, as well as a range of cooling enhancements.

"These developments were strategically implemented to tackle the future demand for data centre usage in the Middle East which is witnessing strong growth in the region," says Sachin Bhardwaj, director, marketing and business development at eHDF. "The investments will enhance and widen the portfolio of services and address to a larger customer base across business verticals."

Existence of data sovereignty laws is one of the major

⬆ There's growing popularity of colocation and managed datacentre services, saving organisations the complexities of acquring data centre space, power, cooling, and physical security for the servers, storage and networking, as well as round the clock monitoring.

drivers of cloud adoption in the region. Bhardwaj takes note of regulatory restrictions on data that require certain data to be hosted locally, which makes the case for locally-based infrastructure. "Further, access to data in time of an emergency, as well as lower latency are key arguments for local infrastructure," he adds.

Having a local data centre amplifies the benefits of cloud computing, as latency is greatly reduced and response time increases significantly, in addition to having better security, says Yvolv's O' Leary. "The benefits of having a local data centre can vary depending on the vertical, as banks and government entities tend to focus more on the security aspect, while SaaS providers in the region can benefit more from the improved latency," explains O'Leary. "Data sovereignty laws are also being put in place and made mandatory by the UAE Government already for certain sectors."

Equinix operates a global network of IBX data centres and colocation centres, enabling it deliver faster application performance, low latency routes, and a digital ecosystem for financial, content or rich-media, enterprise, and cloud networks.

Equinix's data centre in the MENA region is located in Dubai, and powered by Equinix's global Interconnection Oriented Architecture (IOA). With more than 19,000 ft² of colocation space, the Dubai data centre is the first carrier-neutral data centre established in the Middle East, explains Jeroen Schlosser, managing director of Equinix MENA.

It serves as an interconnection hub for the Middle East

and North Africa region, connecting over 40 networks. It is also the home of the interconnected cloud, with over 30 cloud service providers, says Schlosser.

Equinix hosts the UAE Internet Exchange (UAE-IX) interconnecting global networks, network operators and content providers. UAE-IX is a vital hub for regional traffic exchange, enabling Equinix's Dubai customers to connect directly to other UAE-IX members, Schlosser explains.

Colocation is one of the services offered by cloud service providers, and an inreasingly popular one for Middle East

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SACHIN BHARDWAJ, DIRECTOR, MARKETING AND BUSINESS DEVELOPMENT, EHDF

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↑ Needham notes businesses can now provision the amount of resources that they actually need.

“ We add enough servers every day to support a company the size of Amazon in 2015, when it was an $8.5 billion enterprise.”

MICHAEL NEEDHAM, HEAD OF SOLUTIONS ARCHITECTURE, RUSSIA, MIDDLE EAST, AND AFRICA, AMAZON WEB SERVICES

businesses. A colocation centre is a type of data centre where equipment, space, and bandwidth are available for rental to retail customers. Colocation facilities provide space, power, cooling, and physical security for the server, storage, and networking equipment of other firms—and connect them to a variety of telecommunications and network service providers—helping customers save on costs and the complexity of maintain datacentre infrastructure.

Cost savings is often one of the biggest benefits of colocation, says Schlosser. Many companies find that colocation enables them to reduce the cost of overall IT management. “Rather than invest in backup generators, UPS and HVAC units and paying the ongoing expenses associated with this equipment, colocation lets firms leverage an ideal data centre environment that is scalable to their changing needs,” Schlosser explains.

“Your business continuity depends on 100% network reliability, which can be difficult and costly to maintain in a private data centre environment,” says Schlosser. For instance, Equinix colocation services offer high average uptime with its IBX data centres delivering 99.99999% uptime.

Cloud service providers continue to expand the services on offer, way beyond the original storage function.

eHDF owns and operates T3 data centres throughout the region, through which it delivers managed services with round the clock support and guaranteed uptime. “eHDF is also the only services provider in ME to offer credit-based SLAs,” says Bhardwaj.

eHDF’s services and solutions portfolio include, colocation, allowing organisations colocate their IT infrastructure in eHDF’s T3 data centres. These customers get to save mon-

ey and focus on their core business activities. Managed co-location is an extension to traditional co-location, allowing customers to choose from eHDF’s suite of managed services.

Managed hosting lets customers lease dedicated servers in eHDF’s own data centres in UAE. “In addition, we also undertake the responsibility of providing managed services that include backup, storage, security, network, and application & system administration services,” explains Bhardwaj.

eHDF’s managed disaster recovery services include, production/ DR sites in our multiple data centres at different locations in Dubai, design DR solution to meet customers’ unique RTO/ RPO requirements, managed services at the DR sites.

Other services include disaster recovery replication solutions from primary site to DR site as well as business continuity seats offering relocation solutions.

Equinix IBX data centres offer much more than just a carrier-neutral colocation space and carrier-dense interconnections, says Schlosser. “Our IBX data centres are home to an increasing number of partners, as well as digital ecosystems for cloud, mobility, content, and financial services. By locating your data in an Equinix data centre you are surrounded by opportunities to form new interconnections with business partners, service providers and networks.”

From data centres and colocation services, to network connectivity and the interconnected cloud, Equinix provides a range of services for enterprises across a range of industries: When it comes to interconnection and connectivity, Equinix can help businesses connect directly to a dynamic ecosystem of business partners, networks, and carriers, says Schlosser. “Our platform can help customers leverage direct

connections to corporate WAN providers, as well as enterprise, cloud and managed service providers."

Yvolv goes beyond the average could provider, says O' Leary, operating across three key categories; all complementary to cloud. These are Cloud – powered by Alibaba Cloud-Digital Transformation Consultancy & Services and Assessment Services. "We first thoroughly assess our customer's business and operations to analytically determine what suite of products will benefit them the most and help to propel them operationally and competitively."

IT skills

Shortage in relevant IT skills continue to plague enterprises. Recently, LinkedIn unveiled the Top Skills of 2016 report, revealing the skills that are most sought after among global enteprises, including employers in the UAE.

Statistical analysis and data mining topped the UAE list for the second year in a row.

"Employers need employees with cloud and distributed computing, statistical analysis and data mining skills to stay competitive," says Schlosser.

Tech jobs such as data architect sand data engineers are some of the most on-demand roles and but by embracing cloud technology, organisations can offset the pressure of finding, hiring and retining these skills.

Moreover, the speed at which technology is advancing, and the increasing number of companies keen to keep abreast of these innovations, adds to the human resource challenges of employing the most suitable personnel.

With over 175 colocation facilities on five continents, Equinix has a growing global and local talent pool, with continuous knowledge sharing taking place, asserts Schlosser.

Organisations need to understand all of the abilities of the cloud, and equally important, how it differs from the old world of on-premises IT, as it brings new ways of thinking into an organisation, Schlosser adds.

Needham says the region is host to many high quality

Elasticity, or the scalability of the required computing resources on demand, is at the core of public cloud computing, and one of the biggest value propositions for cloud.

universities and tertiary institutes that are producing a lot of good technical talent as well as developers and technologists that are skilled in the cloud.

That said, AWS is also working to help develop the next generation of engineers, developers, and other technical people, says Needham. "We offer a range of training and certification programs, and other resources in the Middle East to train people with cloud skills. We run events like onsite training workshops as well as something we call AWSome Days, which are one day workshop-based trainings for technical professionals. We also have a number of online, self-service

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>
> **JEROEN SCHLOSSER, MANAGING DIRECTOR OF EQUINIX MENA**

materials for people to learn more about AWS, such as webinars, whitepapers, articles, tutorials, and more."

AWS is also investing in developing formalised, and industry recognised, certifications and accreditations, says Needham. "These give people the opportunity to become qualified in the cloud skills that businesses and public sector organisations are seeking."

AWS Certifications currently available in the Middle East include, AWS Associate Solutions Architect, AWS Professional Solutions Architect, AWS Associate Developer, AWS Professional Developer, and AWS Associate SysOps Administrator, and more. "These qualifications have been developed to give students a learning path where they can start in their chosen role, either architecting, developing, or operations, and can progress from developing the basic skills they need to be successful in the cloud through to advanced skills such as big data analysis, security operations, DevOps engineering, and more," explains Needham.

Given the intricacies of managing increasingly complex systems and remain focused on their core business, a large number of organisations are availing of the specialised skills of managed service providers. This holds true for both large enterprises as well as a huge number of SMBs, notes Bhardwaj. "Organisations are now seeing a much more compelling reason to utilise the specialised technology innovations and services of MSPs."

One of the fundamental principles of the cloud is that it needs to be elastic and scalable.

In the old world of on-premises, IT customers used to over provision to ensure they had enough capacity to handle their business operations at the peak level of activity, observes Needham. Now, they can provision the amount of resources that they actually need, knowing they can instantly scale up or down along with the needs of their business, which also reduces cost and improves the customer's ability to meet their user's demands, Needham adds.

"We continuously measure capacity vs. demand-globally. We add enough servers every day to support a company the size of Amazon in 2015, when it was an $8.5 billion enterprise," explains Needham.

AWS is also continually expanding its datacentre footprint globally. With a global infrastructure comprised of 42 availability zones across 16 geographic regions worldwide, with another three AWS Regions (and eight Availability Zones) in France, China and Sweden coming online throughout 2017 and 2018.

As cloud demand rises, an 'interconnection-first' approach is important as cloud success can't happen without interconnection, says Schlosser. "Fast and automated provisioning via direct and secure virtualised connections makes "spinning up and spinning down" cloud services easier to manage and control," explains Schlosser.

Further, dynamic access to the right cloud enables the capability to allocate, on demand, any type or size workload to

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CLINTON O' LEARY, DIRECTOR OF BUSINESS DEVELOPMENT AND MARKETING AT YVOLV

the most high performance and cost effective cloud services, Schlosser adds.

O' Leary offers a "true" pay-as-you-go model available, where users only pay per hour or per GB of compute or storage usage, for instance.

"It is a utility-based service that means organisations no matter their size, will only pay for the computing power and storage that they actually consume."

Elasticity refers to the scalability of the required computing resources and the corresponding billing to match. "Elasticity is at the core of public cloud computing after all and the Alibaba Cloud Platform in Dubai has true Auto-Scale capabilities," says O' Leary.

It's clear cloud will power digital transformation trends now underway in the region. Studies have shown that countries that have more open data ecosystems and competitive ICT infrastructures are better positioned to leverage digital technologies for business, notes Schlosser. ●