

EXPRESS COMPUTER

INDIA'S FOREMOST ENTERPRISE IT MAGAZINE 16-30 NOVEMBER, 2013, ₹75

SOFTWARE DEFINED STORAGE

How software is driving flexibility and manageability

CASE STUDY:
Fullerton goes thin



OFFICE IN THE CLOUD

Office applications in the cloud are becoming a popular choice for SMEs, while enterprises are shying away from them. Here is a peek into the current and expected usage patterns

And now, the future



Express Computer has for over two decades been providing IT professionals with just what they need to stay ahead. The complete picture.



Cover Story | Trends | Case Study | News Analysis | Products | Interviews | News | CIO Profile

To advertise, please write to raghu.pillai@expressindia.com

edit
////////

THE FUTURE OF WORK



////////
TECHNOLOGIES
SUCH AS CLOUD,
MOBILITY AND
SOCIAL MEDIA
ARE CHANGING
THE WAY WE
WORK

One of my favorite ad slogans is from the satellite communication firm Iridium: Geography is history.

I am reminded of this as I key in thoughts on the futuristic dimensions of white-collar work. Will the physical office and fixed seats be history? How about the 9 to 5 rule or working fixed hours? What kinds of work will get most dramatically impacted?

Reams have been written on the subject and extensive studies conducted, so I will not go into the statistics of a growing remote workforce, home opportunities and the like. Instead, let me focus on how technology is making an impact on the way we work.

One of the biggest changes comes from the increasing interplay of personal and enterprise technologies. CIOs are now talking about consumerization of technology, the movement toward, say, user-centric, friendly apps rather than dense lines of code or cumbersome interfaces to configure resources. BYOD (bring your own device) is already a growing phenomenon and people are frequently switching screens from Facebook and LinkedIn to the intranet and CRM.

Given this growing mix, I think certain companies will need to look at the “work output” as a performance measure rather than hours spent in the office or logged into the system.

Another big change: more workers are going to be empowered down the line than ever possible before. Through the Web and the tools it provides, through user-driven business intelligence and through other means, people at various levels will need to take more decisions more quickly — for the collective enterprise to be competitive.

Social sites such as Twitter, Facebook and LinkedIn are also making an impact on assessment and hiring. Not just in jobs that require social media skills but generally in “judging” the future hires and their abilities through posts, usage patterns and circle of friends and followers.

In my own sphere of journalism, for instance, tech is making a big impact by connecting writers and readers in multiple ways; by bringing the whole blogosphere into the picture; by making it easy for us to find “material” through Google and Bing (and others I’m forgetting) yet difficult to escape the barrage of criticism if we slip; by making the whole writing-reading process quick, transparent, conversational...

On a more futuristic leap of imagination, in keeping with the vendors’ fondness for “personalization,” shall we see a day when companies come knocking on your smartphones and say: “Hi there, if we were to offer you the job of the CIO, which of the following amenities will suit you? Please select as many as you like and we will come back with a personalized offer.”

Now, now, I didn’t say that job search will be history!

sanjay.g@expressindia.com

8

COVER STORY

OFFICE IN THE CLOUD

Office applications in the cloud are becoming a popular choice for SMEs, while enterprises are shying away from them. Here is a peek into the current and expected usage patterns

BY MEHAK CHAWLA



feature



STORAGE REDEFINED

By incorporating software for flexibility and manageability, software-defined storage is redefining the space

16



A NEW WAY TO ENHANCE SECURITY

Companies are increasingly encouraging users to help them make their products and online services secure through bug bounty or reward programs

22

case study

AUGMENTED READING

DNA newspaper has employed an augmented reality application, DNAit, to enhance the reading experience and feedback from readers

26

THINKING THIN

During its PC refresh cycle, Fullerton India makes way for thin clients — and reaps fat rewards

28



news analysis

32

WILL iOS 7 MAKE MDM REDUNDANT?

The new operating system from Apple sports enhanced manageability features for enterprises. But will it emerge as an alternative to Mobile Device Management?



in the news

40

» Banks in India at risk with Windows XP support coming to an end

42

» SAP and SAS partner for joint in-memory analytics efforts

» MAIT-KPMG report highlights IT challenges, potential

43

» Juniper Networks introduces MetaFabric for cloud data centers

44

» SafeNet introduces encryption solution for AWS customers

» Trend Micro, VMware tie up to secure software defined data centers

45

» Tata Sky selects Cisco's video solution for multi-screen experiences

» Polycom appoints Minhaj Zia as MD, India & SAARC

46

» Fortinet launches high performance data center firewall appliance

» And more...

event

36

ENGINEERED FOR CLOUD

Oracle, a leader in relational database, is desperate to replicate its success in cloud computing and in-memory technology. Its big bets? Expansive cloud infrastructure and engineered systems



interviews

21

MATT WOOD

General Manager, Data Science, Amazon Web Services

“We start working backwards from what our customers say”

31

RAHUL AGARWAL

Executive Director, Commercial Business Segment, Lenovo India

“Our alliance with EMC will help us enhance our enterprise product portfolio”

38

SANTANU GHOSE

Director – Business Critical Systems, Enterprise Business, HP India

“Revenues are coming down on UX because we are over-delivering on performance”

39

A.S. RAJGOPAL

MD & CEO, NxtGen Datacenter & Cloud Technologies

“Our priority is to take our High Density Data Center live”

EXPRESS COMPUTER

INDIA'S FOREMOST ENTERPRISE IT MAGAZINE

Vol 24. No. 18. 16-30 November 2013

Chairman of the Board

Viveck Goenka

Editor

Sanjay Gupta*

Delhi

Heena Jhingan, Mehak Chawla,
Pupul Dutta, KTP Radhika

Mumbai

Jasmine Desai, Harshal Kallyanpur

Bengaluru

Pankaj Maru

DESIGN

National Art Director

Bivash Barua

Deputy Art Director

Surajit Patro

Chief Designer

Pravin Temble

Senior Graphic Designer

Rushikesh Konka

Layout

Vinayak Mestry, Rajesh Jadhav

Photo Editor

Sandeep Patil

MARKETING

General Manager

Dr. Raghu Pillai

Deputy General Manager

Harit Mohanty

Deputy General Manager

Prabhass Jha

Circulation

Mohan Varadkar

Scheduling

Arvind Mane

PRODUCTION

General Manager

B R Tipnis

Manager

Bhadresh Valia

MUMBAI

Shankar Adaviyar
Business Publications Division
The Indian Express Ltd.,
1st Floor, Express Towers
Nariman Point
Mumbai 400021, India.
Phone: (91-22) 6744 0000, 2202 2527
Cell Phone : +91-9323998881
Fax: (91-22) 2288 5831
Email: shankar.adaviyar@expressindia.com

NEW DELHI

Navneet Negi
The Indian Express Ltd.,
Business Publications Division
Express Building (Basement),
9 & 10 Bahadur Shah Zafar Marg,
New Delhi - 110 002
Tel: 011 - 23465670, 011-23465665
Fax: 011 - 23702161
navneet.negi@expressindia.com

CHENNAI

Johnson Rajkumar
Business Publications Division
The Indian Express Ltd.
New No.37/C (Old No.16/C)
2nd Floor, Whites Road,
Royapettah, Chennai - 600 014
Phone: Board : 044 - 28543031 - 34
Fax : 044 - 28543035
Direct : 044 - 42285520, 42285518,
42285534
E-mail: johnson.rajkumar@expressindia.com

BANGALORE

Gunjan Chauhan
Business Publications Division
The Indian Express Ltd.
502 Devatha Plaza, 5th Floor
131 Residency Road
Bangalore - 560025
Tel: 22231923, 24, 41, 60
Fax: 22231925
E-mail: gunjan.chauhan@expressindia.com

HYDERABAD

E. Mujahid
The Indian Express Ltd.
Business Publications Division
6-3-885/7/B, Ground Floor,
V.V Mansion Somaji Guda,
Hyderabad- 500 082

Tel: 23418673, 674,
Fax: 23418675, 66631457
E-mail: e.mujahid@expressindia.com

KOLKATA

Debnarayan Dutta
The Indian Express Ltd.,
Business Publications Division,
National Highway-6 (NH 6)
Mouza- Prasastha & Ankurhati,
P.S Domjur, Dist Howrah - 711409. Kolkata.
E-mail: debnarayan.dutta@expressindia.com

KOCHI

The Indian Express Ltd.,
Sankoorikal Building
36/2248, Kaloor-Kadavanthara
Road, Opp. Kaloor Private Bus Stand
Kaloor 682 017
Tel. Nos.: (0484) 2343152, 2343328
Fax.: 2343153.
E-mail: raghu.pillai@expressindia.com

JAIPUR

The Indian Express Ltd.,
C-7, Dwarika Puri, Jamna Lal Bajaj Marg,
C-Scheme, Jaipur 302001
Tel: 370002/371272, Fax: 376606

BHOPAL

The Indian Express Ltd.
6, Vidya Vihar, Professors Colony,
Bhopal - 462002 Madhya Pradesh
Tel: 0755 - 2661988

AHMEDABAD

The Indian Express Ltd.,
3rd Floor, Sambhav House,
Nr, Judges Bunglow, Bodakdev,
Ahmedabad 380 015
Tel: (91-79) 26872481 / 82 / 83
Fax: (91-79) 26873950

Important E-mail contacts:

bpd.subscription@expressindia.com
(for all subscription-related queries)
sanjay.g@expressindia.com
(for editorial-related matters only)

IMPORTANT

Whilst care is taken prior to acceptance of advertising copy, it is not possible to verify its contents. The Indian Express Limited cannot be held responsible for such contents, nor for any loss or damages incurred as a result of transactions with companies, associations or individuals advertising in its newspapers or publications. We therefore recommend that readers make necessary inquiries before sending any monies or entering into any agreements with advertisers or otherwise acting on an advertisement in any manner whatsoever.

Express Computer

Reg. No. MH/MR/SOUTH-132/2012-14 RNI Regn. No. MAHENG/49926/90

Printed for the proprietors, The Indian Express Limited by Ms. Vaidehi Thakar at Indigo Press, (India) Pvt. Ltd. Plot No. 1c/716, off Dadoji Konddeo Cross Road, Byculla (E), Mumbai 400027 and Published from Express Towers, 2nd Floor, Nariman Point, Mumbai - 400021. (Editorial & Administrative Offices: Express Towers, 1st Floor, Nariman Point, Mumbai - 400021) Editor : Sanjay Gupta (*Responsible for selection of News under the PRB Act.) Copyright © 2012

The Indian Express Ltd. All rights reserved throughout the world. Reproduction in any manner, electronic or otherwise, in whole or in part, without prior written permission is prohibited.



You're just 180 seconds away from an instant
subscription to Express Computer

For subscription as easy as ABC, just log on to www.expresscomputeronline.com and click 'Subscribe Online'. For further information, you can also contact us on 022-67440451 or email us at bpd.subscription@expressindia.com





OFFICE IN THE CLOUD

Office applications in the cloud are becoming a popular choice for SMEs, while enterprises are shying away from them. Here is a peek into the current and expected usage patterns

BY MEHAK CHAWLA

When Rajesh Piplani, Managing Director of Technovators, an electrical infrastructure company, decided to implement Google Apps for Business for about 60 of his sales force employees, he was quick to see its impact, both on his accounts as well as the business. The per-month, per-user model suited his small user base, and the fact that he had a young sales team that was quick to adapt, added to faster RoI. "We were planning to buy new hardware to support our mailing and messaging needs, but decided to go on an opex model and so far it is working for us," explains Piplani.

Technovators is one of the many small and mid-sized companies that have benefited from using basic office apps in the cloud. However, not everyone has realized the same satisfaction from the apps or a similar return on their investment. What's more, the air around cost models of cloud apps is yet to completely clear.

Nevertheless, the potential of working on the cloud is undisputed. India is home to around 47 million small businesses, yet only 1% are online. Little wonder, then, that it is this segment that the tech giants and cloud service providers are eying greedily.

The public cloud services market in

India is estimated to grow by 36% in 2013 to \$443 million, up from \$326 million in 2012, according to Gartner, Inc. Infrastructure as a service (IaaS), including cloud compute, storage and print services, has emerged as the fastest-growing segment of the market in India, and it is expected to grow at 39.6% in 2013 to \$60.2 million. Software as a service (SaaS) continues to be the largest segment of the cloud services market in India, comprising 36% of the total market in 2012. Gartner predicts that from 2013

through 2017, \$4.2 billion will be spent on cloud services in India, \$1.6 billion of which will be spent on SaaS.

According to a recent study by Ascentius titled "Evolving market for email and collaboration platform in India," the total revenue across on-premise, hosted, and cloud-based email and collaboration platforms and services is expected to hit \$111 million by 2015. The study noted that SMBs accounted for 45% of the revenue for public cloud email





Office apps in the cloud are of two types – off-the-shelf office productivity apps and custom apps built and deployed on the cloud.

Ramesh Loganathan,
Vice President and Managing Director,
Progress Software



The key is to migrate apps that are lower on strategic value but higher on operational value.

Rajesh Awasthi,
Director - Telecom & Cloud Service
Provider, NetApp

and collaboration services.

The numbers are a sure shot indicator of the changing attitude of Indian enterprises toward the cloud. The security question, though still prominent, is no longer a deal clincher in public cloud discussions. And there is hardly any doubt that SMEs are waking up to the transformational value that cloud can bring to their business.

As a result, global software and services giants are adding zing to their Indian marketing campaigns and fine tuning their products for India. The domestic vendors too are capitalizing on niche offerings in the demography they only know too well.

Top cloud-hoppers

The landscape for cloud applications in India is rather conventional, to say the least. The apps that make the best candidates for cloud remain non-mission critical, peripheral and mobility applications. That is why mail and messaging remain top contenders for cloud residency.

In India, companies tend to keep their accounting processes in-house, so ERP type apps are slower to move to the cloud. In most cases, it is apps like Customer Relationship Management (CRM, now also referred to as Customer Experience Management) and Human Capital Management (HCM) that go to the cloud first. Peripheral apps like travel assistance, employee lifecycle management, campaign management, etc., are also moving from in-house servers to the hosted data centers of cloud firms. A few enterprises are also waking up to cloud-based disaster recovery. Rajesh Awasthi, Director - Telecom & Cloud Service Provider, NetApp, observes that enterprises are open to look at cloud models for things like DR and operational apps.

Ramesh Loganathan, Vice President and Managing Director, Progress Software, puts the adoption scenario in perspective. "Office apps in the cloud are of two types — off-the-shelf office productivity apps, and custom-built apps deployed on the cloud. The former is slowly gaining traction in India with

many SMEs using cloud-based email services. Slowly, cloud based data services (like Dropbox) are also gaining momentum. Custom apps is a new capability that enterprises are just beginning to explore."

The fact that Indian companies are looking at cloud for applications beyond mail and messaging is what is fueling vendor enthusiasm. Says Pankaj Sabnis, Project Manager, Product Engineering Services, Blue Star Infotech, "SMEs are evaluating cloud-based applications such as CRM, ERP and BPM along with other collaboration tools in order to boost organizational efficiency. The general mood remains upbeat toward office apps and adoption will become more focused in the next 12 to 18 months' time frame. Microsoft's Office 365 sales grew by over 160% last year and that proves the potential of the market."

When it comes to primary office applications in the cloud, Google and Microsoft remain the most prominent vendors. Both the tech giants are aggressively tuning their products and pricing to tap the bubbling Indian SME segment. While Google is fast catching up in new age organizations, Microsoft has managed to retain its upper hand: Ascentius claims that Microsoft Office 365's share is as high as 70% in the public cloud email and collaboration services market (Google has 29%).

Sukhvinder Ahuja, Director, Office and Cloud, Microsoft India, details some cloud application trends. "Our Office 365 in Cloud includes services encompassing various aspects like Exchange, Lync, Website and DMS. Customers either buy one, buy a bundle, or clusters of these. There are a set of logical plans we have created like grouping of email and unified communication, etc. From the last one year, since we started, we have seen that customers first buy email and then graduate to Lync. We also get questions around our Azure offerings. Customers are no longer devoting a lot of time in discussing traditional issues like security."

When it comes to enterprise apps, moving test and development environments to the cloud is usually seen by organizations as low-risk and as a

validating proof of concept for other applications. "CRM, IT management tools and, increasingly, ERP tools are being moved to the cloud to get the benefits of variabilization of costs and to leverage 'as-a-service' propositions," adds Ahuja.

Even as global giants are going all out to capitalize on India's cloud application market, traditional application vendors too are upping their game, and seeing some impressive churn as far as common cloud apps are concerned. Raju Vegesna, Chief Evangelist, Zoho, reveals that they are seeing a growing adoption of Zoho's apps by Indian businesses. "We see a good uptake for Zoho CRM, Campaigns, Support, Mail, Creator, Sites, Projects, etc. The Office Suite is also becoming popular as the Internet connectivity improves. We are also seeing an immense interest on the mobile side."

However, even as cloud applications garner numbers, the cost equation is coming increasingly under the scanner.

Not always cheaper

If there is one thing that is emerging loud and clear, it is that the cloud does not necessarily mean lower cost. In fact, the cost equation can actually reverse in more than a few cases. That is why Awasthi of NetApp believes that going for the cloud should not be a cost decision, but a business one. "An organization needs to identify what applications can be migrated to a public cloud. The key is to migrate apps that are lower on strategic value but higher on operational value. The cloud is about workload. For instance, a core banking system may not be on the cloud, but anything on the periphery of core banking can easily be put on the cloud."

The good news is that the price-sensitive Indian enterprises are going beyond the cost factor in their cloud discussions. Says Ahuja, "Most of the time, the discussion is not entirely about cost. Customers are now looking at the cloud from a scalability perspective

rather than a cost perspective. We now know that the cloud does not always equate to low direct costs."

CIOs are now looking at putting apps in the cloud mostly to free IT resources and ensure hassle-free management. Explains Niranjan Bhalivade, CIO, CEAT, "One thing is clear: for enterprises, cloud has never been the cheaper option. The cloud does not necessarily imply low costs. Whenever we have done the capex vs cloud evaluation, capex has turned out to be cheaper most of the times. The real advantage of putting apps in the cloud is unparalleled service delivery."

The question then, is essentially to decide what apps are cloud-worthy and can be put there in a manner that is least disruptive to the business. The air around costing, however, needs to be further cleared. Milind Dikshit, Head of Infrastructure Services, Capgemini, believes that while the big promise of cloud for enterprises is in business agility — movability of workloads (applications,

Think Compliance Think Peace of Mind Think Graebert



Tired of threatening compliance letters? Go Legit with Graebert. Finally, a CAD software that meets your requirements completely and is affordable at the same time.

PRECISION CAD TECHNOLOGY FROM GERMANY, NOW AVAILABLE IN INDIA

Distributed by

**INGRAM
MICRO**
Partner Smart™



Toll free: 1800 102 2737
Web: www.graebert.in
Email: sumanta.k@ingrammicro.co.in
info@graebert.co.in

Gräbert
CUSTOM CAD



The general mood remains upbeat toward office apps and adoption will become more focused in the next 12 to 18 months.

Pankaj Sabnis,
Project Manager, Product Engineering Services, Blue Star Infotech



For big companies that need full dedicated servers, the cloud revenue model turns out to be more expensive.

Vivek Khanna,
Vice President - IT & Finance, Havells India

not servers) according to business needs — most enterprises start evaluating the cloud only because of lower TCO claims. And while the license costs do go down in a cloud scenario, other factors like the interest an enterprise is paying to the vendor and the charge-backs, etc., are not often paid as much attention, leading to eventual disillusionment.

This cost factor, coupled with the maturity of vendors' offerings in this space, is precisely the reason why cloud apps are not working for large enterprises.

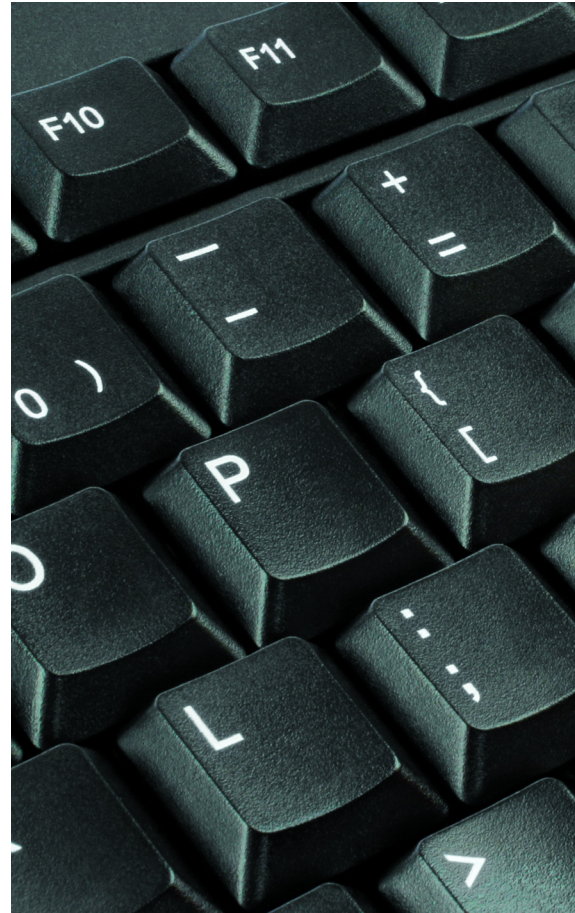
Only for SMEs?

Over the past couple of years, whenever Vivek Khanna, Vice President - IT & Finance, Havells India, has approached vendors to put a large business application like ERP on the cloud, the RoI calculation has established the cloud as the more expensive option compared to capex. "Most of the times, it is because vendors want to realize their own costs within 3 years and charge customers accordingly. For big companies that need full dedicated servers, this revenue model turns out to be more expensive. The viability of the cloud model is higher for smaller organizations because they cannot maintain big IT teams," elaborates Khanna.

If anything, enterprises are more likely to embrace the private cloud model, which allows them to achieve better platform standardization and retain better control over costs as well as applications.

Bhalivade of CEAT gives us both sides of the coin. "Cloud is basically a tradeoff between savings and service. This outlook can differ from company to company. For instance, when we were considering a CMS solution for CEAT on the cloud, the Exchange solution was turning out to be a costlier option for 1000-plus users. However, for RPG Enterprises, a sister company, which had only about 150 users, we decided to go on the cloud because the cost equation was much better."

Bhalivade believes that when it comes to cloud apps for enterprises, it is the offerings and not the technology that needs to mature. "Large-size business



apps in the cloud are not working for enterprises. So, many enterprises are going with the capex option instead of paying higher interest to vendors. However, for smaller apps, we are evaluating the cloud option. For instance, for apps like travel assistance, etc., which do not require extensive management, we are using the cloud model."

Similar is the case with Khanna, who is using only one application on the cloud — Oracle CRM on Demand. "We have tried others but found that they are as of now, more costly than on-premise, especially for medium and big organizations."

KK Chaudhary, SVP and Group Head - IT & IS, Lanco Group, while a big cloud enthusiast, doesn't see tangible value in putting business apps on the cloud as of now. "We are not using diversified field force apps, and customers and suppliers



are fixed. The cloud is more useful in a field force environment. We have in-house data center operations. However, I'm a big propagator of cloud. We are discussing with Microsoft, their Office offerings in the cloud. We have also taken the first steps toward having a DR in the cloud."

Khanna believes that when technology progresses and bigger servers become affordable, we may see cost benefits percolating to bigger enterprises. "As of now, vendors are not passing down the benefits of cloud to enterprises," he says.

Such lack of feasible economic offerings has established the notion that cloud apps are only for SMEs, a belief that is being echoed by the uptake. George Varghese, Senior Director, Applications, Oracle India, agrees that the current models for cloud apps are

targeted at SME customers. "Companies that are coming to us are primarily those who don't have legacy systems to tackle, which are mostly SMEs. Others are companies that have an enterprise stack but are not satisfied with it. With Oracle, a customer can choose an opex model for the first 3 years and then own the piece. SMEs find this model feasible." Also, according to him, SMEs are more nimble to take decisions compared to enterprises.

Dikshit of Capgemini, however, refutes this perception and says it's only a matter of time before we see large organizations in India using more significant business apps on the cloud. "It is a myth that cloud office apps are tuned for SMEs. We have helped several global organizations across North America and Europe in their migration from legacy environments to office apps on the cloud. We are also launching a new cloud orchestration service early next year which will provide enterprise cloud capabilities in several areas and will help enterprises adopt cloud apps more quickly."

CIO concerns

Irrespective of whether the app is operational or business driven, application migration is always a high-pressure situation for IT heads. Amongst the biggest concerns for CIOs, is data sovereignty. However, advances in security technologies have enabled most cloud providers to address these concerns satisfactorily, though awareness levels in India are not matching pace with the technology.

Another big concern is integration with legacy environments. Enterprises have to ensure alignment and compliance with internal IT standards, architecture and governance — a task that becomes complex in a multi-tenancy environment. As Sabnis of Blue Star explains, "Some apps require integration with Active Directory which is within the organization's firewall. Some apps also need to communicate both ways with core apps that may still be within the organization's firewall. Such integration issues are a big challenge."

Bhalivade seconds this line of thought.



We are discussing with Microsoft, their Office offerings in the cloud. We have also taken the first steps toward having a DR in the cloud.

KK Chaudhary,
SVP & Group Head - IT & IS,
Lanco Group



Companies that are coming to us are primarily those who don't have legacy systems to tackle, which are mostly SMEs.

George Varghese,
Senior Director, Applications, Oracle

CLOUD APPS FACT SHEET

- Public cloud services market in India is forecast to touch \$443 million in 2013, growing at 36%
- IaaS is the fastest-growing segment of the cloud market in India, and it is expected to grow at 39.6% in 2013 to reach \$60.2 million
- SaaS is the largest segment of this market, comprising 36 % of the total market in 2012
- From 2013 through 2017, \$4.2 billion will be spent on cloud services in India
- \$1.6 billion of this \$4.2 billion will be spent on SaaS
- Total revenue across on-premise, hosted, and cloud-based email and collaboration platforms and services in India is expected to hit US\$111 million by 2015
- SMBs account for 45% of revenue for public cloud email and collaboration services.

There is hardly any doubt that SMEs are waking up to the transformational value that cloud can bring to their business.



"A big challenge for CIOs is making high-end apps cloud ready. Apps with a large user base, or where high customization is required, are difficult to put in the cloud primarily because in the cloud, manageability does not reside with the IT head. Also, while there is no threat on the information security front, IT heads often find themselves helpless at times of legal audits. In a cloud scenario, we do not have physical servers to show for large office apps and that raises security questions in India where the cloud is still not a very well understood concept."

Infrastructure ownership can also be a complex affair in a cloud model. Says Vegesna of Zoho, "IT traditionally has had complete control on the entire stack deployed in a business. The first challenge they face is learning how to live with these cloud apps. Apps behind the firewall have certain advantages and so do cloud apps. IT heads have to figure out how to maximize these advantages."

The direction

Even though the applications going on the cloud may be small in numbers as well as size, their impact in the long run could be substantial in shaping the future of cloud computing. Vegesna points toward an interesting evolution. "Web apps started as consumer apps (think Web-based email systems, banking apps, etc).

Then they proliferated to small businesses, eventually to medium businesses and we are slowly seeing enterprises adopt cloud apps. This is an evolution. There are some trends that move from enterprises to consumers and some that move from consumers to enterprises. Cloud apps is a case where the move is from consumers to enterprises."

The next phase of growth for cloud apps could well come from the enterprise segment. Ahuja of Microsoft believes that the concerns of IT heads in SMEs and enterprises are largely similar, and differ only in terms of complexity and scale. "Level of talks might differ for an SME and enterprise customer, but the direction remains the same."

Another interesting aspect with respect to cloud apps is the logical maturity curve: the numbers are coming first from SMEs and the apps are gradually evolving to handle scale with enterprises. This is unlike the growth path of most enterprise apps which have been first embraced by larger organizations and gradually took the niche avatar for smaller deployments among SMEs.

These factors make cloud apps a space to watch out for in India.

mehak.chawla@expressindia.com

To
Advertise
in

Business
Avenues



Mumbai: **Shankar Adaviyar**
Tel: (91-22) 6744 0000, 2202 2527, +91-9323998881

Delhi: **Prabhas Jha**
Tel: 011 - 23465670, 011-23465665
Cell Phone : +91-9811153487, +91-9899707440

Chennai: **Johnson Rajkumar**
Tel: 044 - 28543031 - 34

Bangalore: **Pradipkumar**
Tel: 22231923, 24, 41, 60

Hyderabad: **Mujahid Ali**
Tel: 23418673, 674

Kolkata: **Ajanta / Prasenjit**
Tel: 033-22138586, 09831182580, 09830130965



SUBSCRIPTION FORM

Yes! I Want to Subscribe Renew

Note:

Payment should be made in the name of "The Indian Express Ltd."
DDs should be payable at Mumbai.

Please mail to:

Subscription Cell,
Express Computer,
Business Publications Division,
The Indian Express Ltd.,
1st Floor, Express Towers,
Nariman Point, Mumbai-400021
Tel: 22022627, 67440451
Fax: 22885831

E-mail:
bpd.subscription@expressindia.com

Pls. allow 4-5 weeks for delivery of first issue.
Please add ₹ 20/- for cheques from outside Mumbai.

Subscribe Online

www.expresscomputeronline.com

Tick Terms	NewsStand Price	Subscription Offer	You Save
<input type="checkbox"/> 1 year { 24 issues }	Rs. 1,800/-	Rs. 1,300/-	Rs. 500/-
<input type="checkbox"/> 3 years { 72 issues }	Rs. 5,400/-	Rs. 3,500/-	Rs. 1,900/-

International subscription rate for 1 year US\$175

Mailing Address:

Name: _____ Subscription No.: _____

Company Name: _____ Designation: _____

Address: _____

City: _____ State: _____ Pin: _____

Phone: _____ Fax: _____ Mobile No: _____

E-mail: _____

Payment enclosed Cheque/Demand Draft No.: _____ Dated: _____

For Rs.: _____ Drawn on: _____

For Office Use:

Bp No.: _____ Order No.: _____

Docket No.: _____ Period: _____

FEATURE

SOFTWARE DEFINED STORAGE

STORAGE REDEFINED

By incorporating software for flexibility and manageability, software-defined storage is redefining the space

BY KTP RADHIKA

From basic business applications to cloud and big data, enterprise technologies have come a long way in the past 10 years. And one of the beneficiaries of these leaps in innovation has been storage. Even a couple of years ago, virtualization was the hottest trend in this space. But not any longer. Redefining storage is what enterprises fondly refer to as SDS, aka software-defined storage. Derived from the software-defined data center (SDDC), SDS is now causing a tectonic shift not just in the storage sector, but also in the IT industry as a whole for its sheer ability to increase efficiency and service velocity in storage.

What does SDS actually do? It pools hardware storage resources and allows them to be programmatically defined, provisioned and managed in the software. This means that automation and pooling of storage through a software control plane gives the ability to provide storage from industry standard servers. This offers CIOs or IT managers a simplified way of storage that is provisioned and managed on industry standard servers at a fraction of the cost. The new design provides the means for storage services to be provisioned and consumed based on policies and can be deployed on a wide range of hardware spanning from cloud-optimized to commodities on cloud.

The whole concept started when VMware and some other players started thinking toward the idea of software defined infrastructure services. That included networking and storage — services that have traditionally been entirely dependent upon specialized hardware systems. Increasing demand for cost effective and flexible storage solutions created the need and is driving

the adoption of SDS.

According to research firm Gartner, the Indian IT infrastructure market, comprising server, storage and networking equipment, will total US \$2.1 billion (more than Rs. 12,000 crore) in 2013. In this pie, the external controller-based storage is the fastest growing segment with revenues growing from \$374.2 million in 2013 to an estimated \$702.3 million in 2017.

“Managing storage demands is one of the biggest problems faced by Indian users. So, integrating software driven intelligence in the storage is gaining traction in this market and is expected to solve some of the issues,” notes the Gartner report. According to global research firm Markets and Markets, global SDDC market is estimated at US \$396.1 million in 2013 and expects to grow to US \$5.41 billion in 2018. Ashish Nadkarni, Research Director at IDC’s Storage Systems, says software-based storage will slowly but surely become a dominant part of every data center, either as a component of a software-defined data center or simply as a way to store data more efficiently and cost-effectively.

Automated and affordable

SDS is a way for business applications and underlying storage services to share hardware resources. It helps make storage a pooled and freely exchangeable resource across physical boundaries. Traditional external controller based storage systems have made customers feel ‘locked-in’ with specific vendors as most of the storage hardware sold is controlled by the vendor’s proprietary controllers. “In the past few years, we have moved to storage that is driven by software based controllers to eliminate



Software functionalities in HP Virtual Storage Appliance (VSA) makes VSA an agile, scalable shared storage solution that can help reduce storage costs by up to 80%.

Barun Lala,
Director, Storage, HP India

SDS looks into the capacity, availability and performance needs and makes application provisioning simpler



SDS is not about separating capacity from a storage device, but instead is about separating the storage features or services, from the storage device.

Tarun Kaura,
Director - Technology Sales, India & SAARC, Symantec



SDS offers CIOs a significant simplification to the way storage is provisioned and managed while cutting cost.

Chuck Hollis,
Chief Strategist, VMware

these proprietary controllers. The next gradual progression is towards automating storage provisioning and making storage management smarter yet cost effective,” says Purshottam Purswani, CTO, Atos India.

SDS enables storage resources to be utilized more efficiently. With the help of software, storage administration can be simplified through automated policy-based management without any constraints of underlying physical storage system. Storage control is highly automated and this is better for dynamically serving applications and workloads, especially for the ever-changing applications and workloads in the virtual infrastructure.

Converging applications and storage on the same platform improves utilization rates of compute power and storage with power, cooling, and data center footprint efficiency. Chuck Hollis, Chief Strategist, VMware, states, “SDS offers CIOs a significant simplification to the way storage is provisioned and managed while cutting cost.” According to Barun Lala, Director, Storage, HP India, SDS is inexpensive compared to upfront capital investment for storage hardware. Explaining about HP’s SDS offering —HP Virtual Storage Appliance (VSA), Lala feels that software functionalities in it makes VSA an agile, scalable shared storage solution that can help reduce storage costs by up to 80%. “This affordable solution now features sub-volume tiering automation to optimize performance and cost for dynamic workloads. It is also easy to deploy and manage across enterprise,” he points out.

Making it simpler

SDS looks into the capacity, availability and performance needs and makes application provisioning simpler. Incorporating SDS, enterprises can purchase heterogeneous storage hardware and can prevent hindrances owing to interoperability, inefficient utilization of storage resources and further improve application performance, scalability, minimize application downtime, performs online storage migrations, avoid unnecessary fail-over occurrences and associated

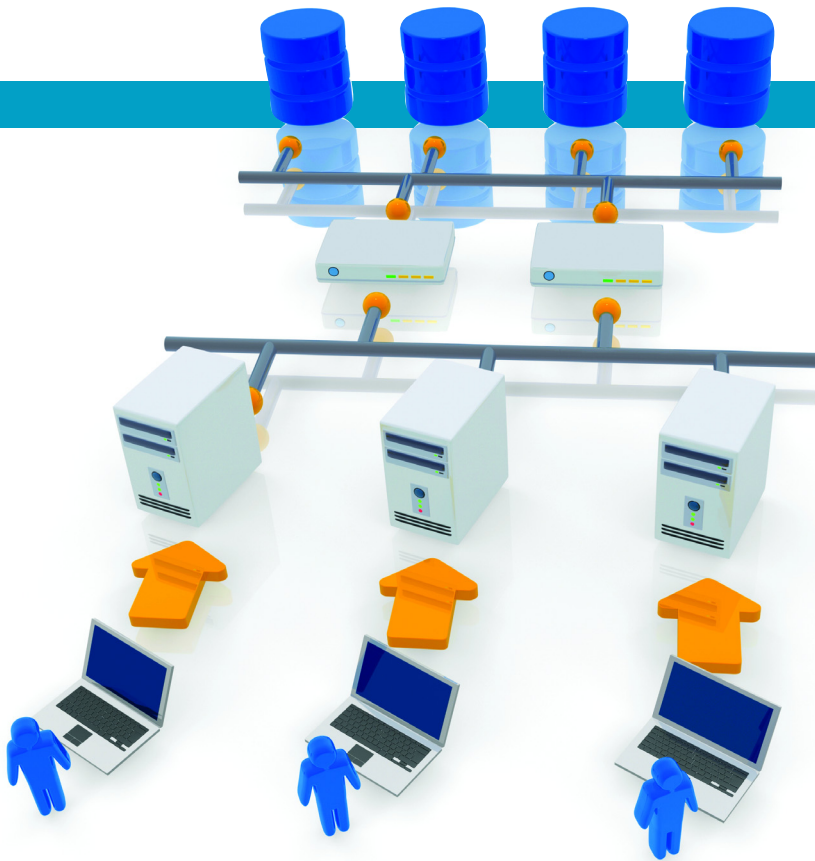
application disruption.

Apart from offering these functionalities, software can also manage the storage environment in a dynamic manner and the user can enable or disable functionalities across the enterprise with a fraction of commands. “Today, storage is typically managed in dedicated hardware silos for individual products. This leads to increasingly complex and fragmented management, deployment processes, and skill sets for each silo. With SDS, the opportunity is to provide a unified control plane across these silos, to simplify the provisioning of applications with the best storage system,” Hollis avers. For example, VMware’s SDS tier Virtual SAN (VSAN) implements a policy-based approach to storage management. Users can specify storage attributes — such as capacity, performance and availability — in the form of simple policies associated with individual virtual machines or virtual disks. Storage is instantly provisioned and automatically configured according to the assigned policies.

SDS is not virtualization

SDS usually gets confused with storage virtualization. SDS is more than storage virtualization. It is a logical extension of existing virtualization concepts to new domains and integrating them in ways not previously possible. Tarun Kaura, Director - Technology Sales, India & SAARC, Symantec, agrees. “SDS has the capacity of multiple storage devices or arrays to be amalgamated so that it appears as if it is on a single device. It is not about separating capacity from a storage device, but instead is about separating the storage features or services, from the storage device.” It therefore helps IT professionals use their storage more efficiently without being restricted to a single storage vendor or platform.

Virtualization changed how we think about computing and IT is not the same it used to be. “We are betting that the same thing has begun in the storage world,” explains Hollis. “SDS will simplify storage provisioning and management dramatically for virtual machines. Featuring a scale-out architecture that is fast, resilient and dynamic, it will deliver



significantly lower total cost of ownership (TCO) in cases such as virtual desktop infrastructure (VDI), test/development environments and disaster recovery targets,” he adds. With its granular, scale-out approach, it will enable customers to start small and add new servers as performance and capacity needs grow instead of incurring large upfront investments.

Technology wise, SDS, unlike storage virtualization, decouples the control path from the data path. By abstracting the control path, storage management operates at the virtual layer, which gives customers the ability to partition their storage pool into various virtual storage arrays and manage them uniquely by policy. Says Abhijit Potnis, Director, Technology Solutions, EMC India & SAARC, “This is analogous to partitioning a server into a number of virtual machines. This decoupling of the control and data paths enables SDS to centralize all data provisioning and data management tasks, and allows applications to access file and block data as they always have and continue to use the unique data services embedded in the storage arrays.”

Facilitating the cloud

The concept of SDS may be new in the storage industry, but CIO and CTOs who are faced with current priorities to implement or use cloud services can definitely benefit from SDS given that it offers superior integration and customization features, along with the necessary flexibility and scalability that suit cloud services. This will reduce overall storage infrastructure and management costs, transforming the way storage systems are designed and managed. For a cloud vendor, providing tenant-based storage, real time provisioning and scalability is an important factor and SDS allows service providers to manage their storage hardware efficiently. Earlier, management of physical storage was rigid and used to lead to over-provisioning. Now, with SDS storage allocations can be done based on priority and service levels under policy driven storage architecture.

“SDS is not a completely established market. However it is picking up very well,” says Shriranga Mulay, Senior Vice President, IT Engineering, Netmagic Solutions. Netmagic is in the process of



Decoupling of the control and data paths enables SDS to centralize all data provisioning and data management tasks.

Abhijit Potnis,
Director, Technology Solutions, EMC
India & SAARC



In the past few years, we have moved to storage that is driven by software based controllers to eliminate the proprietary controllers.

Purshottam Purswani,
CTO, Atos India



////////////////////
 CIOs who use cloud services will benefit from SDS since it offers superior integration and customization features along with the necessary flexibility and scalability

implementing SDS and has partnered with Cloudbyte, a storage software vendor, to implement 'Elastistor' for their internal requirements and for serving customers. "We will be completing it in the next couple of months and it will help us to keep scaling our storage, according to the requirements. For our cloud customers, SDS will give a choice of choosing the storage they want and get the required performance levels," he adds.

Purswani of Atos India believes SDS goes a step further to deliver the service from storage pool as per requirement and utilizes best fit provisioning logic which is completely real time, automated and policy driven. "This is more suitable and beneficial when we use most of the applications or services that are cloud based," he says.

An emerging market

While traditional storage approaches have evolved quickly over the past few years, there are many challenges that outraces the existing solutions. Today, matching the right storage with the right application isn't the easiest thing to do. Over-provisioning performance, protection and capacity is the norm just to be safe. And there's plenty of room for increased efficiency on the operational

side-making storage an integral part of the virtual administrator's experience.

Even though the concept of SDS is very new to the industry and understanding the concept is going to take its own course, experts think that it will solve many of those challenges that CIOs faces today. "SDDC is the future of this industry and adoption of SDS is inevitable," comments Hollis.

According Muly, SDS will get lot of adoption in online transaction processing (OLTP) applications like e-commerce, portals, etc., and for applications which need a lot of agility. "It will have a year on year growth of about 40 to 50% in the next few years," he says.

As of now, global companies have started adopting SDS to satisfy their storage needs. However in India, many of the companies are in the pilot running stage. "Software Defined Storage in India and for overall storage industry is relatively new. We are currently running the software with a few select customers under the Early Adopter Program," says Potnis of EMC. The players are hopeful of a healthy feedback that can pave the way for robust growth in this high-potential IT vertical.

radhika.ktp@expressindia.com

MATT WOOD
AMAZON WEB SERVICES

Matt Wood, General Manager, Data Science, Amazon Web Services, talks to KTP Radhika about the emerging needs in high performance computing and how AWS is facilitating those needs

“We start working backwards from what our customers say”

With the explosion of data, how are high performance computing needs emerging? How does AWS view this opportunity?

Typically, scientists and engineers must wait in long queues to access shared clusters or acquire expensive hardware systems for their high performance computing needs. With the cloud, businesses can roll out hundreds or thousands of servers, even those with HPC power, in a matter of minutes and pay for what they actually use. They are able to store huge amount of data at a very low cost in the cloud. This helps businesses drive costs down significantly while enabling them to analyze enormous amount of data quickly, giving businesses, researchers, analysts and developers the competitive advantage. This is clearly where cloud computing such as AWS can help provide virtually unlimited infrastructure capacity and compute power. There is a tremendous opportunity for AWS by providing businesses, on-demand access to supercomputing power.

Please shed some light on how AWS is facilitating supercomputing needs?

The utility model we use at Amazon Web Services (AWS) is without upfront capital investment, which means that we are able to operate our infrastructure in a very efficient manner, at very large scale for hundreds of thousands of customers across 190 countries.

In high performance computing, we have solutions like Amazon Elastic Compute Cloud (Amazon EC2) that provides several instance types which are designed for data intensive workloads; Cluster Compute instances that offer high performance CPUs and are deployed on a fully bisectonal, 10 gigabit network for low latency communication between instances. We also have Amazon Elastic MapReduce (Amazon EMR) that utilizes a hosted Hadoop framework running on the web-scale infrastructure of Amazon EC2 and Amazon Simple Storage Service (Amazon S3). Amazon Redshift is a fast, fully managed, petabyte-scale data warehouse service that makes it simple and cost-effective to efficiently analyze all your data using your existing business intelligence tools. Amazon



Does HPC on the cloud pose any special challenges compared to other popular cloud services?

One of the most important components of a high performance computing environment is the network, and with Amazon EC2 Cluster Compute instances, we address this challenge by offering not just the computational power in the form of dual Intel Xeon E5 processors, but also a fully bisectonal, 10 gigabit, low latency network.

DynamoDB is a fast, fully managed NoSQL database service that makes it simple and cost-effective to store and retrieve any amount of data, and serve any level of traffic requests.

Today, AWS customers run a variety of HPC applications on these instances including computer aided engineering, molecular modeling, genome analysis, and numerical modeling across many industries including Biopharma, Oil and Gas, Financial Services and Manufacturing. Also, academic researchers are leveraging Amazon EC2 Cluster instances to perform research in physics, chemistry, biology, computer science, and materials science.

As Amazon is very comfortable in operating a high volume, low margin business, and with our high economies of scale and operational efficiency, we are able to drive our costs down and pass those savings back to our customers in the form of lower prices. We have lowered our prices 37 times across many of the AWS Cloud services since 2006. Our customer's HPC workloads can run at a higher scale, complete their processing much more quickly at a very low cost that they can afford and this opens up new opportunities to experiment and drive innovation. We even provide flexible choices that enable our customers to set the price for their infrastructure costs, saving them even more.

What will be the future of high-performance cloud computing?

At AWS, we work backwards from our customers by listening carefully to what they say is important to them, and this means inventing on behalf of our customers and iterating quickly based on our customer's feedback. We also focus on what is fundamentally important for all our customers, i.e., continue to drive operational efficiency with our economies of scale to lower the price of infrastructure resources to benefit our customers around the world. We'd like computing resources to be so low cost and ubiquitous that customers could easily have supercomputing power at their fingertips, at any time they need it.

radhika.ktp@expressindia.com



A NEW WAY TO ENHANCE SECURITY

Companies are increasingly encouraging users to help them make their products and online services secure through bug bounty or reward programs

BY PANKAJ MARU

Not that long ago Mark Zuckerberg, CEO and Co-Founder of the social networking site Facebook, experienced an unusual first. A Palestinian Facebook user, after several failed attempts to warn the company about a security flaw on the site, hacked Zuckerberg's page to prove his point. By taking this risk, the user proved that one need not be friends with a user to post on his wall. This feature, he argued, could be exploited by cyber crooks to spam user accounts, which for Facebook now exceed a billion.

While Khalil Shreateh's act did not win him any "bug bounty money" from Facebook, he did manage to get the site's — and the online community's — attention. Apparently, the social media site did respond to him and take corrective action after the hack.

In recent years, bounty or reward programs have become quite popular both in real and virtual worlds. While in the real world, bounty programs are largely run to nab criminals, software and Internet companies employ reward initiatives mainly to enhance security of their online applications, software products and programs.

Technology companies not only spend big money on research and development, but also invest hugely in security by having dedicated teams as well as deploying solutions. Yet, there are reports of major security breaches, data leakages, spam and malware attacks.

One way to tackle such issues is by taking external help from outside people through bounty programs. These programs help technology companies fight malware attacks or vulnerabilities which the cyber criminals, hackers, and fraudsters try to exploit for reasons varying from hacking, defacing websites, DOS (denial of service) attacks, to re-directing web traffic, stealing data and user information and others.

The idea behind such reward initiatives is to attract and engage with user community or 'white hats' outside the organization, which have in-depth knowledge and understanding, domain expertise and hands-on experience of working on software products and platforms.



Small firms might go to a security vendor or a service provider, but there's a possibility that the security vendor could send bugs, spam or malware to get repetitive business.

Rohit Srivastwa,
Founder, ClubHack

The idea behind such reward initiatives is to attract and engage with user community or 'white hats' outside the organization, which have in-depth knowledge and understanding, domain expertise and hands-on experience of working on software products and platforms

These 'white hats' can range from young students, academics and researchers to top domain or technology experts that work or use a company's products, applications and platforms and are capable of exposing any presence of vulnerability or loopholes and notifying it to company.

Rewards and credits

Recently, Facebook and Google publicly disclosed the amount they paid for their respective bounty programs. Facebook paid over US \$1 million in its bug bounty program to some 329 people from 51 different countries including India. The California-based firm has paid \$20,000 as the highest single bounty so far and some individual researchers have earned over \$10,000.

Google, on the other hand, has raised its prize for its vulnerability reward programs to US \$5 million from this year. So far, the search giant has paid in excess of \$2million over the past three years for over 2000 reported security bugs.

Many small and mid-size tech firms also have reward initiatives. While these firms may not able loosen their purses like Google or Facebook, they too have interesting and encouraging incentives programs. Among them is the U.S. based Barracuda Labs, a global multidisciplinary research and threat analysis wing of Barracuda Networks, which offers bug reporters cash prizes ranging from some \$500 to \$3000 around, depending on the nature of the vulnerability.

"We believe security product vendors should be at the forefront of promoting security research. The goal of our program is to reward researchers for their hard work as well as to promote and encourage responsible disclosure," says Dave Farrow, Manager, Barracuda Bug Bounty Program.

"We receive a number of submissions throughout the year on a variety of topics. The number has remained fairly steady over the years since launching the program," he adds.

Online payment gateway for businesses PayPal, which launched its bounty drive a year ago, has already received over hundreds of participations



The goal of our program is to reward researchers for their hard work as well as to promote and encourage responsible disclosure.

Dave Farrow,
Manager,
Barracuda Bug Bounty Program



Flagging potential issues to us first, helps us to often provide fixes before anyone else is even aware.

Gus Anagnos,
Director, Information Security, PayPal

from researchers across the world.

“We have had participation from hundreds of researchers across 48 countries. Flagging potential issues to us first, helps us to often provide fixes before anyone else is even aware,” says Gus Anagnos, Director, Information Security, PayPal. “We know the importance of working closely with the security community to protect PayPal’s customers and believe that such collaborations across the industry will make the Internet a safer place for everyone.

Anagnos adds that PayPal has seen immense contribution from its security research partners in the one year that it has implemented this program.

Most programs follow more or less the same procedures and strict scrutiny. As a procedure, most users are barred from sharing information about the vulnerabilities detected by them in company’s products or platform and are not authorized to talk publicly.

Symantec, a founding member of the Organization for Internet Safety (OIS), follows guidelines laid by OIS. OIS encourages open communication between the ‘white hats’ and vendors, demarcates responsibilities between the two parties and protects the individual.

“We work closely with researchers who communicate vulnerabilities to us, and we give credit to finders who follow responsible disclosure,” says a company blog post.

Attracting new talent

The program also allows organizations to get talented people on board directly as seen in the case of Facebook. “No matter how much we invest in security — and we invest a lot — we will never have all the world’s smartest people on our team and will never be able to think of all the different ways a system as complex as ours might be vulnerable. Our Bug Bounty program allows us to harness the talent and perspective of people from all kinds of backgrounds, from all around the world,” a blog posted by the social networking site reads.

Among the 329 recipients of Facebook’s bug bounty program, two people have taken up a full time jobs with Facebook’s security team.

“While we have a team of dedicated security professionals who work vigilantly to help keep PayPal’s customer information secure, we realize that no company can do it all alone, and this goes without saying across the industry as well,” says Anagnos of PayPal.





Going forward

Given the significance of security today, it would be no surprise if the reward programs and initiatives become an integral part of business or corporate strategy, and companies start to invest in the same way as they do in CSR (corporate social responsibility) initiatives or setting up research facilities.

Unlike most foreign tech companies, Indian IT firms so far are yet to come up with their own reward initiatives. However, a Pune-based not-for-profit organization ClubHack has launched India's first bug bounty platform Bugs4Bounty, in association with the University of Pune and the Department of Science and Technology, Government of India.

According to ClubHack Founder Rohit Srivastwa, his organization caters to small companies, which can't afford a dedicated security team or resources to run their own bounty programs. "Small firms might go to a security vendor or a service

Google, raised its prize for its vulnerability reward programs to US \$5 million this year. So far, the search giant has paid in excess of \$2 million over the past three years for over 2000 reported security bugs

provider, but there's a possibility the security vendor could send bugs, spams or malware to get repetitive business. Hence, such companies can subscribe to our platform's service," says Srivastwa.

ClubHack's Bugs4Bounty platform is a kind of escrow service that enables organizations to run their own bug bounty programs, he says. "Unlike other programs, where the user notifies the company about the bugs, here the platform allows partial access to bugs reporting — both to the organization as well as our staff. That brings transparency towards the bugs reporting and vulnerability issues," he concludes.

As they say in the security world, "No security is foolproof," but security certainly can be enhanced and tightened using the latest technology along with human skills and intelligence. And the reward programs are another significant step in that direction.

pankaj.maru@expressindia.com



AUGMENTED READING

DNA newspaper has employed an augmented reality application, DNAit, to enhance the reading experience and feedback from readers

BY KTP RADHIKA

Newspapers and magazines often come up with innovative ways to deliver content to readers. One such instance is that of Mumbai-headquartered English daily, Daily News and Analysis (DNA), when it decided to use an augmented reality (AR) application, DNAit, to make its content fluid, interactive and seamlessly integrated.

For DNA, like all media businesses, feedback and engagement with customers has always been a challenge. The management felt that AR will be a

perfect branding tool for them and that the technology will make the media more interactive. It also felt that AR will help them understand consumer preferences in terms of likes or dislikes, their views and opinions on the news the publication offers. Debashish Ghosh, Board Member and Chief Technology Officer, DNA, says, "The whole idea behind DNAit is to engage the readers of print media and offer them greater value. The era of one-way communication has ended. All forms of media such as print, electronic and

online have evolved over a period of time and are now trying to engage consumers by developing online content or mobile applications. We wanted to provide our readers with additional information not only in the form of text but also as images, graphics and videos.”

To meet these demands, the newspaper management approached augmented reality solutions vendor Prisma Global. The vendor’s rich domain experience of over 30 years and its customer-focused approach prompted DNA to choose Prisma’s solution. Prisma studied the needs of the newspaper thoroughly and then built DNAit on top of their product Snap2Life. Shreeram Iyer, Chairman and Group CEO of Prisma Global explains, “Snap2Life is an AR tool that combines the printed world with the web by creating a direct link between a subject and its associated online content. Using this tool, every page and picture in a magazine or newspaper can be a linked to the website and digital content. What we did with DNA was that we customized the user interface to DNA’s requirements. It just took us four days of time.”

How it works

DNAit augments the real world with the help of digital content on a 3D platform. To start with, the user needs to download the AR application on their smartphones. It is currently available on iOS and Android platforms. Like QR codes, one can scan anything in the newspaper such as an image, logo or headline. DNAit then will recognize that particular image and provide additional content (it could be additional images or videos or information). For instance, if one clicks an image of the national flag, applications will algorithmically and scientifically figure out each pixel that matches with the pixel of the reference image. If the image matches, it automatically offers the additional content to the user. According to Ghosh, implementing the application was not a time consuming process. However, they had to train their internal staff to link additional digital content to print

communication which took a week.

As a technology AR has been there for almost 10 years. However, till two years ago, AR was not available to end consumers on devices since the technology was restricted to only B2B segments. “We all have seen the depiction of this technology in many construction events and B2B events but it was never available to the end consumer. However, as smartphones started penetrating the Indian market in a big way, Internet usage on smartphones also went up at a high rate. This has made AR available to the end consumers. Now with developments in the AR space, it can be used as a perfect branding and marketing tool and will be a lot more useful to the media industry,” feels Ghosh.

Real benefits

DNAit has enhanced the overall experience of DNA readers. The daily is now able to provide readers an interactive experience of reading the newspaper. Ravi Joshi, Editor – DNA, says, “In this age when the young urbanite prefers to Google it, tweet it and even WhatsApp it, we give our readers an opportunity to DNAit. The ethos of the newspaper is to ensure that the connect between DNA and its readers is no longer a one-way street. Interactivity is the only way forward and we are taking multiple steps to remain the most vibrant news paper product. The response has indeed been overwhelming.”

Ghosh adds, “With this application, we are able to engage the readers, enhance their reading experience and receive their feedback. Now, the flow of information is not restricted to just one-way communication; it is a two-way process.” And for the management, the benefits were manifold. The DNA management is now able to recognize what interests reader the most in the newspaper. “We could evaluate which news is highly consumed by readers. We are also able to figure out what kind of news excites our readers the most,” sums up Ghosh.

radhika.ktp@expressindia.com



With the AR application, we are able to engage the readers, enhance their reading experience and receive their feedback.

Debashish Ghosh,
Board Member and CTO, DNA

////////////////////
The DNA management felt that AR will help them understand consumer preferences in terms of likes or dislikes, their views and opinions on the news the publication offers



THINKING thin

During its PC refresh cycle,
Fullerton India makes way
for thin clients — and reaps
fat rewards

BY JASMINE DESAI

Fullerton India made a trenchant decision when its PCs were coming for a refresh cycle after roughly four years. Instead of replacing PCs with newer ones — the traditional way of doing things — it went for Citrix-based thin clients.

Fullerton India Credit Company Limited is a Non-Banking Finance Company (NBFC) with over 360 branches. It offers a range of financial services. With over 5,500 employees and one million customers, the company covers over 400 towns and cities and more than 15,000 villages across India. So a hosted solution made even more sense for Fullerton, given that its distributed locations used a variety of PCs.

Says Anoop Handa, Executive Vice President – Technology & CIO, Fullerton India, “Running PCs across so many locations was never cost effective and we were on the look-out to make the whole machinery cost-effective and optimal.” In short, they wanted to manage some 2,000 endpoints more effectively. Also, since the PCs were old, users were losing on productive time due to slow response. A better user experience was in earnest need.

The trend of consumerization of IT made the vendor evaluation procedure very significant. There was always the choice of going for new desktops, but Fullerton decided to diverge from that road and selected thin-clients. The main challenge was to make a business case for establishing an innovative and new way of working at the end-points. Says Handa, “To do something in an innovative and different way calls for a lot of pre-planning and negotiations.” There are close to 3,000 desktops in our offices across India, but the focus under this implementation was for around 2,200 desktops which were getting outdated. Fullerton already shared a rapport with Citrix and had worked with the vendor on its server virtualization initiative. This implementation meant extension on the end point side as well.

Thin clients make a big entry

Any huge implementation comes with inherent hurdles. The first hurdle was on user-front. Explains Handa, “We were taking away a desktop that has built-in memory and users tend to have lot of personal items stored in it. Every PC user is given 300-400 GB of storage. With this implementation, we were limiting the amount of storage allotted to each user.” From a security and control perspective, it is convenient to have everything in a central location, but for users it is a very big change management issue.

The implementation had to be linked to business as it was a huge change program for the company altogether. A detailed

assessment of the technology and implementation was done in a phased manner. The initial phase was convincing the management with benefits of going for hosted thin-client solution. The next phase was conducting a Proof Of Concept (POC) with 30 to 40 users across India, in diverse geographical locations like metros and rural areas and diverse functional roles accessing different applications. The idea behind this was to do a very comprehensive and extensive POC. The POC essentially confirmed that the technology worked across all users, applications, peripheral devices like printers, biometric devices etc. The end-user feedback helped in overcoming a lot of hurdles during the POC stage itself. It was extremely important to maintain constant communication with the business users, stakeholders and the end-users as it is a key to the success of such programs.

Fullerton India had to very carefully define job roles like power users, application specific users, users with need for larger storage among others. Thus, they had to really sieve through it properly and categorize and create images at the back-end for that particular group of users in terms of usage. It was a lengthy process requiring going to the branch to get the user backup of data on the front-end and transferring it to their profiles in



Running PCs across so many locations was never cost effective and we were on the look-out to make the whole machinery cost-effective and optimal.

Anoop Handa,

Executive Vice President – Technology & CIO, Fullerton India



the back-end. The implementation is still in continuing phase. Last month, some 600 of the thin-clients were installed. Around 40 desktops are changed on a per day basis.

Processes were instantly put in place for ease of use. There had to be proper knowledge of what applications and devices were being accessed and used across the organization and had to be documented properly. Another interesting thing was to teach users to do housekeeping. Says Handa, “Psychologically, users tend to keep their data for really long even when it is not useful anymore. We had to see how to migrate only relevant (business related) active data onto the central servers. Presently, on an average each user does not need more than 8-10 GB of storage.” Workflow systems, co-lending application, collection systems, Microsoft utilities, emails etc. are being used presently. Internal applications like HR are also being accessed on thin-clients.

The implementation required some sort of infrastructure overhaul. At the back-end, which is the centralized

storage backup, Fullerton procured new Dell servers and on the front-end, it procured thin-clients. The implementation partner was Anunta Technologies which provided fully managed services. In the industry, there are lot of managed services for the back-end side, but Fullerton India utilized them for implementation and for ensuring application delivery-as-a-service on all locations. It also ensures a single point of contact for anything to do with end-user computing.

Although being mid-way in its implementation, Fullerton India has already started accruing benefits. Once the PCs started getting outdated, the organization was receiving lot of help-desk tickets for PC related issues, either for upgrade or more memory etc. Help-desk tickets for those locations where thin-clients have been installed has gone down considerably. Today, when power has become such a valuable commodity, the organization is saving a lot on power, post implementation. During the POC itself, the power saving was around 50%. Also, with thin-clients boot up is instant, thus resulting in more

productive time.

Fullerton India accumulated lot of valuable learnings during the implementation. Says Handa, “It is necessary to do the homework and carefully assess the requirements. There is no need to follow the herd. Any implementation, especially of this scale, has to be an IT-enabled business affirmation program, wherein you have to do proper planning; extensive communication, user awareness and being with users during the implementation stage is very essential.” Also, he says, any new discovery or lesson during POC should be documented.

Next on the agenda is to leverage BYOD in the next financial year. Since Fullerton India has the back-end infrastructure in place, it can be extended to a variety of end-user devices including tablets. Says Handa, “More and more organizations will be jumping onto what is termed as the ‘consumerization of IT,’ leading to the use of heterogeneous end-points.”

jasmine.desai@expressindia.com

RAHUL AGARWAL
LENOVO INDIA

Rahul Agarwal, Executive Director, Commercial Business Segment, Lenovo India, talks to Heena Jhingan about the PC maker's business pitch to ramp up its stakes in the enterprise segment. Excerpts...

“Our alliance with EMC will help us enhance our enterprise product portfolio”

How has Lenovo's decision to divide the business into two groups, Lenovo Business Group (LBG) and Think Business Group (TBG), translated for the enterprise business?

Lenovo implemented an internal company reorganization which included creating two new end-to-end business groups: Lenovo Business Group (LBG) and Think Business Group (TBG). LBG focuses on the mainstream consumer/commercial desktop, notebook PC and tablet businesses, and the TBG covers premium products in both, the commercial and consumer segments as well as enterprise solutions (such as servers and storage) and workstations. Lenovo's current operations, including its global supply chain, global services unit and corporate functions, will be integrated and aligned with these new business groups.

The decision has been a win-win for both the segments so far. We have successfully sharpened the brand 'Lenovo' in both the segments. This allows us to enhance our ability to innovate in both premium and mainstream products in the enterprise segment, and further increase the speed of decision-making and execution.

In India, Lenovo has a strong presence in the enterprise space, contributing to 45-50% of its India revenues. However, with trends like cloud and mobility dominating the enterprise space and businesses looking at end-to-end solutions, how does Lenovo plan to continue to grow in this market?

While the PC market still represents a substantial opportunity for profitable growth, most of the new growth will be in the PC-plus market. We continue to protect our PC business as a stronghold, while we are rapidly building a strong foothold in the smartphone and tablet markets to become a PC-plus leader. We will explore new areas of growth which will include smart connected devices (smartphones, tablets with smart TVs), broader portfolio of cloud, services and infrastructure hardware — such as storage and servers — that are critical to powering the PC-plus era.

We believe mobility will be one of the key



What are some of the deals that Lenovo has bagged in India in the enterprise space?

On an average, the government sector contributes about 15% to Lenovo's relation (REL) business. At the time we won the ELCOT deal (Q3, FY 2012), the contribution of the government sector went up from 15% to 35-40%. In the recent past, we have delivered some key projects like Maharashtra eGram/MahaOnline Project, UID National Population Registry and Tamil Nadu Students Laptop scheme.

factors to influence the future of products for the enterprise PC market. Lenovo has introduced a range of enterprise tablets which have enterprise-grade security features, making it perfect for our enterprise customers.

In sync with our PC-plus/one cloud strategy, we believe that our recent alliance with EMC will also help us to be more aggressive in the server/storage market to provide more comprehensive product portfolios.

There is an overall decline in PCs, but increase in mobile devices and different form factors. What is going to be Lenovo's differentiation to make use of this opportunity?

We believe that PCs will continue to be at the heart of the connected devices ecosystem and the newer mobile devices will become our area for growth — which is perfectly in sync with our “protect and attack” strategy. We will look to protect our PC business but also continue to evaluate and attack new market trends, form factors, designs, etc.

Lenovo is making use of this growing opportunity by innovating as fast as the evolving market. We have embraced the multi-mode design to provide users with technology that adapts to their needs and new usage scenarios instead of making users adapt to the device. Our Yoga convertible first changed the paradigm, allowing people to combine their activities into one device (laptop and tablet). We have continued to advance this design philosophy to include tablets and all-in-one desktops.

We recently launched our next-generation Yoga and flex dual-mode devices, including the Yoga 2 Pro, ThinkPad Yoga, and Flex 14 and 15 laptops. These new multi-mode devices, along with our Twist, Helix and Lynx products, are changing the future of personal and business computing, and redefining the way people use PCs, with the ability to flip, fold, twist, turn and separate to adapt to multiple usage scenarios. In the PC-plus era, we cannot win by being a quick follower; we must be the trend-setter.

heena.jhingan@expressindia.com

Will iOS 7 Make MDM Redundant?

The new operating system from Apple sports enhanced manageability features for enterprises. But will it emerge as an alternative to Mobile Device Management?

BY MEHAK CHAWLA

Now that iOS 7 has arrived, been installed and has seen a couple of bug fix updates, it can be pronounced a fairly established reality for enterprises. The good bit of news here is that Apple has made considerable efforts to make its newest Operating System (OS) not only enterprise ready, but enterprise savvy, in what is being touted as the most significant OS update since iOS 4. According to Gartner, Apple iOS 7 includes more enterprise enhancements

than any release since iOS 4.0 introduced mobile device management APIs.

Apple has upped the ante in the enterprise mobility game by introducing free iWork mobile apps in the cloud and per app VPN (iOS 7 apps can be configured to automatically connect to VPN when launched, giving administrators more control by ensuring that data transmitted by managed apps travels through the VPN, while other data does not). By adding features like Managed Open In, which implies that

enterprises can force employees to open email attachments in specific, corporate-managed applications, rather than some possibly insecure app of their own choosing, Apple has made clear its focus on corporate security, a domain almost monopolized by BlackBerry until a couple of years back.

There is hardly any doubt that the dwindling fortunes of BlackBerry, once the reigning king of enterprise mobility, is leaving a huge unclaimed space within the corporate world. And though a





Though Android dominates the Indian market because of cost, enterprises who understand the user experience and ecosystem and have the affordability, do opt for Apple devices.

Vishal Tripathi,
Principal Research Analyst,
Gartner India

substantial number of organizations are continuing with BlackBerry devices, disparate OS environments have become a reality for most IT heads. The OEMs, of course, are battling it out to establish their footholds in the enterprise market.

Enterprise envy

Whether it is managed or un-managed, the fact is that BYOD has picked up pace in India. What quite a few mobile platforms are doing is trying to give IT administrators greater control over the

devices that access their IT environments. In line with providing some basic hygiene factor to BYOD, there are quite a few features that iOS 7 provides to better control multiple devices.

Others too are vying for IT heads' attention. Windows is an established enterprise platform, and even though it might not have made much inroads into the mobility space as of now, this story can completely change with Microsoft's recent acquisition of Nokia. Also, even

An enterprise which does not have too many compliance issues to take care of, and is not worried about customer data breaches, will be satisfied with the in-built capabilities of iOS 7

KEY ENTERPRISE FEATURES OF iOS 7

Free iWork mobile apps in the cloud:

Apple has made its iWork free and cloud-accessible, much like Google Docs.

App Store Volume Purchase Program:

Enterprises can now buy apps and books for their iPhone and iPad-using employees, keeping the rights to those apps and books if the employees leave, so that they can transfer them to other workers.

Managed "Open In": iOS 7 allows businesses to protect corporate data by controlling which apps (and accounts) are used to open documents and attachments.

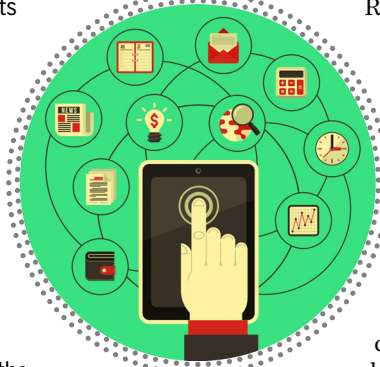
Enterprise Single Sign-On: Each new app configured with SSO verifies user permissions for enterprise resources, and logs users in without requiring them to re-enter passwords.

Per-App VPN: iOS 7 apps can be configured to automatically connect to the VPN when launched, giving administrators granular control over corporate network access.

Easier Deployment of MDM: The new MDM protocol in iOS 7 includes several commands, queries, and configuration options that make third-party MDM solutions even more powerful.

Improved Data Security: For App Store apps, iOS 7 features much tighter security.

Biometric Scanner: This is meant for advanced identity management.



though Android has never been known as an enterprise focused OS, the OEMs using Android platforms are busy incorporating enterprise features in their own devices. The recently launched version of Android, KitKat, also promises enhanced enterprise capabilities.

Vishal Tripathi, Principal Research Analyst, Gartner India, elaborates on this.

"Though Android may not be a very enterprise savvy OS, vendors are doing their bit by adding enterprise capability to their devices.

Samsung's Knox is an example where Samsung has done certain feature

enhancements such as advanced Microsoft Exchange ActiveSync features, AES 256-bit encryption and VPN connectivity to make it more suitable for enterprises. Other vendors like Lenovo are also adding their own R&D to enhance enterprise capabilities of their Android devices."

Apple's other big rival, Windows, is also emerging as a mobility platform of choice for quite some enterprises. Tripathi explains the natural advantages that come with the Windows platform. "A big advantage in case of Windows is that enterprises do not need to rewrite their apps for the mobile environment. Though that may not apply to several apps like CRM etc., the advantage remains." Also, the other significant enterprise vendor, BlackBerry, is not to be ruled out just yet. Their devices are still finding enterprise takers, and with their MDM platform BES10 doing well, BB 10 could still be the mobility engine of choice for Indian enterprises who are looking for tighter security on the mobile. Says Akash Mainra, Business Lead - Large Enterprise, BlackBerry India, "What customers love about BES10 is the complete Data Loss Prevention (DLP) it offers. Enterprises are liking BES 10 for our security applications, especially those who have a higher penetration of other OSes."

However, a key clinching factor in the Indian market is the cost factor, and Apple hardly emerges as the winner there. Even though BYOD is catching up in India, there are enterprises who still provide devices, at least to their top managements, and the high cost of iPhones can prove to be a spoilsport there. Much like all hardware, the pricing of devices plays a key role in enterprise decisions. In India, a price sensitive market, with relatively low awareness levels and loosely defined compliance laws, the right pricing of devices can change the game for vendors.

When it comes to the pricing carrot, Android emerges as a clear winner. The wide gamut of Android devices, ranging across price points, suit the budgets of SMEs as well as enterprises who are not looking for elaborate features, but still want to introduce some basic manageability in their mobile environments. "Though Android dominates the Indian market because of cost, enterprises who understand the user experience and ecosystem and have the affordability, do opt for Apple devices," explains Tripathi.

Friend or foe?

So can an OEM, even if it is Apple, make the need of an MDM solution redundant for an organization by virtue of its advanced enterprise features? According to Tripathi, it all depends on the level of control that an organization is seeking. "When compared with a core MDM player, iOS 7 will only have limited capability. It will give IT administrators some level of control, but it will not replace or obliterate the need for MDM. Eventually it will all depend on how much control does an organization want and how much are they willing to spend on device management."

So an enterprise which does not have too many compliance issues to take care of and is not worried about customer data breaches, will be satisfied with the in-built capabilities of iOS 7. A good number of organizations will still, however, go with MDM and complement rather than supplement it with enhanced OS features. MDM, after all, is moving



beyond the device. "When it comes to mobility, not many IT heads are worried about the device. We are moving toward Mobile Application Management (MAM). Enterprises want to secure data and applications and not just the hardware," says Tripathi.

Abhilash Purushothaman, Solution Sales Head, Service Assurance Business Unit (India), CA Technologies, adds to that by saying, "In the MDM space, managers are brokers rather than owners of technology. The complexity of MDM is going up with the variety of devices. MDM vendors and OEMs are both friends and foes. OS features become a great support in terms of adding more control in an enterprise MDM scenario. For small enterprises, an OEM's MDM features may suffice but these often incorporate very basic features and advanced environments,

which require things like geo-fencing, have to go in for MDM solutions." That is why most MDM players like BlackBerry, Sophos and SAP Afaria announced immediate support for iOS 7 to better manage their customers' complex mobility needs.

Advanced enterprise features of an OS can prove to be a boon for MDM players. With iOS 7, for instance, MDM IT administrators can set up managed apps, install custom fonts, configure accessibility options and AirPrint printers, and white-list AirPlay destinations over the air. Apple has also added Streamlined MDM enrollment, improved App Store license management, third-party app data protection, and improved mail and support for Caching Server 2 into iOS 7, making the jobs of MDM players slightly easier.

In India, according to the research

firm Zinnov, the enterprise mobility market is expected to touch \$1 billion by mid-2015. Within this, MDM is just one small component, though estimated to be growing fast at about 40% annually. And while BlackBerry continues to have the largest installed base in Indian enterprises, rival platforms are growing faster. MDM players like MobileIron, Afaria (SAP) and Zenprise (Citrix) are only going to ratchet up their efforts to capture this growing pie. Apple's iOS 7, by dint of its enhanced enterprise capabilities, has the potential to make some of the prospective enterprises stick with it and forgo full-fledged MDM solutions. But if Apple continues its lackadaisical attitude toward the Indian market, it would miss making the most of the opportunity.

mehak.chawla@expressindia.com



CEO Larry Ellison talking about the company's in-memory solution at Oracle OpenWorld 2013

ENGINEERED FOR CLOUD

Oracle, a leader in relational database, is desperate to replicate its success in cloud computing and in-memory technology. Its big bets? Expansive cloud infrastructure and engineered systems

BY HEENA JHINGAN

Oracle OpenWorld (OOW), the annual event hosted by the business software and hardware systems provider, this year drew about 60,000 visitors from across the world. The corporation made sure they did everything to tell the participants about its intent of making an impact in the market with hardware. This is nothing new but an obvious claim that the company has been making since the Sun Microsystems acquisition. So, there was nothing unusual for Oracle followers to find one keynote of the event focusing on high-performance servers, especially the new SPARC M6-32 systems that run applications in-memory.

Oracle's co-founder and CEO Larry Ellison hit the nail on the head talking about the industry's need to be prepared for the information age. The leader in the relational databases space has been trying to carve space in the in-memory space, so Ellison, in his opening note, did

not waste anytime to announce the news of an in-memory database option for the latest Oracle I2C database, which he said will run at "ungodly speed" (at least 100 times faster). The in-memory option — which competes with SAP HANA — will be available next year.

However, he made his address quick and ended it quite abruptly, leaving a majority of his audience wondering. Most participants that had jostled in the circuitous queues to get in to San Francisco's Moscone Center and listen to him felt his message lacked vision.

Perhaps, this task was bestowed to the company President Mark Hurd, who made a more comprehensive address, talking about trends dominating the industry and the company's plan of action to deal with it.

Hurd noted that macro trends like globalization, rise of mobility, data explosion, social business, sophisticated

customers, are driving IT and this has led every stake holder to modernize to survive.

He admitted, that even as it might sound repetitive, Oracle will be spending US \$5 billion on research and development efforts across multiple areas including not only cloud (the biggest IT trend today), but also product development in cloud, applications and vertical integration.

Explaining that data is likely to grow 50 times by 2020, Hurd said, "Information drives global GDP based on data, based on analytics. The winners are those who can harness it. We are trying to help companies take competitive advantage of information."

Fielding queries around current market turmoil and shrinking hardware revenues, Hurd pointed out that Oracle's hardware story is a bit different in terms of various components. "The server market measured in unit is either flat or down slightly. And last year was not a great year for servers."

However, the unit sales were up 60% for engineered systems and "we clearly gained a lot of share," he added. "And we're penetrating the market. Engineered systems are up 60%, and 40% of those were new customers. Engineered systems form a very big part of our business in hardware and software, and we've chosen very aggressively to go after growth."

On the Software business, Hurd was optimistic and said, "Our view would be in Q1 2013, we grew our software and license business by 17% and we see it growing further by 6%."

The cloud burst

Cloud enablement remained an important focus for the company. Furthering its plan to monetize cloud, Oracle added 10 services to the cloud, including database as a service, Java in the cloud, and business intelligence (BI) in the cloud. A decision that can be viewed timely and will help Oracle achieve its dream of becoming an expansive cloud solutions provider.

According to Thomas Kurian, Executive Vice-President-Product Development, Oracle, in all, Oracle Cloud

has about 20 million users, doing 19 billion transactions a day.

Another significant development announced at OOW was in the form of Oracle's decision to open a marketplace in the cloud, allowing its partners to put up on sale the applications they make for enterprises. On the lines of a conventional app store that exists for Android, iOS and Microsoft's Operating Systems for consumers, Oracle's Cloud MarketPlace showcases both featured (for subscription) and free apps by Oracle's Partner Network program members from across the world, targeted at businesses. The marketplace at present features more than 100 business applications and has been designed to help cloud customers to browse, evaluate, and buy trusted business applications.

The marketplace is a good thing for partners who can leverage Oracle Cloud Platform Services, to build applications, extend and integrate with Oracle SaaS (service-as-a-platform) applications, and publish their applications on the marketplace to reach Oracle's customers. In fact, this will help Oracle offer its customers a greater choice of applications.

Besides, to fulfill the mobility aspirations of its customers, Oracle also announced Oracle Mobile Cloud Services, a mobile back-end as a service (MBaaS) that helps mobile app developers readily create more powerful and sophisticated applications that tap into enterprise back-end services and simplify enterprise mobile connectivity.

Microsoft, Oracle's database rival turned partner hogged the limelight at OOW. As per the recently cemented relationship, Oracle will certify and support its product line — applications, middleware, database, Java, and Oracle Linux — on Windows Server Hyper-V and Windows Azure. Microsoft, in turn, will offer Java, Oracle Database, and Oracle WebLogic Server to Windows Azure customers.

What happens to Oracle's in-memory push though, is going to be an interesting story to track.

heena.jhingan@expressindia.com



Engineered systems are up 60%, and 40% of those were new customers.

Mark Hurd,
President, Oracle

Oracle's Cloud MarketPlace showcases both featured (for subscription) and free apps by Oracle's Partner Network program members from across the world, targeted at businesses

SANTANU GHOSE
HP INDIA

Santanu Ghose, Director – Business Critical Systems, Enterprise Business, HP India, talks to Jasmine Desai on UX, the NonStop platform and the buzz among HP customers

“Revenues are coming down on UX because we are over-delivering on performance”

Where does the NonStop platform feature in your converged offerings?

HP has a highly available server called the NonStop server. It's a key portfolio for us. For any technology to succeed, it hugely depends on how customers are adopting it.

The heart of the converged infrastructure is the fabric. It is the IP cloud which is connected to various resources like CPU, I/O, storage through fabric and then one has a common resource pool. You do not treat these as separate entities. It is a precursor of current generation Virtual Connect. Banks have been using this for the last ten years. Other sectors are just on their way to adopting it. One of the largest deployers of NonStop in the world is one of the largest stock exchanges, having 50% of their operations in the U.S. and the rest in another part of Asia. These systems are connected through a high bandwidth pipe, which behaves like a single system across continents, because of the concept of servernet where you are connecting the routers together. The FlexFabric of HP is managed from there. HP launched the BladeSystem Matrix which had Virtual Connect and FlexFabric.

Converged infrastructure is more than a technology; it is a business process that organizations have to build, wherein they take a conscious decision of having IT in different islands of storage but treat it as a single resource base. That can happen if there is a fabric Virtual Connect on x86 and servernet on the NonStop platform side. Virtual Connect is available also on Unix server Superdome. Presently, all HP systems are fabric-based.

Can you please elaborate on the HP-UX strategy and the struggles you have with it?

There is a wide perception that customers are moving away from the HP-UX platform. There is definitely a growing trend in customers buying UX. Cost savings on the UX server are tremendous. The revenues are coming down on UX because we are over-delivering on performance. For example, a large organization that brought UX infrastructure to run their ERP application five years ago, purchased it for \$3 million. Presently, while making a refresh



How is the cloud evolving at HP?

UX started the whole concept of resource sharing, which then trickled down to the x86 platform. HP is taking all IPs from UX and putting it on x86 environment and enabling cloud services with CSN (CloudSystem Matrix). One of the basic component of CSN is the Global Workload Manager and Capacity Manager. It helps the cloud provider to understand their capacity on an instantaneous basis. UX in many ways is reinventing itself and contributing to modern growth.

and with the load going up 1.5 times they are spending only \$1 million. With the launch of Poulson, we become extremely competitive and good on pricing performance. On a TCO basis, we are better than Linux operations. A low end UX server costs as low as Rs. 6 lakh.

The performance of the system based on new generation processors has become 3-4 times better. This is not only restricted to us but to other UX vendors also. The BYOD trend which is only going to dominate, is creating lot of stress on the security structure in an organization. UX is able to deliver a rock-solid secure environment. The threat perception in the current generation of UX which is Ili v3, have made it ten times more agile.

We are acquiring a lot of new customers, especially from the SMB segment who have been on Windows and Linux environment. While going for refresh, they are choosing UX platform. They do not want to interfere with the running of an application and on these environments, one has to do patch management diligently. For UX, patch management is once in two years and there is minimal amount of manual intervention.

What major challenges are HP customers facing right now?

Presently, the major challenge for customers is around security and lowering the cost of TCO that continues to dominate organizations. TCO comes from various areas, and not just acquisition and maintenance cost. Power and cooling constitutes a part of the TCO. We are addressing this with new processors which we have added. These improve power and cooling efficiency by about 50%. On the security front, when we launched Integrity servers, we improved security management by 10x, so organizations can connect even their external devices. The message that we are giving out is that high-end technology cannot be done away with, because the business depends on that, especially BFSI. It is also about making these systems scalable and cost-effective.

jasmine.desai@expressindia.com

A.S. RAJGOPAL
NXTGEN

A.S. Rajgopal, MD & CEO, NxtGen Datacenter & Cloud Technologies, in a conversation with Express Computer, talks about the company's unique data center services, the Indian cloud market and NxtGen's plans for the future.

“Our priority is to take our High Density Data Center live”

What are the top two or three key differentiators for NxtGen that distinguish it from other players in the Indian enterprise market?

IT organisations today, are business enablers and they need to constantly adopt new applications and technologies to enable business agility. At NxtGen, we are working on providing a long term solution on the IT infrastructure to run the new applications and technologies without the traditional bottlenecks.

We are working on providing an “Infinite Datacenter” for enterprises as a long-term solution to address their infrastructure needs for a dynamic business. With an ‘Infinite Datacenter’, the IT organisation can focus on enabling the business with new applications and technologies and have no concerns about their infrastructure.

Furthermore, we enable enterprises to adopt the hybrid world. We have pioneered the On-Premise Datacenter (OPDC) solution and are investing in a large hosting facility for the cloud infrastructure in Bangalore. Our Enterprise Cloud Services has already delivered business value for many customers, both at customer premises and from within our own facilities. Going forward, these customers can leverage on our cloud services to meet their dynamic infrastructure needs.

While there is more hype around public cloud, do you think Indian enterprises are more likely to adopt private or hybrid cloud models? Where do you see the enterprise adoption going to a large extent?

No enterprise should miss the opportunity of taking the best of both public and private clouds. It evident from enterprise trends world-wide, that it is leading to the hybrid world. Most new age implementations, especially in the e-commerce area, we see internet facing servers being hosted in the public cloud and the actual business is conducted in a private cloud.

Are customers also looking at hosting business-critical data and applications?



What would be the priorities for NxtGen in the next few months to tap the growing cloud solutions space in India?

We have had great response to our enterprise cloud services. Today, our priority is to take our High Density Data Center (HDDC) live in Bangalore. We expect it to be operational by April 2014. Next year, we will be working on three projects, one in India and two at international locations. As the facilities in the international locations go live, we will take our cloud services into those markets as well.

Customers with new implementations are hosting even their mission-critical applications on private clouds. Those with mature IT practices such as banks, have long term investments which would be migrated to the cloud only when the infrastructure is ready for a technology refresh.

You claim to offer customers 70% operational cost savings. How are you able to achieve that?

We work on the entire value-chain of the data center. Significant cost savings can be achieved in the non-IT components of the data center by adopting our OPDC solutions and in combination with our Enterprise Cloud Services, customers should demand such levels of savings. For one of our customers, we have consolidated 30 physical servers into a virtual environment using just 8 servers. In the process, we also created over 30% additional capacity. We have multiple cases of business value being delivered from data center and cloud technologies.

Is there a difference between your On Premise Data Center (OPDC) and a private cloud?

On-premise Datacenter (OPDC) is an integrated datacenter product which hosts a private cloud. For us to deliver the full extent of cost savings, customer should consider OPDC along with our Enterprise Cloud Services.

Do you think cloud interoperability is as big an issue as cloud security? Please share your views on these and other customer concerns.

In my view, the primarily goal of an enterprise customer today is to take advantage of cloud. Interoperability would come into picture only when hosted on proprietary technology cloud implementations. Most industry standard technologies offer interoperability, and we are able to migrate customers between various cloud platforms without a great deal of pain. However, I would advise our customers to keep away from proprietary implementations so that they are not locked into a vendor and cannot take advantage of other choices.

Banks in India at risk with Windows XP support coming to an end



ABOUT 34,115 INDIAN PSU bank branches are at the risk of a security breach once the support for Windows XP ends around April 08, 2014, a study by Microsoft in association with Ascentius Consulting revealed. Though Windows XP will no longer be supported by Microsoft beginning April 8, 2014, the study shows that the penetration of the operating system is still high at 40-70% in the banking sector.

Amongst the greatest risks facing banks that maintain their Windows XP installations, despite the end of support, are their ability to respond to customers and manage waiting times. More specifically, a large number of branches that rely on XP, especially in the rural and semi-urban areas may go down and therefore deny service to customers completely. Secondly, in metro and urban branches, the impact may be as great as

55% of customers facing an extended waiting time of up to 30 minutes for an average transaction.

Further, the fiscal impact of this could be as much as loss of business opportunity worth Rs. 1,100 crore in a day and a loss of income of Rs. 330 crore over a period of 3 days (assuming that a major incident may take 3 days for the systems to come up to normal functioning). Non-migration may also expose customers to greater risk of identity theft and fraud.

According to Ascentius Consulting, staying on Windows XP could also mean that banks may face loss of business opportunities because they will not be able to leverage eKYC (electronic Know Your Customer) norms, as proposed by the RBI. Since Windows XP may not support new biometric devices, as required by RBI-UID norms, banks will be constrained to continue with manual verification of

customers leading to higher costs and longer customer waiting times.

The 100-working days timeline is crucial for banks as per Ascentius Consulting. This is because their study estimates that the time to move from XP to modern technology for banks will be between 4-6 months.

“We have been advising our customers to move off Windows XP for a long time now. There are a significant number of PCs out there that still need to be moved per a plan. The move to a modern OS like Windows 8.1 will not only alleviate the risks for users and businesses, but will also open up opportunities posed by modern technology, like the cloud, for them”, said Amrish Goyal, General Manager, Windows Business Group, Microsoft Corporation (India) Pvt. Ltd.

“A large part of our PC base was on Windows XP and, as the product is reaching end-of-support, we are in the middle of a phased migration to more recent versions of Windows, including Windows 7 and Windows 8. We’ve already seen that employees have been able to enjoy a lot more features like 64-bit computing with better functionality and benefits. This upgrade also brings value to our internal customers and employees by helping them transition seamlessly and enhance their present work processes,” said Jayantha Prabhu, Chief Technology Officer, Essar Group.

“By migrating from Windows XP to Windows 7 we have overcome the challenge of compatibility with modern hardware, software and applications. Security features like bit locker and encryption provide us with better peace of mind while working with sensitive data. The biggest benefit has been that cloud-enabled Microsoft Office 365 is compatible with Windows 7,” said Milind N Kotibhaskar, General Manager, and Division Head, Infotech Division, Toyo Engineering India Ltd.



Nikom - An ISO 9001 Company and member of IGBC (Indian Green Building Council-CII) has an integrated capability to design and build state-of-Art World class green Datacentres on a turnkey basis for large and medium enterprises. Having successfully designed, implemented, and executed various turnkey datacentre projects for enterprises with server farm space of 200 sq. ft. to 15000 sq. ft., Nikom has won "BEST-IN-CLASS" Award in Asia Pacific Japan Region for their significant contribution in the field of Green Datacentres and Energy Management Solutions. Nikom InfraSolutions Pvt. Ltd. one of the Elite DC Partners of many leading global brands, have been winning consistently and delivering various prestigious Datacentre projects. All the Datacentres and Energy Management Solutions designed, and implemented by Nikom are with highest standards of project excellence, and technical expertise.

OFFERINGS:

- Turnkey Datacentre Implementation Projects.
- Physical Infrastructure Solutions - UPS, DG, Precision Cooling, IBMS, Civil, Electrical, Structured Passive Networking.
- Consultancy & Design for Datacentre Physical Infrastructure.
- Energy Management Solutions.
- Project Management of Datacentre Projects.
- Complete Physical Infrastructure Operation of Datacentre.
- Datacentre Audits and Certification.

SPECIAL OFFERING :

- Xpress DC Solution Services - 48 hours
- DC Infra Blocks Services - 1 hour



**Helping You Realize
Your Project Deadlines....**



Nikom InfraSolutions Pvt. Ltd.

Head Office :
309, Skylark Building 60, Nehru Place, New Delhi-110019, India
Tel. : 09968127604, 09811135559, Fax:41606375
E-mail :info@nikom.in Website:www.nikom.in

SMS NIKOM to 52424;  [nikominfrasolutions](http://www.nikom.in)

SAP and SAS partner for joint in-memory analytics efforts



SAP AG AND SAS will partner closely to create a joint technology and product roadmap designed to leverage the SAP HANA platform and SAS analytics capabilities. By incorporating the in-memory SAP HANA platform into SAS applications and enabling SAS' industry-proven advanced analytics algorithms to run on SAP HANA, decision makers will have the opportunity to leverage the value of real-time data analysis within their existing SAS and SAP HANA environments.

The in-memory functionality is designed to improve data scientists' productivity by accelerating model development, iteration and deployment. "The partnership of SAS with SAP will simplify Big Data and analytics efforts by reducing data movement and allowing for faster decision-making," said Henry Morris, Senior Vice President, Worldwide Software and Services, Research, IDC. "It can be more efficient to move the model to the data than the data to the model. This relationship will significantly drive value to joint

customers."

SAS and SAP plan to execute a co-sell pilot program to engage select joint customers to validate SAS applications running on SAP HANA. The goal of this program is to build and prioritize the two firms' joint technology throughout 2014, in particular for industries such as financial services, telecommunications, retail, consumer products and manufacturing. The applications are expected to target business areas that require a combination of advanced analytics running on an in-memory platform that will be designed to yield high value results. Such opportunities exist in customer intelligence, risk management, asset management and anti-money laundering, among others.

"Combining the power of SAP HANA platform with SAS advanced analytics applications is the first wave of innovation we plan to deliver to our joint customers," said Bill McDermott, Co-CEO and member of the Executive Board of SAP AG.

MAIT-KPMG report highlights IT challenges, potential

A NEW REPORT launched jointly by MAIT and KPMG highlights various challenges to increase the IT penetration in the country at multiple levels and suggests recommendations to overcome them.

According to the joint announcement, the Indian IT hardware industry can look forward to making a substantial impact by taking some steps such as, bringing down the hardware cost by 43% with the help of government subsidies, reducing the total cost of ownership (TCO) of a PC and broadband solution (currently estimated to be about Rs. 15,650 per annum), providing income tax exemption to individuals against PC purchase, and promoting the purchase of PCs amongst specific segments like students and households with annual income below Rs. 5 lakh.

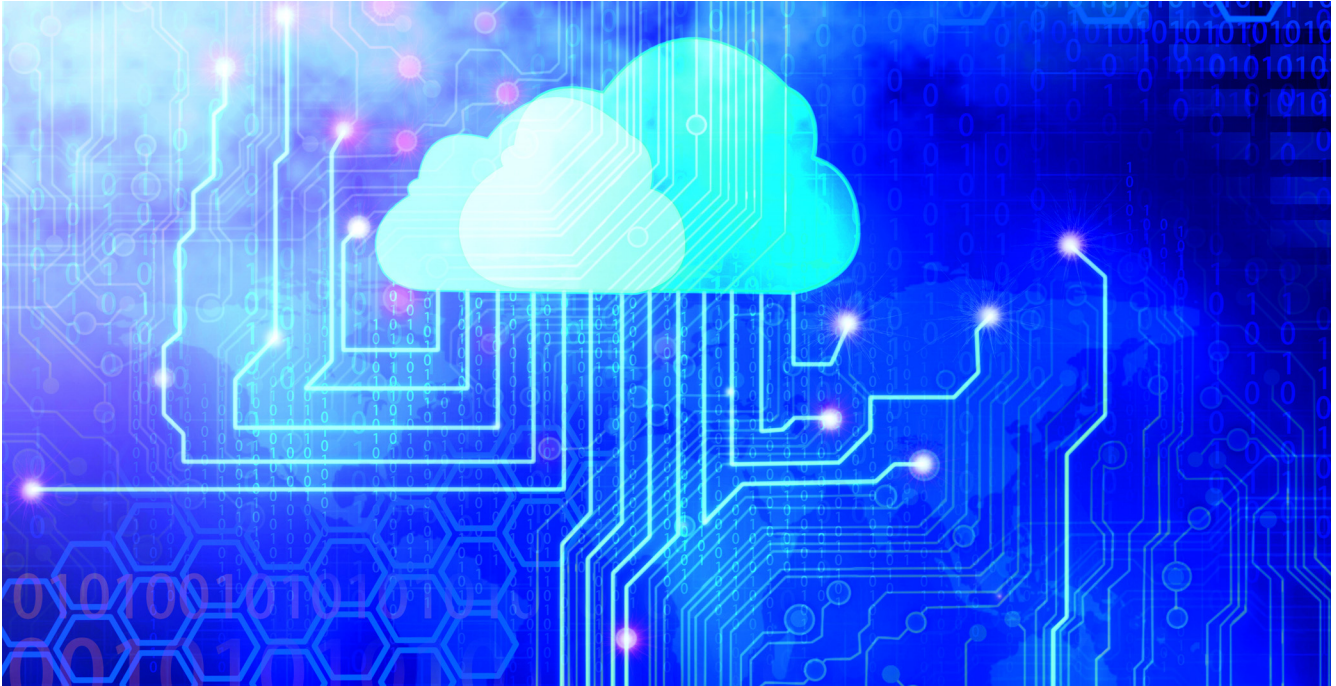
Titled "Indian Market Place - IT the unrealized potential" (sic), the report was unveiled by Sam Pitroda, Advisor to the Prime Minister on Public Information, Infrastructure & Innovations.

The report estimates that in FY 2014-18, there could be an increase in sales of desktops and notebooks from the current 6% to 18% CAGR, thereby contributing an additional GDP of Rs. 66,300 crore, taxes of Rs. 25,000 crore and new employment for 1,11,600 people.

However, if the recommendations are implemented by FY 2018, the total number of persons employed would reach 4,23,500 on average, contributing Rs. 2,91,700 crore to GDP and Rs. 1,10,600 crore in taxes through direct, indirect and induced effects.

This would also result in increasing the current installed base of about 48 million PCs to about 76 million by the end of FY 2018.

Juniper Networks introduces MetaFabric for cloud data centers



TO HELP ENTERPRISE organizations and service providers address the challenges associated with managing multiple, geographically dispersed data centers, Juniper Networks has unveiled MetaFabric, a new architecture for next generation data centers. MetaFabric is designed to simplify and accelerate the deployment and delivery of applications within and across multiple data center locations.

This new architecture will enable customers to run data center networks securely and more efficiently through a combination of Juniper's network innovations, professional services and strategic partnerships.

According to the company press release, today's network infrastructures are not agile enough to keep pace with new and emerging data center technologies, preventing customers from fully capitalizing on the business potential of

the cloud, mobile and big data. According to Gartner, "traditional network design practices do not adequately support the modern user. To optimally serve the business, network architects must shift their thinking from technology to users and business processes."

The MetaFabric architecture claims to have the potential to change the paradigm and can help network architects accelerate time to value. Delivered via a comprehensive portfolio of switching, routing, orchestration, software-defined networking (SDN) and security solutions as well as technology partnerships, MetaFabric is expected to help ensure investment protection by allowing organizations to adapt to the changing needs of the data center, without the need to rip and replace existing infrastructures.

Additionally, with MetaFabric, customers can optimally deploy, utilize

and manage a unified pool of network resources across multiple data centers, achieving greater levels of business agility, cost efficiencies and improving the end user application experience.

"IT leaders have been seeking a network that can keep up with the rigorous demands of their business, leverage the cloud in a smart and evolutionary way, and provide innovative solutions to secure both the infrastructure and data. For the first time, MetaFabric will allow companies to operate multiple data centers — physical and virtual, private and cloud — as a single, flexible pool of network resources, providing tremendous levels of flexibility and efficiency, as enterprises and service providers shift towards an application-driven world," said Rami Rahim, Executive Vice President, Platform Systems Division, Juniper Networks.

SafeNet introduces encryption solution for AWS customers



SAFENET HAS ANNOUNCED key enhancements to SafeNet ProtectV that allow customers to encrypt Amazon EC2 workloads and maintain full ownership of encryption keys, with no need for on-premise hardware.

SafeNet ProtectV with Virtual KeySecure is now available to run entirely on Amazon Web Services (AWS) infrastructure and is compatible with AWS CloudHSM, allowing customers to retain full ownership of their encryption keys while deploying entirely in the cloud. Through the AWS Marketplace, SafeNet ProtectV and Virtual KeySecure are available in a pay-as-you-go pricing model similar to AWS cloud services.

SafeNet's encryption and key management solutions can further enable AWS customers to move their sensitive data and applications into the cloud while maintaining high levels of data protection. Combining the flexibility of the AWS cloud and the strength of SafeNet's encryption offerings can create a convenient solution for customers to optimize the level of security required,

for even the most critical workloads.

"We are excited to work with SafeNet to make ProtectV and Virtual KeySecure available to customers in the AWS Marketplace," said Terry Wise, Director, Worldwide Partner Ecosystem, AWS. "The combination of SafeNet's enterprise encryption and key management, along with AWS' highly scalable, secure and flexible platform, is a compelling offering for customers deploying sensitive workloads in AWS. Making these solutions available on the AWS Marketplace provides customers with a simple, trusted, and secure way to quickly leverage SafeNet security offerings on demand."

"SafeNet ProtectV is a complete, well-designed solution that runs in AWS environments," said Marcus Fritsche, chief technology officer, Informa Group IT. "ProtectV gives us a robust, well-defined process for protecting data so we can effectively retain the control we need over our sensitive information, harnessing the business benefits of AWS cloud offerings securely."

Trend Micro, VMware tie up to secure software defined data centers

TREND MICRO HAS announced its collaboration with VMware to enable the next evolution of virtualization — the software defined data center. Trend Micro is working with VMware to integrate its Deep Security solution with VMware NSX, the platform for network virtualization. This will produce a security framework for joint customers that can help increase



protection and automate security deployments in virtualized data centers.

"With the rise of software defined data centers, Trend Micro is excited to work alongside VMware to create a comprehensive security backbone that protects the data center of the future," said Dhanya Thakkar, Managing Director, India & SAARC, Trend Micro.

"Through the product integration of Trend Micro's advanced network security capabilities with VMware's next generation network virtualization platform, we can help simplify and automate how security is deployed, delivering reliable protection that easily scales to the needs of each customer."

Tata Sky selects Cisco's video solution for multi-screen experiences

CISCO HAS ANNOUNCED that Tata Sky, a player in the Direct-to-home (DTH) space in the country has deployed Cisco's Videoscape Video Everywhere solution, a thin-client user interface application that enables new multi-screen experiences beyond the set-top box.

According to the company, Tata Sky is the first platform in Asia to deploy this solution. Rolled out first on iOS and soon to be on Android platforms, this live streaming service can be enjoyed on many mobile devices such as smart phones and tablets such as iPads.

The Videoscape Video Everywhere solution is a part of Cisco Videoscape Unity, a platform that is designed to deliver and monetise a new generation of compelling, differentiated video experiences, which are personalized, synchronized, and social. It offers content management and user interface capabilities designed to enable consistent and synchronized experiences across all subscribers' devices, including TVs, tablets, PCs, mobile devices and games consoles. It also provides multi-platform



security technology to enable critical end-to-end content protection required to monetize premium content and services. With advanced search and other content discovery features, subscribers will be able to enjoy a good degree of flexibility to find their favourite content and new content of interest quickly and easily.

Sue Taylor, Vice President Sales, Cisco Service Provider Video Software Solutions in Asia Pacific said, "Video services have never been more popular or valuable. Video has moved beyond TV and to differentiate their offerings, video service providers have to take multiscreen experiences to the next level

— delivering video in a more exciting, and engaging way. We are excited to work with Tata Sky on this journey of providing next-generation experience to its subscribers. With this solution, they may be able to watch live, on-demand, and catch-up video content on any iOS and Android device, anytime, anywhere. Furthermore, Tata Sky will be able to improve subscribers' loyalty, speed time to market of new services and service enhancements, as well as assure high quality even over unmanaged networks and devices."

Vikram Mehra, Chief Commercial Officer, Tata Sky said, "Our subscribers will be able to take the video experience with them on the move; thereby transforming their handheld device into a fully-functional TV screen with an interface which is clean, simple and easy to navigate. Cisco's global experience and technology leadership will help us to unleash a new generation of video experiences for our viewers and at the same time strengthen our competitive edge."

Polycom appoints Minhaj Zia as MD, India & SAARC

POLYCOM INC., RECENTLY announced the appointment of Minhaj Zia as Managing Director, India & SAARC. Minhaj will be responsible for leading Polycom's growth and revenue share in the region, and driving new opportunities in the company's key South Asian markets.

With over 18 years of experience in enterprise communications, Minhaj's chief focus for India and SAARC will be to drive growth by addressing the needs of the video conferencing market in the region. Working with Polycom's extensive partner network, Minhaj will also concentrate on

enhancing business development and customer relationship management.

Michael Alp, President, Polycom Asia Pacific said, "I am extremely pleased that Minhaj has joined us as a key member of our highly experienced leadership team in Asia. His strength in developing strategic action plans, drawing upon his significant knowledge of our industry and leveraging established relationships, will ensure we deliver the very best collaboration solutions for our customers." In previous roles, Minhaj served as Sales Director for Cisco's UC Collaboration business in India & SAARC and has led sales teams for

Avaya and Alcatel.

"I'm delighted to be joining Polycom at such an exciting time for the industry," said Minhaj as Managing Director, India & SAARC. "The role of technology to enable collaboration has become crucial, as organisations see the benefits of a more connected and productive workforce. I'm passionate about identifying and understanding a customer's unique requirements to ensure we help them achieve their business objectives and that they maximise their investment in our UC & C solutions."

Fortinet launches high performance data center firewall appliance



FORTINET ANNOUNCED A new high performance, compact network firewall appliance for enterprise data centers, large service providers, cloud providers and carriers. The new FortiGate-3700D is able to achieve up to 160 Gigabits per second (Gbps) firewall throughput. Using Fortinet's new custom NP6 ASIC, the FortiGate-3700D will be able to deliver high performance, low latency and IPv4 to IPv6 performance parity. The company claims to be one of the first network security company to deliver 100

Gbps+ firewall throughput and 40 GbE ports in a compact appliance, which redefines the standard for price per gigabit protected, price per port density, power dissipation per gigabit and space per gigabit. This performance improvement can lower both capital and operational costs for customers while providing the highest performance and lowest latency available.

The appliance leverages FortiOS 5 network security operating system. FortiOS is a security-hardened, purpose-

built operating system that is the foundation of all FortiGate network security platforms. It can be used across large or small enterprise infrastructures and multiple security application personalities.

FortiOS 5 allows for flexible deployment models within the data center such as core firewall, which can provide a high performance firewall with ultra low latency or edge firewall, which can be used to serve internal or external communities with varying trust levels using different firewall personalities, including firewall + VPN, firewall + IPS, NGFW, advanced threat protection and more.

According to the company, Indian data centre and enterprise cloud services provider NxtGen has been using Fortinet's data centre grade FortiGate security appliances. As NxtGen's network handles over 5 million sessions per second, low latency on the network is critical to the cloud infrastructure performance.

"Having customers like Zapak, Bigadda Shop, Reliance Games and Manipal Ankur, we need to ensure that our firewall does not become a bottleneck. Fortinet's solutions provide us with fast firewall throughput for data center and cloud customers, and the best ROI for managed security services," said A S Rajgopal, MD & CEO of NxtGen Datacenter & Cloud Technologies.

"For some time our data center customers have been asking us for higher firewall throughput and high speed port connections as they consolidate data centers around a 40 or 100 Gbps switching infrastructure/fabric. We have an aggressive roadmap to deliver on these requests starting with the FortiGate-3700D," said Michael Xie, founder, CTO and vice president of engineering for Fortinet.

NComputing fastest growing co. in enterprise client device market: IDC

DESKTOP VIRTUALIZATION VENDOR NComputing has been recognised as the fastest growing vendor in the worldwide enterprise client device market in the second quarter of 2013 by IDC.

According to the IDC Worldwide Enterprise Client Device Tracker Q2 2013, NComputing showed 70% Quarter-on-Quarter (QoQ) growth, as well as 65% Year-on-Year (YoY) growth, ahead of Dell Wyse or HP.

The report tracked quarterly growth and shipments from Q2 2012 to Q2 2013 for 58 thin client vendors. In the report, NComputing has emerged as the third ranked vendor for worldwide client device shipments, and one with the highest growth QoQ and YoY. The report also shows that NComputing has increased its number one market share position in the APAC/Japan region, with QoQ growth of 138.93%.

According to the report, NComputing is the top desktop virtualization company in India with a market share of 78.43%. The company has also maintained its leadership position with 30.7% market share in the APAC region.

Manish Sharma, Vice President-Asia Pacific, NComputing Inc., said, "We appreciate the recognition accorded to us, of being the leader in the desktop virtualization market space. All this would not have been possible without the support of Redington, our value added national distributor, and our strong base of 800 partners spread across 120 (plus) cities in India."

He added, "Going forward, we intend to expand the market further through introduction of new products and programmes aimed at nurturing the existing customer and partner/channel base and growing it further by augmenting customer experience and



increasing adoption of our solutions. NComputing India's new website (www.ncomputing.com/India), launched recently, will also serve as the key platform to facilitate seamless communication with our key stakeholders and customers, and contribute towards strengthening our relationship with them."

NComputing also attributes this growth to a combination of accelerating adoption in mid-market/SMB, as well as enterprise, along with share gains versus Dell Wyse and HP. In general, the market grew 7.4% QoQ, and by next year, market growth is expected to be over 10% YoY. Market pressures, budget constraints and an enterprise focus on mobility are driving organizations to desktop virtualization as a viable alternative to traditional PC computing.

The company recently announced major enhancements to its N-series line of Citrix Ready HDX thin clients, which feature its unique and powerful System on Chip (SoC) technology. A new version of the vSpace Desktop and Application Virtualisation Software was also recently announced.

HP unveils big data analytics platform

HP HAS ANNOUNCED HAVEn, a set of core technologies that form a big data analytics platform, enabling organizations to create next-generation applications and solutions to accelerate the adoption and monetization of big data.

HAVEn combines the proven technologies from HP Autonomy, HP Vertica, HP ArcSight and HP Operations Management, as well as key industry initiatives such as Hadoop, to create next-generation, big data-ready analytics applications and solutions.

"The value of big data comes from the ability to analyze all information in real time, so decisions that accelerate growth or improve services to customers and citizens, can be made quickly," said Amit Chatterjee, Country Director, HP Software India.

HAVEn enables HP clients and partners to avoid vendor lock-in with open architecture that supports a broad range of analytics tools, including major Hadoop distributions, programming languages, and an ecosystem of business intelligence (BI); visualization; and extract, transform and load (ETL) solutions.

With HAVEn, customers can protect investments with support for multiple virtualization technologies, such as VMware, Amazon and OpenStack, as well as varied deployment methods, including on-premises, private, managed or public cloud.

HAVEn will also provide a platform for HP's industry-leading worldwide partner and reseller channel to create big data-enabled business transformation solutions to create new market and revenue opportunities.



Teradata unveils Customer Interaction Manager in cloud

TERADATA CORP., THROUGH its Teradata Applications division, has announced the general availability of Customer Interaction Manager (CIM) in the cloud. The offering is a data-driven marketing solution that can enable real-time, dialogue-based customer interaction across the spectrum of digital and traditional communication channels, and promises an extensible “customer interaction hub” for the entire global enterprise.

Whether deployed in the cloud or on-premise, Customer Interaction Manager can offer integrated inbound and outbound messaging which can yield the ability to choreograph and execute multi-step customer “conversations” across multiple digital and traditional channels.

According to the company, these capabilities are helping businesses worldwide to truly engage with their customers and make marketing budgets go further, all by improving communications that drive retention and sales through timely and relevant

communications and offers that drive unprecedented responses and click-through rates.

“By leveraging this technology and expertise, we are developing a better understanding of how our consumers want to engage with P&G, so that we may make communications more relevant to foster meaningful and lasting consumer relationships,” said Andy Walter, Vice-President of Global Business Services (GBS), Procter & Gamble.

“Businesses everywhere run costly and sophisticated marketing campaigns to get the attention of their customers, yet much of that money and effort is wasted because it’s a one-way street — outbound only,” said Gonzalo Hidalgo, General Manager, IMM/CIM for Teradata Applications. “Teradata Customer Interaction Manager makes marketing the two-way street it should be, and helps drive revenue by combining insights from digital and offline campaigns alike to form a 360-degree view of all customer interactions.”

Rackspace launches hybrid cloud offering in Asia

RACKSPACE HOSTING HAS launched Asia’s first hybrid cloud powered by OpenStack, the open source cloud computing platform. The new public cloud joins Rackspace’s existing portfolio of private cloud and dedicated solutions to complete the company’s hybrid cloud offering to businesses throughout the Asia-Pacific region.

“We are excited to launch Asia’s first hybrid cloud powered by OpenStack,” said Ajit Melarkode,



managing director of Rackspace Asia Pacific. “OpenStack already gives thousands of our customers access to the power of open standards and enables them to enjoy freedom from vendor lock-in as they open new gateways to faster innovation through cloud computing.”

Rackspace identifies India as a robust and upcoming market, seen in their decision to launch the first hybrid cloud in Asia powered by OpenStack. The public cloud services market in India is forecast to grow 36% in 2013 to total \$443 million, up from \$326 million in 2012, according to Gartner, Inc. Studies done by Deloitte indicate that organizations that can bridge hyper hybrid clouds with their core systems will be at the forefront to elevate business performance with the next wave of digital innovation.

Dell launches Storage Design Center in Bangalore



DELL HAS RECENTLY announced the launch of its Dell Storage Design Center in India. The sixth of its kind across the globe, the Bangalore center will strengthen the coordinated development of Dell's servers, storage and networking in alignment with the company's focus on IT convergence solutions and its broader enterprise business portfolio.

Dell plans to ramp up operations with its state-of-the-art engineering lab by adding storage architects, design engineers, software developers and engineering managers focused on enterprise storage technologies and data center integration.

"India is playing a strategic role in building Dell's global R&D capabilities, and we see tremendous opportunity for Dell's storage business with the launch of this new design center. The demand for efficient storage products is said to be growing by more than 30 percent annually, and we are receiving more requests for customized products and solutions that address specific data center challenges. With this in mind, we have extended our Dell Storage design

capabilities to India, so we can leverage talent and other resources here to develop new storage innovations that will continue to keep Dell top of mind for a wide range of storage and data center customers," said Alan Atkinson, Vice President and Co-General Manager, Dell Storage.

"The Dell Storage portfolio already is playing a crucial role in how customers manage their new virtualized environments, exponential data growth and resulting application workload challenges. Dell's R&D centers across the globe play a key role in enhancing the value that our storage solutions bring to our customers. The Bangalore center will team with existing server and networking R&D centers to drive innovation and breakthrough technologies across our broad data center portfolio for our global customers," said Pete Korce, Vice President and Co-General Manager, Dell Storage.

"India centers are critical for innovation and product engineering for Dell. Bangalore is the city of choice for

Dell's storage design center for its talent ecosystem to cater to the R&D of software products. Talent acquisition and building the storage engineering capability will be a priority over the next twelve months. The commencement of storage design center opens a new chapter for Dell's R&D in India to collaboratively innovate and deliver end-to-end enterprise solutions." said Rudramuni B, Executive Director and Head, Dell India R&D.

Dell's storage design centers in Austin, Texas; Eden Prairie, Minn.; Nashua, N.H.; San Jose, Calif., Tel Aviv, Israel and now Bangalore will collaborate to create next-generation storage technologies and data center integration while adding to Dell's strengths in storage automation, flash technology, virtualization and ease of use. As an additional design center, the Bangalore facility will focus on a variety of key development areas including management software, support tools, integration, validation and sustaining activities for the Dell Storage portfolio.

Adobe unveils new features for its analytics solution

ADOBE HAS UNVEILED new features and functionality that will extend the capabilities of Adobe Analytics, a key element of Adobe Marketing Cloud. The upgrades are designed to significantly enhance marketers' and data analysts' abilities to rapidly identify and take action on critical insights for their business. New innovations include predictive analytics capabilities, advanced real-time reporting and data visualizations, video analytics advancements and powerful mobile app analytics.

According to the company, the new functionality in Adobe Analytics is expected to be available to customers later this quarter.

"Today's marketers are being held accountable for consistently improving the returns they can deliver on marketing spend," said Bill Ingram, Vice President of Adobe Analytics and Adobe Social, Adobe. "New Adobe Analytics capabilities like predictive analytics and data visualization will help marketers understand the effectiveness of their



marketing campaigns and drive better business results."

"A study by Adobe and CMO Council, the APAC Digital Marketing Performance Dashboard 2012, highlighted that Indian marketers are analytical and strategic in their approach to digital marketing," said Umang Bedi, Managing Director, Adobe South Asia.

"About 70% of respondents indicated that they are measuring and testing results of digital marketing campaigns. The features and functionalities that we have added to Adobe Analytics help empower Indian marketers with powerful insights through access to in-depth analytics, equipping them to derive better ROI on their marketing campaigns."

Netgear enhances its Managed Switches portfolio

ADDING TO ITS range of switching solutions, Netgear has unveiled Intelligent Edge M4100 series L2+ managed switches. Combining resiliency and advanced security even far from the wiring closet, the Intelligent Edge M4100 series is designed to provide comprehensive Layer 3 routing.

The M4100 series consists of 12 fully managed switches, ranging from 8-port Fast Ethernet to 50-port Gigabit Ethernet. These new switches are ideal for organizations requiring intelligence at the network edge. As a cost-effective component of converged voice, video and



data networking solutions, the M4100 series promises to deliver a secure edge in commercial buildings and campus LAN environments. PoE (802.3af) and PoE+ (802.3at) versions of M4100 series are ideal for Wireless access points, IP telephony and IP surveillance deployments.

Subhdeep Bhattacharya, Regional Director, India & SAARC, Netgear said, "These new switches are ideal and cost effective for all organizations considering reliable, affordable and simple access layer switching with CLI, advanced scripting capabilities and Layer 3 routing features."

EXIDE

Sure power everywhere

If you are looking for UPS power make sure you have the right battery. Environmental conditions, frequency and duration of power cuts, maintenance, reliability and budget, all play a part in determining the choice. Only Exide has the range of AGM VRLA, Tubular GEL VRLA and Tubular Flooded batteries to ensure you get what is right for you. Why compromise? Remember your UPS is only as good as its battery.



City, Town, Small Town or B-town. We don't see them differently.

Experience standardized services with Canon MDS across 700 locations in India.

Why restrict your business to just a couple of metro locations when you can prosper nationwide. With standardized SLAs provided by Canon MDS across 700 towns and cities pan-India, you can expand your reach hassle-free in your desired business location. We understand, branching out requires tremendous effort and strategy on your business part which is why we are inevitably the best to deliver consistent services.



Canon MDS
Managed Document Services

efficlick

