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INDIA'S FOREMOST ENTERPRISE IT MAGAZINE

1-15 MAY, 2014, ₹75

MANAGED Printing Evolution

The managed print services segment in India has come a long way. It is no longer just about the compulsion of saving costs but reflects other compelling reasons as well

DEALING WITH DESKTOP AS A SERVICE

HEARTBLEED: ARE YOU AFFECTED?

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edit

IS TWITTER LOSING ITS CHIRP?



THE PROBLEM
WITH TWITTER IS
NOT JUST FINANCIAL NUMBERS;
IT IS NOT GENERATING ENOUGH
USER INTEREST

icroblogging site Twitter recently announced its results for the first quarter of 2014. Soon after, its stock took a beating of about 11%, even though its topline grew to \$250.5 million compared to \$114.3 million in the year-ago quarter. It also added 3 million active users compared to just 1 million in Q1 of 2013.

The financial reasons for the thumbs-down by Wall Street are obvious: despite growth in revenue and users, losses widened from \$27 million in the year-ago quarter to over \$132 million in the recent one.

But even otherwise, there have been signs of trouble for the social media biggie for some time. Apparently, its efforts to cast itself more and more in the image of Facebook (by improving profiles, adding features such as Twitter Cards and Nearby, etc) are not getting it enough traction.

There are other reasons as well. At one point, breaking news was touted as a big pull, but now Facebook and YouTube seem to be ahead in the game. Pew Research, for instance, is said to have found that only 8% of Twitter's entire user base (it has over 240 million active monthly users) uses it to stay updated with news. This is against 30% for Facebook and 10% for YouTube.

Another weakness, say critics, is that Twitter is not generating as much interest in markets outside the US as other social giants.

While sites like Facebook, YouTube and even LinkedIn are capturing the imagination (and engagement) of people worldwide, Twitter continues to be seen as a niche vehicle with limited utility (how much can you pack in 140 characters or less, for example). Twitter has certainly caught the fancy of celebrities, politicians and others who like to broadcast their views to their fawning hordes—but the average Joe or Jane is still keeping their distance.

There is another silly thing happening in the dark corners of Twitter: I have come across several Twitter profiles that appear robotic, superhuman, idiotic or a mix of all. A typical such profile reads: 23 tweets, 19,265 followers, 20,897 following (with weird handles I would rather not name). Besides, there are millions who created a profile out of curiosity but then went into a deep slumber.

Some of them do wake up once in a while to tweet something sleepy. (What I find more annoying is when even these folks get followers in triple digits!) Frankly, to me these tweeters, their tweets and followers look like the T-equivalent of click frauds.

Not that other social media sites are free of fakes and inactives, but the situation seems acute with Twitter.

Will the bird get its chirp back next season?

sanjay.g@expressindia.com



feature



DEALING WITH DAAS

Desktop as a service is picking up interest in India even as concerns on Rol and complexity of the technology remain



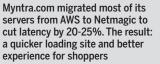
HEARTBLEED ARE YOU AFFECTED?

The insidious bug has caused a lot of buzz and alarm in security circles. Are Indian enterprises affected and, if so, what are they doing about it?



case study

FASTER FASHION



GOING THIN FOR EFFICIENCY

HDFC Life uses Citrix's XenDesktop thin client platform to improve efficiency and security





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column





A LITTLE SECURITY FOR BIG DATA

Securing big data in the enterprise requires smart policies enforcement, thorough analytics and high performance tools





WHY CIOS CAN'T IGNORE ENTERPRISE SOCIAL COLLABORATION

Regardless of giving headaches to many IT heads, social collaboration tools are set to get a lot of likes among enterprises because of multiple benefits



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MANAGED PRINTING EVOLUTION

The managed print services segment in India has certainly come a long way. It is no longer just about the compulsion of saving costs but reflects other compelling reasons as well

BY HEENA JHINGAN



ne of the biggest boosts for the printer market in recent times is the emergence of managed print services (MPS). These services have given printer vendors—for long used to competing on hardware—more room for innovation and differentiation.

The obvious attraction for MPS clients is the initial cost savings that come with switching to a usage-based model rather than investing upfront in hardware. MPS helps organisations achieve savings through consolidation of devices and scale.

MPS basically includes optimisation of purchases by matching the correct speed segment and technology to an organisation's utilisation need. This helps the organisation to lower the print cost per page and strain on the equipment, thereby reducing downtime.

These factors have kept the ball for global MPS market rolling, and it is expected to grow at a CAGR of 10.75 % over the period 2013-16. Increasing demand for cloud service offerings and cost reduction is providing the requisite impetus to the growth of the MPS market.

The MPS market in India is growing much faster. Going by a survey conducted by Xerox and EY India, India is one of the fastest growing markets in the MPS segment globally. The market size, which was estimated at \$80-90 million in 2012, is expected to grow to about \$250 million by 2015.

Many shades of MPS

While the growth rate of MPS is fast, the overall market penetration is low. According to Bhaskar Joshi, Senior Marketing Manager - Office Imaging Solutions, Canon India, a key factor responsible for the low penetration is the fact that the true sense of the service is sometimes lost in its definition. However, he says that MPS is experiencing good traction among the top 2,000 companies in the country, out of which nearly 60% are using some form of MPS—varying from basic fleet

2015 2012 \$80-90 mn \$250 mn

Growth of the MPS market in India

management to end-to-end management offering.

"In certain cases some enterprises categorise just 'printer on lease' model under MPS, which is incorrect, as the software component is fundamental to managed services. It is the software that forms the management layer," he says.

Konica Minolta calls its MPS as Optimised Print Services (OPS). Its approach combines consultancy, hardware and software implementation, workflow management and automated services and supplies, all to lower the costs and improve the workflow efficiency. In contrast, players like HP emphasise the security and environmental aspects of their portfolio.

Slow, but steady

In India, many processes are still manual and paper-based, therefore MPS is taking time to see greater adoption. However, there is a big wave coming from digitisation and management of records, which is likely to push the uptake of MPS.

Industry experts feel that for digitisation to take off in a big way, organisations will first need to overcome the challenges of dealing with confusion over the way they take it up. Sometimes, the cost of digitisation is prohibitive and requires expert guidance. Another reason is resistance of the employees to change.

Joshi says while large enterprises have already started adopting MPS, a huge opportunity lies in the SME and government segments, which at present make up only 5 to 7% of the MPS customer base in the country.

Nitin Hiranandani, Director, Printing Systems - PPS, HP India, quotes a Zinnov study, Indian SMB ICT Adoption Insights, that finds 20% of the total 50 million small and medium businesses in India are technology ready. "MPS is gathering significant interest among medium-sized businesses as they seek new ways to get more out of their printing infrastructure and simultaneously reduce costs. Also, as businesses are getting more conscious of their environmental impact, they are looking at reducing printing wastage by optimising their workflows in a better way," he says.

Hiranandani further says that MPS helps organisations accomplish these goals by creating a secure, centrally managed print environment that streamlines workflows, optimises document output and related business processes and also reduces the overall cash outflow and print related costs..

Virtually all kinds of enterprises, big or small, would benefit from adoption of MPS, as organisations primarily seek cost efficiencies and increase in productivity. A lot of organisations are also driven by MPS for sustainability and security-related objectives.

FOR CONVENIENT PRINTING

Printo, a customised online printing services provider, started operations in 2006 with one store in Bangalore and a singular mission: make printing convenient.

The idea took root when the founding team was disappointed with the lack of professional print services for young businesses and individuals. These people had print requirements that did not justify investing in higher quality printers.

Today, customers can walk into a Printo store to get anything printed—from a business card to a letterhead, and from marketing brochures to exhibition banners and invitation cards. Even personalised gifts.

Manish Sharma, CEO, Printo, says they are looking for an MPS partner to basically cut the cost of deploying equipment, which is important for capacity building. The high grade print equipment is expensive and if there is a delay, even by a year or so, in buying the hardware, the technology gets outdated. Hence they are looking at something like printer-on-lease kind of a model.

Printo is currently using Xerox equipment and its current high grade colour print consumption is about 4 lakh a month. The mono print volume could be higher.

"Only about 10% of our work is on large format printers, which is outsourced," he adds.

Sharma says it is important to delve into the factors that have affected the penetration of MPS. In India, there is a huge grey market. Most of the competitors in the market are using reconditioned printing equipment, which are discarded by other countries as waste. They run these on toners and cartridges imported in the same way. There is a big gap in the cost of operation in that case. There is limited consumer awareness and commitment to buy original, so people depend upon these local players instead of going to the professionals like a Konica Minolta or a Xerox.

Talking about Printo's requirements, Sharma emphasises on the need to be associated with professional vendors who can deliver quality products. For Printo, it is likely to be a mixed environment of a couple of vendors. "We use Xerox equipment, and the vendor also offers MPS, but there are newer companies like Konica Minolta that can be good for certain businesses at the entry level. An intelligent combination of different vendors can help us create a full range," he says.



For buying MPS, print volume alone cannot be the determining factor; factors like efficiency, agility matter too.

V Balakrishnan, General Manager, Konica Minolta Business Solutions



"Our challenge is that most of the competitors in the market are using reconditioned printing equipment that is discarded by other countries.

Manish Sharma, CEO, Printo



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The results of implementing MPS have been impressive, with the equipment time going up to almost 99%.





With MPS in place, we have done away with any individual printers and there are now large printers at back offices.

Vishal Salvi, CISO. HDFC Bank

CASE STUDY: APOLLO HOSPITALS



Arvind Sivaramakrishnan, CIO, Apollo Hospitals Group, says that the organisation was looking at a digital paperless environment. Although it is impossible to completely do away with paper in the healthcare segment, he says. This is partly due to the regulatory framework and partly because of the patients' expectations.

Still, Apollo Hospitals is trying to make the paper records minimal by scanning the documents.

"Printing mostly depends on the kind of medical records, and there are areas where a print is indispensable. The cost of printing for us is sizeable. Typically, in a day, each of our units is visited by about 2,000 patients. There are about 200 patient admissions and discharge activities; for each patient there are about two to five pages of various prints that are required," he says. (This is still relatively small, considering that in the BFSI segment, a loan document might run into 50-odd pages.)

"Most of our hospitals have entered in to MPS contracts with local vendors. There is a central procurement team for IT, which decides vendors based on their proximity to the unit and the cost factor," he says.

Having partnered with the local

vendors, the group has not found anything amiss that would require it to look for a large MPS partner.

"In fact, local vendors have been very quick to serve; besides, the contracts with our partners are based on stringent SLAs: there is penalty in case of a lapse, which makes them very diligent," Sivaramakrishnan adds.

However, he says that though the local vendor does not offer any security tool, security is ensured by the hospital information system that tracks who prints what and how much.

"In India there is no law on privacy of patient health records, but we take utmost care. There are certain printers that have access through the biomedical equipment. The access to all the printers is role- and authentication-based. It is much easier to maintain medical records electronically, but their movement across different organisations can be difficult. In that case, a printed record file becomes critical," he says. In fact, delay in access to health records "could cost a life."

However, the organisation has come up with digital records that make cooperation among experts faster and the same can be accessed across all the units of the group.

Not just volume game

V Balakrishnan, General Manager, Konica Minolta Business Solutions, says that for an organisation, buying MPS will always remain a strategic decision. Print volume alone cannot be the determining factor. Many other factors like improving efficiency, gaining agility and rationalising deployed resources to focus on core areas are more important.

According to Joshi, having the right economies of scale is a critical factor for an enterprise to decide the right time to buy MPS. He says, on an average, a large company that has a print consumption of about 2.5 lakh sheets a month is fit to avail MPS, whereas an SME with print volume measuring up to 40,000-50,000 sheets a month can benefit from MPS.

"To be able to exploit MPS to the fullest, the enterprise must not invest in too many MPS vendors, as that does not make economic sense. However, in India, most enterprises feel safer working with at least two vendors, as they always want a backup plan," elaborates Joshi.

This makes enterprises more dependent on the vendors, as the

Managed print services are helping organisations streamline workflow operations and document management, which is largely achieved via digitisation.



CASE STUDY: HDFC BANK



With an extensive network of branches in the country, it was getting arduous for HDFC Bank to manage the printing needs across various locations. About a year and a half back, Vishal Salvi, Chief Information Security Officer, HDFC Bank, decided to enter into an MPS contract with Xerox.

"With MPS in place, we have done away with any individual printers and there are now large printers installed at back offices. Most of the large branches, where the bigger chunk of printing happens, have been covered under MPS," Salvi says.

Stressing that security is of utmost concern for a bank, he says that MPS provides a complete MIS of who prints and what. Print is processed once the system is authenticated by the employee's security pin.

To ensure there is no information sabotage, employee security pins are unique and sharing of the same is strictly prohibited.

Salvi says that the implementation is still in process and the organisation has already started experiencing rationalisation of printers and savings on print spends.

CASE STUDY: MAX LIFE INSURANCE



As a part of its journey to optimise cost and bring in agility to the IT infrastructure, Max Life Insurance implemented MPS at over 200 locations. Earlier, the company was buying different printing devices such as copiers, multifunction printers (MFPs) and scanners for each of the branch offices.

All of these printing devices were managed by IT teams, which partnered with multiple vendors for technical support and other services. Although Max Life had invested substantially on supplies management to ensure continuous printing, device downtime could not be avoided as the supplies were often not delivered in time.

Parvinder Singh, Corporate Vice President and Head - IT Services & Technical Control Unit at Max Life Insurance, says, "Besides the high costs of consumable supply, the existing machines were not energy efficient and were incompatible to meet security requirements. There was a huge gap in employee-to-device ratio, showing inefficiency in device allocation." "In order to address these challenges, we first needed to collect the data and analyse it to understand the problem," he says.

"We partnered with various OEMs and a few service integrators. We had two options. One was to replace the existing MFDs /printers, which was an easy task in terms of implementation and adaptability, but it wasn't cost effective. The other option we had was to implement MPS," Singh adds.

On analysing its needs, Max Life finally decided to go the MPS way. Though selecting the right vendor was a challenging task, it chose the one with high SLAs, value-added services and, most importantly, a player with efficient pricing.

Singh says that the results of the implementation have been impressive, with the equipment time going up to almost 99%. It was hard to believe that better services could come with cost savings. Reduced paper consumption by implementing duplex printing by default and energy efficient technologies have helped the organisation lower the TCO of the print equipment.

software applications that form the most crucial piece of the entire MPS stack are mostly vendor-dependent. The applications might not be customisable once an enterprise decides to change its MPS partner.

However, more openness is expected in the days to come. "Vendors at present do not share their application tools," says Joshi, "but that might happen in the future."

Apps and more

Vishal Awal, Executive Director Services, Xerox South Asia, believes
work happens anytime, anywhere,
causing both challenges and
opportunities. Workplaces are being
modified under the combined trends of
mobility, data analytics, cloud
computing and social media—and their
impact is reflecting on enterprises'
printing operations as well. Therefore,
MPS consumers are now getting more
demanding and are more focused on the
control tools.

In the enterprise segment, customers are giving more importance to visibility and strategic reporting. This is in addition to the normal requirement of all services (including manpower) being outsourced. BYOD (bring your own device) and use of mobile devices are also becoming prevalent. These trends impact the solution design.

Balakrishnan of Konica Minolta says that SME segment needs are primarily met by VARs and SIs, which have local visibility to their operations. "Size of the solution design and infrastructure requirements too differ for SMEs and large organisations: SMEs tend to prefer light and effective solutions that provide control, whereas enterprises tend to lean more towards standardisation across the organisation," he adds.

Joshi of Canon says that gone are the days when you could simply talk about benefits of a solution and sell it, as the enterprises now demand real delivery. "Many of our customers have cut the TCO by 10-20% after using our MPS offerings", he claims.

He further says that the cost of a solution is now secondary. Enterprises demand same service level agreements

(SLAs) across branches: one country, one SLA is the mantra. Vendors also need to keep backup equipment in case of problems at the customer end. If one of the printers in a consolidated, managed environment breaks down, then the enterprises demand to know the backup strategy of the vendor.

"Convenience of use and reporting is a must for MPS. Enterprises look out for applications that are capable of enabling anywhere print, authentication and control print quota," says Joshi. "Also, the need to replace the entire setup at the time of upgrade should not arise."

The digitisation drive

Awal of Xerox says that owing to the combined trends of mobility, data analytics, cloud computing and social media, it is important to consider the implications for printing and flow of content. Digitisation is a key outcome of these trends.

Managed print services are helping



The contracts with our partners are based on stringent SLAs: there is penalty in case of a lapse, which makes them very diligent.

Arvind Sivaramakrishnan, CIO, Apollo Hospitals Group

organisations streamline workflow operations and document management, which is largely achieved via digitisation.

Each year improper document management costs businesses crores of rupees in liability, reduced efficiency and lost productivity. Hence it becomes very important to maintain proper document management infrastructure/programme. An organisation should also ensure data privacy and security, regulatory compliance, control and access to information and cost control associated with information processing.

Current trends indicate that the variety and level of sophistication of network attacks is increasing, which result in loss of valuable data, such as personally identifiable information (PII).

Awal says that security is not just a feature on a device; it is a comprehensive effort to understand the



COVER STORY



MPS helps enterprises accomplish their goals by creating a secure, centrally managed print environment.

Nitin Hiranandani, Director, Printing Systems - PPS, HP India



The impact of mobility, data analytics, cloud computing and social media is reflecting on enterprises' printing operations as well.

Vishal Awal, Executive Director - Services, Xerox South Asia



vulnerabilities of the entire document infrastructure, protect the enterprises' most valuable asset, i.e. information, and maintain compliance with all applicable regulations.

For example, employees accessing network output devices can be identified and authenticated at the device. In the mail room, actionable mail is managed as an end-to-end chain of custody, from signature of the delivering vendor to signature of the recipient. "In centralised print centres, we have advanced printing technologies and trained experts that embed encrypted information so documents have appropriate protection," says Awal.

Organisations are increasingly realising the importance of digital

record keeping, and the adoption of MPS is triggering the digitisation initiatives within organisations. When paper is converted to images, information becomes available at each step of the workflow. This enables automation across business processes and improves collaboration and decision making.

According to Joshi, as of now, MPS is being looked at as a means to cut print cost and keep the content secure. However, reducing paper use and need to print is still a step away. "For this, the workflows will need to be automated, and we will see document management solutions being integrated with MPS," he says.

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VIJAY RATNAPARKHE RBEI

Vijay Ratnaparkhe, President and MD, Robert Bosch Engineering and Business Solutions Ltd (RBEI), talks to Pankaj Maru about how the company is focusing on the evolving concept and ecosystem of Internet of Things (IoT). Excerpts:

"I see India taking a lead as a consumer of Internet of Things"

In 2014, RBEI plans to focus on the Connected World conference that revolves around IoT. So which are the areas where the company is concentrating?

The Internet of Things concept is pervasive, which affects every line of business. RBEI's prime focus is on IoT and it is not limited to software and design. RBEI would also work towards simplifying everyday life, by making automation devices Internet-friendly.

Though IoT is a new concept, what kind of potential do you see in terms of business and services opportunities? What is the scope in India and where does RBEI stand?

I see India taking a lead as a consumer of IoT. We have one of the largest youth populations in the world and the Internet is a core part of their life. For them, it's nothing special, it's the life they know. This is the generation that has not even seen a tape recorder. With advanced technology, smart phones, tablets, laptops and other gizmos, and with Internet-on-the-go, there is a wide opportunity for every industry to use the IoT to connect with this generation.

Bosch believes in "invented for life" and we work on products for a better future. RBEI supports Bosch in all areas; hence we are practically in every field related to automotive, industrial applications, energy and consumer applications. We would be a visible contributor to IoT.

In your view, the cost of intelligence is becoming affordable, which is pushing IoT. But besides cost, what are the other factors that will build the IoT ecosystem?

Technology, availability and affordability play a major role in IoT. Today, practically everyone who is literate has a smartphone which can connect to the Internet. Memory (RAM, ROM, storage) is available at a very cheap price and equipment like tablets and touch-screen devices are available and affordable for all. A simple mobile app can transform a smartphone into a measuring device—for measuring pulse or temperature, for example. The smartphone can also act as a pedometer, security device (via camera), a video conferencing device (via



Please share some numbers on IOT. How big is the market?

It is predicted that by 2015, there will be 6.5 billion devices and systems capable of communicating and consulting with each other without human input. IT analysts at Gartner expect IoT to create added value worth \$1.9 trillion across several branches of industry by 2020.

Skype), etc. So, there is no limit to what we can do to connect or how we can connect. It is all in the imagination and conceptualisation.

RBEI is a 100% Bosch owned entity. What kind of engineering and development activities are done at the Bangalore facility and how much does it contribute to Bosch's overall business and research?

Our [RBEI's] primary areas of work, as with Bosch, is in the areas of automotive, industrial applications, consumer applications and energy. As a captive, RBEI provides solutions to almost all Bosch units worldwide. Primarily a software centre, we also work on products from the conceptualisation phase to the final sample release phase. Hence we are a part of Centre of Excellence (CoE)/Centre of Competence for various units in Bosch. We are a CoE for software development in the areas of power train, multimedia, drive safety and comfort in automotive, mechanical engineering, automotive after-market, and many more.

RBEI has around 9,000 associates working in R&D. We also cater to IT and ITeS as a part of our global business. We have good in-house hardware capability for design and conceptualisation, complemented with our sister concerns' (Bosch Limited) capability on the electronics production front. Our customers choose us for our innovative strength and efficiency, for our reliability, flexibility and quality of work.

How has RBEI grown over the past few years and what's the outlook going ahead?

RBEI's growth over the past two years is standard market growth for an R&D captive centre. However, in the last decade, we have grown from a pure software services organisation to a solutions organisation. Going forward, we will be driving a value addition agenda with our architects and experts working on products developed and implemented in India. RBEI engineers have filed for 179 patents in 2013 alone. In the next few years, we will look to better this achievement in terms of applicability in future growth areas.

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DEALIS DAAS

Desktop as a service is picking up interest in India even as concerns on Rol and complexity of the technology remain

BY JASMINE DESAI

he year 2014 looks set to be a big one for the data as a service (DaaS) market, as demand continues to grow for anytime, anywhere access to corporate data and as companies continue to look for ways to reduce the TCO for enterprise desktops.

One indication of this is the growing number of vendors targeting DaaS. Recently, NTT Communications of Japan announced its foray in the US market, VM ware also came up with its VM ware Horizon offering.

IDC expects the workspace-as-aservice (WaaS) software market, which includes both DaaS and desktop applications-as-a-service markets, to grow to \$661 million by 2016, representing a CAGR of 84.6% from 2011-2016. The market opportunity is much bigger if one adds infrastructure and add-on services.

DaaS is a nascent market in India,



\$661

MILLION is the expected size of the workspace-as-a-service (WaaS) software market, which includes both DaaS and desktop applications-as-a-service markets, by 2016, according to IDC



but it is generating a lot of interest among enterprises. Says DD Mishra, Research Director, Gartner, "In this geography, DaaS has triggered a lot of curiosity. Though many people are planning to consider DaaS as a part of their strategy, we will have to wait to see significant adoption."

Changing the legacy

The legacy desktop is going through a significant change. This is primarily

because the end users are increasingly accessing corporate resources from a variety of non-Windows devices. As such, organisations are looking for ways and means to provide access to applications irrespective of the OS or hardware platform used.

For any organisation to enable DaaS, desktop virtualisation is the core component. One needs to decouple applications from the physical PC. Thus, regardless of the endpoint, customers

can access these applications. Once DaaS is deployed, organisations can choose to run it from their on-premise data centre or as a service provided by a third-party hosting firm.

According to Ramesh Vantipalli, Head, EUC India & Systems Engineering (South), VMware, "End-user applications are evolving as well, with traditional and cloud applications being delivered from private and public clouds. With the cloud now being a viable business option,



When CIOs acquire PCs, the real cost they see is just the cost of a physical PC, but they overlook other components like maintenance, manpower, etc.

Atul Ahuja,Director, Desktop & Apps, Microsoft Alliance, India Subcontinent, Citrix



One of the problems with early DaaS offerings was lack of comprehension of the business use of the desktop, especially the application portfolio and application dependencies.

DD Mishra, Research Director. Gartner



When one compares the actual operational cost of PCs with the deployment cost of DaaS over a period of time, DaaS can even come out to be cheaper

companies should take advantage of cloud-hosted desktops and transform end-user computing into next generation workspaces."

DaaS has been labelled expensive, but there is a way to deal with it. Atul Ahuja, Director, Desktop & Apps, Microsoft Alliance, India Subcontinent, Citrix, says, "When CIOs acquire PCs, the real cost they see is just the cost of a physical PC, but they overlook other components like maintenance, manpower, etc. Thus, the actual cost includes these variables and operational expenditures."

So when one compares the actual operational cost of PCs with the deployment cost of DaaS over a period of time, DaaS can even come out to be cheaper.

Says Mishra of Gartner, "One of the problems with early DaaS offerings was lack of understanding of the business use of desktop, especially the application portfolio and application dependencies. Reducing complexity of technology can be the key to reducing cost."

For a typical task-based worker with office and email integrated into the image, it can be a relatively simple

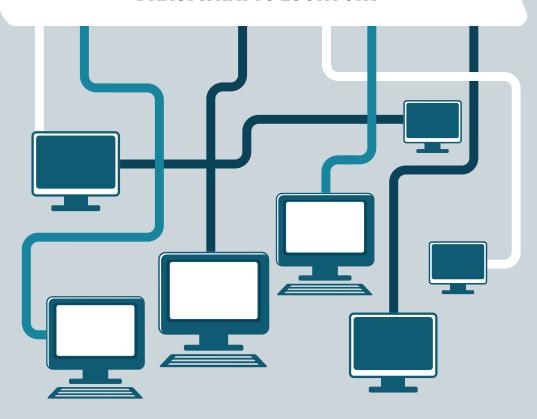
scenario, he says. If local productivity and Web-enabled line of business applications form the majority of the user application profile, DaaS may be a good fit, especially if the Web content is public SaaS content.

There are interesting developments in the market: for example, Microsoft and Citrix collaborating to offer XenDesktop hosted shared desktops; VMware's Desktone acquisition, and Amazon's AWS Workspace offering. These developments will continue till the market matures towards improved cost performance. Over a period of time, simplification of licenses will enhance the usage of DaaS.

IT is also under immense pressure to enable the new mobile workforce without sacrificing security and control. For this, IT must ensure that corporate data and applications are secure and it also must control the costs associated with the management of end user devices.

There are several ways to look at cost reductions through DaaS. In the Daas model, organisations do not have to pay upfront cost for a device lifecycle of 3-5 years. Another aspect to cost is the

DAAS: WHATTO LOOK FOR?



Finding the right fit for DaaS:

VDI is rarely implemented in
isolation—mostly it's part of a
broader strategy of cost savings,
flexibility or collaboration and
communications. Therefore,
Forrester recommends looking
closely at the use cases for VDI in
an organisation.

Investigate and understand the other DaaS options available: The performance of DaaS solutions, based on Citrix or VMware/Desktone, may be similar or better than that of Amazon Workspaces.

Keep an eye on Microsoft
Windows Azure: Microsoft
continues to upgrade RemoteFX
and now lets customers use
remote desktop services (RDS)
on Azure. Also, with rumours of
Project Mohoro, Forrester
believes that Microsoft is in an
excellent position to offer a
compelling DaaS offering in the
future.

Do not confuse DaaS with a mobility strategy: There are other important practices to be considered for mobility. If enabling touch-screen tablets is the goal, workspace instances are expensive to be used as the dedicated secondary desktop environment, and the user experience on touch-screens is best suited for occasional use.

Review other options for providing flexible access to Windows applications on demand: Session-based computing technologies, such as Citrix XenApp, application streaming tools such as Microsoft App-V, application remoting tools such as Framehawk and even customdeveloped native tablet apps, all of these may prove to be better options for some use cases. The digital workspace delivery technology landscape is rich with innovative technologies, so I&O pros should choose the best tool for the job.

Source: Forrester

ESSAR ADOPTS DESKTOP VIRTUALISATION



 $\begin{tabular}{l} Essar Group, a multinational conglomerate in sectors as varied as steel, oil \& gas, power, BPO, telecom services and shipping, employs 75,000 people, with $1.50 $\times 10^{-5}$ and $1.50 $\times 10^{-5}$ are steel.} \label{table_equation_equation}$ operations in more than 25 countries, was facing data security as a major challenge. The situation was aggravated because of two reasons: demand for user mobility and the trend of bring your own device (BYOD) catching up.

"We had around 3,000 BlackBerry users and more than 2,000 people with tablets, and with all the applications being accessed on the tablets, it was tough to ensure security of critical information," says Jayantha Prabhu, Chief Technology Officer, Essar Group.

The distributed workforce and the complex hardware environment further added to the challenge. Essar had 8,000 desktops to be managed, which also included its BPO organisation. "We needed a solution that would be able to streamline and simplify our hardware management process," says Prabhu.

Essar approached desktop virtualisation with three major objectives: to enable highly secure remote working, reduce the time spent on management and deliver virtual desktops and applications to approximately 3,000-4,000 of its mobile workforce. Essar discovered that it could move 75 to 80% of users to the desktop virtualisation platform.

Working closely with Citrix's hardware and architecture teams, Prabhu completed migration of 5,000 desktop users.

Essar's decision of implementing Citrix XenDesktop and Citrix NetScaler solutions across the globe utilises a building block approach, which can then scale to thousands of virtual desktops. It can deliver applications to any device in any workplace environment, supporting a rich user experience, and provide IT with additional security and control. The most important benefit realised by the Essar Group through desktop virtualisation was that of information security. The company was able to centralise information and not have it loaded on individual devices.

"While the IT, ITES and banking sectors have adopted desktop virtualisation solution quickly at this scale and complexity, we are the first manufacturing operation in India that is going for such an implementation of desktop virtualisation," says Prabhu.

With 8,000 licenses of the XenDesktop virtualisation solution implemented, Essar now plans to roll out the solution for all users across its offices. "One of the main advantages of Citrix desktop virtualisation technology is the ability of the organisation to have control and governance over the corporate data instead of leaving it at the mercy of the end user. For us, desktop virtualisation as a technology also helps the organisation strengthen its governance and compliance by giving the capability to monitor, manage and restrict the applications on the virtual desktop," savs Prabhu.

reduction in size of the manpower required to support the DaaS infrastructure (compared to legacy desktops). There is also direct increase in employee productivity, as DaaS gives flexible work options to them and facilitates workplace mobility.

Ahuja of Citirx says, "CIOs are also considering DaaS as it can reduce the cost incurred on setting up workstations for employees. They do not have to be of similar fit, as customers can configure DaaS models based on the usage pattern and work profile of employees."

Concerns regarding DaaS

One of the concerns for organisations is that their applications and data may not find the path to cloud. When the desktop is in the cloud, but all the important applications and data are in the local data centre, a non-optimal user experience is likely to be created.

For these situations, Mishra of Gartner gives some advice. "One should get those servers that are hosting applications into the public cloud and, possibly, with the same cloud provider which is hosting DaaS." Another option, he says, is to use on-premise DaaS.

ROI is another problem area for DaaS initiatives, as it is difficult to calculate ROI in the absence of comprehensive evaluation.

Says Mishra, "I would discourage speedy decisions while deploying DaaS. A phased approach for selection, containing several stages—starting from evaluation to pilot roll-out—can provide better insights for a compelling business case."

Some of the business goals CIOs can look at for evaluating DaaS include agility improvement, increase in productivity, better control, enhanced flexibility and, of course, TCO reduction.

This should be followed by identification of appropriate use case and technology. One should also look at segmenting the end users and thus optimising the roll-out for better cost justification.

DaaS is a compelling technology, but vendors still need to demonstrate it in more real-life scenarios and prove that it is as cost-effective and simple as touted.

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INTERVIEW

TARUN JAIN HITACHI

A late entrant in the projector market, Hitachi is trying hard to grab a bigger chunk of the business. Tarun Jain, Country Head - India & Deputy General Manager, Hitachi Home Electronics Asia, talks to Pupul Dutta about the company's plans

"We have been constantly evolving the digital learning and presentation market"

Hitachi plans to increase its market share in the projector category to 14% by 2015. What would be the company's go-to-market strategy to achieve the same?

India has been a key market for Hitachi both in terms of quantity and value. With a wide range of projectors catering to the professional segment as well as the mass market, we are set for a bullish performance, targeting a market share of 14% in India by 2015. Going forward, we plan to enhance focus on the professional projector market. To tap this segment, we have recently introduced an extensive line up of 16 high-end installation series projectors. At the same time, education, government and home will also be vital segments for Hitachi. Over the next few months, we are slated to introduce some technologically advanced and customised projectors serving the needs of all these segments.

Our go-to-market strategy is a compilation of various strategies segmented on the basis of various factors. We have formulated a specific plan for each activity, such as product, pricing, channel, sales force and promotional activity. With our product strategy, we would be catering to all industry verticals: ProAV, education, corporates, home and thus we plan to reach out to more end-users.

Portability in projectors is driving the market. How are your products addressing this need of enterprises?

Portability of projectors is of importance to only a certain market segment. The projector market is extremely diverse and each segment has varied priorities depending on its projection needs. Currently Hitachi is focusing strongly on the highend niche projector market. Hitachi's installation series projectors are feature rich and have tremendous installation flexibility, thus becoming an ideal choice for any type of installation environment. At the same time, the volume zone projector market too remains on Hitachi's priority list. To address needs of this segment, we are developing customised models with features like wireless connectivity and PC-less presentation. We are making sure that we cater to all segments by strengthening our distribution network in big



In the corporate and government sectors too, with the IT infrastructure spending becoming an integral part of budgets, projectors have become an essential asset for organisations. High-end projectors for professional usage like cinema, events, retail, branding have always been a big chunk of sales, and now with the ever increasing mall and multiplex penetration in tier II and III markets, this business is only set to soar.

as well as small cities in India. We are also gearing up our post-sale service accordingly.

Which sector do you expect will be driving projector sales in India and why?

We look forward to the government giving special focus to the education segment and the progression of audio video infrastructure in educational institutions. For the personal or home segment, the changing lifestyle of consumers, access to affordable technology and increase in spending on electronics has led to an upsurge in the demand for high-end products, including projectors. In the corporate and government sectors too, with the IT infrastructure spending becoming an integral part of budgets, projectors have become an essential asset for organisations. High-end projectors for professional usage like cinema, events, retail, branding have always been a big chunk of sales, and now with the ever increasing mall and multiplex penetration in tier II and III markets, this business is only set to soar.

What are the company's future plans? How do you plan to take on competition?

We have been constantly evolving the digital learning and presentation market, providing customers with a full range of projectors and interactive whiteboards. Our team is planning its strategy in a way that would ensure success by swiftly adapting to market demands and constantly adopting distinctive positioning and marketing strategies.

Hitachi has taken lead in the education segment with the new product line up of ultimate short throw (UST) projectors and created a market for the same. In the high-end projector category, we have created better value for our customers, using rich connectivity features like HD base input and SDI input. We understand that customers need products, which are rich in connectivity, easy to operate with high product performance and reliability. Hitachi focuses on product development, considering all these specifications and launches products at competitive prices, with assured post-sales support.

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The insidious bug has caused a lot of buzz and alarm in security circles. Are Indian enterprises affected and, if so, what are they doing about it?

BY HARSHAL KALLYANPUR

ver the past few days, there has been a lot of talk about the Heartbleed bug and how it can potentially cause havoc from the data security perspective. The bug allows an attacker to exploit vulnerability in the OpenSSL cryptographic library and gain access to the system memory and steal data from it. This data could range from anything between passwords and active transaction data to even encrypted private keys that would allow an attacker to launch a phishing attack through

legitimate websites.

However, the jury is still out on what is the exact impact of this bug – there have been no reported attacks that point to possibility of the vulnerability being exploited to launch the attack. There are various figures on how many systems are actually compromised, as most figures are given out by security solution vendors based on the analysis of their own customer base.

According to Surendra Singh, Regional Director, SAARC & India, Websense, Inc, industry figures suggest more than half a million vulnerable systems, but the extent of damage is still not yet known as there are no concrete reports of a direct impact.

Venkatesh Sundar, CTO, Indusface, is of the view that industry statistics indicate that two thirds of all websites may be vulnerable, though in India only 5% of Indusface customer base was affected by the bug. However, both Singh and Sundar suggest that enterprises should pro-actively look at keeping

themselves protected and take both detective and preventive approaches to secure their organisations.

A low-down on Heartbleed

The biggest problem in countering the Heartbleed bug is the fact that its use is widespread but cannot be mapped with exact numbers. A lot of web servers and Internet-connected devices may be using OpenSSL as it is freely available. Therefore, there is a lot of ground to cover in terms of detection and prevention.

Nanjundeshwar Ganapathy, Chief Technology Officer, Uniken, says that the bug affects the OpenSSL library, which is in widespread use by Apache web servers as well as servers running Linux or even Solaris.

According to him, OpenSSL is an open source community based effort, where much of the focus was purely on performance. While a lot of enterprises use OpenSSL, no one really pays for its use. Most of the time, its use goes insufficiently audited from a security perspective.

The fact that OpenSSL has been in use for years on a wide scale, but the vulnerability was only discovered until recently, substantiates this view.

Ganapathy also believes that mobile devices could be potential carriers of malware that orchestrates the exploit. For instance, mobile applications that support in-app purchases can connect to servers, which use affected versions of the OpenSSL software.

Talking about the impact of OpenSSL, KK Mookhey, Principal Consultant and Founder, Network Intelligence India, says that the impact of this bug is that it allows the attacker to access the memory of the target server.

"The memory typically contains passwords and could potentially also contain the private key of the digital signature. This would mean that the SSL encryption is basically now not actually existent: the attacker – if he/she can sniff the traffic – can also easily now decrypt it with access to the private key of the server," he adds.

According to Avinash Kadam,

Advisor, ISACA India Task Force, the basis for secure communication is the private key of the web server. This private key is used to identify the server and encrypt all the traffic. "Once the private key is stolen, all security is lost. The server can be impersonated. Any encrypted communication with that site such as passwords, credit card numbers, secure transactions are now exposed," he says.

Ashish Thapar, Head – Global Consulting & Integration Services (GCIS), India & South Asia, Verizon Enterprise Solutions, describes this bug as a 'forever-day vulnerability.' According to him, it could take years for this vulnerability to be completely eliminated from hardware, embedded systems and legacy applications. TLS implementations in Windows and OS X operating systems are not vulnerable. However, applications running on these OSes that were developed using a vulnerable OpenSSL library might be at risk.

"The attack code is in the wild and leaves no trace of the attack on the server. Around 66 per cent of all websites are using Apache that use OpenSSL, most TLS implementations use OpenSSL and the majority of hardware appliance vendors use OpenSSL code in their products," adds Thapar.

He says that for mobile devices, the Heartbleed vulnerability is being referred to as "Reverse Heartbleed". Traditional clients like web browsers, apps that use HTTP API on mobile handsets and PDAs may be vulnerable if they use OpenSSL for Transport Layer Security. "For instance, millions of mobile devices running Android 4.1.1 (Jelly Bean) use the OpenSSL version and are currently affected with the Heartbleed issue," he says.

Protecting against Heartbleed

As the exact spread and impact of this bug is not yet known, enterprises will need to start identifying where the vulnerability exists in the organisations, and apply the necessary software patches and make the required upgrades.

Ganapathy of Uniken says that most



The level of awareness is very high and organisations first focused on finding out their exposure to the bug.

KK Mookhey, Principal Consultant and Founder, Network Intelligence India



Millions of mobile devices running Android 4.1.1 (Jelly Bean) use the OpenSSL version and are currently affected with the Heartbleed issue.

Ashish Thapar,

Head – Global Consulting & Integration Services (GCIS), India & South Asia, Verizon Enterprise Solutions



If the estimate of two thirds of servers on the Internet using OpenSSL is correct, there will be a huge demand for new digital certificates.

Avinash Kadam, Advisor, ISACA India Task Force



We have taken a letter from all vendors using OpenSSL, verifying that they have applied the necessary patches and are protected against the Heartbleed bug.

A Balarkishnan, CTO, Geojit BNP Paribas Financial Services Ltd enterprises do not know how many and which services they are running internally are using SSL encryption. This makes it extremely difficult for security teams to prepare against the malicious attacks which can be caused due to Heartbleed vulnerability.

After identifying the vulnerability, they need to fix it at their end at multiple levels. They need to identify and upgrade their servers and network infrastructure to patch this bug. They also need to fix the vulnerability across the complex set of platforms and devices because of significant BYOD population.

Giving his perspective, Mookhey says, "First identify your OpenSSL footprint. Then immediately contact your vendors, service providers and administrators to obtain the patch and implement it. Then test your site using any of the vulnerability scanning tools, which have plug-ins for this vulnerability."

"Finally, if you're not able to apply the patch for some reason, then either disable the heartbeat functionality in your OpenSSL implementation, or implement a blocking rule on your IPS or WAF," he concludes.

Sundar of Indusface says that what enterprises can and should do is ensure their own mobile apps are tested and the vendors engaged for doing the mobile app security testing also includes the Heartbleed risk assessment as part of their mobile app security test suite.

"Heartbleed is an example of "server" vulnerability, but it is not impossible to find similar "client" side issue. BYOD devices introduce a litany of diverse OS and apps in the enterprise environment. Be ready to protect your assets against these known-unknowns in future. Before admitting a new device into the enterprise environment, it can be checked for Heartbleed. That would be the additional check needed in BYOD strategy," he says.

Sharing a similar point of view, Thapar of Verizon says, "The impacted devices would be vulnerable to a hack where a malicious server would be able to exploit the flaw in OpenSSL to grab data from the device's browser, which could include information such as previous sessions and logins. The BYOD security strategy should ideally address this issue as part of security controls preventing data leaks, providing network protection, mobile device lock-down and sandboxing for enterprise applications."

Giving the vendor perspective, Singh of Websense says that the company has already identified websites that are not patched and is blocking access to them.

"We have updated our solutions, but it is also necessary that enterprises intimate their employees and customers to take the necessary precautions, because if they do not change passwords, they are still vulnerable to an attack despite the patches and updates," he adds.

This means that an enterprise might have made the necessary updates to its infrastructure but they should also issue advisories about Heartbleed to their employees, customers and other partners, so that these entities take the necessary precautions at their end.

However, customers too should proactively check if their vendors or service providers have made the necessary upgrades to their SSL infrastructure and applied the necessary software patches, albeit merely changing a password at their end would just leave their new passwords vulnerable to data leakage.

Since the bug can also affect security certificates for websites, enterprises would also end up going in for a security certificate refresh, while revoking their current certificates. However, Mookhey of Network Intelligence feels that unless there is a clear sign of compromise of existing user data, he doesn't see too many organisations investing in new digital certificates. "I believe Symantec and some others have declared that they will be issuing revised new digital certificates at no additional cost. So organisations that do go in for new digital certificates just might be able to do so without a huge cost overhead," he adds.

Kadam of ISACA believes that there will be an increase in the number of organisations applying for digital certificates. He says, "They have to not only patch OpenSSL but also get new public/private key pair, update digital certificates and change every password that could have been stolen. If the estimate of two thirds of servers on the

Internet using OpenSSL is correct, there will be a huge demand for new digital certificates."

How are enterprises going about it?

According to Mookhey, organisations have rallied quickly to address this issue. The level of awareness is very high and organisations first focused on finding out their exposure to the bug – i.e. which of their public-facing systems were using OpenSSL. Vendors were also very quick to release patches. "In my opinion, almost every enterprise took very quick action to apply the patch and fix the issue," he says.

Sundar of Indusface says that India was not as impacted as we thought it would be, mainly because most of them were running the older version of the technology, which helped them avert this bug. The level of awareness is very high among the techies and the CIO/IT managers in enterprises. "The challenge for the enterprise is more to eliminate the level of confusion and panic, and gain back confidence of its non-technical consumers—so that they get back to doing online transactions again," he adds.

Echoing this sentiment, the CISO of a reputed bank, who did not wished to be named, says that the bank does not use OpenSSL for its critical servers, but relies on Microsoft's Internet Information Server or IIS. However, the non critical servers were running on older version of OpenSSL, which did not have the bug. Still, they have been updated to the latest version that offers a fix, just in case.

He further says that the government of India and CERT have issued advisories against Heartbleed to financial organisations. Even governing bodies for banks have issued letters informing them about the bug. However, he is of the view that there should be a national level advisory for everyone on Heartbleed, as much of what is getting reported in the media is mostly negative, with lesser focus on how to resolve the issue.

He is also of the view that any organisation following compliance standards, such as ISO 27000, would typically have an updated inventory of its software assets. Therefore identifying



We have done a vulnerability risk assessment and determined that we are not affected.

Sunder Krishnan, Chief Risk Officer, Reliance Life Insurance

BEST PRACTICES TO KEEP HEARTBLEED AT BAY

- Implement monitoring (e.g., IDS/IPS or similar network packet capture and examination controls).
- Update OpenSSL to 1.0.1g or disable heartbeat support on external facing systems.
- Identify applications and other systems using OpenSSL and upgrade or disable heartbeat support on the remaining vulnerable systems. In some cases (e.g., OpenVPN), this will require recompiling the application.
- After OpenSSL has been addressed via upgrade or reconfiguration, regenerate private keys and coordinate for revocation and reissue of TLS/DTLS/SSL certificates on all affected servers.
- Post adequate remediation of OpenSSL vulnerability; reset user credentials on all sensitive and affected systems.
- Work with your third party service providers (as applicable) to ensure that they have effectively remediated the OpenSSL vulnerability.

and patching should be easier for them.

Sunder Krishnan, Chief Risk Officer at Reliance Life Insurance, says, "We have done a vulnerability risk assessment and determined that we are not affected. We have even issued advisories and a list of FAQs to our employees and other stakeholders." The company relies heavily on in its vendor partnerships and therefore has interfaced with all the solution vendors to ensure that they have released the necessary patches to the organisation. Simultaneously, the company is also monitoring its assets using the OpenSSL 24x7, for any apparent anomalies.

Geojit BNP Paribas, one of India's leading stock trading companies, also offers a suite of apps on Facebook which include an online trading application. Facebook was one of the websites listedby security solution vendors among the websites that can be potentially hit by the bug.

Talking about how the company is going about protecting itself from the bug, A Balarkishnan, CTO of Geojit BNP Paribas Financial Services Ltd, says that the Facebook application has no connection with the core trading business, which runs on the broker secured network. The transaction enabled app is based on the Facebook API and runs on a separate network.

The general pages of the company on Facebook do not give access to any market data, as the company is not legally allowed to share market data with anyone who has not passed through KYC compliant processes.

"In our case, we are not running the affected versions at all. We have checked all our OpenSSL deployments and taken a letter from all vendors using OpenSSL, verifying that they have applied the necessary patches and are protected against the Heartbleed bug," he adds.

The company is also running campaigns for its employees and other stakeholders on the disclosure of the bug and how it can affect them. These campaigns are based on the research by BNP Paribas Asia Pacific Info Security Division.

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Faster



servers from AWS to Netmagic to cut latency by 20-25%. The result: a quicker loading site and better experience for shoppers

BY HEENA JHINGAN

n the highly competitive Indian online retail landscape, dotted with a million retailers in the fray (according to an IAMAI survey), every second counts. And speed is what prompted online fashion store Myntra.com to move some of its web servers closer home—from Amazon Web Services' Singapore data centre to Netmagic's Mumbai facility.

Myntra Designs had started off in the business of personalisation of products mostly for corporate customers. Later, in 2010, the company shifted its strategy to becoming a B2C firm, expanding its catalogue to fashion and lifestyle products. Today, it offers products from over 500 Indian and international brands through its portal.

The company's B2C shift called for devising simple and effective ways to reach out to customers, including innovative payment models such as cashon-delivery. Thus, they redesigned Myntra.com to meet the needs of online shoppers. They also expanded their warehousing capacity to deal with the surge in orders.

Initially, Myntra was hosted at the AWS data centre at Singapore. However, soon they realised they were experiencing network latency.

"Every user accessing the site from India had to be routed to Singapore; that would add quite a bit of latency and thus adversely affect user experience," explains Shamik Sharma, Chief Technology and Product Officer at Myntra Designs.

Besides, Myntra also needed more control over the infrastructure, which was difficult with AWS because the data centre was located at Singapore. The company needed to move its infrastructure closer home for better network speed and control.

"We wanted more control on what infrastructure we run our business on and the ability to choose specific server types. Also, we had limited control [with AWS]; though there were many configurations available to choose from, we could not customise it to the degree we wanted," he reasons.

In the previous setup, says Sharma, there had been a couple of incidents of downtime that made the network



Latency of services is now down by 20-25% overall.

Shamik Sharma, Chief Technology and Product Officer, Myntra Designs

unreliable and unpredictable. This made Myntra look for an India-based hosting provider.

Going hybrid

Not that Myntra wanted to move completely away from AWS; there were several good things—flexibility of billing and scale, for instance—that AWS had to offer. So currently, Myntra's is a hybrid setup, with about 80% of its servers hosted with Netmagic and the rest still on AWS.

"We have now about 80 servers at the Netmagic data centre—all managed on an opex model by them. Netmagic directly talks to our suppliers, such as Dell, and procures the desired infrastructure piece for us. We pay on a monthly basis, thus not having to incur capital expenditure," says Sharma, adding that Netmagic has software-based load balancers that help ease the pressure on various servers.

"We use a couple of servers for load balancing and on the network side we have firewalls to secure the website. Some servers are virtualised and used for development work—developers work on virtual instances for their jobs. And a server runs the caching service," he elaborates.

Netmagic also provides Myntra the bandwidth that powers the website, on a pay-per-use model. On redundancy of the website and the applications, Sharma says they are working with Netmagic to include cross-datacentre BCP (business continuity planning) or high availability.

"What we do within Netmagic facility is that we have load balancers, firewalls and partitions across clusters. If one server goes down we can use another. We also take regular snapshots (every six hours) of our database and apps on to a parallel setup so that we can bring it back up there at short notice," he explains.

Shifting to the Netmagic data centre in Mumbai has resulted in some key benefits for Myntra. It has not just dramatically lowered the latency, but helped them improve customer experience as well.

"Latency of services is now down by 20-25% overall. Our website shows up on the user's page in a little over two seconds, whereas it used to take almost three seconds earlier," he says.

Faster load time a key advantage in the online retail space: if a site takes too long to load, impatient shoppers can switch to another e-tailing competitor.

Now that the company also avails of bandwidth from Netmagic, the network has become more reliable and robust than before.

An obvious choice

The migration to Netmagic wasn't smooth, if not cumbersome, points out Sharma. They had complex layers of applications and customer databases to manage. However, Netmagic stood besides the company as a strong partner to resolve all the issues that emerged, avers Sharma.

Citing an example, he says, "At one point of time we had a situation wherein one of the servers was not working due to a BIOS configuration issue. The Netmagic support team worked with us on an hourly basis: they set up a warroom and had three to four engineers working with us throughout the problem, and they resolved it."

"Netmagic pitched in with skill sets wherever we lacked," says Sharma. He feels they have forged a strong partnership with Netmagic and they are now also running a pilot of the solution provider's on-demand capability that helps manage traffic during peak times.

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GOING THIN FOR EFFICIENCY

HDFC Life uses Citrix's XenDesktop thin client platform to improve efficiency and security

BY PUPUL DUTTA

hen HDFC Life, a leading insurance company, decided to do away with legacy infrastructure, it faced a series of problems. To begin with, the company had the challenge of maintaining and providing support to the ageing computers. Secondly, there was a spurt in mobile devices and the company wanted to capitalise on this trend by offering services through mobiles and tablets. That's when HDFC Life felt that it should consider desktop virtualisation for its IT needs.

"We did not want to get bogged down by the constraint of servicing our customers only through branches. With the proliferation of high-powered tablets and mobiles and improvement in connectivity, we wanted a solution that could complement this trend," says Thomson Thomas, Senior Vice President - IT (Head - Business Systems and Technology), HDFC Life.

Besides the problem of ageing infrastructure, HDFC Life also wanted to overcome the challenge of information security. It had become a problem for the IT department to enforce security in the

conventional IT desktop environment.

Thomas says that even though the company had control over what one could download and store on one's PC, it was still a challenge for IT as far as security was concerned. "Therefore, we wanted to eliminate the hard disc and storage at the branches," he adds.

While the cost of deploying virtual desktop infrastructure (VDI) was not lower than that of new desktops, Thomas took the long term view and went ahead with VDI, as he wanted to deploy a technology that would enable HDFC Life to scale up.

HDFC connected all its 360 branches through multiprotocol label switching (MPLS), linked to the back-end hosted in Mumbai. The sales staff had to access applications through PCs at the branches. In all, the company had around 7,000 workstations.

The solution

HDFC evaluated several solutions before zeroing in on Citrix's XenDesktop. Thomas, who had previously used Citrix solutions, was very positive about working with the company again.

He felt that the biggest advantage with Citrix was that it had an entire suite of platform and software to enable any level of virtualisation. "Citrix offers XenDesktop for end point virtualisation, XenServer for server virtualisation and XenApp for consolidating applications," Thomas asserts.

"Besides, the Citrix platform is light on the network and easy to deploy. It gave us an edge by letting us go to any extent of virtualisation with the same partner," says Thomas.

For the proof of concept (PoC), Thomas picked up a mix of locations. "We did a PoC of 30 thin clients across 10 locations. The PoC ran for over a month and provided us important feedback on the benefits and robustness of the solution," he says.

Post the PoC and the positive feedback from the end users, HDFC Life went ahead with the first phase of deployment of Citrix XenDesktop, rolling out 1,000 Citrix XenDesktop terminals at 50 locations.

Thomas says that the speed at which the user could access applications was phenomenally better than that in the

desktop environment. "This gave us the confidence to go in for the next phase with more branches and more functions," adds Thomas.

The company went live in less than a month. "We only had to upgrade certain network switches to cater to the increase in traffic that the VDI solution would bring. Given the solution works well on standard Intel boxes, this does away with the need for upgrades," he says.

The VDI solution, which has been deployed for the sales function, is being considered by HDFC Life for other applications as well.

"While Citrix XenDesktop was initially deployed for the sales function, after witnessing the host of benefits, HDFC Life has decided that the desktops of other functions such as training and operations would also be replaced with the VDI platform," says Nilesh Goradia, Head - Pre-sales, India Subcontinent, Citrix.

Since thin clients are 90% more power efficient than desktops, in case of remote areas where there is no electricity for longer durations, they are very useful.

Nilesh Goradia,

Head – Pre-sales, India Subcontinent, Citrix

benefits for HDFC Life. One key benefit has been the ease of manageability for the IT team. "They can now quickly roll out, clean up and manage anti-virus patches and software updates. Managing the

computing devices itself has become easy," says Thomas.

With the
management of
devices now
happening
centrally, the
security
risk has
been

minimised. Most applications can now be accessed faster, as they don't run on a local PC. Since it is a virtual session, there are not too many offline software open on the end-user devices. Hence, there is improvement in the feed of the applications that are used by the sales force.

By providing lean devices, the solution has helped save space and has resulted in fewer terminals. "Even though there are only 2,000 thin clients, we have a coverage ratio of 1:3. The sales force moves out in the field and comes back in the evening for uploads. They don't need dedicated terminals," says Thomas.

HDFC Life plans to extend the technology to tablets and mobile devices. "When we kick off our initiatives on the mobile front, we would be using the Citrix platform to enable our employees to access applications," says Thomas.

In addition, the total cost of ownership too has come down considerably, with operational efficiency improving at the same time. According to Goradia of Citrix, "Since thin clients are 90% more power efficient than desktops, in case of remote areas where there is no electricity for longer durations, they are very useful. It also promotes green computing."

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Benefits galore

The deployment of Citrix XenDesktop has yielded a host of

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SUHAS ULIYAR ORACLE

Suhas Uliyar, Vice President, Mobile Strategy & Product Management, Oracle, shares insights into how IT heads can address the challenges of enterprise mobility in an interview to Pupul Dutta. Excerpts:

"Our strategy is to simplify mobility for our customers"

Isn't Oracle a little late to the mobility business?

Well, mobile has gone through an interesting evolution and has been deployed in enterprises for over a decade in a lot of variations and trends. Enterprises are now re-looking at mobile and we have the perfect opportunity right now, especially since enterprises are shifting from tactical approaches to a more strategic architecture that brings together the convergence of social, mobile, web and the internet of things. Overall, we are yet to find enterprises that are taking a really holistic approach to mobile, in an ever changing landscape of mobile devices and new types of interfaces. We have an opportunity to leapfrog and address customer pain points in this new landscape.

What is your strategy to gain share in this market, where some of your competitors are way ahead?

Our strategy is to simplify mobility for our customers. Given Oracle's breadth and depth of providing apps and middleware, we are approaching mobility in three ways, whereas our competitors are in one or two buckets, providing either apps or infrastructure. So, what we are doing is that we are providing out-of-the-box mobile apps based on our platform to a lot of the Oracle backend—be it Siebel, PeopleSoft, JD Edwards or Enterprise Business Suite solutions. Our customers can further extend the web based applications built on the Fusion Middleware stack (where we are number one leader) to mobile as well.

Even if we just focus on our own customers—be it Oracle's apps customers or Fusion Middleware customers—there are enough customers for us to be market leaders without breaking a sweat. And the reason we are so confident about this is the aspect of mobile security where Oracle leads the market.

The competitors are going to struggle because the world of mobile is moving away from very complex and conformist model to more of a simplistic model in the cloud. This is what is going to enable us to leapfrog and gain



What is your current play in the enterprise mobility market and how many customers do you have?

We have several customers who have basically taken the Oracle Fusion Middleware stack and use our tools like ADF mobile and WebCentre to take their existing internet and intranet sites, to mobile devices. One of our customers, Northumbrian Water in the UK, uses the tool for field service applications. Then there is Texas Industries, which provides a B2C app for its customers to give visibility about their vehicles; it is integrated with Google Maps.

market share because we can go across the stack from small and medium to large enterprises. To summarise, there are two reasons why and how we are going to gain market share, one is our existing customer base in apps and middleware and the second is the platform that enables us to have a larger ecosystem to reach individual developers as well as larger enterprises and everything in between.

What are the challenges faced by enterprises with respect to mobility?

The challenge is really to think more strategically than tactically. The hurdle enterprises face today, is how to really create an architecture where they are not sort of trying to boil the ocean but take perhaps a baby step approach and not put themselves in a corner. So, organisations are going mobile, starting with small projects, but they also do not want a situation wherein, as more and more apps come in and more users join in, they have to redo the architecture.

Another challenge for enterprises is to adopt a BYOD strategy that addresses security and a much holistic architecture that complies with their existing infrastructure. Instead of re-inventing the wheel, they can take advantage of all the investments they have made. This is why we believe that we are not late to market because, basically, hundreds and thousands of our middleware customers can take advantage of the investments they have made and, in a few weeks, start delivering the applications.

In the past, if anyone were to ask me how much time it will take to build a mobile app, I would have said six months to a year. What is happening with our customers now is that they are delivering these apps in weeks. With this change, enterprises are becoming more agile. Now updates happen overnight, a day after the original download. So, this is the kind of speed and efficiency customers are hoping to get.

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INTERVIEW

JIM THOMPSON UNISYS

Jim Thompson, Engineering VP and CTO of the Technology, Consulting and Integration Solutions (TCIS) unit at Unisys, talks to Pankaj Maru about the lesser known side of virtualisation, the migration risks and challenges, among other things.

"The next frontier for security is the storage and virtualisation layer"

Why are organisations not opting for full scale virtualisation?

Going by Gartner or IDC estimates, about 50% workloads are virtualised today. Though virtualisation technology has been around for some time, the question is why are the other 50% workloads not virtualised yet? We believe there are couple of things happening in that part of the workloads. Some workloads are not virtualised simply because of their size, they are so large that virtualisation doesn't make sense.

Virtualisation tends to be a great consolidation play. It's great when you want to thin provision or over provision. But it's not so good for predictable performance, error containment or security. In most cases of virtualisation, you give up something in exchange for thin provisioning. It's acceptable in the context to that workload. However, we found that other workloads have a mission critical or performance prediction aspect to them, which makes virtualisation not the best fit for them. Hence they haven't been virtualised yet.

I also think some workloads have not been virtualised because of the complexity or cost. If an organisation decides not to go for virtualisation, then it is also about control. People who are responsible for the workload are simply unwilling to give up on the perceived or real security problems.

Often, customers are unclear whether they want a combination of workloads to move to the public cloud or out of the building—because of the application nature, kind of data and regulatory issues attached with it. So, I think there's room for all of these. The challenge for us is to build a system that can deliver all of these: on premise, off premise, virtualisation and provisioning. It depends on the customer to decide how he wants to plan his infrastructure.

From a risk point of view, what are the areas or elements that come along with virtualisation?

There is a set of characteristics and trades that come along with virtualisation. When you start doing thin provisioning in virtualisation, be prepared to tolerate unpredictable



Organisations are undertaking migrations now. What are the reasons for this?

There are a number of reasons. I think one reason for organisations undertaking server migrations today is they don't like the pricing policy of their vendors, be it Solaris, IBM, or HP. They need to find a solution that fits their business critical model. I think it's price, licensing and technology pressure as well. Everybody wants a low cost solution with more capability, security, reliability and resiliency. But they are not ready to pay more, so it's a huge opportunity for us.

performance in the application. Also, be prepared to deal with the system where the failure of one VM (virtual machine) may lead to the failure of multiple VMs. That's where the application needs to tolerate or the infrastructure has to be designed to cope with. Then there are security concerns and issues linked with the system when the infrastructure, particularly storage, is shared. There have been some cases where the control on some part of the virtualisation software has been compromised.

So I think the next frontier for security is actually the storage and virtualisation layer. We have put lot of effort into security capability around the technological stealth. That's not only about dealing with data in motion but also with data at rest.

What's your vision for Forward!? What role is it going to play for enterprises?

Forward! plays in the business critical space. Our initial use cases are around SAP ERP, migration of UNIX workloads and other business-critical areas. Then there's mainframe application in that space, which is called nonmainframe mission critical. It's the euphemism for UNIX, like IBM-AIX, HP-UX and Solaris. Each of these environments has its own problems today. Generally, those people want to move to Linux.

They look at Linux environments, be it SUSE or Red Hat—they are less expensive and meet their opex or capex needs. Linux environments offer a fairly open architecture, where they don't have to deal with one vendor. The inhibitor to this move have been business critical workloads that tend to run on those systems. People are attracted by all the attributes of open systems and pursue it because of the platform's longevity. But they can't just leap to the Linux environment with the workload sets through looking for something that got security and resiliency characteristics that they have today. So, we think Forward! fits exactly that space. That's why it's one of the use cases.

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A LITTLE SECURITY FOR BIG DATA

Securing big data in the enterprise requires smart policies enforcement, thorough analytics and high performance tools

In a big data environment, policy creation and enforcement are more critical than usual because of the larger volumes of data and the number of people who will require access to it

ringing the issue of security into the big data discussion often produces two divergent schools of thought from IT professionals—categorical denial that big data should be treated any differently from existing network infrastructure, and an opposite response towards over-engineering the solution given the actual (or perceived) value of the data involved.

Big data—defined by Gartner as highvolume, high-velocity and/or high-variety information assets that require new forms of processing to enable enhanced decision making, insight discovery and process optimisation—increases routine security challenges in existing data networks.

These are the four facets, as defined by IDC, that give rise to challenges but also opportunities:

- Volume: The amount of data is moving from terabytes to zettabytes (1 zettabyte is 1,000,000,000 terabytes) and beyond
- Velocity: The speed of data (in and out), from static one-time datasets to ongoing streaming data
- Variety: The range of data types and sources - structured, un/semistructured or raw
- Value: The importance of the data in
 context

Yet, while big data presents new security challenges, the starting point to resolving these challenges remain the same as creating any other data security strategy: by determining data confidentiality levels, identifying and classifying the most sensitive data, deciding where critical data is to be located, and establishing secure access models for both the data and analysis.

Plan around the big data lifecycle

Properly defended big data necessitates defining specific security requirements around the big data lifecycle. Typically, this begins with securing the collection of data followed by securing access to the data. Like most security policies, a proper assessment of the threats to the organisation's big data never ends but revolves around ensuring the integrity of data at rest and during analysis.

Performance is a key consideration when securing the collected data and the networks. Firewalls and other network security devices, such as those for encryption, must be of sufficiently high performance so they can handle the increased throughput, connections and application traffic. In a big data environment, policy creation and enforcement are more critical than usual because of the larger volumes of data and the number of people who will require access to it.

The sheer amount of data also proportionately increases the need to prevent data leakage. Data Loss Prevention technologies should be employed to ensure that information is not being leaked to unauthorised parties. Internal intrusion detection and data integrity systems must be used to detect advanced targeted attacks that have bypassed traditional protection mechanisms, for example, anomaly detection in the collection and aggregation layers. The inspection of packet data, flow data, sessions and transactions should all be scrutinised.

Because big data involves information residing over a wide area from multiple sources, organisations also need to have the ability to protect data wherever it exists. In this regard, virtualised security appliances providing a complete range of security functionality must be positioned at key locations throughout the public, private and hybrid cloud architectures frequently found in big data environments. Resources must be connected in a secure manner and data transported from the sources to the big data storage must also be secured, typically through an IPSec tunnel.



Leveraging big data with the right tools

While big data presents challenges, it also offers opportunities. With the right tools, vast amounts of information could be analysed, and this allows an organisation to understand and benchmark normal activities. If that organisation could then monitor for users who stray from that norm, it could proactively get ahead of potential data and system breaches.

This effort is aided by competent IT staff and efficient deployment of the appropriate security tools. These tools include dedicated logging, analysis and reporting appliances that can securely aggregate log data from security and other syslog-compatible devices. These appliances will also analyse, report and archive security events, network traffic, Web content, and messaging data. Policy compliance could then be measured and easily customised reports produced.

The difficulty in capturing, managing and processing information quickly in big data environments will continue to make security an afterthought in many firms.

SIEM: A BIG DATA PROBLEM

To improve their security, some organisations have Security Information and Event Management (SIEM) solutions to help them collect and analyse security alerts and logging systems. This may inadvertently, however, create a big data problem — if every single log and alert is collected.

To avoid this problem, organisations should begin thinking less about security as a purely defensive system and instead as an abstraction layer above all pertinent enterprise data. They need to ask themselves what data is relevant in a security context. Obviously, network-level logs (i.e., firewall, IPS, etc.) and user-access logs would still be required. However, endpoint security logs, proxyrelated logs and even deep packet inspection data may no longer be relevant.

As portable storage and bandwidth continue to grow, the mobility of these larger datasets will also increase, resulting in breaches and disclosure of sensitive datasets. Threats will likely come from intruders manipulating the big data in such a way that business analytics and business intelligence tools could generate false results and lead to management decisions that could profit the intruders.

Even small changes in big data can have a big impact on results. So, organisations must not ignore the need to secure big data assets—for security reasons, business intelligence or otherwise. They must address big data's main needs in terms of authentication, authorisation, role-based access control, auditing, monitoring, and backup and recovery. Going forward, big data analytics involving behavioural benchmarking and monitoring will also become increasingly crucial in addressing next-generation information security challenges.

Rajesh Maurya is Country Manager, India & SAARC, Fortinet.



COLUMN AJAY KAUL

Why ClOs Can't Ignore Enterprise Social Collaboration

Regardless of giving headaches to many IT heads, social collaboration tools are set to get a lot of likes among enterprises because of multiple benefits



Not only does it provide a centralised and organised place for company communication, but enterprise social collaboration also creates a comprehensive knowledge base and allows for easy document management

or many CIOs, social media belongs in the realm of the marketing team down the hall. The idea of bringing Facebook or Twitter into the workplace seems to be one of sheer lunacy—surely this would create a host of security threats and privacy concerns. However, the demand for enterprise social collaboration is on the rise—and with good reason.

Social media has become an integral part of how people communicate in their personal lives. It is natural that this new communication has begun to change how they collaborate and communicate professionally in the workplace. With millennials becoming an increasingly larger part of the workforce, CIOs will be forced to face enterprise social collaboration (ESC) in the future. Intelligent CIOs—who are ahead of the trend—have embraced it now, leading to staggering results.

Why CIOs hesitate to take the plunge

A set of common concerns often come up when CIOs are presented with the question of whether to implement enterprise social collaboration tools. In addition to the concern that adopting such platforms will decrease employee productivity, many executives fear the failure associated with internal social initiatives. In fact, 70 percent of internal social initiatives eventually fail. For CIOs who often lack practical knowledge about social media and fear change, this statistic is enough to keep them from considering the potential benefits of enterprise social collaboration.

The question remains: why should CIOs implement enterprise social collaboration platforms if they're seemingly destined to fail? The answer is quite simple: the benefits far exceed the risks.

A new form of communication

For years, the social media revolution has been affecting how people communicate on a daily basis. Daily life has become increasingly digitalised. With the workforce becoming dominated by millennials, it is hard for employers to attract and keep a young workforce that thrives on and even expects social media to be integrated into their office lives. In addition, it allows for the mobile communication that has become so vital to modern business practices. ESC platforms allow information to be accessed from anywhere at any time, across multiple devices.

Overcome security issues

One of the biggest hesitations CIOs have about adopting enterprise social collaboration platforms is the potential security issues and threat to business critical data. While breaking down information silos and improving collaboration is great from a productivity standpoint, many believe that such platforms will result in the disclosure of confidential information. However, the opposite is true. Social collaboration tools have a host of security and governance measures in place to prevent such security breaches from happening. Administrators can easily control access rights for individual users and groups of users, making sure the right people have access to the right information. In addition, advanced tools allow for the creation of keyword-based profanity

No more email overload

A common issue surrounding communication in the workplace is email overload: extended conversations between multiple parties that result in a long string of emails that must be sorted



through for the information needed. While email communication is still great for quick messages, it is not conducive to carrying on in-depth conversations. With the ability to break things down into topics, sub topics and specific groups, ESC tools allow for quick and organised communication.

Fewer hassles

The cost of developing infrastructure can be high. Many platforms require constant upgrades and customisation in order to maximise the benefits for an individual company. Enterprise social collaboration tools eliminate these hassles. Hosted and cloud-based ESC solutions reduce the need for further capital expenditure on infrastructure. They are easy to scale up and down in order to suit the number of users on the platform, and require minimal or no customisation. Best of all, they eliminate the inconvenience of constant upgrading.

The solution to many problems

Today's CIOs are facing a host of challenges — and enterprise social collaboration platforms provide many of the solutions they require. Not only does it provide a centralised and organised place for company communication, but also it creates a comprehensive knowledge base and allows for easy document management. Furthermore, platforms can be adopted with ease. Many enterprise social collaboration tools integrate with current business applications and systems, such as HRIS, CRM, Leave Management System and more. Easy and seamless integration allows for maximised return on previous investments in infrastructure.

The future is here

Getting social is inescapable. By 2016, 50 percent of large businesses will have implemented an enterprise social collaboration network. Thirty percent of these will be considered as crucial as email and telephones are today (source: Gartner) The enterprise collaboration market as a whole is estimated to be worth \$47.3 billion in 2014 and expected to grow to more than \$70 billion by 2019 (source: Digital Journal). Whether CIOs like it or not, the structure of business is changing from a network of isolated

islands to one integrated body. Whereas, previously, each company branch would function individually; now every part of the body is aware of what the other parts are doing and all parts work together to accomplish company goals more efficiently.

Employees now expect companies to provide some means of the social collaboration they experience daily in their personal lives. The forward-thinking CIO must educate him or herself and fellow senior leaders on how the social media landscape functions outside of their company, in order to determine how it can be best leveraged as an enterprise tool. Failure to do so simply cheats themselves and their company out of increased productivity, and the opportunity to tap into employee ideas and talents.

The time to go social is now. The business landscape will continue to change into a more collaborative, social atmosphere—those who do not change with the trends will find their company left behind.

Ajay Kaul is a Managing Partner at AgreeYa Solutions.

Emerson report predicts massive changes in data centres in next 10 years



EMERSON NETWORK POWER recently released "Data Center 2025: Exploring the Possibilities," a report that offers a glimpse at the data centre in the year 2025.

The results range from the expected—increased utilisation of the cloud—to the ambitious—largely solar-powered data centers with power densities exceeding 50 kW per rack.

More than 800 data centre professionals from around the world responded to the Data Center 2025 survey.

The feedback, viewed collectively, indicates most in the field remain bullish on the data centre industry and on continued innovation in the IT space and beyond.

On average, experts predict density in 2025 will climb to 52 kW per rack. According to the Data Center Users' Group, average density has remained relatively flat since peaking around 6 kW nearly a decade ago, but experts are anticipating a dramatic upswing in

density that could radically change the physical environment of the data centre.

"We started the Data Center 2025 initiative with a sincere desire to discover what our customers, collaborators, colleagues and others in the data centre community believe the future holds for this industry," said Steve Hassell, president, data centre solutions, Emerson Network Power. "We approached the research with an open mind, no expectations and no preconceived notions of what we would find. The results reflect a level of sophisticated understanding, visionary thinking and genuine optimism that I find inspiring. I believe the true impact of this report lies not only in its measurement of current opinion, but in its ability to spark future innovation."

Other survey results and forecasts from the report:

• Big changes in how data centres are powered: The experts believe a mix of sources will be used to provide electrical

power to data centers. Solar will lead, followed by a nearly equal mix of nuclear, natural gas and wind. 65% believe it is likely hyperscale facilities will be powered by private power generation.

- Cloud forecasts are somewhat conservative: Industry experts predict two-thirds of data centre computing will be done in the cloud in 2025. That's actually a fairly conservative estimate. According to Cisco's Global Cloud Index, cloud workloads represent around 46% of current total data centre workloads, and will reach 63% by 2017.
- DCIM will play a prominent role: Twenty-nine percent of experts anticipate comprehensive visibility across all systems and layers, while 43% expect data centres to be self-healing and self optimising. Taken together, that would indicate 72% of the experts believe some level of DCIM will be deployed in 2025—significantly higher than most current estimates of DCIM adoption.
- Utilisation rates will be higher:
 That increased visibility is expected to lead to more efficient performance overall, as 72% of industry experts expect IT resource utilisation rates to be at least 60% in 2025. The average projection is 70%. That compares to estimated averages today as low as 6-12%, with best practices somewhere between 30-50%.

"The data centre of 2025 certainly won't be one data centre. The analogy I like to use is to transport," said Andy Lawrence, vice president of Datacenter Technologies and Eco-efficient IT at 451 Research. "On the road, we see sports cars and family cars; we see buses and we see trucks. They have different kinds of engines, different types of seating and different characteristics in terms of energy consumption and reliability. We are going to see something similar to that in the data centre world. In fact that is already happening, and I expect it to continue."

Sanjay Deshmukh to join VMware

VMWARE, RECENTLY ANNOUNCED that Sanjay Deshmukh will join the company as Head of End User Computing Business, Asia Pacific Japan. The IT veteran will be responsible for VMware's end-user computing (EUC) business throughout markets in the company's Asia Pacific Japan (APJ) region.

Deshmukh joines VMware from Citrix Systems India, where he was Area Vice President, Indian Subcontinent for more than four years. Reporting to Sanjay Mirchandani, VMware's Senior Vice President and General Manager for the APJ region, Deshmukh will take up his new post on May 12 and will be based in Singapore.

Before joining Citrix, he served SAP India as Vice President, Business User and Platform Group, after working as Country Manager for Business Objects Software India. During his 21-year career, he has built successful businesses in the areas of mobility, virtualisation and analytics. Deshmukh holds an MBA in Marketing from the Institute of Technology and Management, Mumbai.

Speaking about the appointment, Mirchandani said, "We are making this appointment at a very important stage of



our development in end-user computing. Sanjay's experience and expertise will help us build on the establishment of our EUC portfolio across Asia Pacific as the solution of choice for enterprises in the mobile cloud era."

He added further, "VMware's EUC capability is the envy of our industry and offers the best solution in terms of empowering employees to access enterprise applications and data on any device from any location, securely and cost-effectively."

According to the release making the

announcement, VMware's EUC strategy was reinforced in April when the company launched a comprehensive desktop solution, VMware Horizon 6 — that would enable enterprises to transform their applications and desktops for the mobile cloud era — extending access to employees on any device, anywhere, simply, securely and cost-effectively. In late February, VMware had acquired AirWatch, a leader in enterprise mobile management and security solutions covering laptops, peripherals and wearables.

Public cloud services market to touch \$557 million in India in 2014: Gartner

THE PUBLIC CLOUD services market in India is on pace to grow 32.2% in 2014 to total \$556.8 million, an increase from 2013 revenue of \$421 million, according to Gartner, Inc. Spending on software as a service (SaaS) will be around \$220 million in 2014, growing 33.2 percent from last year.

SaaS is the largest overall cloud market segment, followed by infrastructure as a service (IaaS), worth \$78 million and business process as a service (BpaaS) is around \$75 million.

"Growth of cloud services in India



reflects the demand for new sourcing models," said Ed Anderson, Gartner's

Research Vice President. "We expect high growth rates across all cloud services market segments in India."

BPaaS is expected to grow from \$62.3 million in 2013 to \$204 million in 2018. SaaS is expected to grow from \$166 million in 2013 to \$636 million in 2018, and IaaS is forecast to grow from \$58 million in 2013 to \$317 million in 2018.

The total cloud market in India in 2013 was \$421 million, and the total market for public cloud services in India is expected to reach \$1.7 billion in 2018.



IBM launches Enterprise Cloud marketplace with Global Partner Ecosystem



IBM RECENTLY ANNOUNCED the launch of its Cloud marketplace. According to the company, this single online destination will serve as the digital front door to cloud innovation bringing together IBM's capabilities-as-a-service and those of partners and third party vendors.

This marketplace will serve as a cloud innovation hub where technology will meet business with hundreds of cloud services from IBM, partners and third party ecosystem. Enterprises will be able to access a full suite of IBM-as-a-Service with 100 SaaS applications, IBM's

Bluemix platform-as-a-service with composable services, the SoftLayer infrastructure-as-a-service and third party cloud services.

According to Robert LeBlanc, Senior Vice President, IBM Software & Cloud Solutions. "IBM Cloud marketplace puts big data analytics, mobile, social, commerce, integration and the full power of IBM-as-a-Service and our ecosystem at our clients' fingertips to help them quickly deliver innovative services to their constituents. Several IBM partners including SendGrid, Zend, Redis Labs, Sonian, Flow Search Corp, Deep DB,

M2Mi and Ustream have featured a wide array of cloud services on IBM marketplace for enterprise clients. The IBM cloud marketplace will be available to all IBM and non-IBM customers.

Organisations will be able to test and experience hundreds of IBM and partner enterprise-grade cloud services online that are open, scalable and secure. Content is dynamically served up by job role and service pages offer easy access for those interested in categories such as Start-ups, Mobile, Gaming and others.

IBM's cloud marketplace has three key components for Line of Business

Professionals:

IBM Cloud marketplace for business will serve as a single stop where business and IT professionals can learn about, deploy and consume over 100 SaaS applications.

For Developers:

IBM's Cloud marketplace Dev will provide an integrated, cloud-based development environment where individual developers, development shops and enterprise development teams can quickly and effectively build enterprise applications via leading services and application protocol interfaces (APIs). These applications can be easily and securely integrated in hybrid on premise and off premise cloud environments. It is built on an open environment so developers can choose any open source or third party tools and integrate apps, as needed.

For IT Departments:

Ops will provide a secure set of cloud services built on Softlayer that will help clients deploy cloud services. It will also support high performance businesses at enterprise scale. Services include Big Data, Disaster Recovery, Hybrid environments, Managed Security Services, Cloud Environments for Small and Medium Business among others.





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Supports Virtual Tape Library

iSCSI target, Fibre-Channel target, SRP target



- SRP Support





Redundancy Fault-Tolerance







Supports Virtual Tape Library

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SECURITY

Over 69% of targeted attacks in India focus on large enterprises



ACCORDING TO THE latest Internet Security Threat Report (ISRT) volume 19 from Symantec, over 69% of targeted attacks in India focus on large enterprise. Globally, there was a 62% rise in the count of data breaches from 2012 resulting in more than 552 million identities exposed, proving that cybercrime remains a real and damaging threat to consumers and businesses.

"One mega breach can be worth 50 smaller attacks. While the level of sophistication continues to grow among attackers, what was surprising last year was their willingness to be a lot more patient—waiting to strike until the reward is bigger and better," said Tarun Kaura, Director -Technology Sales, Symantec India.

The size and scope of breaches is exploding, putting the trust and

reputation of businesses at risk and increasingly compromising consumers' personal information from credit card numbers and medical records to passwords and bank account details.

Each of the eight top data breaches in 2013 resulted in the loss of tens of millions of data records, while 2012 had a single data breach.

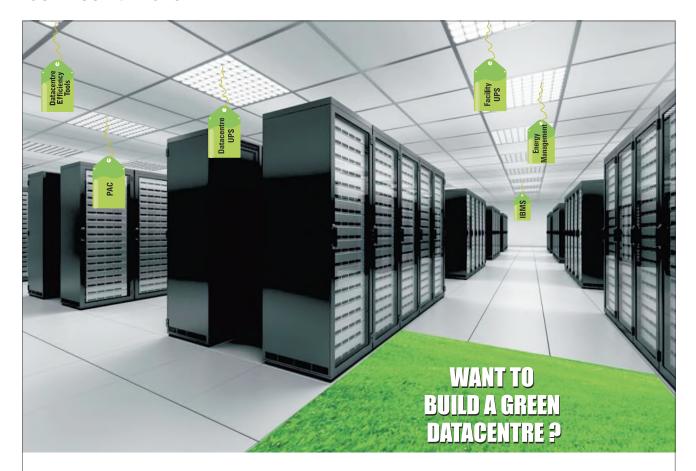
The report further observes that globally, targeted attacks were up 91% and it lasted on an average three times longer compared to 2012. In India, cyber criminals are unrelenting in their focus on large enterprises with a staggering 69% targeted attacks carried out against them. Despite stepping up their information security measures, business in India continue to be an attractive target for cyber criminals.

In India, nearly four in 10 attacks were

carried out on non-traditional services industries, like hospitality, business and personal services. This was followed by attacks on manufacturing, finance and insurance.

India emerged as a key threat frontier, ranking as the third highest source of overall malicious activity. It continued to hold its position as the spam capital of the world with 9.8 % of spam zombies; along with highest source of botnet spam close to 1.45 billion spams or 6.6% originationg from its borders everyday.

India also ranked high in the number of top botnets like Cutwail, Kelihos, GRUM, and GHEG. Cutwail which is the spam sending botnet for the malware Pandex sends 8.06 billion spam messages every day, out of which the highest are sent from India (over 620 million), according to the report.



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SECURITY

India faced maximum phishing attacks in 2013 in the APAC region: RSA study



RSA, THE SECURITY division of EMC, recently announced the findings of its 2013 Fraud Report. As per the report, India emerged as the top nation in APAC region in terms of phishing attacks by volume closely followed by Australia and China. The estimated loss in India from phishing attacks stood at \$225 million.

The findings suggest that globally, loss due to phishing attack was close to \$5.9 billion which is significantly higher than \$1.5 billion loss in 2012. The total number of phishing attacks in 2013 stood at 448,126 as against 445,004 the previous year. The overall trend in attack number showed a significant rise in volume through the year, reaching an all-time high in Q4 2013 (1, 41,254).

Key highlights from the report are:

- Brands in the U.S, the U.K, India and Canada were targeted by almost 57% of phishing attacks in the first half of 2013.
- USA and Canada remained the most targeted countries by phishing attacks in 2013, with a total of 63% of the phishing attacks directed at them.
- There has been a significant rise in phishing attacks in every Quarter in 2013, with Q4 seeing the most number of attacks.

Top countries targeted by phishing are United States, United Kingdom, Germany, India, South Africa, Canada, Netherlands, Colombia, Australia and Brazil.

2014 PHISHING FORECAST

Phishing, the cybercrime equivalent of pickpocketing, is a crime that is easily committed with very little cost to the attacker: cheap (criminal) hosting services—offered mostly on top of hijacked websites—are abundantly available. If spamming 500,000 emails addresses only set one back a mere \$65, it is no surprise that phishing attack volumes are not dropping.

- Phishing volumes will not drop considerably, though there may be a slight decline. The decline will be mainly due to growing adoption of email authentication, namely DMARC, which together with tighter policy, should help in the reduction of phishing emails received by end users. However, wider global adoption (into LATAM and APJ) still plays a major factor in the battle against phishing.
- Big data analytics and broader intelligence collection will lead to faster detection and quicker mitigation, resulting in lower financial losses. With the millions of spam messages traversing the internet on a daily basis, separating the wheat from the chaff has become far more challenging. Advancements in phishing techniques and methods also serve to add a layer of complexity when it comes to detection. Deploying analytics into the detection process provides a way to see though the noise and get to the phish faster. Coupled with broader intelligence collection, attacks may be prevented before they are launched.
- Greater end user awareness will serve to reduce losses. Cyber awareness has become a mainstream conversation topic—people are becoming more aware of the dangers in the digital world. More awareness translates directly into fewer losses.

SOFTWARE



Accenture to deploy SAP ERP for Azure Power

ACCENTURE HAS been selected by Azure Power to implement an SAP enterprise resource planning (ERP) solution to support and drive growth in its solar generation business.

As part of the agreement, Accenture will provide implementation services in support of the SAP solution to Azure Power to help strengthen its business processes and improve planning, budgeting, forecasting, supply chain and revenue projections. The new solution will help the company scale its rapidly expanding solar footprint across India and will enable more effective management of complex business transactions.

"We are leading the solar revolution in India by bringing the cost of solar energy from Rs17.97/KWhr in 2010 to Rs5.45/KWhr in 2014 and are working with the Government and all stakeholders to reach grid parity by 2017," said Inderpreet Wadhwa, CEO, Azure Power. "While we are growing at a very fast pace, it is essential for us to have our core business processes automated with adequate controls in place and we are excited to start our relationship with Accenture to manage our growth better."

Sandeep Dutta, Managing Director-Resources Operating Group, Accenture India, said, "We are seeing an increasing number of independent providers entering the market to take advantage of the opportunity offered by solar, but it is critical that these companies have the right business framework in place to support the fast pace of growth in this sector. We look forward to working with Azure Power to implement integrated and agile business processes that can help it outperform the competition and deliver on its expansion strategy."

Sonata Software partners with Progress Pacific to deliver PaaS

PROGRESS SOFTWARE ANNOUNCED its partnership with Sonata Software, to deliver its Progress Pacific platform-as-aservice (PaaS).

Speaking about the partnership, Sujit Mohanty, Head Technology Infrastructure Business, Sonata Software, stated, "Through our wide distribution network in India, we



intend to deliver Progress Pacific solution to users, realising value in the market for Progress Software and our customers".

Progress Software provides data application solutions to customers globally to help improve big data integration, data interoperability, mobility and application development needs of customers. Stephen McNulty, vice president and managing director for Asia Pacific and Japan at Progress, said, "We are extremely pleased that Sonata Software has selected Progress to help its customers react quicker to opportunities and increase productivity to grow their businesses. Progress sees Sonata Software as a key partner in the region to unleash the potential of the Progress Pacific platform."

SOFTWARE

JDA Software launches end-to-end supply chain collaboration solution



JDA SOFTWARE GROUP, Inc, has released JDA Flowcasting, an end-to-end supply chain collaboration and management solution.

The JDA Flowcasting solution is designed to enable a completely integrated and unified supply chain for manufacturers, distributors and retailers. Using inputs such as point-of-sale, inventory and promotions, the solution can eliminate the disconnect that exists today in retail supply chains by providing a common set of plans for demand, replenishment, transportation, capacity and financial projections that all trading partners can agree upon and execute.

According to the company release, JDA Flowcasting represents the next generation of collaboration for trading partners looking to create joint value for their respective organisations and is a massive leap forward from previous forms of collaboration such as Collaborative Planning, Forecasting, and Replenishment (CPFR). Built on JDA's rich end-to-end collaborative supply chain management capabilities, it leverages JDA's scalable architectural platform and is deployed via

JDA Cloud Services to deliver rapid, sustained return on investment and enhanced organisational agility.

The solution will enable trading partners to effectively collaborate on the supply chain parameters that drive time-phased plans from the shelf to the factory versus just the outputs of the plans, such as the sales or order forecast. By enabling the end-to-end supply chain to be modelled in a common shared cloud instance, accelerated forms of simulation can take place to extract new value streams that were not visible in the past. This will allow trading partners to quickly evaluate the trade-offs of different supply chain options that drive mutual benefit, make joint decisions, and then quickly execute.

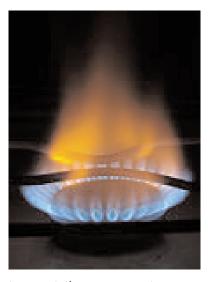
"JDAFlowcasting provides companies with dramatic new capabilities to drive higher on-shelf availability at lower supply chain costs," said Fred Baumann, Group Vice President, JDA Software. "We are very excited about the business value this technology can bring to our customers and the long-standing problem it solvesenabling a single source of forecast truth for retailers and their suppliers."

SHV Energy simplifies its distribution model with SAP

SAP AG HAS announced that SHV Energy Pvt Ltd (SEPL) has chosen its solution for transport management and supply network planning.

SEPL is engaged in the business of importing and distribution of LPG to domestic, commercial and industrial customers. In India, SEPL markets its products and services under the brand name Super Gas.

As the global marketplace grows,



transportation management becomes more complex and expensive. In their efforts to grow revenues and cut transportation costs SEPL aimed to gain better control over their supply chains and minimise coordination inefficiencies. Implemented in partnership with Hexaware, the deployment of SAP's portfolio of customiwed solutions will help SEPL lower inventory and logistics costs, improve processes and increase visibility across its national operations.

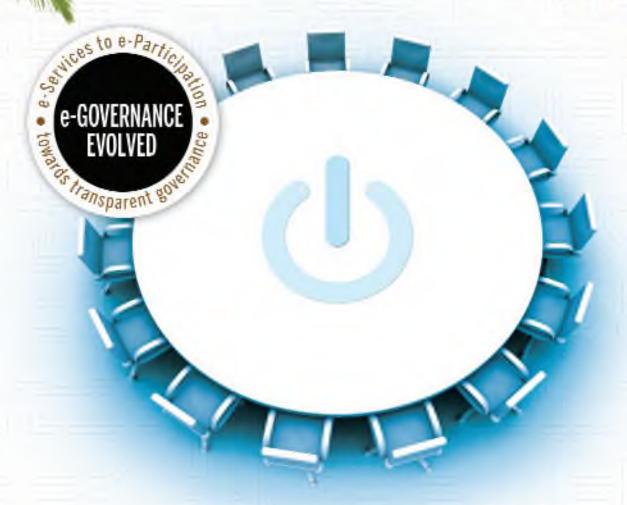


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The 16th edition of the Express Technology Sabha is here. With the theme "e-Services to e-Participation" this edition will highlight how wider participation and greater transparency mean that e-governance is much more effective and trustworthy. As India's premier e-governance forum, Express Technology Sabha will see practitioners of ICT within the government get together to exchange ideas, assimilate concepts and share knowledge on varied technology issues so as to deliver a better governance mechanism.

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