EDGE2014 – For Innovation and the Art of the Possible, Infrastructure Matters

Introduction

On May 19th, we returned to Las Vegas to attend IBM Edge2014[1]. This year's event at the Venetian, focused on infrastructure-driven innovation. Over 5500 IT business/technology executives and practitioners spent the week viewing, hearing about and discussing the latest in infrastructure capabilities and application. The event is a showcase for IBM technology covering IBM Storage, IBM PureSystems, IBM System x, IBM Power Systems and IBM System z. Lenovo's eminent acquisition of IBM's x86 business as well as post-acquisition plans for partnership, etc. were natural topics of interest as the latest publicly available information was presented.

The attendees at this event are primarily problem solvers. Therefore, the emphasis is on discussing and demonstrating how IBM's capabilities are and can be used in real-world situations, not just speed 'n feed specifications.

Attendees get actionable advice on best practices and application strategies from other IT and business professionals who are facing and successfully dealing with the same, seemingly intractable challenges to improve their datacenters, implement public and/or private clouds and deal with the complexities of a global mobile environment. Breaks, interest sessions and social activities provide opportunities to network with technical experts, business and technology partners as well as IBM staff. In this article, we present some items we found to be of special interest.

The Event

Day 1 the theme was "Infrastructure Innovation that Matters"[2] Tom Rosamilia, SVP, Systems & Technology Group (STG) and IBM Integrated Supply chain led his team in discussing how and why the right infrastructure is a foundational necessity for success in a

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[1] IBM Edge2014
[2] https://tinyurl.com/ptkrlrt

data-driven world. Infrastructure provided the underlying theme as a major topic, but the focus was on how clients were achieving practical enterprise operational and economic benefits from technology that:

1. Allows rapid processing of new, frequently inconceivable) workloads,
2. Ensures "right-time" data-driven decision-making, and
3. Seamlessly and transparently integrates front and back office operations.

Achieving these require innovative solutions from teams that are able to leverage Cloud, Big Data, Analytics, social and mobile technologies to optimize results.

On Day 2, the focus shifted to the details of how to go about "Creating an Agile Infrastructure"[3]. Customers relating their successes and future plans were intermingled with IBM executives discussing how to put the infrastructure to work for you by simplifying, accelerating and delivering IT.

Chris O'Connor, VP of Strategy and Engineering, IBM Cloud and Smarter Infrastructure, provided an overview of the software solutions, initiatives and services available that make leveraging the infrastructure simpler and easier. This includes Infrastructure as a Service[4] (IBM SoftLayer) delivered by over 40 global data centers and IBM Service Engage[5] – IBM's SaaS delivery of its IT service management solutions and Codename: BlueMix[6] – a next generation service providing developers access to IBM and third-party software, services and solutions to develop, deploy and manage cloud applications. Read our opinions on these at www.ptakassociates.com.

Executive sessions provided an overview of what could be done (improving data economics, increased business value, enterprise transformation). Technical sessions provided the details of implementation (increasing infrastructure agility with software-defined environment, best practices in infrastructure management and OpenStack integration, using Flash to improve performance and reduce costs, etc.). Success stories were detailed enough to demonstrate that these were not one-of-kind flukes. Comparable achievements are possible in their own organizations.

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[3] https://tinyurl.com/q7pr8ba
[4] http://www.ibm.com/cloud-computing/us/en/iaas.html
[5] https://www.ibmserviceengage.com/
[6] http://www-01.ibm.com/software/ebusiness/jstart/bluemix/

Of course, there was significant interest in how things will be divided as well as the status of Lenovo's acquisition of IBM's x86 business. IBM spoke, took questions and provided a graphic (right) summarizing product, support and service responsibilities expected post-acquisition. It also clearly represents the high degree of collaboration planned by the companies. A Lenovo executive presented and was available to answer questions.

Considerable attention was given to System x solutions that are optimized for specific workloads. These include enterprise (ERP, big data, analytics, etc.), HPC and cloud. Announcements included: new IBM Flex System x280, x480, x880 X6 servers that scale from 2 to 8 sockets with 3 to 12 TB of memory. These perform up to 2x faster with 3x lower latency using eXFlash. Comparisons are hard to evaluate, we're working on a more detailed report. The immediate impression is that the improvement is real and significant.

New System x solutions for Big Data and Analytics[7] include: SAP HANA on IBM Flex System x880 (SoD), IBM System x Reference Architectures for Hadoop and IBM DB2 with BLU Acceleration. New cloud solutions include: IBM NeXtScale hyperscale clouds, IBM Cloud Manager with OpenStack V4.1, and IBM PureFlex System Solution for Parallels MSP.

IBM announced PureApplication on SoftLayer[8], cloud-based access for the PureApplication solutions. The same capabilities and performance are available on-premise and through the cloud.
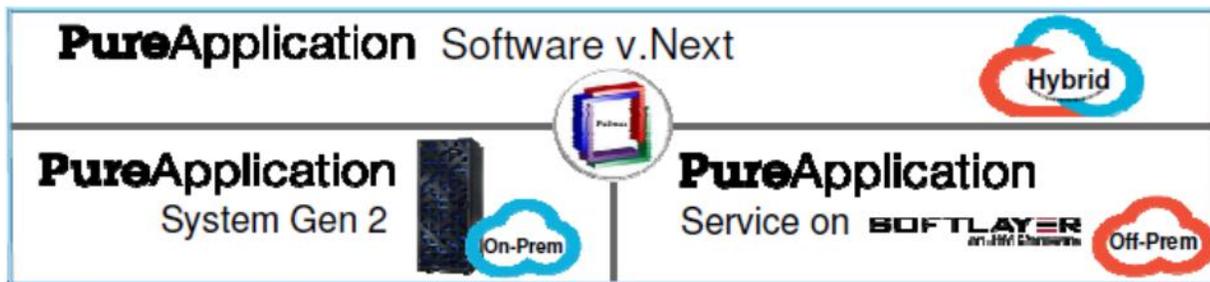
This increases access to applications in an economical and efficient manner to expand markets without having a local presence. It can be used to safely and economically learn existing applications or to modify and test them to improve performance.

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[7] Big Data and Analytics
[8] https://tinyurl.com/kwxh9zz

The number and variety of storage-related announcements deserve detailed review and coverage. We'll summarize here. IBM's data virtualization capabilities[9] (SVC) deserve attention by those interested in optimizing storage infrastructure. Capabilities such as: self-tuning infrastructure, SVC Real-time Compression that cuts data storage requirements by 80%, the new SVC Data Platform combined with Storwize V7000 to offer better SLAs with a 2x performance improvement are only a part of the story. A cost-efficient infrastructure and pricing model reduces initial pricing by up to 40% with XIV cloud storage for MSPs; and the TS4500 tape library to backup 3x as much cloud data in the same footprint are worth noting.

IBM' lowered the costs (thus improving the economics) of moving to flash with a 27% lower entry point pricing for the IBM Flash System[10] 840. They made the DS8870 High-Performance Flash Enclosure more attractive by improving performance by 4x while reducing footprint by 50%. In our opinion, their Flash story merits more attention by serious users.

Finally, IBM introduced Code Name: Elastic Storage[11] as their latest enhancement to Software Defined Storage technology. By automating the process of moving data to Flash (6x better performance), or Tape (up to 10x cost savings), it delivers greater speeds with more simplicity and increased cost efficiency even as it scales to handle multi-petabyte capacities.

The Final Word

We believe that the potential inherent in an infrastructure composed of elements which include cloud, big data, intelligent, automated analytics, mobile and social technologies with advances and changes accelerating are overwhelming. It will take time and considerable effort to understand it well enough to effectively exploit its full potential. A significant gap exists between the inherent capabilities of emerging technologies and existing abilities to consume it.

The scale of effort required if using traditional methods for educating enterprise staffs in the complexities and intricacies of these emerging technologies exceed the budget and time of most enterprises. In any case, by the time the task was completed new, more powerful and sophisticated technologies will be crowding on the scene. The gap between the capabilities of technology and the ability to consume and leverage the technology must be bridged by other means.

We believe It requires a major commitment and investment by vendors. But, that is not enough. It also requires cooperation among partners, competitors and customers

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[9] http://www-03.ibm.com/systems/storage/virtualization/
[10] http://www-03.ibm.com/systems/storage/flash/
[11] http://www-03.ibm.com/systems/platformcomputing/products/gpfs/

in a number of areas, not the least being to build useable standards in multiple areas. IBM has been among the leaders in recognizing and acting on this recognition.

IBM is committed to accelerating the pace of adoption and realization of benefits from these technologies. Hence, their string of multi-billion dollar investments in these areas. They are accelerating the move of technology from IBM Research Labs to the market to make it easier for their customers to leverage and benefit from technology. At the same time, they are forming partnerships with clients and competitors to establish practical standards, understand requirements and increase the adoption of technology. They are, as well, involving clients, partners and customers in product definition, product development and testing in numerous ways. IBM, as should any individual or enterprise involved, will benefit from these activities. But, so will their customers and the consumers of the results of these efforts. Even those who fail to participate or contribute will, in the end, benefit.

We continue to be impressed with IBM's vision and acceptance of the risks involved in a major transformation of themselves, the market and the industry. IBM sees the future in that transformation. We tend to agree.

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About Ptak Associates LLC

Our analysts cover a breadth of areas that are ideal to bring you the "Big picture" on new technology trends across the industry. Whether it's Cloud computing, Mobile (BYOD), the Internet of Things, DevOps, Big Data, IT Operational Analytics, Workload Optimized systems or other new trends, Ptak Associates analysts cover these trends with a unique perspective that is both deep and broad.

Our clients include both industry leaders and dynamic newcomers. We help IT organizations understand and prioritize their needs within the context of present and near-future IT trends, enabling them to use IT technology effectively in solving business problems. We help technology vendors refine their strategies, and provide them with both market insight and deliverables that communicate the business values of their products and services. We provide all clients with an understanding of how their competitors are playing in their market space, and deliver actionable recommendations.

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