

The New Data Generation

By Dave Parry

Today's data centers consist of three core elements—computing power, networking, and storage. Virtualization technologies are beginning to blur the lines and remove many of the traditional system boundaries, increasing flexibility and utilization of resources. This adds new challenges in managing these dynamic environments and requires new tools and new skills with an enterprise view of your entire infrastructure.

- When your LAN is now carrying email and voice traffic, windows shares, iSCSI and NAS storage, Web2.0 applications, and tunneling other protocols.... can this still be managed by your network administrator?
- When your workloads are no longer tied to a specific server and can migrate between systems based on policies and resource availability, will standard system management utilities still be effective?

- When your daily backup could fit on a single tape, D/R was a simple process. Increasing capacities, new types of unstructured data such as multi-media, and new uses for this data (OLAP/warehouse) are driving the need for sophisticated data management. The need for a real-time, high-availability strategy to protect

your data has become apparent, since daily backup is no longer sufficient.

- Backup windows are becoming non-existent. Last night's backup does not provide protection for today's transactions. Snapshots, CDP, and disk-based backup are providing near-real-time protection on tiered storage architectures and virtual tape systems, allowing any-point-in-time recovery. Today if IT systems are down, business stops. How quickly can you recover? How much data can you

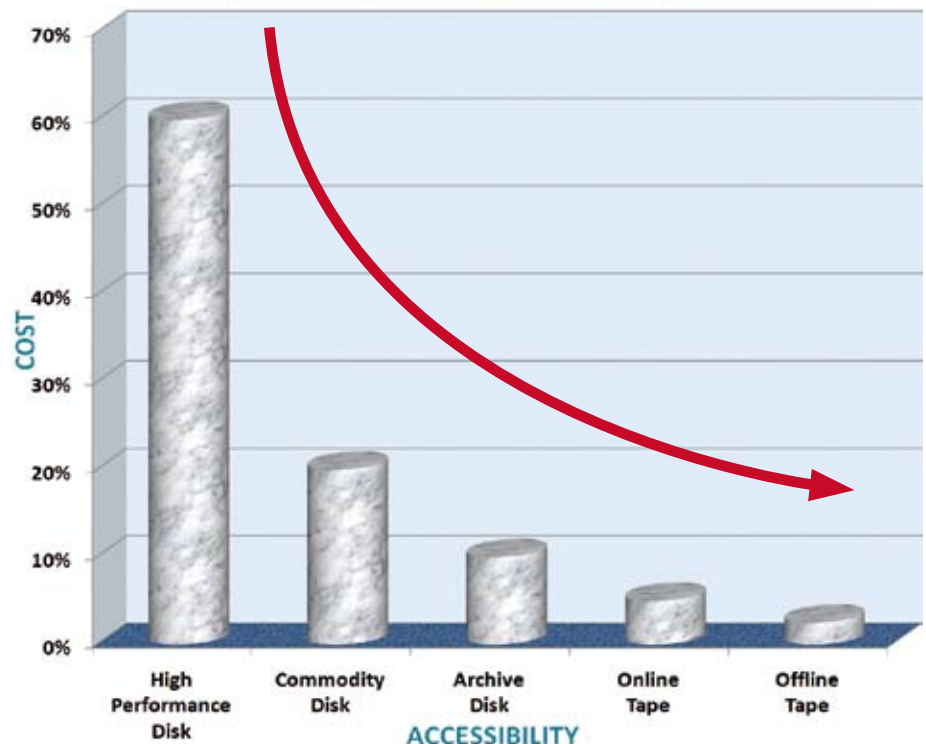


IBM DS3300 ICSI Storage Subsystem: SAS entry storage subsystem provides host connectivity options for SAS (DS3200), Fibre (DS3400), and iSCSI. Scales up to 14TB. www-03.ibm.com/systems/storage/disk/ds3000/ds3300/.

afford to lose?
• Industry regulations are (re) defining how your data is to be managed and protected,

- mandating access to historical data for periods significantly longer than the lifespan of the technology it is stored on. Are you prepared for an audit?
- Server hardware is often refreshed on a 3-5 year cycle, but your data is forever. How do you move to new technology while avoiding complex migrations? How can you do this in an "always-on" 7x24 world?

Fully Managed Costs: Storage Options



MID-RANGE Education

solve IT. for Less™



- Power requirements have become critical in many data centers. How do you know what you are using? When do you hit the limit? Can you manage it? IBM is integrating technologies like PowerExecutive to help measure, trend usage, and manage power and thermal requirements. Have you heard about it?
- Virtualization is a reality today, and requires that we re-think how we manage and protect these environments. Virtual servers need virtual storage. Provisioning new environments can now be accomplished in minutes. Networked storage facilitates this by decoupling storage from specific servers and moving more of the data management functionality to the SAN. Storage is becoming an independent resource and should be managed that way.
- Will traditional O/S environments such as Windows, Unix, or Linux continue to thrive in a virtualized world? As businesses become increasingly interdependent and system boundaries continue to shift, the IT landscape is going to evolve in areas we have not yet thought of. Will you be able to adapt?

There are no right or wrong answers to these questions. Every customer environment is unique. Your IT solution should be able to adapt as your business needs change. The challenge can be deciding which direction to take as information technology is changing at such a rapid pace. Mid-Range helps customers through this maze every day with the right people and experience to help guide you along this journey in a true partnership. **M-R**

Dave Parry is a pre-sales technical specialist at Mid-Range, focusing on IBM System p and Storage solutions. His 22 years of IT experience includes field service, AIX and HP/UX technical support, networking, high-availability, and solutions assurance. Dave has been directly supporting IBM opportunities for the past 10 years. He can be reached at dparry@midrange.ca.



System i Education Courses:

To register for any of the courses listed below, please e-mail educate@midrange.ca. Indicate the course selected, along with the name of the attendee/s, in your reply. Registration confirmation and details will be sent prior to the start of the course.

System i - Administration and Best Practices

Understanding Your System i

Length: 2 days

Scheduled: May 7 & 8, 2008

Registration: 8:30

Course Time: 9:00 - 17:00

Location: 34 Riviera Drive



Course Abstract:

These hands-on sessions cover System i administration, including system values and controls. The native save and restore functions of the operating system and best practices for reviewing logs will also be covered. On completion of this course, you will understand the System i IPL process and be able to perform PTF management.

System i and iSeries Upgrade

Moving Your System i Operating System From One Release to the Next

Length: 1 day

Scheduled: May 14, 2008

Registration: 8:30

Course Time: 9:00 - 17:00

Location: 34 Riviera Drive



Course Abstract:

A step-by-step review of the system preparation and technical procedures required to move up to a new iSeries release. Learn and understand what needs to be done on your system to ensure a successful operating system upgrade.

Backup and Recovery Media Services (BRMS)

Backup, Recovery, and Media Services on System i

Length: 2 days

Scheduled: May 21 & 22, 2008

Registration: 8:30

Course Time: 9:00 - 17:00

Location: 34 Riviera drive



Course Abstract:

Learn how to use BRMS to manage your backup, recovery and media in stand-alone or multiple i5 environments, at a site or across a network.

Note: Familiarity with the i5/OS standard save and restore commands is a prerequisite.

Location: 34 Riviera Drive, Markham, On. L3R 5M1
Register @: educate@midrange.ca
