



ThinkTank

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BUSINESS CONTINUITY

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POWER SERVERS FOR SMALLER BUSINESSES

The new Power server range from IBM is designed specifically for small and medium-sized businesses and has IT optimisation and virtualisation in mind. The Power server has been designed to allow businesses to create up to 160 virtual partitions on a single system, which could dramatically improve the utilisation of servers, reduce hardware and utility costs and maintenance overheads.

The new "virtualised" approach to computing in the Power systems is designed to allow businesses to reduce energy consumption by as much as 80 percent, better manage system growth, and achieve total cost of ownership reductions of up to 72 percent.

The servers are based on the IBM POWER6 microprocessor which provides twice the performance of previous processors. The processors will appear in System i, System P high and low-end servers as well as

IBM'S ARSENAL TO ADD RESILIENCE IN THE DATA PROTECTION ARENA

Data storage and backup is a significant issue for most businesses and with the instigation of compliance regulations such as Sarbanes Oxley happening in the UK, the issue is going to gain in importance.

To help reduce the data headache, IBM has recently acquired Arsenal Digital Solutions, an emerging worldwide leader in on-demand data protection with a comprehensive suite of Information Protection Solutions (IPS).

"Information protection is not optional for businesses today. Continuity of data, applications and infrastructure means survival in a world that operates around the clock regardless of a company's size or industry," says Philippe Jarre, Vice President, IBM Global. "IBM's leading business continuity and resiliency services, combined with managed services from Arsenal, give IBM the most comprehensive range of IPS and provide clients with the ability to back up and protect their information in a way that is fully integrated with their business continuity plan."

WIMBLEDON AND IBM

Each year the All England Lawn Tennis and Croquet Club stages The Wimbledon Tennis Championships, and IBM has been their IT partner since 1990. IBM technology enables over 748 million households to watch the action and see the scores on TV, in addition it allows over 8.6 million users to access the Wimbledon web site. Security and safety is of paramount importance at Wimbledon so the Club is currently working with IBM on a three-phase security command and control implementation incorporating state-of-the-art IBM security surveillance software.

The implementation will integrate every aspect of security from cameras and video management to intruder alarms, trip wires and automatic number plate recognition. The IBM software, part of the Digital and Video Security (DVS) solution will provide the real-time intelligence needed to automatically monitor trends and analyse events captured by security devices such as cameras.

WELCOME

Welcome to the tenth edition of ThinkTank and welcome also to two new additions; ThinkTank Update email newsletter and the ThinkTank Comment. The newsletter and Comment take subjects discussed in ThinkTank and expand on them offering practical ways you can use IT to further improve your business through IBM's wide range of hardware, software and services.

In this issue we look at business continuity. Most businesses know that it's important to backup data and applications regularly, but with increased reliance on data to run businesses and with more regulations governing this data, it is important to make sure that we can access that data around the clock. We look at strategies to make sure that your business never loses data.

To discuss improving your businesses resilience, get in touch with your local support team to see how they can help in the most cost-effective way.

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Be prepared...

Every business needs to face the reality of disasters, no matter whether they result from forces of nature, acts of terrorism, careless (or malicious) employee actions or simple hardware failure. Every business, no matter what its size, is now re-examining the IT preparations it has in place and its disaster and disaster-response plans.

We are moving nearer and nearer to a digital world, we rely more and more on computers and because of the internet and devices such as laptops, mobile phones, Blackberrys, iPods, iPhones and USB data keys, our reliance on electronic data – rather than the written or spoken word – becomes greater and greater. Many businesses cannot function without spreadsheets, word processors, email, databases, web sites, and high-end applications like Enterprise Content management (ECM), Enterprise Resource Planning (ERP), and

Customer Relationship Management (CRM). All of these applications not only need data to work, they also produce prodigious amounts of data.

According to Gary Masada, CIO of Chevron, his company is accumulating data at the rate of about 2 terabytes a day or 23MB every second. The Daytona data management system used by AT&T to solve data management problems manages over 312 terabytes of data where the largest database contains over 938 billion records and the entire system manages over 2.8 trillion records in total.

content, searching and retrieving, and disposal. In addition, IDC suggested that 20 percent of the data being created is subject to compliance rules and standards such as Sarbanes-Oxley, the Financial Services Authority, HMRC and other regulations.

Due to the increasing litigation and reliance on digital contracts, companies are being asked to save more of the data, for longer. Additionally, current and past data stored in CRM, ERP and transactional systems is essential to any business.

Data loss can be devastating. Business records are now increasingly in electronic form. Dependency on these records, and the tools used to process and store them, continues to grow. Most electronic records, such as emails or transactions, never get printed out. If electronic records are lost, they may be impossible to re-create. For most businesses, data loss is not an option.

Data storage is becoming a big headache and posing a few dilemmas. What do you store? Do you save private emails or Instant Messaging chats? How much do you store and how for long? Do you save the past six weeks or six years of data? Do you delete data or archive onto tape? How often should you check the data?

It's not only the big companies making huge amounts of data. The Radicati Group estimates that the average corporate email user sends and receives a total of 133 messages and receives about 18 MB of data per day. This number is expected to grow to over 28 MB by 2011.

According to IDC while 70 percent or more of the digital universe is created, captured, or replicated by individuals – consumers and business users – enterprises, at some point in time, have responsibility or liability for 85 percent. This responsibility includes information security, privacy protection, copyright protection, screening for obscenity, detecting fraud, reporting on and archiving the

POWER520 EXPRESS

Inevitably all systems go wrong at some point – wouldn't it be good to have a system that warned you when it was about to go wrong, and helped you get back to normal as fast as possible? The Power520 Express range is designed to be robust and reliable and also has built-in systems that warn of potential disk failures and self-fixes any problems.

The Power520 Express's capabilities include recovery from intermittent errors and self-healing hardware that automatically corrects any errors.

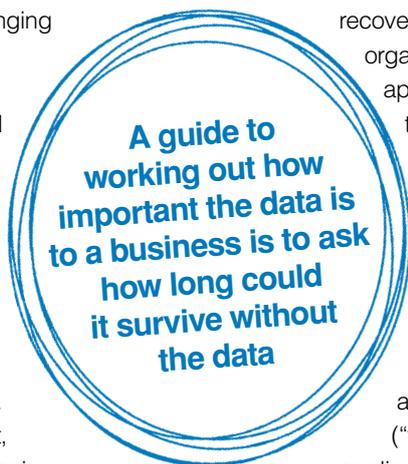
The Processor Instruction Retry RAS feature provides continuous monitoring of processor status and work can be redirected to alternate processors, all without disruption to the programs running on the server.



To answer all these questions you need to develop a backup strategy. The first question to ask is "What information do you have?" Until you know, you can't create a strategy.

Typically data within a company does not reside on a single system, and not all of the data saved is the most up-to-date. Business data typically resides in multiple disparate systems, ranging from enterprise resource systems to business-specific departmental applications and multiple Excel spreadsheets on individuals' personal computers. And then there's email; employees tend to handle their email in a variety of ways. Some keep thousands of email in their Inbox, rarely deleting anything. Others have folders by subject, that correlate with the filing of their other electronic and paper documents. Some employees never empty Deleted Items/Trash or delete Sent Items.

Once you know what you have and where it is, you then have to decide on the priorities and how to back up. Generally, the more important the data is, the more often it needs backing up. A guide to working out how important the data is to a business is to ask how long could it survive without the data. A transactional website that takes thousands of orders a day, or the business's email server needs to be backed up hourly, whereas a file server may only need to be backed up daily and an application server weekly.



If it's a 24/7 business that lives and dies by email then to achieve a real-time infrastructure, where all data is constantly updated Continuous Data Protection (CDP) is required. This provides multiple copies or snapshots of data instead of a daily backup.

CDP is likely to be implemented in situations where current backup or recovery methods expose an organization to data loss for critical applications. While many technologies provide snapshot copies, CDP offers additional flexibility and reliability by creating snapshots at logical or critical times, such as every time a new piece of data, like a transaction on a website or a new email on an email sever is produced, ("true-CDP") or when the application is closed down or at pre-selected points eg every hour, every 100th email ("near-CDP").

Can you assess which data sets or applications are truly critical and would, therefore, necessitate the fastest recovery? Real-time analysis and scheduling is required to determine the files, data and applications that are used most frequently - and to manage the immediate backup of changes to that data to ensure recoverability.

To obtain a data-management and recovery solution that meets the requirements of CDP and real-time infrastructure there are several critical considerations.

IBM express advantage™

TIVOLI STORAGE MANAGER EXPRESS

To backup data to disk, Tivoli Storage Manager Express (TSME) is the solution.

To create TSME, IBM reengineered the technology used in IBM Tivoli Storage Manager Extended Edition and delivers the same reliability and robustness as the enterprise-class offering, in an easy-to-use solution with an affordable price.

It easily and conveniently handles data storage requirements for small-to-medium businesses.

TSME is simple to install and features an easy user interface, and backs up vital data direct to disk. It doesn't require a dedicated administrator and it provides email reminders and on-screen guidance about what management tasks need to be done.

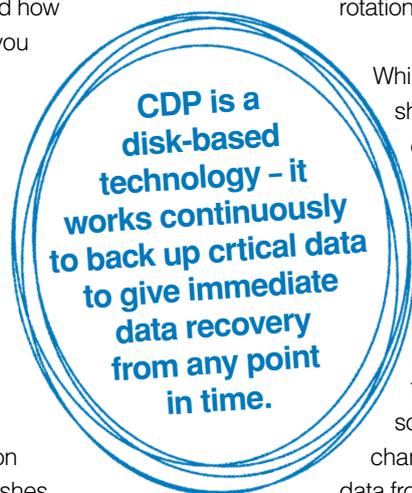
Tivoli Storage Manager Express can be installed, configured, and running its first full backup in less than 30 minutes.

To test the strengths of TSME download a free 30-day trial copy at http://www.ibm.com/developerworks/downloads/tiv/tsm/?S_TACT=105AGX28&S_CMP=DLMAIN or learn more about it at <http://www.ibm.com/developerworks/downloads/tiv/tsm/learn.html>

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Once you determine what information is most significant in the short term, you know what mission-critical data should get the highest priority for backing up and the greatest precedence for recovery. When you've established what you have, and how often you're going to backup, you need to look at where you're going to back up to and what you're going to do with it should everything go wrong. A good backup strategy needs three basic criteria.

Backups must be protected. To be efficient, a second copy must be in a different physical location. You must be able to recover your business operation from the backup. If one site washes away in a flood, there must be sufficient data in a protected location to continue normal business operations. The recovery process must function properly within a given timeframe prescribed by specific business needs.



The most common approach to backing up data is offsite tape, where backups are periodically run. The backup tapes are then duplicated and transferred to a secure offsite location. The tapes are recalled based on a rotation schedule.

While a business might do well shuffling weekly backup tapes offsite because its recovery needs may not justify more expensive options, a global 24/7 internet retailer would probably require a complete replication of its data as downtime will cost far more than the disaster recovery solution. As business data changes frequently, recovering lost data from tape is often a lengthy, laborious and error-prone process.

CDP is a disk-based technology that doesn't require the interruption of applications to perform backups. It works continuously to back up critical data to give immediate data recovery

from any point in time. For example, if an important document is accidentally deleted or data corruption happens due to a virus or hacker attack, there will be access at the point just before the problem occurred. Recovery occurs immediately with just the push of a button.

A popular option is remote disk replication, where data is periodically copied to similar storage resources at a distant location. Duplicate resources such as this can often allow faster recovery than tape and, when properly implemented, might also take over as the main storage location if the primary site becomes unavailable.

Inevitably, there is a cost element to disaster planning/recovery. It's a form of insurance: You're spending money to protect against a greater financial loss. The ultimate goal is to match the complexity of the data protection scheme and the associated cost with the potential loss that you're trying to prevent.

IBM INFORMATION PROTECTION SERVICES



IBM Information Protection Services is a suite of services that can help businesses implement a plan based on priorities for backup, retention and retrieval, enabling virtually anywhere, anytime access to essential information.

The suite comprises of five elements:

- Remote data protection – Automatically backs up data from servers, PCs and laptops, anywhere they are located, to IBM's secure data centres via an existing network

- Onsite data protection – Provides hosted backup and recovery services for mission-critical data at IBM's offsite data centres, along with comprehensive management

- Custom data protection – Manages and provides data protection at your own data centre using your infrastructure – without overburdening your in-house staff

- Remote data protection Express – An automatic, security-rich and offsite data

backup and recovery service for small-scale remote Windows servers and PCs

- Data retention and archival – Specifically designed for email; this supports your email systems and supports email archiving policy management capabilities for e-discovery, storage management and disaster recovery.

With over 155 global recovery centres, IBM can help you access your data virtually anywhere.

Visit <http://www-935.ibm.com/services/us/index.wss/offerfamily/bcrs/a1026934>

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