

"HERE TODAY, GONE

TOMORROW?" Article by SUN

MICROSYSTEMS Executive in

DISASTER RECOVERY & THE

67% of companies that go through a

weeks are out of business within 2

NETWORKED WORLD -

disaster lasting more than two

years.

IF THESE QUESTIONS ARE ON **TOP OF YOUR MIND TOO...**

BACKUP POLICY

Do I have a well defined backup policy for my critical business data?

- How frequently is my critical business data backed up?
- How can I be sure that the backup schedules are religiously followed?
- How recent and complete is my current backup?
- Have I verified this backup policy? Can I verify it without disrupting operations?

COST OF BACKUP POLICY

What is the REAL cost of implementing this backup policy?

- What is the cost of backup hardware such as multiple-generations of tape drives and backup software?
- What is the actual cost of multiple magnetic or optical media such as tapes, DVD's, external disks, etc.?
- What is the cost of personnel time to perform actual data backup... week after week, every week?
- What is the cost of time spent and equipments required for verifying backup?
- What is the cost of maintenance, cleaning and administration of magnetic media?

EFFECTIVENESS OF BACKUP POLICY

How effective is my backup policy?

- How long would it take after a crash to restore fully operational environment?
- How do I mitigate missing, corrupt or out of sequence media?
- How many days, weeks or months of data would still be lost when the system crashes?
- If there was a disaster today, would my entire critical data be restored, WITHOUT FAIL?

FINANCIAL & FUNDAMENTAL IMPACTS OF COMPUTER

Most of the times, disaster strikes unannounced as happened when the World Trade Center building in New York was bombed in 1993. Of the 300 companies that were affected by data loss in that bombing, 260 had no recovery plan in place. Within a year, 150 of those companies had closed shop.

OUTAGES ON BUSINESSES -

CENTRE FOR RESEARCH ON **INFORMATION SYSTEMS -**

Of the companies that experience a disaster but have no Business Continuance Plan in place, 43% never recover. Of companies that experience a disaster but have no tested BCP in place, only 1 in 10 are still in business 2 years later.

LOST BUSINESS OPPORTUNITIES

Would just a successful data backup and restore guarantee business uptime?

- How much time would be lost to perform a successful data restore from backups?
- How much would it cost in resources to be fully operational again?
- How much business would I lose during operations downtime due to system crash?
- For how long can my business afford to be without access to critical applications?
- What would happen to my business if not operational within a "reasonable amount of time"?
- What would be that "reasonable amount of time"? For me? For my customers?
- What would be my customers' reaction if their service levels agreements are defaulted upon?

COST OF LOST BUSINESS OPPORTUNITIES

Would my business be affected due to functional downtime?

- What would be the cost of lost business?
- What would be the financial penalties for defaulting on Service Level Agreements?
- What would be my cost of lost revenue if my competition offers better performance?

..WE HAVE



FORGET BACKUPS, DUMP RESTORES AND

SAY GOODBYE TO

OPERATIONAL BREAKDOWN...

with IT's BLACKBOX...

NEVER LOSE DATA -NOR BUSINESS



BENEFITS

Superior Business Resilience

- Data protected continuously, avoids possibility of missing a backup
- No single point of failure like in tapes or multiple media infrastructure
- RAID hardware redundancy virtually disk-crash-proofs data in the event of a harddisk crash
- Mirror practically crash-proofs data if IT's BLACKBOX server crashes
- Data Protection against sabotage: Data that is intentionally deleted is retained on mirror opaquely as per pre-defined customizable policy
- Data Protection against accidental deletion: Accidentally deleted files are not immediately deleted from LMS as per standard policy, offering the user a windows of opportunity to recover deleted data
- Data Protection against disasters: Development is under way to take IT's BLACKBOX off-site over standard IP-networks¹

Enhanced Profitability

- Share data over network across multiple users, simultaneously
- Data is stored and delivered in a fast, efficient manner
- Version control improves data reliability and eliminates administrative overheads to control data explosion
- Business interruptions minimized or eliminated, meaning revenue stream is uninterrupted
- Superior Service Levels allow premium charging to customers

Improved Operational Availability & Productivity

- Business operations can be restored within minutes; not hours, days or weeks of disk crash or computer crash
- Near-continuous replication minimizes any possibility of data loss and subsequently also the operational efforts and resources to re-create it
- No operational breakdown for hours, days or weeks during restore process - access the data in minutes, just as before the crash
- Much faster than the process of loading multiple tapes (assuming you
- have the right ones and that they are in the right sequence)

 Data is near-instantly available on IT's BLACKBOX unlike the limited
- accessibility and availability on storage media such as tapes or DVDs

Cost-savings

- IT's BLACKBOX server is a full featured file server eliminating further need for another proprietory file server
- Costs a fraction of commercial solutions: Charges levied only for implementation, support and for funding future development
- Multiple backup resources redundant with IT's BLACKBOX
- Plugs into existing standard network cable; no need to invest in any specialized information infrastructure
- Say good-bye to regular investments in changing tape infrastructure
- Zero media costs otherwise required for multiple formats redundancy
- No maintenance, cleaning and no administrative overheads those are so common for ensuring proper storage, tagging, etc. of media
- Financial benefits vis-à-vis user or seat licensing, no software cost since based on free, open-source, Linux



FEATURES

Automatic & Unattended

- Simultaneous write to multiple harddisks
- A file saved and unlocked is synchronously written to mirrored disk and asynchronously written to mirrored server over the network
- Automatic mirror save as often as every 1 minute
- Automatic disk fail-over in case of single disk failure (requires reboot)
- · Policy based data replication, retention & deletion is automated

Secure

- Control access to data with user password authentication
- Policy based selective access to users and groups to ensure sanctity of data from prying by unauthorized users
- Read-Only & Read-Write access customized per folder for users and groups as desired
- End-to-end secure encryption with private-public key pair for server-mirror connectivity
- Data is encrypted before sending over network
- Virtually virus-proof: IT's BLACKBOX is built on Linux platform

Blazing Fast Performance

- Data transfer at over ½GB or 500MB per minute; over 30GB per hour
- Disk crash fail-over can be achieved in less than 5 minutes & IT's BLACKBOX main server crash fail-over within 30 minutes
- Only the files change are backed up on mirror and data compressed before transmission improving throughput

Integrated

- Can be integrated in existing Microsoft Windows Server / SBS / EBS networks vide drive mapping from Microsoft Windows Server
- IT's BLACKBOX Server can be configured as domain controller or Workgroup server or alternately even just a data store

Scalable

- Future plan to implement IT's BLACKBOX RPS shall make it possible to create and store unlimited time-in-point images or restorepoints.
- Disaster Recovery: Development is under way to replicate data remotely at any distance over public IP broadband¹
- Storage capacity tested up to 6 Terabytes (6000GB)
- Built upon Open Source Linux using standard community tools

Simple and Affordable

- Tiered with choice of hardware starting from 500GB to suit varying budgets and performance to suit many objectives
- Simple management using any popular Web browser
- Easy to define users, groups and data folders
- Requires ZERO command line usage by users
- Available from your current local IT service provider
- Remote Infrastrucutre Management support included
- 3 year warranty
- Also available on lease rental

BACKUP ISN'T THE REAL CONCERN, RESTORING NORMAL OPERATIONS IS –

IT'S BLACKBOX is not a backup software, nor a backup device; but a complete solution that ensures continuous data protection. Data loss, if any, is minimal, operations are restored within minutes, not hours, days or weeks of outage.

BACKUP AND RESTORE TAKE TIME AND, CAN BE MISSED –

IT'S BLACKBOX is a near-continuous data protection solution... backup are triggered automatically as frequently as every one minute. With transfer speeds exceeding 500 MB per minute, the changed files are transmitted to mirror, without missing.

SAY "NO" TO DOWNTIME WITH EASE, SPEED & CONFIDENCE -

IT's BLACKBOX provides near-instant availability of data, thus providing businesses with continued productivity and superior service levels; bound to result in improved customer & employee satisfaction boosting profitability while saving hours of IT & operations time. Protection against accidental or intentional file deletions, providing secure, limited access to users is a plus. Hardware redundancy and fail-over protects against diskcrash and system-crash and resistance against virus epidemic is inherent due to IT's BLACKBOX being built on LINUX.

IT's BLACKBOX:

Making the BEST businesses *more* confident