

IBM Data Continuity Services for backup and recovery – Electronic Data Management

Highlights

- **Helps reduce storage costs with disk-based data backup**
- **Benefits day-to-day operations by improving data availability and reliability**
- **Improves security with encryption and protected storage formats**

As the volume of data generated in organisations continues to increase, the time available for data backup continues to shrink. But it's not just the amount of data that's expanding. The manner in which organisations must deal with data is rapidly growing broader and more complex.

Companies across industries are required to comply with standards and regulations that now dictate the continuous availability of a wider range of data over longer periods of

time. Additionally, terrorist threats, identity theft and increasingly destructive events are intensifying a focus upon operational availability and data protection and recovery.

Historically, companies building an effective data management system were required to invest substantially in servers, networks, tape technology and people. Backup processes could interrupt employees' access to important information, leading to lower productivity and lost revenue.

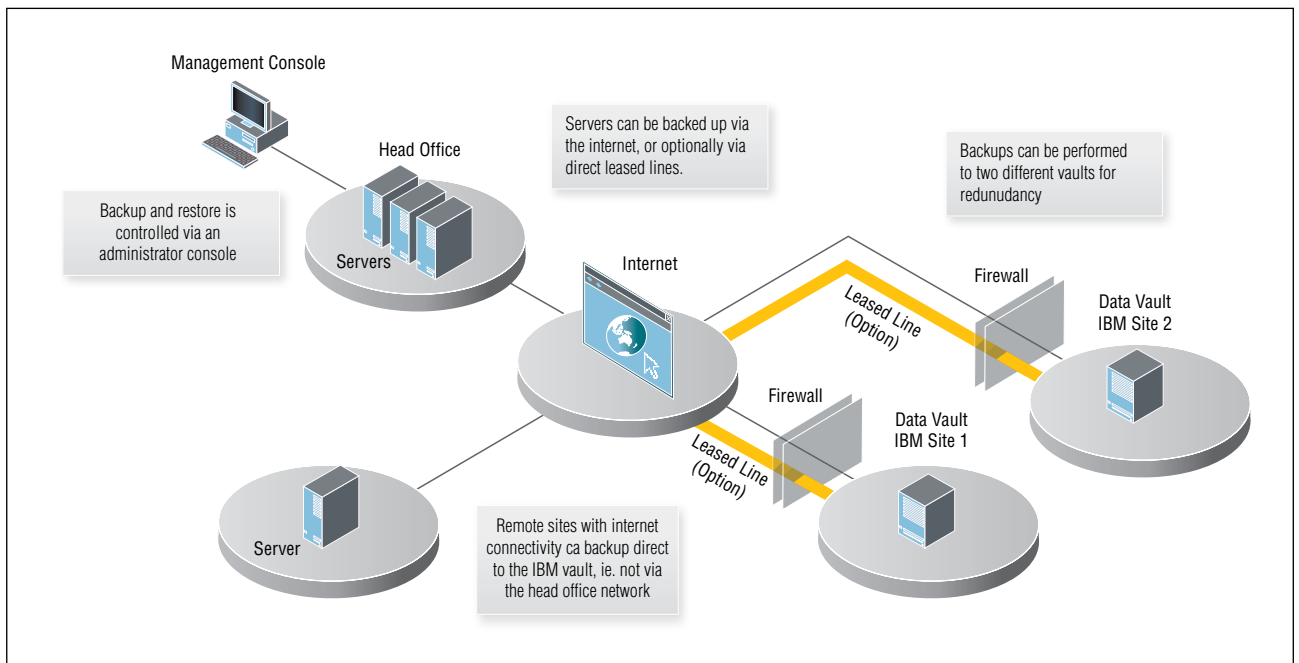


Figure 1: How Electronic Data Management works.

Problems in the processes also could destroy data, thereby increasing business risk. To avoid downtime and risk, businesses are moving beyond traditional backup, storage and recovery approaches that rely on tape. They're looking for more effective and less expensive ways to help ensure that:

- *Current and historical data are more accessible within increasingly compressed timeframes*
- *Data is more secure at rest and in transport*
- *Data protection consumes less of already limited storage budgets*
- *The effect of backup on data availability and the production window is reduced*
- *Data is rapidly recoverable in the event of system failure.*

IBM helps organisations achieve these objectives by combining data backup retrieval and recovery processes into an integrated, online, disk-based solution. IBM Data Continuity – Electronic Data Management, using EVault Inc's EVault InfoStage software product, provides a highly efficient, low-cost alternative to tape-based processes. You're able to back up critical information to an IBM data centre, with the data remaining online but offsite for enhanced protection. Helping you link operations, backup and recovery together in a single process The Electronic Data Management solution is built on the premise that there is a fundamental interrelationship among operations, backup and recovery (see figure 2). By linking operations, backup and recovery together in your recovery plan, you can not only enhance your business continuity and reduce storage

costs, but also deliver day-to-day operational benefits that enable you to efficiently support your data protection and retrieval requirements. Backup of your operational data can be initiated automatically in the background of your production environment at the point in time you designate in your data management policy. You can place backup agents on your outlying branch office servers and create one centralised backup repository for all operational backups at an IBM data centre. For both backup and data recovery, the need to transport physical media such as tape via truck as part of normal backup and recovery operations is replaced by efficient data transmission over the Internet.

Selecting the most affordable deployment option

The Electronic Data Management solution provides a choice of deployment options so nearly every organisation—from large enterprises to midsize businesses—can have an affordable solution that meets its data management requirements. The dedicated storage model offers two deployment options for larger organisations.

You can back up directly from your production servers to a shared vault at the IBM data centre, which can serve as your primary backup location.

You can think of the shared storage model as a vault with many strongboxes. You can back up your data directly from your production servers into your own strongbox in the vault at the IBM data centre.

Operations (effective) Backup (efficient) Recovery (enabled)

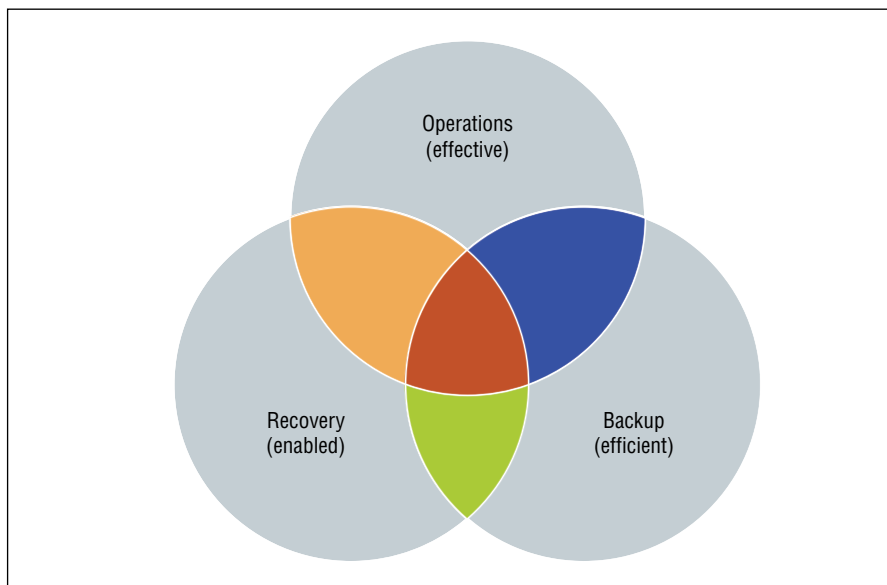


Figure 2: Electronic Data Management enables you to link operations, backup and recovery together in an integrated, online, disk-based process for enhanced data availability and protection at a reduced cost

Helping reduce costs with online, disk based data backup and replication

With Electronic Data Management, you can lower your data backup costs by eliminating tape production. Data is online and available to restore almost around the clock. This can help to eliminate costs that may be incurred from errors and losses associated with tape transport and storage. In distributed operations, this can help you decrease remote user data loss and lower your support costs through efficient centralised backup.

Improving day-to-day operations

To enhance operational efficiency, Electronic Data Management automates data backup with smart technology that can help enable fast file retrieval and operational restoration. Unlike tape-based backup, there is generally little effect on production. For example, when organisations use tape, they generally back up between six and ten times the amount of primary data that needs to be stored. This can cause bottlenecks in the local network and lengthen the backup window.

Instead, the Electronic Data Management point-in-time backup begins by storing all of your data at one time. During subsequent backups, the solution backs up and replicates only changed and unique data, not the data blocks it has already seen. The result is a decrease in required bandwidth. Even for large amounts of data, a complete backup can usually be accomplished in a fraction of the time required for traditional methods.

Helping ensure that data is secure

Lost tapes are not a new phenomenon. They've just recently become a higher profile issue because of the kind and amount of data on those tapes. Stakeholders and customers expect organisations to protect sensitive business and account information. Tapes are vulnerable to damage or theft, particularly when they are being transported to and from offsite storage centres.

With Electronic Data Management, you no longer need to ship physical media. Your data can be protected with encryption and automated integrity verification while in transit and at rest. Encryption is performed at the backup agent level on the organisation's production servers. Your data is also better protected against unauthorised access with storage formats that are encoded to discourage outsiders from hacking into the data. And physical security is strictly enforced at the IBM data centre.

Supporting business continuity

Backup and recovery may appear to be two separate functions—but they are inextricably linked. Without efficient and appropriate strategies and processes for data backup, you can find it difficult to perform effective data recovery. You can also have difficulty meeting your recovery time objective (RTO) and recovery point objective (RPO) requirements.

Electronic Data Management helps you to meet the necessary RTOs and RPOs for each key business function so you can efficiently allocate resources. And it helps you to verify that your infrastructure is specifically configured to meet changing RTOs. With the Electronic Data Management solution, you can weigh the cost of data availability against business risk as you develop backup and recovery solutions that address local and company wide needs. You can establish different objectives for each type of enterprise data, including:

- *Daily operations data*
- *Recovery data needed to get an enterprise back up and running (either all or a subset of operational data).*



Why IBM?

Companies across industries of all sizes can look to IBM as a trusted adviser and provider for their information storage and protection needs. With a comprehensive range of options and approaches, IBM can provide integrated solutions that help you justify, design, deploy and manage robust and effective Electronic Data Management.

For more information

To find out more about IBM Data Continuity Services for backup and recovery – Electronic Data Management, please contact your local IBM sales representative or visit:

ibm.com/au/resilience

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