

M4 Systems

M4 Online Backup

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Introduction

On average 20Mb of data takes 30 hours to build and is worth £50,000.

Even though businesses have a legal requirement to safeguard their own or anyone else's data against loss, corruption or unauthorised disclosure (Data Protection Act, 1998) and although 79% of people place significant value on their data with 40% classifying it as "priceless"¹, poor data protection techniques are still rife. Most businesses today continue to protect their data by running tape or CD backups. As statistics testify the conventional system is inherently flawed. In practice, 99% of all businesses do not run a daily backup, 60% of backups are incomplete, 50% of restores fail, only 25% of tapes are stored off-site and end-user compliance with backups is only 8%. The results of a severe data loss disaster are crippling and often fatal: 93% of companies that lost their data centre for 10 days following a disaster filed for bankruptcy within one year of the disaster and 50% of businesses that found themselves without data management for this same period filed for bankruptcy immediately (National Archives and Records Administration, Washington). M4 Systems offers an online solution which customers will find effective, safe and, above all, reliable. M4 Systems' online backup solution does all the work for you by automatically and securely backing up your data each night and transmitting it to two offsite data centres within highly secure and separate IBM business continuity buildings. With an online backup system losing a file is no longer the major drama it used to be. Backed up data is available online 24 x 7 and it only takes a few clicks to retrieve any file, anytime day or night.

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Benefits

An effective online backup solution, such as that provided by M4 Systems allows you to:

- Save valuable time (up to 98% times faster than traditional media)
- Maximise employee productivity
- Improve IT control
- Fully protect and regain ownership of your most valuable asset - data!
- Help significantly towards meeting your business data protection obligations
- Recover lost or deleted files literally in minutes wherever you are!

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Features

If you're still using outdated tape backup systems, switching to an online system could give you huge advantages. An online service is:

- **Automatic** – a “set and forget” system, just set up your backup choices and schedules and the system scheduler does the rest.
- **Efficient** – after the initial backup, daily backups contain only the changes since the last backup. Thus, the data sent offsite is often so small that a standard ADSL line is usually all that is required. Backing up incremental data also ensures that the backup is more quickly executed (up to 98% faster than traditional tape methods).
- **Secure** – all data transmitted and stored is in encrypted format so that no-one, apart from authorised users, can read them. The buildings where these data centres are located are highly secure.
- **Stress-free** – backups run automatically in the background, freeing up your time to get on with other things, whilst you're safe in the knowledge that your backup won't fail.
- **Anytime, anywhere** – a file can be recovered in minutes simply by pointing and clicking. Data can be retrieved and restored to the original laptop, desktop, server or replacement machine anywhere in the world via web interface. Files can be downloaded, viewed or e-mailed.

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Additional features include:

- Intelligent data filtering & selection ensures completeness of backup sets
- Runs as a service (no login required)
- Easy restore in the case of data loss, virus attacks, hardware failure, etc.
- JAVA client allows cross-platform functionality
- Redundant off-site storage means less downtime and greater security
- Secure encryption of company data
- Easy to setup and usage
- Network monitoring
- Version control
- LAN, WAN, and VPN support
- Reduced file server and network loads
- Snapshot option to address large data volumes during initial backup and in the case of data recovery

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- Open File Management Plug-ins available
- Trickle transfer with up to 98% bandwidth reduction
- Centralised administration
- Administrator-level file exclusion with full logging and error reporting
- Fully scalable, available for servers, desktops and laptops

Data Centre Features

- Fully secure and in separate locations
- Access controlled by swipe card system
- 24-hour security surveillance of buildings (inside and outside) by CCTV
- Multiple, redundant mains power feeds with UPS and generator backup
- Fire suppression systems
- Monitored air conditioning

Security Features

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M4's Online Backup Server Edition ensures your data is protected every step of the way, incorporating the leading security technology available. M4's Online Backup Server Edition uses the Attix⁵ Backup Professional software to power the solution and is the most secure product of its class in the world. This means that any sensitive data stored, transmitted or accessed online using Backup Solutions is protected by „bank-level plus“ security. The key security features of M4's Online Backup are:

- 448 bit encryption of all data stored on Storage Platforms
- 128 bit SSL encryption for data in transit across the Internet
- RSA KEON – PKI and SecurID (plug-in)
- Intelligent file selection
- Advanced backup scheduling
- Automatic offsite data transfer
- Resume on disconnection

How It Works

Technical Architecture & Description

M4 Online Backup Server Edition is a key component of any enterprise backup solution. It ensures that all servers backup data automatically over the network. Firstly, a full backup is made of the identified data set, compressed, and transmitted to the Storage Platform. Proprietary Snapshot technology allows for large initial data backups.

An incremental patch backup is then executed that sends only the binary changes made to data files and then copies the data to the remote server. The backup works over any TCP/IP network. The administrator can access the data over the corporate Intranet, direct dial up or from anywhere in the world via the Internet.

All backed up data is stored on highly redundant Storage Platforms, using RAID5 file servers, in secure Data Centres, which are located in disaster recovery buildings owned and run by IBM Business Continuity & Recovery Services.

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The primary Storage Platforms are used for processing backups and act as the primary data store; thereafter the data replication takes place every 15 minutes and is transferred (via a Private Network) to a second remote site, otherwise known as the Mirror Storage Platform, thus providing the highest level of redundancy for customer data.

Software Components

Attix5 Overview

The system supplied by M4 Systems is powered by Attix5 - a professional, RSA security approved backup solution. The Attix5 software automatically filters, selects and copies data from a client's server to a highly secure, off-site Data Storage platform. Thereafter the stored data is replicated every 15 minutes to a secondary remote data centre.



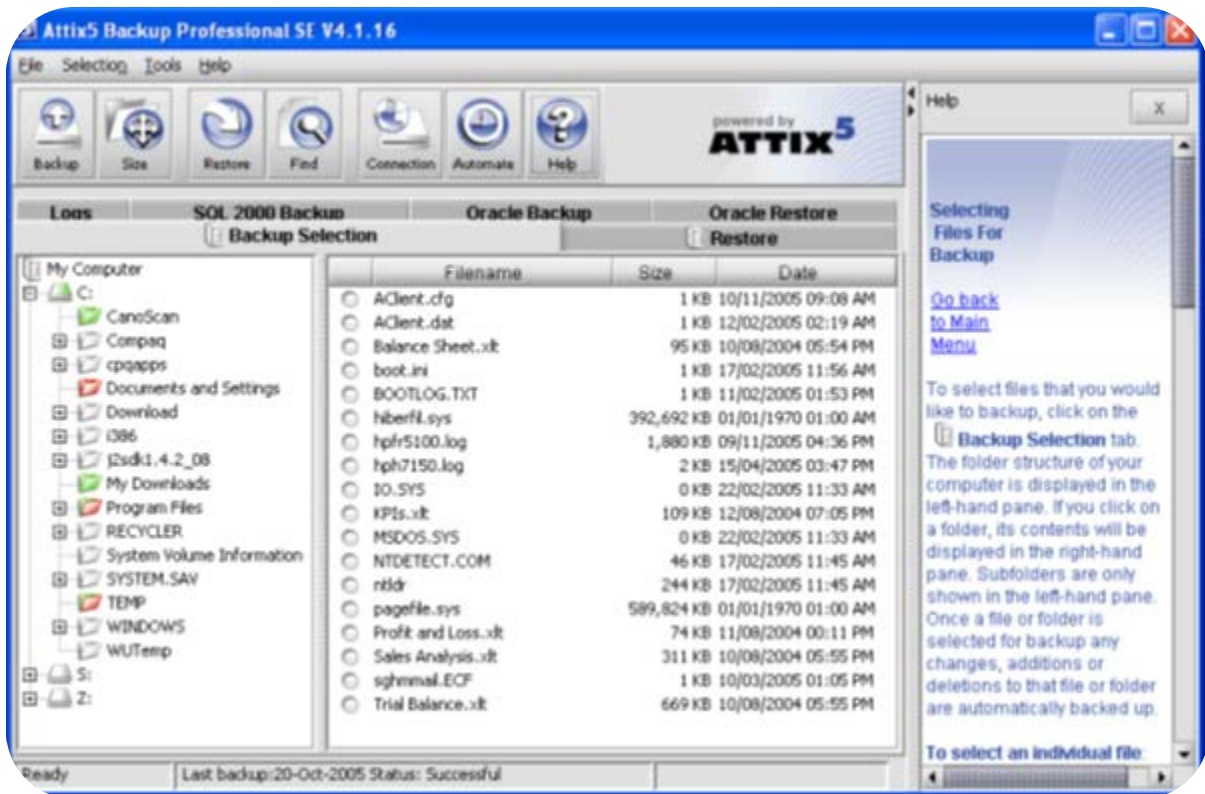
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Attix5 Backup Professional is a small JAVA client, which is remotely deployed to user devices to automate secure backup of data according to customisable file filters and scheduler settings. Data transfer is reduced by as much as 98% by a proprietary incremental patching technique. Secure encryption of all data ensures confidentiality while an intuitive user interface allows users to recover data immediately, and from any point in time.

Attix5 Backup Professional Server Edition - Client Agent

An, easy to use, Attix5 Server Edition client agent is installed on each server. The administrator will then choose an encryption key and ensure that the correct files and folders have been selected for backup. The Client Agent then automatically schedules backups according to the policies set up by the administrator.

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Remote servers will automatically detect network connections and backup whilst online. The Client Agent is a 100% JAVA application and, together with the correct JRE (Java Runtime Environment), can be installed onto most operating systems.

Attix Backup Professional Server Edition – Database Agent

Backup Professional Server Edition supports most popular databases and applications. The Server Edition offers seamless integration with these databases and applications and enables online operations that do not eliminate end user access to data – through the backup of locked files. The ever-growing list of agents currently includes MS Exchange, MS SQL Server, Lotus Domino, Sybase ASE, Oracle, and GroupWise.

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Operating System & Database Support

M4 Online Backup Server Edition safely and securely backs up most common operating systems as well as open files and databases running on them. M4 Online Backup Server Edition currently supports: Operating Systems:

- Microsoft Windows Server 2003
- Microsoft Windows 2000 Server
- Windows NT4.0 (SP6)
- Novell NetWare v6 & v6.5

Server Edition Plug-ins:

- MS Exchange 2000/2003
- MS Exchange 5.5 (NT4 only)
- MS SQL 2000
- MS SQL 7
- Sybase ASE12.5
- Lotus Domino 5
- Lotus Domino 6 & 6.5
- Oracle 8i & 9i
- Email notification
- Script Plug-in
- System State Plug-in
- Single Mailbox Recovery for Exchange

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References

The following are just some of the organisations successfully using the Attix_s powered online backup system:

- Aerion Fund Management Ltd
- Aspen Healthcare Ltd
- Audio Network plc
- Citisoft plc
- Commonwealth Secretariat
- European Nickel plc
- Kennedys Solicitors
- King Edward VII Hospital
- Overseas Development Institute
- Majedie Fund Management Ltd
- The Evolution Group plc
- Thurrock Council
- Toni & Guy
- Unite plc