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# Backup and Disaster Recovery: Our Managed Service

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## About the Author



Author  
Mark Ridley



Mark Ridley is the Managing Director of Backup Systems. Mark started computer programming at the age of 10 on a BBC Micro and went on to become a graduate of King's College London. After working for multinational giants such as Goldman Sachs and Barclays Capital, Mark founded Backup Systems in 2006, providing a bespoke service to his valued customers.

Specialists in on-site and cross site business backups, Backup Systems are one of the UK's leading backup companies. We specialise in cost effective, secure backups for medium to large businesses.

For an annual or monthly flat fee, we back up everything from PC's, laptops, exchange servers, SQL, disk imaging, to virtual machines – including Hyper V and VMware.

We keep your business protected from natural disasters and site outages with an off-site copy that can be restored in minutes.

We provide a tailored solution, all within a main managed backup service, allowing you to create a managed backup service that suits your business needs, no matter how you grow.

Backup systems are not a reseller. By cutting out the middle man we are able to offer a cost effective managed backup service that is written and controlled directly by us.

100% Secure



No Hidden Costs



Automation



Version Control



Performing data backups is tedious, often requiring long man hours and seemingly endless administrative duties. And what's more it's a thankless chore; no one ever calls to congratulate you on a job well done. But when something goes wrong ...

Backup Systems understands this, and so we take care of everything, starting with creating the perfect solution right through to the running and checking of your backups.

Working with you to understand your organisations means we create a perfectly tailored Backup and Disaster Recovery Solution to include each of the elements needed to protect your data.

### Our Managed Backup Services include:

Laptop Backup  
Email Archiving  
Virtual Machines  
Hyper V Backup  
Cloud Data Backup  
Disaster Recovery Solutions

Disk Image  
Enterprise Solutions  
VMware Backup  
Microsoft Exchange Backup  
SQL Server Backup  
Windows Server Backup

Each of the services we provide are used to create a backup and disaster recovery solution that meets your exacting business needs.



#### No Hidden Costs

Practically invisible to the end user, our bespoke solutions are virtualised allowing you to source the hardware from your preferred supplier and better manage your budget spend with absolutely no hidden costs. This also means that the dedicated backup appliance allows the system to be centrally managed; meaning that we take care of all the upgrades and maintenance, providing you with a seamless experience.



#### No More Admin

It's not just the maintenance we take care of but also the daily running and checking of your backups. From hourly backups for the finance department to monthly backups of customer records. Your backups can be made in real time, with specific files or directories; and everything, including backup frequency, determined by you. Your backup system is developed for you but fully monitored and configured by us, allowing us to make necessary changes and solve any problems before you've noticed. Backup Systems gives you back the time that could be better spent on business critical projects.



**Keeping 100% of  
your data 100%  
Secure**

Backup systems don't believe in punishing companies for their growth, so we charge a flat annual or monthly fee. Whether you want to store a file area for a year, or a database doubles in size – your bill doesn't change.

What's more our managed backup is cross-site; that means that all data remains within your network at all times, moving from one site to another or data centre of your choice. Your data is always under your control.

Our dedicated disaster recovery server stores the latest backups of individual files, software and both internal systems and individual system disk images for quick restoration in the event of any kind of issues. Whether it's the simple loss of individual files on a single machine, or major disasters such as complete hardware or network failure, your latest backups are easily accessible by us for virtually immediate recovery.

When it comes to effective disaster recovery systems, speed and reliability are both vital to ensure impeccable restoration of files or whole systems, as well as reducing downtime to as little as possible. Bit-differencing ensures the replication of disk images is as efficient as possible – for reliable disaster recovery.

### **Our Bespoke Disaster Recovery Solutions**

We'll tailor any disaster recovery solutions to meet the needs of your business and in line with how you operate. The backups themselves can be taken at any intervals you want – hourly, daily, weekly monthly or at whatever other frequency suits your IT setup best.

From this, the backed up files, systems or individual disk images can then be quickly restored with minimum downtime and no data loss.

We keep a version history of all our backups so that, in the event of a need for disaster recovery, you can have files or systems restored to a given point in time. For example, system failure that causes corruption of vital files.

Cloud data backup solutions are a fantastic way to ensure safe, secure and regular backups of everything from individual files through to entire networks of data and disk images of individual systems. We deal with the entire data backup process, managing everything from taking backups to controlling access and file restoration in the event of system failure.

These business cloud storage and backup solutions are ideal for businesses who don't have the capacity or space for physical server storage or who simply need the flexibility and ease of access offered by using the cloud.

### Effective Cloud Data Backup Solutions

We tailor all storage and data backup packages around your business – from its size and the industry you work in through to the regularity of the backups (e.g. monthly, weekly, hourly etc.) and the levels of access needed for your account.

We work with industry-leading business cloud storage providers such as Amazon and Microsoft Cloud to design the right overall solution for you. If you're not sure how cloud storage or backup will work for your business, or feel the need to test a particular service provider, then we do offer a free, non-committal trial.

### What Cloud Solutions can we Offer?

Our SME cloud data backup solutions offer the following features:

- Backs up file data from Linux, Unix, Apple and all versions of Microsoft Windows.
- Creates images of the system disk for all versions of Microsoft Windows.
- Backs up MySQL, Microsoft and Oracle databases.
- Protect Exchanges at the Message Store level.
- Replicates data from on the road laptops to the Backup Server via a software agent.

Our cloud storage, backup and controlled access solutions offer a fully managed service; comprehensive reporting on each job and overall backup status comes as standard.

Handing backup over to us allows you to concentrate on what you do best – running your business.

Here at Backup Systems, we know how important it is to keep your business's IT systems running; software, operating systems, network structure and individual files are always set up in a way that works for you. That's why the failure of individual devices or entire networks can have such a devastating impact – starting from scratch, even if files are backed up, can be a huge step back.

### What is Disk Imaging?

Disk imaging is an essential part of backing up your IT infrastructure, or even just individual machines within your business. This process takes an exact copy of a system or other data disk. This contains a mirror image of the disk – including the operating system, applications, files and any data components.

### Keeping your Business Running

Should any single machine in your network break down (resulting in data loss or non-functioning devices), or even the whole network itself, then this service ensures that you are back up and running again as quickly as possible.

When it comes to systems or individual machines breaking down, every second counts. With minimal (or no) ability to function, then the result is more than just inconvenient – there can easily be a financial impact.

What makes our services so important is we regularly take backups of disk images, making the copies we store as up to date as possible. This means that, should systems fail and we need to use the images to restore data, you'll be able to run your IT systems exactly as they were before disaster struck.

The images we create are fully compatible with VMWare ESX and Microsoft Hyper-V, meaning your physical servers can be started up in minutes in a virtual environment, or even in the cloud. The images can also be restored back to physical hardware, a process known as a bare-metal restore.

Our secure storage of your disk images means that the information is always safe. Unlike other backup methods or on-site storage, the risks of unauthorised access of the backups are minimal – letting you confidently carrying on running your business, even if your systems shut down.



SQL database servers are vital to your business's operations, managing everything from employee records and customer management to payroll and accounts. Any loss of data, server downtime, or physical damage to hardware can have a devastating impact on your company and your customers – not to mention financially.

That's why here at Backup Systems we can provide a safe and effective SQL server backup solution as part of our managed backup service – keeping your business and every last bit of data safe.

### What does our SQL Backup Involve?

Backups of your SQL server databases can be taken at any intervals of your choosing, including hourly, daily or weekly. These can be full, incremental or differential backups covering everything within each database. The system is fully customisable – you can choose to include or exclude any number of databases on each SQL Server.

This ensures that, in the event of the need to restore databases or complete disaster recovery, nothing is ever lost; you will always have access to the most up-to-date versions of your SQL databases.

Our management solution includes full SQL database backups for a number of different platforms including:

- MS-SQL
- MySQL
- Oracle
- PostgreSQL

Regardless of what database platform you use, we can provide a comprehensive backup solution that not only protects your data in the most effective way possible but also ensures a quick and easy recovery process for any or all of your SQL databases.

This minimises downtime – saving your business both valuable resource and, most importantly, money. View our full breakdown of our managed service by [clicking here](#); get in touch to discuss what you need to keep your business protected and running, including SQL server backup.

We're able to include a number of specific products as part of the main Windows server backup solution. This includes backups of files & documents, databases, Microsoft Exchange, System State and whole server images including the operating system – all of which can be restored to physical or virtual systems with a couple of clicks, and with no complicated specialist software.

### Windows Backup Services We Offer

Given the type of backups this service creates, it can't be stressed enough just how vital it can be in protecting your company from issues such as costly downtime and data loss. Our Windows backup service offers a number of benefits, including:

- File Level backups
- Database backups (including MSSQL, MySQL, Oracle, PostgreSQL), of which we do full, incremental and differential
- Microsoft Exchange
- Email Archiving
- System State
- Server images including the Operating System

### Additional Platforms Covered

We know that not all businesses run Windows platforms, which is why we offer a tailored service that can cover any operating system you might be running. This includes different builds of Linux and Unix, as well as systems running iterations of OSX – as well as any network shares from Windows, Linux, Unix, OSX and NAS.

This means you can have a comprehensive backup from whole server disk imaging through to individual file and database level backup, regardless of the platforms you use.

### Fast But Simple Data Recovery

Regardless of how extensive any data loss or any other need for disaster recovery is, you can be fully confident that we'll get all affected files, databases and systems back up and running in the fastest way possible. Any disk images can be restored or started up using a virtual machine platform such as ESX or Hyper-V.

By taking this approach and utilising our Windows backup services, you're able to minimise downtime as much as possible; backups are taken of systems, files, emails and databases in real-time which reduces the risk of data loss, and recovery is simple, with no complex software to learn.

The backup of virtual machines ensures that, when you're running in a virtual environment, everything from the operating systems you're running and the files you're using are stored securely in the event of any disaster.

From the backups of the virtual machines' hard drives, you're able to pick up exactly where you left off – with little to no system downtime affecting your business.

### Why Virtual Machine Backup is Vital

Virtual machines can be a fantastic way to remotely run multiple systems from a single machine physically based somewhere – allowing for easy access for staff regardless of location, and simple ways to add more systems to a network, without unnecessarily increasing hardware.

This does, however, mean that the physical hardware is more vital than ever; it's responsible for multiple virtual machines, so downtime or hardware failure here can have a much more significant impact across a business.

### How we can Protect your Virtual Machines

What's important about that service we here at Backup Systems provide is that backups are made while virtual machines are still running, and can be configured to include all or just a selection of virtual systems.

We connect to virtual environments directly, including Microsoft Hyper-V, VMware ESX and Citrix XEN, which means your machines can be up and running again in a matter of minutes – with virtually no downtime.

We can take backups at any specified intervals, whether that's daily, weekly or in 'real time' as systems are constantly running. The storage of the images employs block level de-duplication which minimises the amount of storage space actually used.

### Is your Data Secure?

We take the security and storage of any of our customers' backups incredibly seriously, ensuring restricted access to only our team and you as a client.

In terms of data security, our services ensure regular backups are taken at multiple intervals to allow you to restore your virtual machines at any point – giving you confidence that virtual machine backups are always up to date, with no data lost in the interim.

Using virtual machines can be enormously beneficial to your business's IT infrastructure – regardless of size. It offers security (through simple access control), a scalable way of working as your business grows, and the flexibility to work both in and out of the office.

Virtual machines can be a huge asset, particularly in large organisations, but when you invest in platforms like vSphere you're putting a lot of trust into a small set of centralised server hardware. Should hardware fail in just one server you could see any number of systems down and with potential data loss, including entire systems and operating systems.

We appreciate that a vast majority of businesses using virtual machines will likely be running the VMware platform, and that's exactly why we offer a dedicated VMware backup solution to keep your infrastructure secure and minimise any potential system downtime.

### **What do our VMware Backup Solutions Offer?**

Our VMware backup solution ensures a separate third party backup that won't be affected by any kind of disaster, such as hardware failure, which ensures minimal risk of data loss and fast restoration of virtual machines so your business's systems are running again quickly – exactly as you left them.

Our VMware and vSphere backup systems provide:

- Fast incremental backups ensure minimal risk of data loss
- A scalable solution for larger organisations
- Entire VMware servers are backed up; all machines, files & databases
- Our backups connect to clusters and vCenter Server

If your business relies on VMware solutions to run your IT infrastructure's virtual machine setup, then get in touch with us here at Backup Systems. Our VMware backup provides you with the peace of mind that, regardless of what happens to the server, you'll always be able to get your business up and running again in just a few clicks.

Microsoft's Hyper-V virtualisation platform offers your business the chance to run multiple operating systems from one server.

This allows you to use the hardware more effectively, but it also means less pieces of server equipment – so it's much more convenient.

However, with this reliance comes the need to secure all your data. Your business is putting a lot of trust in a platform providing access to files and virtual machines so an effective backup strategy is essential – and that's where our solutions at Backup Systems come in.

### **Why are Backups of Hyper-V servers vital?**

Virtualisation is great in many respects, however it can be seen as putting all of your eggs in one basket. Hyper-V is like a computer in that, at some point, it (or one of the operating systems) will likely fail. But if you have the correct backup server in place and perform regular backups, this won't be an issue.

Our Hyper-V backup solution ensures that every single virtual machine running the Hyper-V server platform is safe and can quickly be restored in a matter of minutes.

Our Hyper-V backup provides:

- Fast incremental backups.
- A reliable & safe platform for SMEs.
- Entire Hyper-V server backups; no need for us to connect to single machines for individual backups.
- Real-time backups; little data loss.

Regardless of whether disaster strikes, hardware fails or data loss occurs. We'll be able to restore your virtual environment exactly as it was – not only will your virtual hard disks be backed up, but also the full virtual machine configuration. So you'll have access to previous versions of a virtual machine very quickly, should you need it. This means minimal data loss and significantly reduced downtime; the cost to even a small business from downtime can easily run into the thousands as each hour passes!

System and file backups are far from being the only essential data backups for your business; Microsoft Exchange and Office 365 can be vital tools, particularly with any important information, files or correspondence stored in mailboxes.

And that's where we come in; our Exchange backup solution offers:

- A complete and consistency checked backup of the Microsoft Exchange Database Stores
- A fully searchable email archive for an unlimited number of mailboxes
- Office 365 email archive for an unlimited number of mailboxes
- A complete image including the operating system which can be started up in minutes

Emails kept in a Microsoft exchange backup can be kept in a local replicated archive, and are available for recovery in Microsoft's native email format (\*.msg) – making the process fast and effective, with no complex restoration.

### **Flexible Archive Access & Control**

All backups are stored read-only, which gives protection against anything being changed by any user; nothing will get deleted, which allows for a comprehensive backup and full access to all emails.

Access of these can easily be controlled by your internal IT admin, which could include allowing individual users access to their own email archive to retrieve lost emails when needed or keeping access locked to IT support or HR for tracking or investigating employee emails.

### **What's so Important about Exchange Backup?**

Our exchange archiving is the best way to combine an archive of all the old emails in any number of mailboxes alongside a separate backup – something you won't get from Microsoft as a standard, or the security of a backup on a third-party server such as our own.

This affords you the flexibility and security of being able to pull any single email, group of emails or entire mailbox from any period of time since you started backing up and archiving with us. In the result of hardware failure, disaster recovery or general data loss you can have every mailbox running again exactly where you left off; exchange backups and archiving can be done at regular intervals, as well as in real-time, to minimise any kind of data loss.

Being able to work on the go when needed is essential for any organisation. Whether you've got a mobile sales team, employees who frequently work out of the office or regularly use laptops for flexibility around the office, the mobility of your data is essential.

With this, though, comes the increased risk of data loss – whether that's through the connection to unknown networks, loss of physical systems or damage to data or storage devices.

The data stored on laptops is just as important as those on on-site systems or stored in servers.

Mobile data shouldn't mean less protected.

### **What Level of Laptop Backup do we Provide?**

Here at Backup Systems, we ensure that the backup of one or any number of your business's laptops are backed up consistently, minimising the risk of data loss due to out-of-date backups. This means that, regardless of the type of system failure or loss when working out of the office or simply 'hot desking' internally, any valuable files are always backed up – ready to be restored in a matter of minutes.

Our laptop backup service is built around you, your business and your needs. You get to choose which laptops and how many of them are connected to our on-site backup server, as well as which files are backed up. This allows you to specifically select the important data you can't afford to lose – whether that's account records, customer work or internal documents.

### **Is Remotely Backed-Up Data Safe?**

The transfer is encrypted in transit for maximum security, and can be controlled by the user to reduce interference with other applications. All back-ups are integrated with your other backed up data, and can be accessed in exactly the same way – making the restoring of lost data as easy as possible.

Email archiving is the process of taking the mailboxes of given email accounts and keeping a secure and separate copy of all individual messages. These can then later be restored or remotely accessed in the event of system failure or data loss.

### How do our Email Archiving Solutions Work?

Access to archived emails is possible in seconds; retrieved using a simple front-end program. And searches of any backed up mailboxes can allow for messages to be opened in a client like Microsoft Outlook or restored to an account's inbox.

Our email archiving solutions can be used independently or as part of a wider disaster recovery strategy. In addition to cloud storage access for all archived emails, we also keep a local and replicated archive in native Microsoft (.msg) file format – allowing for easy recovery into most major email clients.

### Is Email Archiving Different from Normal Backup?

Please be aware that the email archiving that we offer is slightly different to whole database backup. These solutions are specifically designed with emails in mind, so offer a more tailored approach with individual emails stored separately. This allows for quicker and easier access to individual messages, and quicker restoration in the event of disaster recovery.

As with all backup solutions we offer, backups are always kept secure and encrypted and our email archiving services are no different. Despite the ability to access individual emails rather than needing to download entire archives, your email archives will always be just as securely stored.



## Why Choose Backup Systems?

Backup Systems is the UK's leading provider of fully managed backup solutions for SMEs and large enterprises.

We have been successfully planning and implementing market leading backup solutions for our clients since 2006 and are increasingly seen as an indispensable extension of our clients' IT function.

Our system is designed to operate almost silently in the background, allowing our clients to focus on their core business activities, while providing the business with complete peace of mind with regard to the protection of valuable data.

Our fully managed business backup service includes:



Laptop backup



Email archiving



Virtual machines



Cloud data backup



Disaster recovery systems



Disk imaging



Document backup



Enterprise solutions

For more information on our fully managed backup solutions, call our friendly team on [0844 800 5532](tel:08448005532) or click below to register for your free trial.

[REGISTER FOR YOUR FREE TRIAL](#)

T: [0844 800 5532](tel:08448005532)

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## What Our Customers Say



We were looking for a cost-effective, reliable backup solution. As Backup Systems offered a fully managed service, we chose to pursue this option as it freed crucial time across the business to focus on other business critical IT responsibilities.

- Stuart Fairbairn, ICT Manager, Edinburgh Leisure

Backup Systems presented us with a fully managed backup solution in 2011 using our own infrastructure and we haven't regretted a single moment...



- Bradley Gull, Infrastructure Manager, Hood Group Ltd



[We] decided to review our backup and business continuity processes, [as] we only used a tape drive and had no off-site offering in the event of a major outage. We looked at various options and found that Backup Systems [provided] a good, cost effective solution within budget.

- Billy Douglas, IT Director, Campbell Dallas LLP