SQL Backup

Fully verified SQL Server backups you can rely on

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91% of Fortune 100 companies use Red Gate

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Kiwibank uses SQL Backup Pro automated restores to verify backups

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"What Kiwibank is doing with SQL Backup Pro isn't rocket science. In fact, it is achieved easily with the built-in wizards, and yet it gives us full confidence that our backups are 100% reliable in a failover situation."

BRENT MCCRACKEN
Technical lead of Kiwibank's DBA team

"As DBAs, we all know that we can't be 100% sure that a database backup is good until we restore it. Kiwibank is located in New Zealand, a small country on the Pacific "ring of fire", where earthquakes and volcanic activity are a business reality.

"For our Tier 1 systems, classified by their importance to customer interaction with the bank, we need to have a 100% guarantee that our backups are good, even when we have other high availability technologies in place.

"The challenge we had was finding the time to perform test restores on all these backups. This is where the scheduled restore capability of SQL Backup Pro proved its worth.

"Our business continuity plan, in the event of disaster, relies upon two geographically distant data centers. In our primary data center, we create and schedule through the SQL Backup wizard all of the database backup jobs for our production server. In the alternate data center, we create an automated restore job, again through a SQL Backup wizard.

"In our primary center, each backup job, run by SQL Agent, completes the backup and then uses the `COPYTO` feature in the backup command to copy the backup, compressed and encrypted, to the backup server in our alternate data center. The concluding step of the backup job is to initiate the automated restore job, which restores the backup to our backup server. This obviously avoids any performance hit with performing the restore on a production server.

"This means that as we take daily differential backups, SQL Backup Pro automatically copies them to the alternate data center and restores them on our backup server. Using the `AUTO` command for naming the backups, these restores "just work".

"The icing on the cake is that we perform all our `DBCC` consistency checks once the backup and restore operations are complete. So not only is our database backup in good shape, so is our production database. At the end of all this, the database is dropped saving the space we just used, and all this happens during the night.

"What Kiwibank is doing with SQL Backup Pro isn't rocket science, in fact, it is achieved easily with the built-in wizards, and yet it gives us full confidence that our backups are 100% reliable in a failover situation."

For the Quellos Group, the differences are clear

Finance

"Against its nearest competitor, SQL Backup is much less expensive, 10–15% faster in backups, and 60% faster in storing files; backup file sizes are anywhere from 5% to 25% smaller… SQL Backup's ease of use and reliability save us around 30 person-hours a week."

WAYNE HINER
Database IT Manager, Quellos Group

Some IT managers have posited that SQL Server database backup tools, like brands of vodka, are all the same. Not Wayne Hiner, Database IT Manager for the Quellos Group, based in Seattle.

Hiner has seen the differences at first hand, and quantified them. The Quellos Group offers integrated financial services to its clients. The emphasis on service means up-to-date information delivered on demand which, in turn, means multiple backups during the day, and the ability to bounce back quickly from any disaster – natural or man-made.

After a thorough analysis of the leading SQL Server database backup tools, Hiner has declared Red Gate's SQL Backup a clear winner.

Ease of use and reliability save valuable working hours

 "It's really no contest," says Hiner. "Against its nearest competitor, SQL Backup is much less expensive, 10–15% faster in backups, and 60% faster in storing files; backup file sizes are anywhere from 5% to 25% smaller. Log shipping in SQL Backup not only works, but is robust, enabling us to automate for greater business continuity. SQL Backup's ease of use and reliability save us around 30 person-hours a week."

So, next time you hear that "all SQL Server backup tools are the same" bromide, think of Wayne Hiner and give the appropriate response:

"Rubbish! Obviously you haven't tried SQL Backup from Red Gate."

The good life in Norfolk, supported by SQL Backup

Local government

"SQL Backup Pro met our criteria: proven compression ratios, industry-standard encryption levels, and to keep costs down, licenses that are priced per server and not per instance."

KURT FRARY
ICT Architecture Manager, Norfolk County Council

"I am a Norfolk man and glory in being so." So said Lord Horatio Nelson, architect of Britain's greatest naval victory at the Battle of Trafalgar. More than 200 years later, residents of Norfolk are still justifiably proud of the place they call home.

One of the people working to make Norfolk a great place to live is Kurt Frary, who has managed the county council's IT infrastructure since October 2004. A vital cog in that infrastructure is fast, reliable and safe backups, a task for which Frary relies on SQL Backup Pro from Red Gate Software.

Frary selected SQL Backup Pro for Norfolk County Council's new virtual environment based on SAN storage. Along with internal IT, the new environment supports a wealth of county services on the council's web site, where you can report a faulty streetlight, research schools, find out the best places to enjoy the Norfolk countryside, and even apply for an arts grant.

Frary says, "We didn't have infinite amounts of disk storage for SQL backups, so it was imperative to keep the disk footprint as small as possible. With native SQL backups, that's not possible because compression isn't available.

"SQL Backup Pro met our criteria: proven compression ratios, industry-standard encryption levels, and to keep costs down, licenses that are priced per server and not per instance."

Norfolk County Council's infrastructure is based on VMware ESX Virtual SQL 2005 and comprises four virtual servers: one for development, one for test/training, and two for production. Although most of its SQL applications are web-based and less than 50 GB, Norfolk County Council has a Microsoft Operations Manager (MOM) with a current database size of 350 GB. Fortunately, the compression algorithms in SQL Backup Pro have downsized Frary's backup footprint to just 14 GB, a 96 percent reduction.

"SQL Backup Pro has cut storage requirements considerably. It is also much cheaper to purchase SQL Backup Pro compared with additional SAN storage disks that would be needed to accommodate increasingly large backup files. Encryption is important due to the sensitivity of information held in some databases. With the choice of either 128- or 256-bit key encryption, we can be sure our databases are secured."

SQL Backup saves a day and a half a week that I can use for other vital database activities

Travel & tourism

"The scripting ability in SQL Backup has allowed us to completely change our backup strategy from a largely ad-hoc manual process to a completely automated system.

With compression in SQL Backup Pro, our biggest backups take up one-fifth of the space of native SQL Server backups."

LEE MELLORS
DBA, MRM London

"I'm a database administrator for MRM London, a top-five interactive and direct communications agency based in the UK. We're noted for our outstanding digital marketing, creative communications, technology innovation, data management and analytics.

"MRM London's reputation is built and maintained in the digital world, so we can't afford technology failures. Secure and reliable backups are especially important, since data is at the core of our direct marketing business. We use Red Gate's SQL Backup Pro.

Faster backups, less storage space

"SQL Backup Pro is simple to use, has enabled us to speed up the backup process, and saves us huge amounts of storage space because of its impressive compression rates.

"We have approximately 100 servers hosting SQL Server 2000, 2005, and 2008 in two domains. These servers house production and test environments for several clients, including a leading global computer manufacturer, one of the world's largest automotive manufacturers and a national not-for-profit company. Data comprises names and addresses, contact preferences, marketing history, analytical information, and various websites. Our databases range in size from about 1 GB to 1.6 TB.

"The scripting ability in SQL Backup has allowed us to completely change our backup strategy from a largely ad-hoc manual process to a completely automated system. With compression in SQL Backup Pro, our biggest backups take up one-fifth of the space of native SQL Server backups.

Freeing-up time for vital activities

"The combination of scripting automation and faster backups has freed up a day and a half each week. I've used that time on other vital activities to ensure the health of our databases, including:

- Creating a table-archiving process to avoid databases growing unnecessarily
- Automating a schema snapshot process to monitor database schema changes
- Developing a detailed code-deployment strategy
- Monitoring index fragmentation
- Creating reporting around the backup history and server disk space

"Red Gate's SQL Toolbelt has been a key tool in accomplishing these tasks. We use SQL Compare for auditing database schema changes and to ensure successful code deployments. I've also used SQL Data Compare and I'm looking into SQL Multi Script. All of these tools are simple to use, reasonably priced and effective.

"Red Gate tools save me quite a bit of time over the course of a working week, and that pleases me."

Smooth sailing
with SQL Backup
Marketing & communications

"We were able to restore three mission-critical databases, one of which was over 60 GB in size, to three new servers in just 30 minutes. The same process completed with native SQL Server and tape backups took us over four hours to complete."

KEN MILLER
Applications Manager, Carnival UK

Ken Miller is Applications Manager in IT at Carnival UK, part of Carnival Corporation & PLC, the largest cruise line operator in the world with an 81-strong fleet including P&O Cruises, The Yachts of Seabourn and the Cunard Line. With around 75,000 employees, revenue coming to around $11.8 billion in 2006 and more than 144,000 berths across its ships, there are several terabytes of valuable SQL Server databases for the operational work both offshore and ashore.

Ken Miller and his team have recently rolled out SQL Backup to a new ship, Ocean Village 2, launched in April 2007. Without the help of SQL Backup, Ken found the process to back up data onboard ship complicated and time-consuming.

"Typically, what would happen for onboard backups would be for each database to be backed up to a disk on the server. That backup file would then be backed up to tape. The tape would have to be moved to another location on the ship, a different fire zone where the tape could be protected in case of emergency."

For Ken, there were two major problems associated with this strategy:

- Standard backups created by native SQL Server did not compress the backup file, resulting in a frequent need for tape changeover and mounting storage costs.

- This system relied on tapes that were an effort to maintain, as Ken and his team needed to catalogue the tapes before being able to restore a specified backup.

Ken found his solution in SQL Backup. With a ship being divided into different fire zones from fore to aft for safety reasons, Ken set up a redundancy strategy to guard against disaster in case of fire or other emergencies. With a computer room in one fire zone, Ken ensured a PC was set up in a different fire zone, with one fire zone left free between the computer room and the PC. This way, one system could take over if the other were affected by fire in a different part of the ship.

On the PC in the different fire zone, Ken placed a 1 TB USB drive to which SQL Backup backed up all the ship's data. With several days' worth of data capable of being stored on the USB drive, and each cruise on Ocean Village 2 lasting around seven days, it was no longer necessary to manually change tapes at sea. Using SQL Backup, Ken determined that data should be overwritten after a certain period of time had passed.

With this system in place, SQL Backup ensured the ship's backup strategy was fully self-automated. To make the strategy even more secure, Ken then wrote the files from the USB drive to tape. Once a month, the tape is landed as soon as possible, just in case the USB drive becomes redundant. And because SQL Backup compresses backups by up to 95%, only one tape is needed for each month's backups.

At every step, Carnival UK uses SQL Backup to safeguard its SQL databases. The success of Ken's system also means that it can be replicated in the fleet. With the large customer databases, both on board and ashore running on SQL Server, SQL Backup helps keep Carnival UK's passenger service at the highest standard.

It's the performance of SQL Backup that particularly impresses Ken.

"We were able to restore three mission-critical databases, one of which was over 60 GB in size, to three new servers in just 30 minutes. The same process completed with native SQL Server and tape backups took us over four hours to complete. And let's not forget the lengthy task of cataloguing the tape backups for database restores that SQL Backup has now made redundant."

And because SQL Backup provides Ken with an 88% saving on time, considerable storage cost savings and peace of mind, Ken's backup strategies now really are plain sailing.

SQL Backup gives peace of mind to Ysaias Portes, senior DBA

Healthcare

"Although our data has doubled in size over the last two-and-a-half years, we are using about the same amount of storage space. We haven't had to buy more space and backup is much quicker."

YSAIAS PORTES
Senior DBA, Memorial Healthcare System

Ysaias Portes, a senior DBA at Memorial Healthcare System, likes to save his adventures for trips to faraway places. When it comes to his job, he wants calm and quiet. Fortunately, he's found an ally for his preferences in SQL Backup from Red Gate.

"It gives me peace and lets me sleep," says Portes.

It also lets him travel without worrying about backup. That was especially welcomed on a recent two-week trip to his home country, the Dominican Republic. Portes had enough to think about on that trip, with the earthquake devastation facing his neighbors in Haiti, where he has long-time friends.

"It was tough to see good friends suffer, so I was relieved not to have work-related stress."

Familiar backup issues

It hasn't always been that way. Before SQL Backup, Memorial Healthcare System (MHS), the fifth-largest public healthcare system in the United States, had issues familiar to DBAs presiding over large SQL Server installations: not enough storage space, no monitoring of backups, and a backup procedure that was manual and tedious.

"We were using an automated data protection tool for SQL Server backup, and it's not a tool designed for that job," says Portes. "If the backup failed, nobody would know." The situation was becoming serious as data was doubling in size and local hard drives were being maxed out. Reliability was a central concern too, as Memorial Healthcare System databases contain information for more than 10,000 employees in five hospitals and multiple clinics and cancer centers, as well as patient information for those facilities. If something goes wrong with the database, employees might not get paid or physicians might not have the patient information they need for treatment.

"About 25 percent of our SQL Servers are on critical systems that must not be down at any time," says Portes.

Finding the right tool

Portes is a detail-oriented person. So when it was time to select a backup system, he put all the major tools in the marketplace through their paces before making a decision.

"I was looking for ease of deployment and manageability, compression rate, notification reliability, and the ability to integrate with T-SQL code," says Portes. "SQL Backup was a clear winner."

MHS recently upgraded its 80 licenses of SQL Backup to SQL DBA Bundle licenses, which gives Portes and his team access to SQL Monitor, Red Gate's SQL Server monitoring and alerting tool. With SQL Backup, Portes has assurance that he will be notified of backup failure, and with SQL Monitor, he will know whether a server has failed.

"One tool complements the other," says Portes.

Besides the comfort factor, Portes has conserved computing resources and reduced his backup time. He estimates that his two terabytes of data is compressed by 90 to 95 percent through the combination of SQL Backup and the automated data protection tool that's now being used as a complementary product.

"Although our data has doubled in size over the last two-and-a-half years, we are using about the same amount of storage space," he says. "We haven't had to buy more space and backup is much quicker."

Expanding Red Gate use

The good experience with SQL Backup has led MHS to buy multiple licenses of Red Gate's SQL Toolbelt, which provides 16 SQL Server tools under a single installer.

"When you're buying tools to manage critical systems, you want to stick with a company that can provide integrated solutions that do what you need," says Portes. "Red Gate does that for us. We have about a half-dozen people who use Red Gate tools every day."

It all adds up to better sleep and travel free from work stress for Ysaias Portes.

Faster, secure backups and the end of the dreaded highway trips

Government

"The backup compression is very good. It decreases the size of our database by about 90 percent and reduces our backup window from more than two hours to one hour.

"We can then electronically retrieve a backup in several hours instead of several days or a full day of traveling to the government site."

CONAN WHALEN-MCKAIN
Senior Technical Consultant, Aquilent

One of the most reviled highways in the U.S. is the one around Washington, D.C. called the Capital Beltway, scene of multi-tasking motorists driving too fast, frequent accidents and breakdowns, and highway work at the most inopportune times and places.

Before buying Red Gate's SQL Backup, Conan Whalen-McKain, a senior technical consultant, had to face the Capital Beltway whenever he had to retrieve backups for a database he manages for Aquilent, a company that provides technology services to the U.S. government.

Here's Whalen-McKain's story in his own words.

"The government database we manage is not housed locally and we don't have access to the servers in the agency's secure facility. Before implementing SQL Backup, the database was so large that it would take several days to remotely retrieve a backup when we wanted to restore a production database to development. We experienced failures and too much data loss retrieving the backup in this way. So, instead we decided to retrieve the backup on location, which meant driving a state away and staying the entire day. And, we had to drive on the Capital Beltway, which if you've ever done it...

"It was important for my sanity and the efficiency of our operations that we find a secure backup system that could handle our requirements, so we would no longer have to deal with the one-day backup trips, and we could do backup any time we wanted.

"We selected SQL Backup because it was the most compelling solution for the price. It had the features of the much more expensive systems at a better price, and installation was the easiest I've ever seen. We were doing backups the same day we installed the software.

"The backup compression is very good - it decreases the size of our database by about 90 percent and reduces our backup window from more than two hours to one hour. We can then electronically retrieve a backup in several hours instead of several days or a full day of traveling to the government site.

"Encryption in SQL Backup is done easily through the software's interface. Ease and reliability of backup encryption are essential for us, since it is a federal mandate that data at rest - basically backup data - must be encrypted and as secure as day-to-day operational data. With SQL Backup, we know our data is as secure as possible.

"We are ramping up to using more and more tools from Red Gate's SQL Toolbelt. SQL Data Generator is helping us create ways to do development work without using actual government data. SQL Compare has helped us find and track back problems in code when we move from production to test databases.

"Red Gate software has been a total win for Aquilent and a comfort for me. Away from work, I can concentrate on my computer gaming and the never-ending job of fixing the wear and tear on my 1926 house in Baltimore, Maryland."

Trusting SQL Backup Pro with critical data

Web hosting

"We are able to compress databases by over 50% and also automatically copy them to another location in one job. This gives us and our clients' peace of mind that their data is safe."

PAUL REDPATH
Managing Director, Catalyst2

Paul Redpath is the Managing Director of Catalyst2, a web-hosting company established in 2000. Catalyst2 began by hosting websites made by family and friends, and has grown to become one of the UK's most established providers, winning the 2012 ISPA (Internet Services Providers' Association) Award for Best Consumer Customer Service.

"We're trusted with critical data"

Catalyst2 provides customers with web hosting, dedicated servers, and email for their customers. They are a small, dedicated team who know most of their customers by name and get things done quickly, and with minimum fuss.

All their servers are hosted in London Docklands, with databases ranging in size from 1MB to 200GB. Hosting packages for customers are provided on their own VMware cloud platform. Because Catalyst2 provides managed dedicated servers, their customers rely on them to store business critical data and count on Catalyst2 to have a consistent, reliable backup solution with fast, simple restores if required.

"It is our responsibility to ensure that we have the best backup solution possible, which is why we use Red Gate's SQL Backup Pro."

Choosing the right solution

"We looked at several different SQL Server backup solutions out there. After testing each against our criteria Red Gate's SQL Backup Pro came out on top – reliable, and doing everything that we needed. Technical Support is also an important element, even the best solutions can have issues sometimes, and knowing there is a knowledgeable person at the end of the phone at Red Gate takes away much of the worry around reliable backups.

"It's important that we can rely on the integrity of a backup solution, without having to spend countless man-hours verifying that jobs have completed and that the data is intact.

"SQL Backup Pro provides a much faster, more reliable method of backup and restore compared to native SQL Server backup. No more messing around in SQL manager, just a simple-to-use GUI that works flawlessly every time."

Why we love SQL Backup Pro

"SQL Backup Pro enables us to set-up email alerts for any issues that occur and easily move backups between servers, even going as far as mirroring them to a separate server

"When backing up larger critical databases, the compression and copy features have proved invaluable, we are able to compress databases by over 50% and also automatically copy them to another location in one job. This gives us and our clients' peace of mind that their data is safe."

Log shipping over the WAN to save time and money

Manufacturing

"SQL Backup enables us to keep 13 simultaneous environments in sync on our DR servers. It was easy to install, and we were able to implement it immediately. All of our databases are now synchronized perfectly with a compression ratio of more than 80%."

JOHAN FEYTENS
IT Support, Sonaco Europe

Sonoco Europe wanted to log ship its Navision databases from subsidiaries spread across Europe. Unable to perform this log shipping with native SQL Server, because the log files were too big after a full backup, Sonoco Europe needed a fast, dependable solution.

Simple, fast, and economical

Fortunately, the answer was simple, fast, and economical: use Red Gate's SQL Backup with integrated compression to set up log shipping over the WAN.

It took only a couple of hours to implement the software; after a week of testing it was online and working perfectly. Sonoco Europe has saved time and money by not having to make extra LAN-to-LAN connections to its disaster recovery site, and by being able to use standard SQL Server instead of Enterprise SQL Server on its DR servers.

Perfect synchronization, impressive compression

Johan Feytens, Belgium IT Support for Sonoco Europe, says,

"SQL Backup enables us to keep 13 simultaneous environments in synch on our DR servers. It was easy to install, and we were able to implement it immediately. All of our databases are now synchronized perfectly with a compression ratio of more than 80%."

For Feytens, SQL Backup does not just back up and log ship data. SQL Backup has also given Feytens peace of mind, and the luxury of time.

SQL Backup's compression capabilities, easy-to-use interface, and good price meet all of my needs. It gives me time to work on my many other projects.

Support your core SQL Server database administration tasks with the SQL DBA Bundle

The SQL DBA Bundle is a set of seven essential tools for DBAs. They help you protect your data, monitor your servers, manage changes to your databases, and more.

The SQL DBA Bundle saves you 45% over the cost of buying the tools individually.

These are the tools you'll get:

Take smaller backups with backup encryption and verification

Monitor your SQL Server performance and be alerted to problems

Creates a database from source files in version control

Generates schema and data deployment scripts

Validates that two databases are identical

Generates pre/post-deployment reports for troubleshooting

Write, refactor, and explore SQL effortlessly

Deploy multiple scripts to multiple servers with just one click

Automatically generate database documentation

Try the SQL DBA Bundle free: www.red-gate.com/sql-dba-bundle