



Online Backup Powered By:



Fully Managed Online Backup Proposal

Prepared by: Declan Hussey /DNA IT Solutions



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EXECUTIVE SUMMARY

This document describes the value proposal for delivery of DNA IT Solution's Online Backup. Powered by keepITsafe, the outline solution provides a robust secure and very proactive online backup strategy for any business. DNA IT Solutions is one of Ireland's most well respected IT service providers, we have carefully chosen KeepITsafe as our backup partner and have worked hard with them to bring to the market an extremely well positioned, robust and technically proficient solution. Whatever the requirement we have the package that we can tailor to meet your needs.

As our provider keepITsafe is Ireland's largest online backup provider and is currently backing up over 1700 businesses. KeepITsafe is Ireland's only ISO27001 certified online backup company.

KeepITsafe protects your data in multiple data centres with 24/7/365 onsite monitoring and security, state-of-the-art fire detection and suppression systems. Redundant power distribution units and diesel generators ensure that even in the worst of circumstances, your data is protected.

The keepITsafe software is extremely powerful, its features include:

- Military level 256-bit AES Encryption
- In-File delta technology that ensures only the changes in large files is backed up.
- Snapshot/Roll back feature allows you to roll back to previous versions of a file as it was a point in time.
- Full support for Exchange, SQL, Oracle, Lotus Notes.
- Full Exchange Information Store and Mail Level Restore.
- Each backup is fully managed and monitored by highly qualified engineers.
- View backup reports and restore files through keepITsafe online web console
- KeepITsafe available 24/7 to restore your lost data.
- €1,000,000 indemnity for each customer



2 KEEPITSAFE COMPANY PROFILE

KeepITsafe is Ireland's largest online backup provider with more than 1,700 clients and 150 partners. The company was formed in 2003 by Trinity College Graduates with a passion to eliminate the headache and burden of backup for businesses.

The success of the company stems from its fully managed and fully monitored online backup service along with its investment in key infrastructure in two of Ireland's leading datacenters. It is also the only online backup company in Ireland and one of few worldwide accredited with the esteemed ISO27001 (Information Security Standard).

The company's current customer base is drawn from a broad mix of sectors, including major financial institutions, corporate and SME, as well as well known multinationals. KeepITsafe will be happy to present reference customers. Due to the non disclosure/confidential nature of the customer base keepITsafe will firstly gain clearance from existing customers prior to presenting details.

KeepITsafe continue to push the boundaries of backup and to educate business owners in the areas of online backup and the legalities associated with the data protection act. Data loss has detrimental effects on businesses, what keepITsafe can guarantee is that you will never lose a file again.

KeepITsafe is indemnified for €1,000,000 per customer, this is underwritten by Hiscox. Copy of certificate available on request.

KeepITsafe is registered with the Data Protection Commissioner. Reg No. 10898/A





2.1 CONTACT INFORMATION

DNA IT Solutions office is located at unit J2, Maynooth Business Campus, Maynooth, Co. Kildare.

DNA IT Solutions

Tel: +353 16510300

Fax : +353 16510333

Mobile: +353 868177696

Email: sales@dnait.ie

Web: www.dnait.ie

2.2 OFFICE & DATACENTRE LOCATIONS

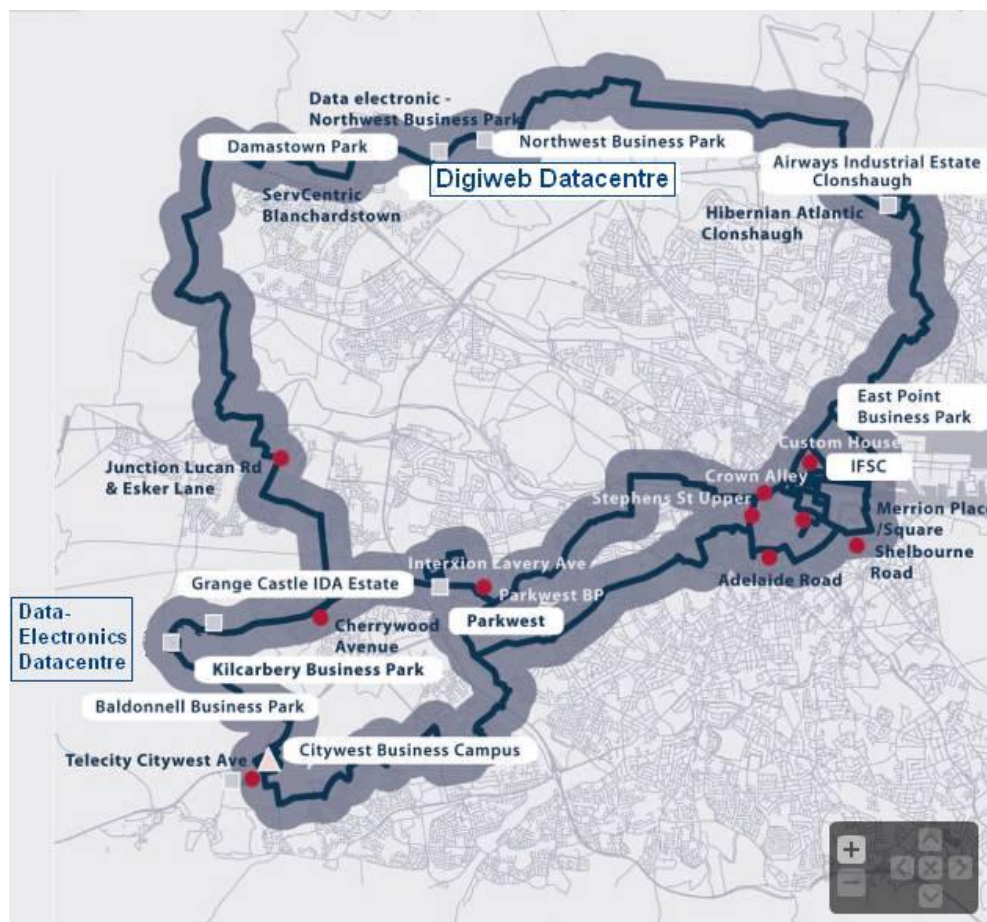
KeepITsafe's office is located in highly secure premises in Aston House, Kinsealy Lane, Malahide, and Co.Dublin. The office is where keepITsafe monitor customer backups.

All customers' data is backed up to the keepITsafe enterprise servers located in two of Irelands leading datacentres.

- Digiweb Datacentre, College Business & Technology Park, Blanchardstown, Dublin 15
- Data Electronics Datacentre, Kilcarbery Business Park, Nangor Road, Dublin 22



Both datacentres are connected via dark fiber leased over the Dublin Metropolitan Area Network. KeepITsafe utilizes this link to mirror customer's data between the two sites.



3 KEEPITSAFE DATACENTRE SPECIFICATIONS

Both Digiweb & Data Electronics datacentres both offer the state of the art facilities required by keepITsafe to house their backup servers.

3.1 SECURITY

- Access to the datacentre is controlled by security guards.
- Access to the data suite is allowed only to authorised staff, their guests and authorised customers. This is enforced via a swipe card system.
- All entrances and exits to the building are monitored by CCTV.
- Access to the keepITsafe servers is behind number of security controlled doors.

3.2 GUARANTEED CONNECTIVITY

- Highly resilient MESH network of tier 1 providers provides keepITsafe with a 100% SLA on internet connectivity. These tier 1 providers include:



3.3 GUARANTEED POWER

- Provided by on-site dedicated ESB substations
- Backup 10,000 litre diesel tank and generator, multiple Uninterruptible Power Supply (UPS) units with transformers as well as 10 tonnes of batteries.

3.4 ENVIRONMENT

3.4.1 FIRE PROTECTION SYSTEMS

- Active VESDA fire detection system and a passive fire alarm detection system.

VESDA is an active aspirating smoke detector system, in such that it draws in air from various points in the data centre and utilises a solid state laser, tuned to detect the extremely small particles of combustion.

3.4.2 COOLING

Average temperature: 220C with limits of 180C and 250C

- HUMIDITY: 50% +/- 10%
- N+1 air-conditioning
- Climate control performed according to ETS300019 class 3.1 "Telecom Centres"

4 KEEPITSAFE SOFTWARE

4.1 FEATURE OVERVIEW

KeepITsafe is packed with all the business-quality features you would expect from a full-service online backup solution.

4.1.1 SECURITY

- 128-bit SSL encryption safely secures your data during transport over the internet
- 256-bit AES encryption safely secures your data on keepITsafe's servers.
- Private encryption key option ensures only authorised company staff can restore data. It is impossible to restore data without the encryption key.
- Near Continuous Data Protection (optional) automatically detects and backs up new and changed files up to every 2 hours.



4.1.2 PERFORMANCE

- Automatic or scheduled backups can be performed daily or weekly at specified times
- Block level incremental backups only backup changes since the previous backup. This ensures lightning fast backups.
- Bandwidth throttling allows the customer to specify to the maximum bandwidth usage of keepITsafe

4.1.3 EASE OF USE

- Version (snapshot)/Roll Back allows recovery of multiple file versions up to 3 months in the past. Retention policies are extremely flexible and can be tailored to suit the needs of any business.
- In-built wizards allow easy configuration of SQL, Exchange, Oracle and Lotus Notes databases.
- Agentless/Network Drive support enables the back up networked or mapped drives.
- Full support for Windows Server 2008, 2003 and 2000. Mac, 64-bit Windows and Unix/Linux are also supported.
- Open/locked file support allows files and databases to backup while they are open.
- Mail level restore allows individual emails to restore into a live exchange database.
- KeepITsafe's easy-to-use interface was designed with the "non-tech-savvy" user in mind. Single file restores are extremely simple and fully support is included in with every package.

4.2 DATABASE BACKUP

4.2.1 EXCHANGE BACKUP

KeepITsafe fully supports online Exchange backups using the standard set of Microsoft APIs. None of the Exchange services have to be stopped for this backup to complete. Microsoft Exchange Server databases can be backed up while users are online, even as new data is written to them. This capability exists because of Exchange's transaction logging mechanism.

KeepITsafe invokes the Microsoft Exchange APIs to stream the database files to a temporary backup location. Changes to the database continue, even to parts of the database that have already been backed up. These missed changes will later be reconstructed from transaction log files. This is standard practice with an online backup of Exchange and this information is freely available online. After the database file has been backed up, Exchange copies at least one transaction log (and usually several of them) to the backup set. These are the transaction logs generated from the time the backup starts until just after it finishes.



The exchange log files can be backed up throughout the day (every hour or less if required) by using the Microsoft transactional log backup procedures. During a restore these daily logs are played back into the latest database backup to bring the database up to date.

4.2.1.1 EXCHANGE RESTORES WITH KEEPITSAFE

KeepITsafe fully supports entire Exchange database and individual mailboxes or even single mail restore. The way we do this is unique - using our software we can backup at Exchange database level only, while still giving you the ability to restore single mails and mailboxes. Our software has the ability to restore individual mails right back into your live Exchange store which is excellent in Disaster Recovery Situations. There is no need to create Recovery Storage groups or use tools such as Exmerge and this really simplifies the recovery process.

Other companies will need to create what is called a brick level backup of Exchange on top of the Exchange store level backup, in order to provide the same granularity at restore time that we can provide. This is effectively backing up your email twice in two different formats and will more than double your space requirements. With keepITsafe all mail is only backed up once in the most efficient manner possible which saves you money without affecting the granularity at restore time.

4.2.2 SQL BACKUP

In a typical installation SQL Server stores its data in two files. One has an MDF extension and stores the data itself and the other has an LDF extension and stores the transaction log. KeepITsafe supports Microsoft SQL three recovery models Full, Simple and Bulk Logged and does not require the SQL services to be turned off.

The SQL add-on connects to the SQL database and issues the chosen backup statement. These commands are industry standard and are the same commands that are called when you initiate a manual backup from SQL Server's Enterprise Manager (2000) or SQL Server Management Studio (later). SQL server then spools each database to a Microsoft SQL Server database backup file (*.bak file) in a temporary location and encrypts the backup and transfers the data off-site. Transactional log backups can be scheduled throughout the day to increase the RPO.

KeepITsafe staff full manages, configure and monitor the backup solution and advice of backup

Strategies:

- The Simple model is widely used by companies with basic/small databases.
- The Full model allows recovery to a point in time or, usually in the case of very large databases (VLDB) such as SAP and Navision, you need to restore individual files and file groups independently of other files and file groups. In Full Recovery mode SQL Server keeps every transaction in the transaction log file until you explicitly backup the transaction log.

Restoration is extremely simple and can be carried out by using SQL Server's Enterprise Manager \ Management Studio. As usual you can restore the master database to rebuild all databases from scratch or you can restore a single user table.

4.2.3 ORACLE BACKUP

KeepITsafe supports a database backup (full, differential or incremental) or an archive log backup. During a database backup keepITsafe connects to the Oracle database using SQL*NET over TCP/IP.

The following steps are performed:

- All data files in each of the tablespace(s) selected are copied to the temporary directory specified (can be local or on another server)
- If there are temporary files in the database, the script to re-create the temporary files are generated to a file located in the temporary directory specified
- All non-default initialization parameters will be spooled to an initializing file located in the temporary directory (PFile)
- All control files will be copied to the temporary directory specified
- All archived log files will be copied to the temporary directory specified
- The final step is to encrypt and compress this information and then transfer off-site.
- In file delta technology reduces backup sizes down to only changes at the block level in this data.

The different with archive log backup it that only all the archived log files will be copied to the temporary directory.

5 DNA IT SOLUTIONS/ KEEPITSAFE INSTALLATION PROCEDURE

1. USB Drive is couriered your office, this is required as first backup is often too large to transfer over the internet.
2. Highly qualified keepITsafe engineer will connect remotely onto server(s).
3. Backup sets will be configured according to your backup requirements.
4. All data it is encrypted as it is backed up to the USB Drive.
5. Drive is collected by courier and delivered to datacentre.
6. Data is transferred from USB Drive onto the keepITsafe servers.
7. Backups scheduled according to requirement.
8. All relevant software vendors are contacted to make sure their software is being backed up correctly. For example, Sage, Tas Books, Big Red Book and Exchequer. This ensures you have total cover.
9. keepITsafe will supply you with a detailed excel spreadsheet of all folders being backed up.

6 KEEPITSAFE PROACTIVE BACKUP MONITORING

This area is extremely important to you the customer. No other online backup provider proactively manages or monitors backups. Eg. They setup the backup software and you the customer need to manage and monitor it. This creates many difficulties as your time is spent going about your daily tasks and may forget to check that your backups went through accordingly. The value of your online backup being a fully managed and fully monitored service is second to none. To date keepITsafe are the only service provider in Ireland that offer a guaranteed fully managed and fully monitored service.

Each customer's backup is monitored daily by the keepITsafe monitoring team. Whenever a backup fails or is missed the customer will be contacted within 24 hours and informed of the

problem. The keepITsafe engineers will then endeavour to resolve the issue as quickly as possible

Other examples of keepITsafe's proactive backup monitoring...

- If more than 10% of the total files on your server are deleted it is flagged to the keepITsafe team as suspicious or unusual. The company is contacted immediately with a list of all files deleted.
- If there is a large amount of video or music files downloaded and saved, again this is flagged to management as unusual.

7 RESTORING DATA

"Backup is important but it's the restore that counts"

KeepITsafe has a distinct advantage over traditional tape backup methods as it has the ability to restore files within seconds – making sure that you're business experiences minimum down time and zero loss of data.

The keepITsafe restore process is as follows

- Customer calls the keepITsafe 24/7 phone line to say they have lost a file due to deletion or corruption.
- KeepITsafe will identify the date and time of file deleted and restore the file to the most recent backup taken.
- Typical file restore takes approximately 5 minutes.
- In the event of a full server crash, keepITsafe will restore the data to a USB drive and deliver it to customer's office the next business day.