DATA LOSS

- WHITEPAPER -

A look at various data loss issues, how they happen and how you can solve the problem of data loss.

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DATA LOSS

THE FACTS

FACT Data loss and downtime cost enterprises $1.7 trillion in 2014.

DID YOU KNOW 64% of enterprises surveyed in one study had experienced data loss or downtime in the last 12 months.

FACT The average business experienced more than 3 working days (25 hours) of unexpected downtime in the last 12 months.

DID YOU KNOW Other commercial consequences of disruptions to data were loss of revenue (36%) and delays to product development (34%).

FACT 62% of companies rated big data, mobile and hybrid cloud as "difficult" to protect.

DID YOU KNOW Enterprises that have not deployed a continuous availability strategy were twice as likely to experience data loss as those that had a continuous availability strategy.

FACT One study found:

- 32% of data loss is due to human error.
- 44% of data loss is from hardware errors.
- 14% of data loss is from software errors.
- 7% of data loss is due to viruses and malware.

- 3% of data loss is due to disasters.

DID YOU KNOW In any given year, **6%** of PCs will suffer an episode of data loss?

FACT There are 4.6 million instances of data loss each year.

DID YOU KNOW 71% of IT professionals are not fully confident in their ability to recover information following an incident.

FACT 47% of enterprises lost data in the cloud and had to restore their information from backups.

DID YOU KNOW One report stated

- 47% were due to end-users deleting data
- 17% were users overwriting data
- 13% were because hackers deleted data.

Facts and figures are from various sources. See reference at end of whitepaper for further information.

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  - OVERWRITING FILES

  - COPYING WRONG FILES

  - FAILURE IN COPYING

- ⊙ **DATA LOSS THROUGH HARDWARE/SOFTWARE ERRORS**

  - NATURAL DATA LOSS

  - BROKEN EQUIPMENT

  - NETWORK DOWN TIME

  - COMPUTER DOWN TIME

  - FILES IN USE

- ⊙ **DATA LOSS THROUGH THEFT**
  - SUDDEN LOSS

- ⊙ **DATA LOSS THROUGH TIME**

  - PEOPLE BEING UNAVAILABLE

  - TIME COST FOR MANUAL DUPLICATION

  - DATA MIGRATION

- ⊙ **SOURCES & RESOURCES + SOMETHING SPECIAL**

◉ Data Loss Through Human Error

One of the studies we found had shown that 32% of data loss occurs due to human error. Data loss can affect end users as well as in IT administrative work such as data migration.

Copying Wrong Files

Overwriting Files

Failure In Copying

Copying Wrong Files

Manual file copy and file synchronization on windows based systems can cause major losses to organizations as well as home users. Even professional IT people can have problems in this department. Consider a staff member is away and files need to be copied. Staff sends wrong files. This kind of downtime can delay a whole department for example when a department head was trying to copy files or send files from one location to another.

Many small organizations and businesses can experience 2 main issues when it comes to using Windows own copy utility built into windows. One is loss of time in copying and the other is in actual copying of wrong files.

These cost eCommerce companies a lot of bad feedback.

Overwriting Files

One of the benefits of a backup solution is to stop the issue of overwriting files. Some software such as Microsoft Word have a solution where it backs up files in case the program closes or save at intervals, this can help, but doesn't provide a total solution. Often time's files can get overwritten on local computers.

Solutions

GS RichCopy 360 – Job Schedule Wizard solves this problem, allowing the job to be created and GS RichCopy 360 deals with file synchronization as its needed, based on several conditions that you set.

Has the job been completed? GS RichCopy 360 can email you the results.

The result is that files are where they are needed – when they are needed. There is also a big time saving as high level staff and executives don't have to manually do file copy.

This can be extended to directories, multiple directories or files in one job.

- ✓ *Download GS RichCopy 360*

A backup solution is needed. GS RichCopy 360 offers a convenient solution to make backups at regular intervals with its mirror file or folder feature when setting copy options.

Having a network storage solution is one option, but can also work in smaller organizations with pen drives.

- ✓ *Download GS RichCopy 360*

Failure In Copying

A major issue with Windows own file copy utility built into windows is that of failure with copying files in use or with a long file name or path to file. This issue affects all users, including home users, business and organizations.

Where you copy a range of files and there is failure in some of them, you often won't notice. This is a reoccurring problem when copying files on Windows based systems.
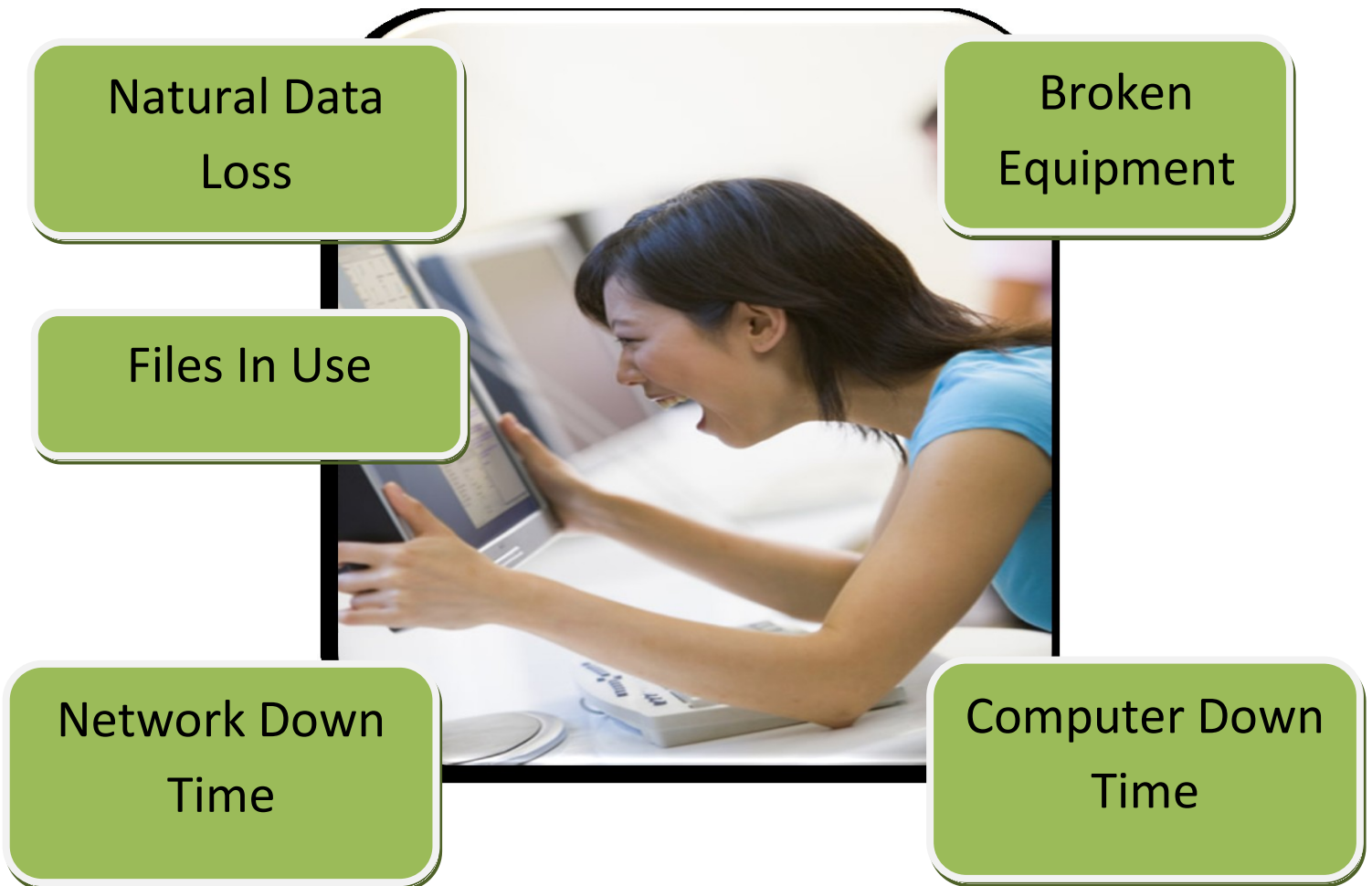
Solutions

GS RichCopy 360 can copy files in use and locked files. The reporting feature in the log can help you learn about successful copying, replication and migration of data. The alert feature in GS RichCopy 360 also allows an email to be sent to one or more recipients which scales in both small and large organizations.

- ✓ *Download GS RichCopy 360*

⊙Data Loss Through Hardware/Software Errors

6% of computers will experience data loss this year. 58% of data loss this year in your organization or business or home will be due to hardware and software errors.

Natural Data Loss

Broken Equipment

Files In Use

Network Down Time

Computer Down Time

Natural Data Loss

Digital data is not set in stone. Old equipment, wear and tear and natural use of magnetic media and other digital storage options results in little losses in data. Bad sectors on hard disks as well as losses in SSD drives over time can result in major losses. Database, files and other data with 1GB> is likely going to experience this issue at some point. A small loss equals a big loss. Which records are lost, even if you manage to salvage some of the data? How important are those records?

Files In Use

Files in use can cause problems in Windows own file copy utility built into Windows operating systems. When files become locked, they won't often be copied. Errors as well as no confirmation of errors results in home, business or organizations loosing credibility, reputation, sales and revenue, as well as a lot of time waste in customer service departments. Files with old data could result in shipping out products to the same people and delays in getting new orders out.

Solutions

Mirroring data from source A to source B is one option, but there is so much more power to have a solution. GS RichCopy360 has the features you need to replicate and mirror data to 1 or multiple locations, so protecting your data. With 71% of IT professionals not being confident in their ability to recover data, GS RichCopy 360 provides the best solution that is easy to use – making IT people confident in data recovery.

✓ **_Download GS RichCopy 360_**

The solution is found in several features found in GS RichCopy 360. NTFS permissions can replicate, so can time and date, so that you can be sure of differences between files. GS RichCopy 360 is also integrated with Windows VSS allowing open and locked Outlook files, databases and documents to be replicated with confidence.

✓ **_Download GS RichCopy 360_**

Network & Computer Down Time

A major loss in productivity and company profitability and reputation is due to network and or computer down time. Today many offices are interconnected. Some offices are departmental and have specific functions. Individual users are also an important function, especially in smaller organizations where one person takes on a specific role.

When the network or computer goes down, there are delays for entire offices, departments, even when the problem is a small one – one system down or one network connection down, everyone in another location can be stopped from doing further work.

The cost of an entire building or department having down time is a major loss to organizations and is simple to resolve some of the greatest costs.

Solutions

Having a backup plan is a good idea and having incremental backups is an extra level of protection. There are many options for this, such as in the network, flash USB drives on the local computer,

GS RichCopy 360 – Job Schedule Wizard solves this problem, allowing the job to be created and GS RichCopy 360 deals with file synchronization as its needed, based on several conditions that you set.

The result is that when there is network or computer down time, you can be sure that your files are the same on one or multiple locations.

- ✓ *Download GS RichCopy 360*

⊙ Data Loss Through Theft

The sudden loss of data accounts for 10% of losses to data. Another study found only 13% of data loss was due to hackers deleting information. Though data loss through these methods is not the biggest in businesses and organizations due to good IT administration, this is a huge problem for home users.

Malware

Viruses

Theft

Viruses & Malware

Viruses, Spyware and malware are common occurrences in both home and business use. You may have a good anti virus software but this is not enough. Data often becomes corrupted or deleted not by viruses or malware but through the A/V software as it seeks to clean a damaged file. One important consideration is also making sure you have a clean backup of the file. Reinstalling your operating system may result in a dirty file, deleted or corrupt file which can not be sent to other systems or it can spread.

Theft

What do you do when data is suddenly gone and there is no way to recover?

Theft can happen in many ways from theft from external sources as well as theft internally.

This also effects digitally in the case of hackers and disgruntled employees.

Disaster

3% of data loss is due to disasters. Most businesses fail in a short period of time after such a disaster.

Data can be lost through several disaster types such as the typhoons in the Philippines or the earthquakes in Nepal.

Being able to protect data in all cases is important.

Solutions

Backing up in rotation to several media can be the best solution to curb virus, malware and spyware problems. On a weekly schedule, this could be week one backs up to one set of media then following week to another set. This would give a better level of protection and time to notice and clean the problem while having a good copy. GS RichCopy 360 has the features to do this with its Job Schedule Wizard.

✓ *Download GS RichCopy 360*

To protect data, it is best to encrypt data. GS RichCopy 360 can help you backup to any media connected to the computer locally, on the network or external mapped drives.
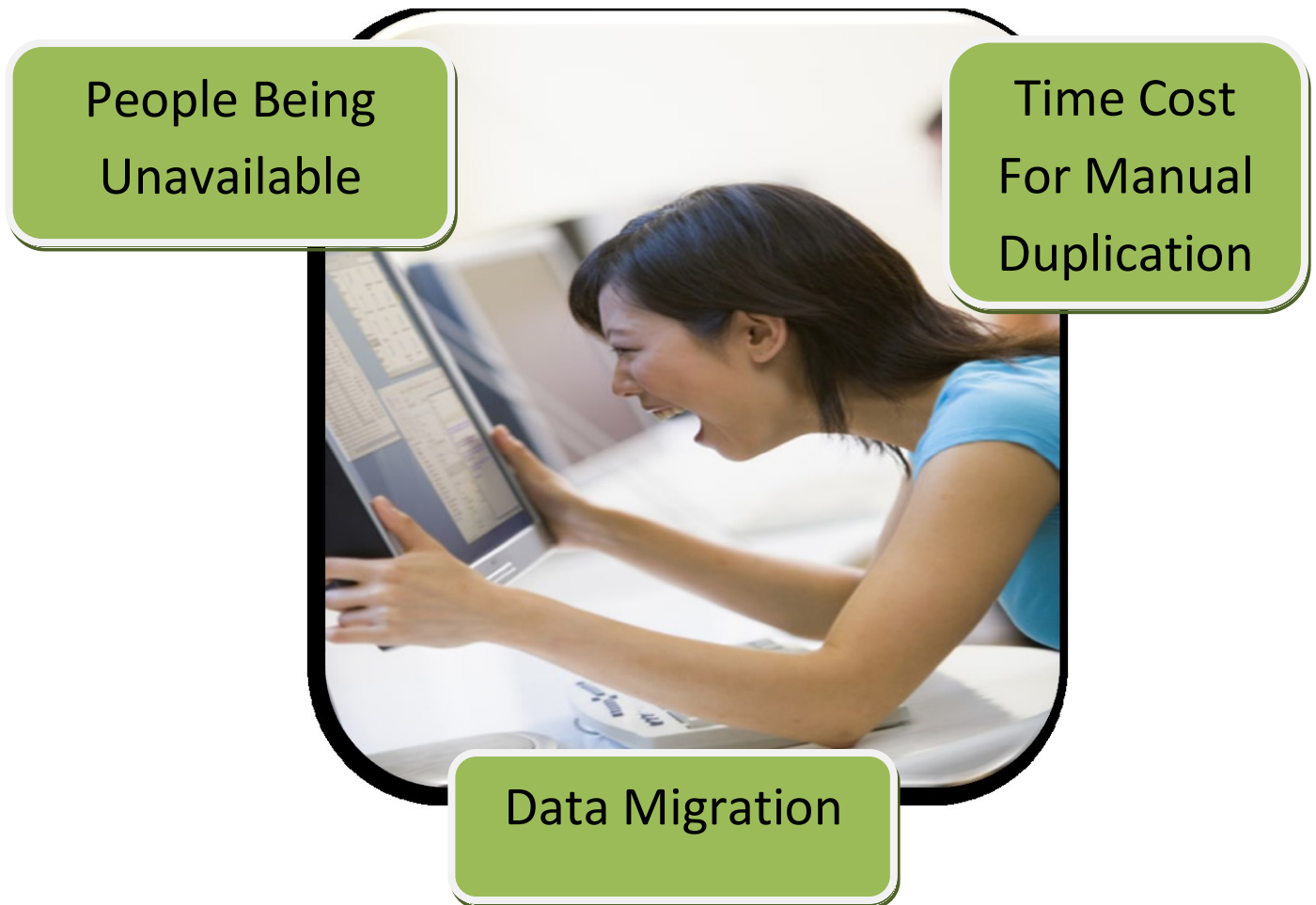
✓ *Download GS RichCopy 360*

To protect data, it is best to use the mirroring features in GS RichCopy 360 to other offices at other locations. Having more locations available to you, the more mitigation of potentially disastrous data loss situations you have. GS RichCopy 360 can help you backup to any media connected to the computer locally, on the network or external mapped drives.

✓ *Download GS RichCopy 360*

⊙ Data Loss Through Time

We have seen the costs of data loss and how it is estimated by some studies to cost over $1.7 Trillion US dollars each year, but what about the other cost – the cost of loss through time?

People Being Unavailable

Time Cost For Manual Duplication

Data Migration

People Being Unavailable

Unavailability of key people is a recurring situation in many places. People go to lunch, go to meetings at another location, people go on vacation, and people sometimes get sick, and even the case of people being fired.

In small organizations this problem of unavailability can be problematic and the costs can be high. Though our focus has been on data loss cases where data is lost, people being unavailable can cause delays to a project, loss in revenue and loss in productivity as others await this data to be available again.

Time Cost For Manual Duplication

We have looked at several ways that data loss happens. One aspect we have not considered is the time cost for manual duplication.

In home as well as small businesses, the time costs are very high. It is only in large organizations like Fortune 500 companies where processes are examined to find out true costs as well as find out savings. Small businesses and home users don't have to go without and spend more tine than is necessary.

For many home uses and small businesses, files are copied or emailed manually. The result is time wasted. Considering an earlier topic of files in use and the software errors that can result, time is a cost we don't consider and it can be high when things go wrong.

Solutions

In a network, the best solution is to have a computer that is accessible to several IT administrators that mirrors and replicates essential data from systems. The end result is that even if there is down time, then the replicated data will still be available, and there is no need to chase people to get data back. GS RichCopy 360 features allow you to accomplish this.

✓ *Download GS RichCopy 360*

Utilizing the Logging and Alerting features in GS RichCopy 360 as well as being able to visualize job progress is the solution you need to automate these processes. The results in time savings can be huge. When you consider saving an executive or manager wasting precious minutes each day, GS RichCopy 360 provides the solution needed to save time.

✓ *Download GS RichCopy 360*

Data Migration

As operating systems, systems and software becomes outdated, there is a need to migrate data. Data migration is not often a regular occurrence but it can be. Whatever the case, data migration can be a complex situation that requires multiple systems data to be transferred to new systems, backed up or sent to other locations. When done manually the time costs can be very high.

Solutions

The use of systems that are unique – with different operating systems can easily be migrated. Where files are stored in common locations, GS RichCopy 360 features allow selecting specific folders. GS RichCopy works on all versions of Workstation and Server versions of Windows after XP, such as 2003 Server, 2008 Server, 2012 servers and XP, Vista, Windows 7&8 versions, allowing you to migrate with ease. As GS RichCopy 360 allows multi-threaded copying to each logical core, you can be sure that your migration of data will be done fast.

Where many machines have the same directory structures, the ability to make and use scripts will allow this to be done with ease.

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⊙ Sources & Resources + Something Special

Sources

This document was prepared with research from:

Boston Computing – Data Loss Statistics

Symantec

Backupify

DSS Corp

Protect Data

Data Backup and Online Storage
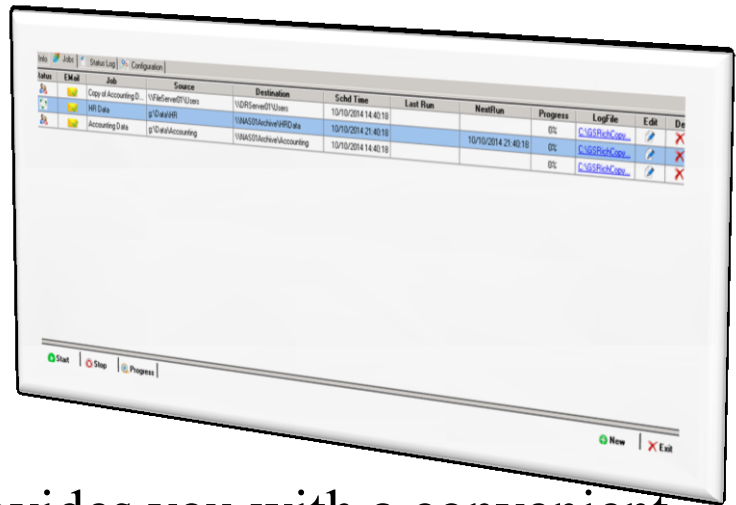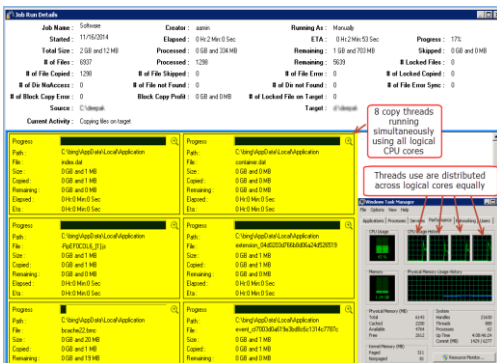
EMC Corporation

Dunn and Bradstreet

Security Week

Members of the press can request links to information by contacting us at
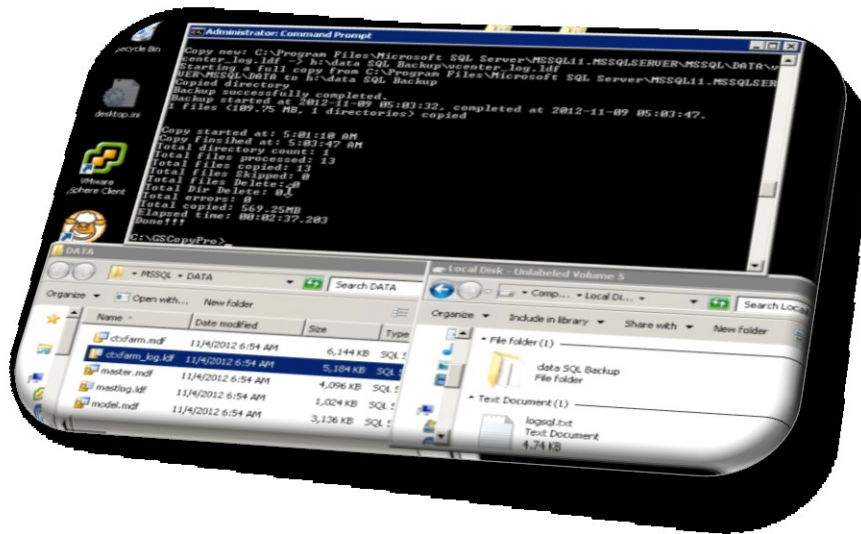**http://www.gurusquad.com/contact**

Resources

GS RichCopy 360:

GS RichCopy 360 provides you with a convenient interface that you can use to migrate, replicate and copy data.

Working both locally and on a network it is the ideal solution for home, business or corporate environments. Some of the largest Fortune 500 companies use GS RichCopy 360 to provide them a solution that doesn't require a rocket scientist to operate.

Visit to find out more and buy a copy:
http://www.gurusquad.com/Replication/GSRICHCOPY360

GSCopyPro:

The command line focused version of our range is the GSCopyPro which is currently at version 8.1. The RoboCopy alternative offers a convenient command line solution to achieve data migration, replication and copying of data.

Visit to find out more and buy a copy:
http://www.gurusquad.com/GSCOPYPRO

Something Special

Data Loss cost organizations with more than 250 employee's $1.7 Trillion USD in 2014. At GuruSquad, we have a solution that can solve a large part of this problem. If you are not using GuruSquad solutions in your home, business or organization, be sure to get something special today.

At GuruSquad for a limited time we are offering GS RichCopy 360 available to you for only $49.99 and GSCopyPro at only $29.99. Corporate and business users can contact us for multi licence solutions.

To buy online visit:

www.GuruSquad.com

Or give our sales team a call to find the best solution for your organization in the US on:

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