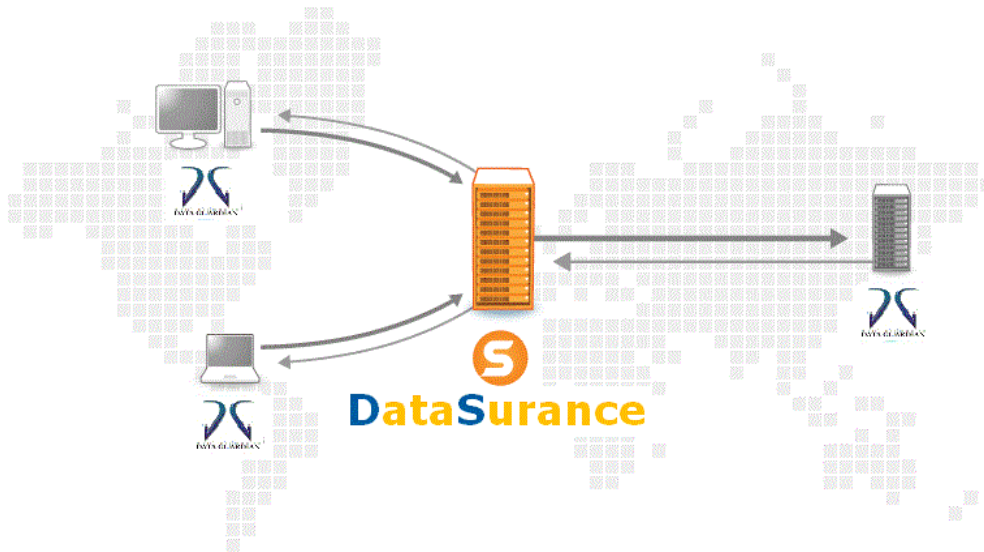
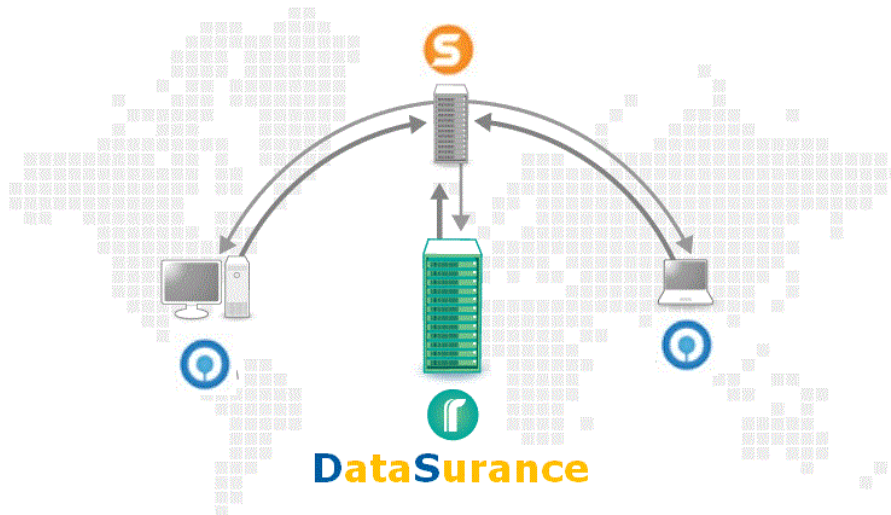


DataSurance

- S** DataSurance™ Offsite Backup Server (DataSuranceOBS) is a server application which offers online backup services to its users.



- O** DataSurance™ Online Backup Manager (DataSuranceOBM) is a full-featured client application used to backup data to the DataSuranceOBS.
- A** DataSurance™ A-Click Backup (DataSuranceACB) is a lite client application typically used on laptops and desktops for easy backup / recovery of files to / from the DataSuranceOBS.
- R** DataSurance™ Replication Server (DataSuranceRPS) provides an offsite store for backed up data from multiple DataSuranceOBS servers.



For more information please visit
www.dataguardian.co.za



Support All Common Databases

DataSurance™ Online Backup Manager (DataSuranceOBM) client-side backup application of DataSurance™ Backup Software comes with specialized backup modules for backing up commonly used database and email servers. System administrator is able to activate or deactivate individual modules for different users through DataSurance™ Offsite Backup Server (DataSuranceOBS). These modules include:

- Microsoft Exchange Server
- Microsoft SQL Server
- Oracle
- MySQL
- Lotus Domino/Notes

In conjunction with our pre-backup command line tool, DataSuranceOBM is even able to back up Microsoft Sharepoint, Hyper-V Server, VMware Server, and other applications.



Support All Common Operating Systems

DataSurance™ Backup Software is developed with Java. Therefore, all applications in DataSurance™ Backup Software can run on all common operating systems, including Windows, Linux, Mac, NetWare, UNIX and all other platforms that support Java. Moreover, you can deploy DataSurance™ Backup Software in heterogeneous environment. For example, you can install DataSurance™ Offsite Backup Server (DataSuranceOBS) on a Linux server, while having the client-side backup applications, DataSurance™ Online Backup Manager (DataSuranceOBM) and DataSurance™ A-Click Backup (DataSuranceACB), installed on Windows and Mac OS X. Please refer to DataSurancepedia for the latest supported versions of these operating systems.



Support Microsoft Outlook and Microsoft Outlook Express

DataSurance™ Online Backup Manager (DataSuranceOBM) and DataSurance™ A-Click Backup (DataSuranceACB) client applications of DataSurance™ Backup Software can be used to backup Microsoft Outlook and Microsoft Outlook Express. Microsoft Outlook and Microsoft Outlook Express are the two most popular email readers used by businesses and home users. However, backing up data stored in these two email readers is a headache to most users, with DataSuranceOBM and DataSuranceACB, users can back up these data easily by simply checking a single checkbox.



Brick-Level Backup and Restore for Microsoft Exchange Server

The built-in Microsoft Exchange Brick-Level Backup Module in DataSurance™ Online Backup Manager (DataSuranceOBM) allows you to perform brick-level backup and restore for Microsoft Exchange Server, including individual emails, calendars, and contact lists, etc. When data loss disaster strikes, user can restore any individual emails, calendars and contact lists within a very short period of time, without the need to restore the full Exchange's information store. This capability makes DataSuranceOBM an ideal backup tool for Microsoft Exchange Server.



Continuous Data Protection

DataSurance™ Online Backup Manager (DataSuranceOBM) and DataSurance™ A-Click Backup (DataSuranceACB) are equipped with advanced Continuous Data Protection (CDP) feature which can be set to capture every version of the data of a file that has been saved to your hard drive. With CDP, whenever you have made changes to the files in the backup set, it will automatically backup the changes to DataSurance™ Offsite Backup Server (DataSuranceOBS). Thus, it provides a highly dependable means of real-time, continuous data protection for file servers, desktops, and laptops effortlessly and transparently, without any human intervention.



In-File Delta Technology

Both client-side backup applicants, DataSurance™ Online Backup Manager (DataSuranceOBM) and DataSurance™ A-Click Backup (DataSuranceACB), are equipped with our proprietary In-File Delta technology. With this feature, the original file is required to be backed up once only, i.e. in the first backup job. Subsequently, only changes are necessary to be backed up. There are two types of In-File Delta that users can choose.

Incremental Type

All delta files are generated with respect to changes made since the last incremental backup. It means the last full backup file and ALL incremental delta backup files are required to restore the latest snapshot of a backup file.

Differential Type

All delta files are generated with respect to changes made since the last full backup file (i.e. differential backup). It means only the last full backup file and the last delta file are required to restore the latest snapshot of a backup file. Other intermediate delta files are only required if you want to restore other snapshots of a backup file. Differential in-file delta backup has the benefits that a corrupted delta file would only make one particular version of a backup file non-recoverable and all other backups created by other delta files of the same file would still be intact.



Windows System Backup and Restore

For computers running either Microsoft Windows Vista Business/Enterprise/Ultimate Edition or Windows Server 2008, DataSurance™ Backup Software is able to perform Windows System Backup and Restore. Moreover, for other Windows versions, DataSurance™ Backup Software is also able to perform Windows System Backup and Restore in conjunction with StorageCraft's ShadowProtect application.

Although both ShadowProtect and Windows' built-in system backup functionality allow users to perform Windows system backup, they both lack the ability to perform remote offsite backup easily and efficiently. By combining ShadowProtect and Microsoft Windows System Backup with DataSurance™'s expertise in automatic remote offsite backup technologies, users are able to perform complete offsite bare-metal system backup for Windows easily and securely. In case of a total-loss disaster happened to a local computer or server, backed up image containing the complete operating system and installed applications with the latest configurations and settings, along with all data, can be restored easily from the backup stored in the offsite backup server, to a completely new hardware that is different from the original one, without running into the Windows' blue screen.



Open File Backup

Both client-side backup applicants, DataSurance™ Online Backup Manager (DataSuranceOBM) and DataSurance™ A-Click Backup (DataSuranceACB), have integrated with Microsoft's latest Volume Shadow Copy Service (VSS) framework. It allows you to back up files that are being opened without any additional applications or plug-ins. VSS is

only available on Windows XP / 2003 / Vista, and you must have administrative privileges to start the VSS service on a computer. Also, VSS will only work if at least one of your partitions is formatted using NTFS.



256-Bit Data Encryption

All data will be compressed and encrypted with 256-bit encryption with an encrypting key selected by the user on the client-side applications, DataSurance™ Online Backup Manager (DataSuranceOBM) and DataSurance™ A-Click Backup (DataSuranceACB), before being uploaded and stored on DataSurance™ Offsite Backup Server (DataSuranceOBS). The encrypting key will NEVER be uploaded to DataSuranceOBS during backup. In addition, it is also possible to back up your critical data using a secure SSL channel which will further increase the level of security. On the other hand, decryption is only possible with user's encrypting key. Therefore, this whole mechanism provides exceptional security to the backed up data.



Flexible Backup Schedule

Other than Continuous Data Protection (CDP), both our client-side backup applications, DataSurance™ Online Backup Manager (DataSuranceOBM) and DataSurance™ A-Click Backup (DataSuranceACB), are equipped with flexible backup scheduler that allows you to implement your desired backup policy.

As DataSuranceOBM is a comprehensive client-side application designed for backing up servers, it comes with an advanced scheduler which allows system administrators to create multiple backup schedules such as backup at a specific time and at multiple times per day etc. DataSuranceACB is designed for desktop and notebook backup, thus its scheduler is with simpler options.



Seed-Load Utility

If you have a lot of data (e.g. 500GB) to backup to the backup server, it would take a considerable amount of time to perform the first full backup through the Internet. If you run into this problem, you can use the Seed Load Utility to back up your backup set to local hard disk (instead of directly to the backup server) and then transport the backup data, using removable hard disk, to DataSurance™ Offsite Backup Server (DataSuranceOBS). The administrator can then load all your backup files from your removable hard disk into your backup account. This could then save you days (even weeks) of performing your first full backup. Since subsequent backup will be incremental backup (only new or updated files will be uploaded to the server) you should have no problems uploading your backup data afterwards.



Command Line Tool

DataSurance™ Online Backup Manager's (DataSuranceOBM) client application of DataSurance™ Backup Software is equipped with a command line tool, which allows users to run pre-backup and post-backup commands. This feature is extremely useful for system administrators to back up an application or a database which DataSurance™ does not have a dedicated module for it. For example, you can write proper scripts to spool out a database to a temporary folder before running backup, and delete the temporary folder after finishing backup. With this powerful tool, DataSurance™ Backup Software can back up essentially any applications and databases.



Web Based Data Restore

DataSurance™ Backup Software allows users to restore backup data via the Internet through any web browser. This provides you with the option of restoring your backed up data from a computer that has no DataSurance™ Online Backup Manager (DataSuranceOBM) or DataSurance™ A-Click (DataSuranceACB) client applications installed. It would thus be very useful when you need to restore some backed up files during traveling, or when your notebook is stolen during your business trip.



Bandwidth Throttling

As a system administrator, you can use the centralized web management console of DataSurance™ Offsite Backup Server (DataSuranceOBS) to assign the maximum bandwidth that a specific backup user can consume. It is extremely useful for better managing the available bandwidth for the whole backup system, and eliminating the chance that a backup user consumes all the available bandwidth because of backing up large files.



Auto Software Upgrade

DataSurance™ Offsite Backup Server (DataSuranceOBS) comes with an auto-upgrade feature. When auto-upgrade is enabled on an DataSuranceOBS, any DataSurance™ Online Backup Manager (DataSuranceOBM) or DataSurance A-Click Backup (DataSuranceACB) client-side applications connected to this DataSuranceOBS will be upgraded automatically whenever the DataSuranceOBS is upgraded to a new version.

Backup 500GB in One Night

Date	Incremental	Storage Space (GB)
DAY 1	Seed Load	(Full) 500
DAY 2	Upload	(Full) 500 + (Delta-1) 5 Total = 505
DAY 3	Upload	(Full) 500 + (Delta-1) 5 + (Delta-2) 5 Total = 510
DAY 4	Upload	(Full) 500 + (Delta-1) 5 + (Delta-1) 5 + (Delta-1) 5 Total = 515

Our seed load and in-file delta technologies enable backup of a large volume of data to be completed in a very short period of time. The seed load feature allows backup of the large volume of data to a local hard drive. With our proprietary in-file delta technology, the original file is required to be backed up once only, i.e. in the first backup job. Subsequently, only the changes within the file made since the previous backup are necessary to be backed up.

For example, for a file that is as large as 500GB, you can simply seed load the full backup to a removable local hard drive and then deliver the seed loaded data in the removable hard drive to the backup server. Since only the changes made within the 500GB file, normally less than 1%, i.e. 5GB, of the original file size, are required to be backed up again, this amount of data can be

backed up easily to the server via the Internet or Intranet in one night. As a result, instead of having to back up 500GB every day, you just need to back up 5GB every day to keep the file up-to-date on the backup server.