

The
Secure Data
Solution[®]

U.S. Patent 7,293,179; European Patent 1669872;
and Others Pending

Security
&
Key Management

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Secure Data Solution® Security & Key Management

Overview & Benefits

The Secure Data Solution (SDS) is an enterprise data backup and recovery suite. It is designed to replace physical tapes necessary for a backup. Once the backup occurs, the SDS moves the backed-up data offsite for safe archiving and eventual restoration in the event of disaster or business interruption.

Any discussion of moving data offsite or outside of a secured data center must be accompanied by a description of how that data is to be protected: 1) while it is moved from the data center, 2) while it is in storage outside of your immediate control, and 3) when *and by whom* it is recovered. This document describes how the Secure Data Solution utilizes security concepts such as encryption, remote access control, logon control, and key management to provide the highest level of patented data security available today.

Security within the SDS is accomplished by using the patented and patent pending SecureAgent Security Service (SecureAgent). This service utilizes and enforces the increasingly accepted practice of Role-Based Access Control (RBAC). RBAC is mandated by a growing number of data center security officers as well as US federal regulatory authorities.

Increasingly, regulatory guidance requires that sensitive data, whether in transition or at rest, be protected at all times. RBAC further requires that access to particular categories of data only be made available to those whose role in an organization requires such availability of data. In short, a person's need-to-know determines the data to which they will have access.

The security services within SecureAgent act on every data packet sent to the Secure Data Solution. After a virtual tape image is completed on the SDS a tape "dismount" command occurs. As a virtual tape image is written, it is compressed and then encrypted. The virtual tape image is always compressed and encrypted. The encryption

protects the data while it resides in the local cache, on any attached disk, while it is transmitted to the remote location, while it is stored at the remote location, and if applicable, when it is written to and stored on a physical tape cartridge.

Security Groups—The encryption key used to secure the data is generated randomly within the IDG 9485[®] Secure Library Controller[™]. The process begins when a Secure Data Solution administrator or security officer uses the SecureAgent Administrator tool (an easy-to-use GUI front-end application) to create a particular security group, and then assign a number of virtual tape drives to that group.

Each security group can represent a functional unit of the organization, for example, personnel, payroll, accounting, etc. When a security group is created, the SecureAgent service subsequently automatically generates a random encryption key that it uses to encrypt all data created on virtual drives assigned to that group.

With this process in place, storage managers can routinely run backups; direct particular types of data to the drives assigned to the appropriate security groups, and have total control of who has access to the different types of data.

Key Management—Once the data is encrypted and protected for transportation and storage, it's appropriate to discuss how the data can be recovered, decrypted and restored. This function is performed in a similar fashion to encrypting the data originally.

Each virtual tape image has header information containing the name of the security group to which the drive that created each particular image was assigned. In order to decrypt the information, the SDS administrator need simply assign one or more drives to the appropriate security group, and the SDS will automatically use the appropriate key.

The SecureAgent approach to key management is protected by issued patents as well as additional patents pending. This key management methodology has been the standard for more than a decade in some of the world's largest companies and organizations, including major Wall Street financial institutions, large insurance companies, national governmental agencies, and others across the US and throughout Europe.

Within the Secure Data Solution, SecureAgent security service offers security and data storage managers the following benefits:

- Provides Role-Based Access Controls to protect various types of data
- Provides a non-intrusive, patented key management strategy that provides high level data protection without interfering with job duties
- Never stores encryption keys and data in the same location
- Never exposes encryption keys for possible examination or inspection
- Enables immediate recovery of data only by the appropriate people

The Secure Data Solution is protected by U.S. Patent 7,293,179; European Patent 1669872; and others pending.

About SecureAgent Software

SecureAgent Software has been helping customers manage sensitive data for more than 20 years. Many of the largest companies across the United States and throughout Europe use SecureAgent products in mission-critical areas of their daily operations. They play an integral role in secure remote console access, data backup and recovery, advanced automation, integrated tape management, and disaster recovery.

SecureAgent Software is playing a pioneering role in the implementation of role-based access controls, and is used extensively by both commercial customers and the governmental sector to comply with evolving regulatory guidance.

Among the companies using SecureAgent Software are three of the four largest US banks, the two largest credit card processing companies, the nation's two largest communications companies, the world's largest stock exchange, the largest US airline, and the largest airline reservations companies in the US and Europe.

For additional information, please contact:

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