DiskSafe Agent

Reliable and secure data protection for Microsoft Windows Server and Linux Server

FalconStor® DiskSafe™ is a host-based replication software agent that delivers block-level data protection for a broad base of software and hardware platforms.
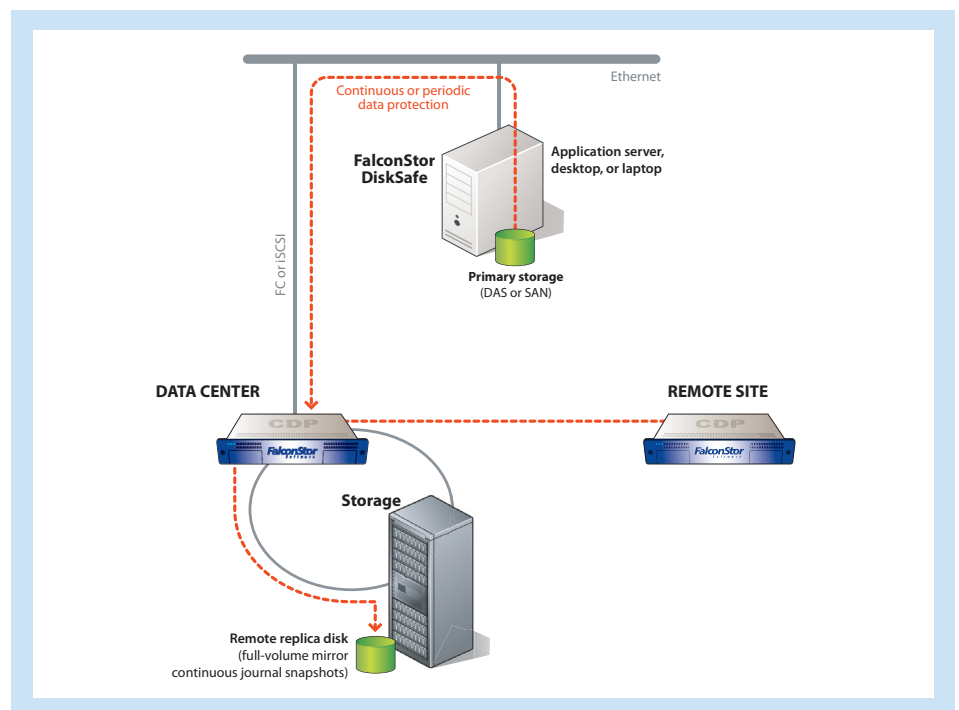
Highlights

> Supports Microsoft Windows Server and Linux operating systems

> TOTALLY Open™ architecture integrates seamlessly with storage infrastructure

> Simplified block-level data protection

> Support for both Fibre Channel (FC) and iSCSI

> Cluster support for continuous protection

> Minimal host overhead

> Encryption capabilities for optimal security

> Flexible protection configuration

> Wide range of application-aware snapshot agents to ensure 100% transactional integrity

> Agents certified for Microsoft Windows, Microsoft Exchange, and Microsoft SQL Server

> Continuous or periodic data protection

> Instant local recovery, 30-minute remote recovery

Continuous access to mission-critical data is essential to the success and operations of businesses. Loss of data, no matter how brief, has negative financial ramifications. The FalconStor DiskSafe agent protects data by replicating block-level data, either by partition or by entire disk, to the FalconStor Continuous Data Protector (CDP) solution. FalconStor DiskSafe offers two modes of data protection; continuous or periodic. They can be implemented separately or together. FalconStor DiskSafe delivers real-time data protection for either DAS or SAN storage. When combined with FalconStor CDP, it provides a comprehensive solution to meet your need for end-to-end data protection, remote disaster recovery (DR), and backup.

A new approach to data protection

Traditional DAS or SAN data protection environments load each server with lengthy periods of downtime for backup operations. Associated recovery methods are cumbersome, often go untested, and cause significant downtime for business application operations. As data volumes grow, administrators have increased difficulty completing backup operations within accepted backup windows; typically nights or weekends.

In contrast to this method, the FalconStor DiskSafe agent transfers business data to secondary storage, where backup operations are executed without any impact to production environments, completely eliminating the backup window and providing local or remote recovery data volumes. In addition to eliminating the backup window, FalconStor DiskSafe dramatically increases the granularity of data protection. Instead of being protected once a day or once a week, application data can be protected continuously.

Certified for

Microsoft®
Windows
Server™ 2003
Standard Edition
Enterprise Edition
Datacenter Edition

CERTIFIED FOR
Windows
Server® 2008

FalconStor DiskSafe operation

The functionality of FalconStor DiskSafe is that of a block-level I/O WRITE-Splitter. That is, every WRITE I/O operation of a server, file system, or application to primary storage is duplicated to secondary storage behind a FalconStor CDP appliance. This block-level WRITE copy supports Fibre Channel (FC) or iSCSI networking. Therefore, FalconStor DiskSafe and FalconStor CDP easily fit into customers' existing network infrastructures.

This WRITE copy functionality can be set up for either continuous or periodic mode, accommodating any business requirement or network infrastructure. Data protection can extend from entire disks, disk partitions, or applications to target FalconStor CDP solutions in local or remote data centers. Implementation of the resulting physical recovery disk protection can be local, remote, or a combination of both. FalconStor CDP includes full backup, file or directory recovery, and individual email or database object recovery. Recovery or restoration operations are facilitated by an intuitive Restore Wizard. The Restore Wizard easily guides customers through recovery or restoration of files, partitions, snapshots, or entire disks.

Cluster support

FalconStor DiskSafe supports multi-node Microsoft Cluster Service in active-active or active-passive configurations. When a Microsoft Windows cluster node fails, FalconStor DiskSafe seamlessly continues mirroring from the remaining nodes. When the failed node is restored, mirroring resumes automatically.

Thin Provisioning

FalconStor DiskSafe provides data protection via secondary storage from any vendor, provisioned by FalconStor CDP. The FalconStor CDP solution provides an abstraction layer, effectively eliminating single-vendor constraints often associated with array-based solutions. FalconStor technology enables customers to use thinly provisioned volumes for data protection or recovery. This standard feature greatly increases disk capacity utilization while reducing initial and ongoing costs for the customer. Thin Provisioning is the ability to define and logically provision storage volumes of any requested or expected future size, while only physically allocating disk capacity according to current real data capacity. Thin Provisioning setup is intuitive, and an alert function enables administrators to provision additional capacity as needed.

Comprehensive data protection options

Since FalconStor DiskSafe is functionally a WRITE-splitter, users can leverage FalconStor CDP for continuous data availability. Protection policies enabled by FalconStor CDP include continuous mirroring, snapshots (up to 256 per volume), journaling (for individual transaction recovery), or a combination of all three methods. Intuitive configuration wizards guide the user into setting up schedules of snapshots, retention of snapshots, and size of journals (minutes to hours of protection). For example, a protection policy could include journal protection for the most recent two hours, and 24 hourly, seven daily, four weekly, and 12 monthly snapshots. Configuration flexibility includes the ability to exclude weekends and holidays if required. Additionally, remote replication or DR protection can be achieved with multiple FalconStor CDP servers. WAN-optimized remote replication supports any distance or transport bandwidth, and includes deduplication, compression, and encryption features.

Instant data recovery

Full integration with FalconStor CDP allows FalconStor DiskSafe to provide multiple benefits and configuration options for customers. Instant recovery of disks, partitions, files, or messages is enabled, as is complete bare-metal recovery, either locally or at the DR site.

Broad operating system (OS) support

There are two versions of FalconStor DiskSafe available: FalconStor DiskSafe for Microsoft Windows Server and FalconStor DiskSafe for Linux Server. Support for Linux distributions is provided on a kernel-by-kernel basis. (Certification matrix details can be found on the FalconStor website: www.falconstor.com)

TOTALLY Open™ Data Protection

The combination of FalconStor DiskSafe and FalconStor CDP enables centralized and intuitive management of local and remote applications, file systems, servers, and databases, with the flexibility to assign different protection policies for each customer application. The simplified and comprehensive capabilities of FalconStor technology help to increase IT staff productivity for overall business value and reduce the total cost of ownership (TCO). FalconStor storage solutions help eliminate backup windows, maximize disk capacity utilization, and enable customized data protection and recovery policies that satisfy even the most demanding business and service level agreements (SLAs).

For more information, visit www.falconstor.com or contact your local FalconStor representative.

Corporate Headquarters
USA
+1 631 777 5188
salesinfo@falconstor.com

European Headquarters
France
+33 1 39 23 95 50
infoeurope@falconstor.com

Asia-Pacific Headquarters
Taiwan
+866 4 2259 1868
infoasia@falconstor.com

FalconStor
S o f t w a r e ®