SafeCapacity™

Capacity Downtime Protection
Storage Resource Optimization
Data Life Cycle Management

- Create Storage Audits with Visual Reports
- Automated Data Life Cycle Management
- Efficient use of Storage Resources
- Continuous Storage Availability
- Cost Savings
- Ease of Scaling
- Automated Capacity Management
- Cost-Balanced Storage Resources
- Reduced Administration Time
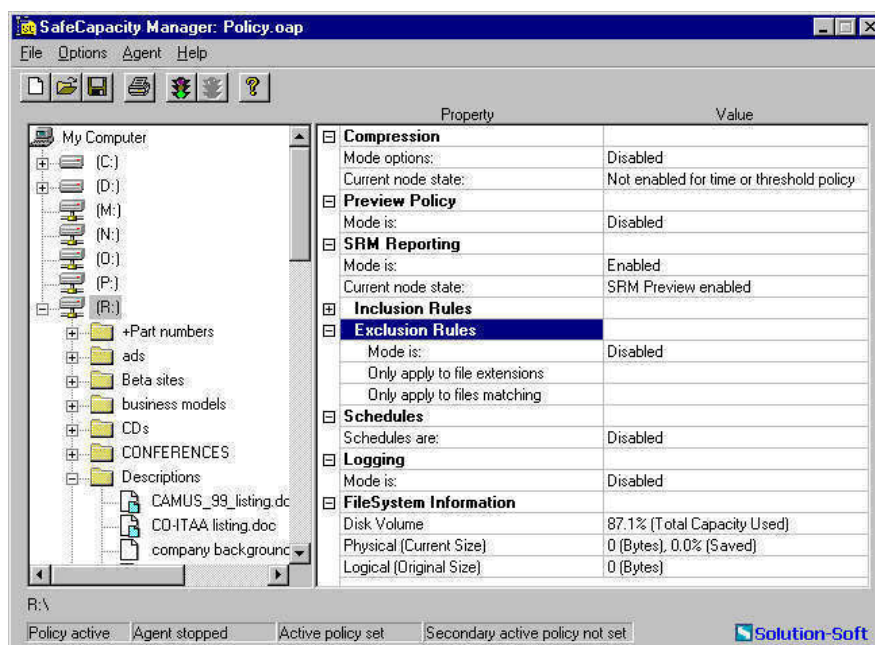- Supports all Storage Architectures
- Management by Automated Alerts

S Solution-Soft™

Surviving the Data Explosion

There are major needs in the storage management market caused by the enormous explosion of data required to be stored even longer, non-stop 24x7 operations, and the requirements placed on IT professionals to do more with less. The demand for storage continues to rise every year across all industries. Digitization of everything drives even more storage demand. This continuing call for more capacity combined with the zero downtime requirements placed on enterprises operating in the global economy further complicate and challenge the management of storage systems. For every dollar spent on storage systems, corporations are spending five to seven dollars every year to manage them. Further, when comparing the 5% yearly growth rate of IT staff to the 30% annual expansion of managed storage one can clearly see there is a significant and continually increasing strain placed on storage administrators to effectively manage the storage environment.

Optimizing Storage Resources

SafeCapacity, an automated data management and capacity monitoring solution, addresses these difficulties by optimizing data across varying levels of storage resources while the systems remain online and available.

SafeCapacity provides the following significant benefits to its users:
- Transparently migrates files across devices to cost balance storage resources
- Provides a robust management system for handling fixed-content data
- Delivers clear, file-level reports and charts on storage utilization
- Reduces system monitoring time by twenty percent
- Reduces over-capacity allocation of storage space
- Increases the efficiency of existing storage
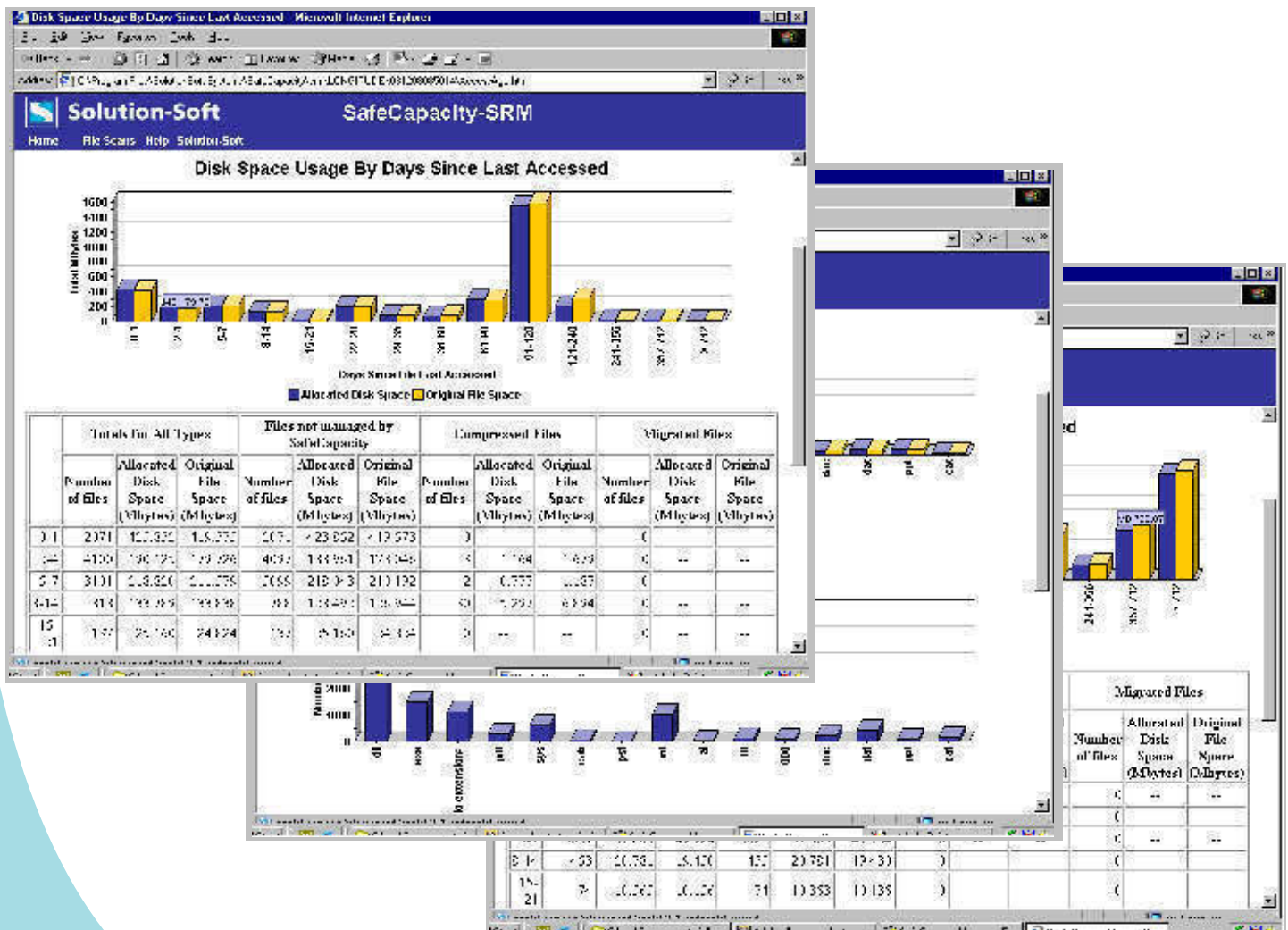- Eliminates out-of-disk-space events

SafeCapacity

Conduct Storage Audits with Visual Reports

SafeCapacity's robust SRM (Storage Resource Management) snapshot feature simplifies the process of making complex storage decisions. The graphical reports from SafeCapacity provide aggregate information on file attributes of data residing on NAS, SAN or Direct Attached Disk across your entire storage environment. The resulting graphs display information on your data by modification or access time, relative size, physical count or space used per file type, or even complex combinations of any of the above.

Users of SafeCapacity's SRM module typically will report scan speeds of over 1 million files per hour!

1 million file mark reached on a 300 Mhz. single-processor Sun Ultra 60

running on a 100 base-T network, files residing on NetApp 880 Filer NAS.

The resulting reports allow users to easily identify improperly allocated storage, target storage intensive users and applications, discover and quantify illicit data types stored in violation of corporate rules or simply perform a quick storage audit of existing resources prior to purchasing additional storage to ensure the proper equipment is acquired.
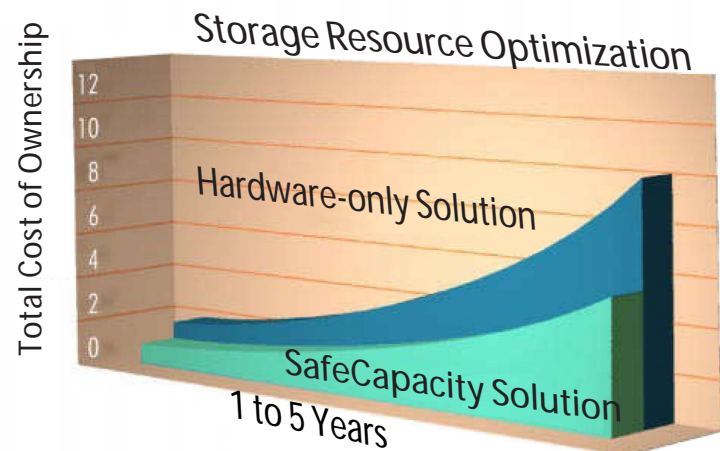
Eliminate Down-Time from Out-Of-Disk-Space Errors

A major storage management issue that causes down time is out-of-disk space. SafeCapacity's Capacity Downtime Protection features provide out-of-disk protection for the heterogeneous storage environment. Using a policy-based configuration, users establish high and low capacity thresholds that invoke the relocation of infrequently used files to an overflow disk-storage pool. Access to relocated files is transparent to the users and applications. The appearance and attributes of the files remain the same. SafeCapacity continuously monitors file systems, and seamlessly and automatically allocates more storage space when needed.

Automated Capacity Management Saves Time and Cost

SafeCapacity decreases the need to over provision storage resources on individual systems. As opposed to management by crisis, SafeCapacity automatically notifies system administrators when capacity reaches a predefined threshold and takes corrective action immediately. While your applications are still up and running, allowing you to address capacity issues at your leisure. SafeCapacity reduces IT spending and exposure to down time through policy-based capacity management. This solution enables employees to be more productive by allowing them to focus on other critical tasks.

SafeCapacity can save 20% to 45% over conventional hardware storage solutions.

Efficient Use of Storage Resources Reclaims 20% of Available Storage

SafeCapacity's Storage Resource Optimization features help you overcome your storage crisis with patent-pending technology that enables optimization of your existing storage resources through automated capacity management. This policy-based file relocation and/or compression allows more data files to be stored online. Additionally, SafeCapacity can leverage your existing storage resources and limit the requirement to over provision. SafeCapacity can reclaim at least 20% of your existing storage availability and reduce the growth rate of your storage needs.

SafeCapacity-NAS

Data Life-Cycle Management

Organizations have two primary reasons for retaining data, one of which is to fulfill a business purpose and the other to ensure the company adheres to the required data retention regulations imposed by industry or governmental policies.

The duration over which a set of data contains a business value varies greatly and has many levels of relative worth, from critical information needed on a daily basis,to files accessed on occasion, down to files that may possibly be needed for future reference. At some point, a large portion of data that was once critical will have gone through a natural business-value degradation and will reach the point that it is no longer needed for any business tasks or analysis. Interestingly, companies have information across this time/value spectrum that must be retained to guarentee compliance with restrictions imposed by various regualtory bodies.

A simple rule is data that is no longer needed for any critical business tasks or analysis should be moved to an archive system if retention is required. If there is no legal reason to maintain a copy of this information it should be cleansed from the storage environment. The process of implementing a proper data life cycle management process begins with the somewhat ardourous task of creating a set of business rules for quantifying the utility of all information combined with any legal impositions required, then formulating rules to allocate the data to the proper storage medium relative to need.

SafeCapacity is the easiest and most advanced way to manage your data retention. Following a policy that matches the defined business rules, SafeCapacity monitors data from creation time, moving files from one class of storage to another class of storage and then automatically deleting these files when the data is of no further value and is not longer mandated to be available. SafeCapacity's ability to transparently manage this process allows an organization to automate their data retention procedures thereby providing a significant reduction in the cost of storing data over its life span.

Achieve Optimum I/O Performance

The SafeCapacity-Hotfile option achieves the previously unobtainable goal of continuously maintaining optimum file I/O performance in mixed storage device systems, making short-work of its proven near-perfect IOPS [input/output per second] levels. Powerful file management that, until now, could only be partially realized and only the result of speculative guesswork, ongoing and time-consuming scrutinization of system access times, and regular, rigorous system file configuration and re-configuration by system administrators.

The Hotfile option monitors individual file I/O rates, instead of comparing disk utilization rates, identifying the most active "hot-files" in your system by name and location. Database and system administrators can identify and transparently migrate any file causing I/O bottleneck, quickly and with 100% accuracy.

Optimize Storage across Vendor Boundaries

Storage devices from different vendors have widely varying performance, capabilities, and cost. Until now, users have not been able to optimize storage across vendor boundaries. SafeCapacity solves this problem by allowing users to establish storage classes and automatically relocating data, based on user-defined policies.

SafeCapacity delivers seamless migration of files to any storage device without affecting performance. Using an advanced pass-through migration method, accessing files migrated through SafeCapacity occurs at line speed, essentially a function of the IO performance of the remote device. This revolutionary aspect allows users to match data to physical storage by access time and price per megabyte thus achieving the best optimization in a storage environment. As a result, more critical and frequently used data are stored on faster, high availability disks while less critical data are routed to slower, less costly disks. SafeCapacity provides a new level of storage optimization never before achievable!

Scaling Across All Storage Architectures

Interoperability and compatibility in heterogeneous environments are keys to successful enterprise-wide storage management. Adding additional storage is as simple as bringing it online in your environment and reconfiguring SafeCapacity to exploit it. SafeCapacity is compatible with all data storage architectures: Network Attached Storage (NAS), Storage Area Network (SAN), SCSI over IP (iSCSI) and Direct Attached Storage (DAS).

Platform Support

Solution-Soft SafeCapacity currently supports the following platforms. Check with your Solution-Soft sales representative or authorized reseller for the most current list of supported platforms.

>   Windows 2000 or greater, including MSCS Clusters

>   HP-UX, IBM AIX, NetApp filers, Red Hat Linux, Sun Solaris 2.7 and above

System Requirements

Disk space 25 MB, Memory 64 MB

Ordering Information

For more information or to order, please contact our sales team at:
Sales@Solution-Soft.com, (888) 884-7337 or visit our web site
www.Solution-Soft.com to download a free 30-day evaluation copy.

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PN DS-CAP2 12-09-2003