Network Computing's storagepipeline

Questionnaire

ENTER
CATEGORY
Comparative Review

Dear Data/Information Lifecycle Management Solution Provider,

The following is a questionnaire for our use in understanding and evaluating the numerous solutions that are collectively called data or information lifecycle management solutions by vendors. Our working definition of these types of solutions is “a software and/or hardware solution for migrating data through the storage infrastructure using automated policies that match data content and/or access characteristics to storage platform capabilities and costs.” If you would like to suggest amendments or revisions to this definition, please make your suggestions as part of this questionnaire.

Please respond as per the cover letter attached to this questionnaire. You can edit this document directly to provide your information.

Usage Scenarios

Since the capabilities of these solutions may vary, we are going to assess their effectiveness in the context of different usage scenarios.

Capacity Utilization Efficiency. These users mostly use a D/ILM solution to place data on platforms or media that are least costly, most capable and best suited to their access characteristics and “inherited” requirements in terms of retention, security, and criticality. Automated data migration may also be seen as a strategy for reducing TCO by reducing or capping administrative staff requirements.

Capacity Allocation Efficiency. These users are primarily interested in D/ILM as a mechanism for sharing capacity in the most efficient way and for eliminating unnecessary replication or junk data – often to defer additional hardware purchases. Automated capacity allocation may also be seen as a strategy for reducing TCO by reducing or capping administrative staff requirements.

Disaster Recovery and Business Continuity. These users seek to use a D/ILM solution to segregate data by its restoration priority in the wake of a disaster and to route data to the appropriate protection process (mirroring or continuous data protection, snapshot or disk-to-disk replication processes or tape backup). These users may also seek to leverage D/ILM to provide input to change management processes designed to keep plans up to date with burgeoning data.

Questions

Development Status and Objectives. Describe your vision of D/ILM and identify what features or functions your platform currently provides and what features or functions are still in development.

Softek Storage Manager is an ESRM solution that enables administrators to implement ILM strategies by:

- Providing a unified view of heterogeneous storage
- Profiling and analyzing data across the enterprise
- Taking direct actions to reclaim wasted space
- Optimizing use of differentiated classes or tiers of storage and the retirement of data that's no longer needed.

By better understanding their environment and maximizing existing resources based on business requirements, organizations can stop the cycle of constantly purchasing additional storage. More efficient utilization of existing assets and the placement of data on the appropriate tier of storage will result in immediate savings and more intelligent decision-making about storage requirements.

The "Softek Lifecycle Management" strategy is based on leveraging Storage Manager's unified view of storage, data profiling and active management capabilities. Data profiling capabilities can be used to identify and classify different types of data requiring different quality of storage (availability, performance, cost). Active Management features can then operate on the data and intelligently move the data between different tiers of storage based on policy (such as aging criteria), delete data, or archive data.

Softek Lifecycle Management enables IT departments to achieve the majority of the functionality they require to better manage the cost of their data infrastructure. Additionally, in a SAN environment, Storage Provisioner can be used in support of ILM to provision the appropriate quality of storage to an application and its data and to automatically mirror the storage based on policy.

Development Partners. List the vendors with whom you are working to deliver your D/ILM solution functionality.

Softek Storage Manager is a vendor-independent solution. The capability to execute custom commands based on lifecycle management criteria, allows users to leverage virtually any existing solutions that they may already have deployed.

For archiving, Softek Storage Manager ships with support for Veritas NetBackup, Tivoli TSM and Legato Networker. The architecture and design of Softek Storage Manager enables other solutions to be quickly and easily integrated and leveraged to support customer D/ILM initiatives.

Data Naming Scheme. What is your method for identifying data storage requirements or characteristics and for using those requirements or characteristics in building policies?

Softek Storage Manager can profile data based on several characteristics. Data can be profiled by application (MSOffice, email, etc.), by user, or by any of several data aging criteria. These profile characteristics can be used independently, or in combination, to give users a very powerful method for grouping data.

Softek Storage Manager will also identify the logical storage requirements of an application and map it to the underlying physical storage attributes. By associating logical attributes of applications, and data, to the physical storage infrastructure, moving data between tiers of storage can be easily achieved. Using the Softek Storage Manager Action Set Engine (policy engine) defining the policies to execute these data movement policies is a very simple task.

Access Frequency. Identify the mechanism by which your solution identifies how frequently specific files or datasets are being accessed and whether and how access frequency is used in migration policies.

Softek Storage Manager identifies the last time a file or dataset was accessed as its closest proxy for access frequency (i.e. files most recently accessed are also likely to be the most frequently accessed). By increasing the frequency of data scans, the storage administrator can have a higher degree of granularity for the last access date and time for each file.

Reports of the data scans can be run to identify file access characteristics across the enterprise.

As Softek continues to enhance the Softek Storage Manager platform, modifications are being planned to extend the capabilities to include more accurate modeling of access frequency through statistical sampling.

Storage Platform Characterization. Explain the mechanism that your solution provides for characterizing the performance capabilities and costs of specific hardware platforms for data storage so that this information can be used to target the appropriate storage platforms as destinations for automatically-migrated data.

Two key mechanisms are used by Softek Storage Manager for characterizing the storage platforms used for automatic data movement in an ILM implementation.

First are Storage Pools, which identify the physical characteristics of a set of storage. A related facility is the concept of Storage Requirements, which identify the logical requirements of an application, including cost and availability.

Storage Pools are associated with specific Storage Requirements to drive automated policies that migrate data through multiple tiers of storage based on any user-defined criteria.

End of Useful Life. Explain how your platform facilitates the automated removal and clean-up of data that has outlived its useful life and restoration of freed capacity for use by applications.

One of the pre-defined actions available in Softek Storage Manager is the automatic retirement of data based on data profiling – including aging characteristics, file types, location and size.

An administrator can use pre-defined data retirement criteria in Softek Storage Manager, based on how aggressive an organization wants to be regarding data movement, or in conjunction with regulatory compliance requirements for data retention and ultimately, retirement.

Once data has been identified as a candidate for retirement, Softek Storage Manager will automatically delete the files and make that freed capacity available for use by applications. Softek Storage Manager performs this action across multiple servers and applications on a broad range of operating platforms that include; Windows, Unix, Linux, and NetWare, regardless of the underlying network topology.

Policy Articulation. Describe how policies are created and how they are applied to existing data.

Softek Storage Manager Action Sets are defined by using a Wizard-like interface that follows a simple workflow for creating and assigning policies to servers (or groups of servers that have similar data lifecycle criteria). Action sets can define a cascading series of events, such as moving data between several tiers of storage based on various policy criteria.

Device Support. What storage devices does your product support? Are their any proprietary devices (controllers, arrays, HBAs, switches, SAN topology, virtualization products, etc.) that are required for your solution to work?

Softek Storage Manager supports any storage device.

Softek Storage Manager is a vendor-neutral solution that has no dependencies on any proprietary devices. By managing data from a logical point of view, any underlying topology is supported. Softek Storage Manager supports SAN, NAS and DAS environments on a broad range of platforms (Windows, Unix, Linux and NetWare).

Resource Consumption. How much bandwidth and server CPU "overhead" is introduced by your solution (e.g., to support polling processes, migration processes, agent processing, access frequency counting, etc.).

Softek Storage Manager micro-agents are installed on all managed servers in the environment. The agents run as either a service or daemon and when not actively polling the data or executing actions these agents, use no resources.

These agents are mostly idle. However, during scanning there is some resource utilization by the agents. Typically this does not exceed 10% of available resources. However, to minimize any impact on production servers scans can be scheduled to only happen during non-peak times.

Flexibility. Does your solution have multi-vendor support? Can data, once integrated into your D/ILM scheme be migrated readily between your solution and other solutions in this space? Is your solution interoperable with other solutions in this space?

Softek Storage Manager supports a true heterogeneous environment. All data is stored in a standard SQL database.

Softek Storage Manager has capabilities to export and share information from its repository with any other application that can use database files or csv files as input.

Since Softek Storage Manager contains the metadata about files and applications and not the actual data, it is very easy to share information with other solutions.

Speeds and Feeds. How should a prospective customer compare the relative performance of competitive solutions in this space? What are the appropriate performance measures or metrics to use in evaluating competitive solutions?

Customers should principally evaluate the performance of a D/ILM solution on how quickly and easily it can be installed and deployed, how easy the solution is to use, the management overhead associated with the solution, and the scalability of the solution for the customer's environment.

Softek Storage Manager is one of the industry's easiest solutions to install and deploy Softek Storage Manager does not require the management of stub files or symbolic links to implement a data movement strategy. By eliminating this expense (time and resources), Softek delivers improved productivity and performance.

Scalability is another very important metric that should be considered when evaluating a D/ILM solution. A solution that does not scale will create additional management concerns. Staff and resources will have to be dedicated to maintaining the solution as opposed to doing other more productive activities.

Softek Storage Manager has been proven to scale for the largest environments. A great deal of effort has gone into supporting environments with over 1,000 servers and hundreds of millions of files from a single centralized server. By lowering the deployment and management costs, Softek delivers improved performance and savings for customers deploying D/ILM solutions.

Interconnect Support. List the network or fabric interconnects that you support. Is there an optimal interconnect for data movement for your solution? What about for management?

Softek Storage Manager supports whatever interconnect or network that an administrator may be using. Softek believes that to be a truly independent solution, its products need to be able to layer into a business' existing environment without requiring administrators to make massive changes to support a new solution.

Protocol Support. List the storage networking technologies supported, including FCP, Ethernet, iSCSI, FCIP, iFCP, Parallel SCSI, SAS, and network file system protocols (NFS, CIFS, HTTP, DAFS).

Softek Storage Manager supports any protocol that is supported by the servers that our agents are installed on. Managing from this logical allows Softek Storage Manager to support the broadest range of operating environments.

Data Type Support. List the data types supported by your solution, including file types and file systems, databases, and hybrids such as email. Comment on the granularity of your D/ILM solution: will it support the migration of database components or subsets, subsets of email files, etc.?

Softek Storage Manager supports all file types. Data is managed from a central repository based on metadata collected from each managed server, so any file that the operating system can access can be managed from Softek Storage Manager.

Softek Storage Manager supports a very broad range of operating system and file systems: Windows NT/2000/XP/2003, Solaris 2.6, 7, 8, 9; HPUX 11 & 11i; AIX 4.3.3, 5.x; NetWare 5 & 6; Redhat and SuSE Linux; and MVS, OS/390 & zOS. File systems supported include: EXT 2 & 3, FAT 16 & 32, HFS, JFS, JFS2, LFS, NFS, NTFS, NTFS5, NSS, UFS, VxFS and XFS

Cost. List the cost of your solution or provide some means for calculating cost for a specific environment.

Softek Storage Manager pricing is based on a server/agent model. The Storage Manager Server has a list price of $39,000. This includes the console, repository, Action Set Engine, Reporting and correlation engine. Each agent has a list price of $795.

Standards. List any relevant open standards upon which your product is built.

Softek Storage Manager is built on an open platform. There are no proprietary requirements for hardware, on either the target or destination site, and the solution is completely network and interconnect independent. In addition, Softek Storage Manager easily integrates with existing tools for data moving, archiving or backup, so that a storage administrator will not have to perform a "fork lift" upgrade to implement.

Other features. List other pertinent aspects of your solution.

In addition to profiling data and creating policies for data movement, Softek Storage Manager has a very powerful and robust Reporting Engine. The reporting capabilities of Softek Storage Manager give users the ability to make decisions based on reports. These actionable reports drive decisions and monitor the effectiveness and compliance with policies that have been created.

Miscellany: Please note any additional information that you think would be worthwhile for prospective customers to consider about your solution or other solutions in this space.

As a component of an organization's D/ILM initiative, Softek Storage Manager is an ideal solution to be used for the profiling of data and the creation of policies to move data automatically between tiers of storage.

Traditionally, D/ILM solutions have been based on HSM types of products. HSM solutions have not been broadly accepted in the open systems environment for a number of reasons. First, managing and maintaining stub files and symbolic links can become more of an IT management support and cost issue than the benefits achieved by implementing the solution. Second, most open systems HSM solutions do not scale well to support large customer environments. Third, the ability to recall data transparently and automatically can create problems with the amount of space available to restore to.

However, once data has not been accessed in a certain amount of time, there is a very small low probability of that data ever being accessed again. Softek has chosen to give users the most benefit of a D/ILM solution with the simplest and fastest deployment strategy. By minimizing the focus on auto-recall, D/ILM becomes a much easier solution to deploy. Softek Storage Manager provides the foundation for implementing D/ILM solution with the least amount of support and disruption to the IT organization.

The bottom line is that Softek is delivering a key part of an organization's D/ILM solution today. This is not a long term vision that will not be available for customers to implement for another year or more. Softek does not require that customers purchase new hardware, or pay for a long professional services engagement. Softek offers a very cost effective solution that customers can rapidly and easily deploy today.

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