



SANscreen: Datacenter Automation for Storage Environments

Traditionally discussions about enterprise storage have been dominated by two core questions. How much is needed? How to minimize storage costs? Ptak, Noel & Associates (PNA) believes this discussion is changing. As SAN environments become more complex and as more business applications and services interact with these environments, the more necessary, indeed, the more vital it becomes to have service-oriented, process-enabled management tools specifically for the storage environment. The growing adoption of virtualized server environments will only increase the need for such tools. Let us take a look at how NetApp's SANscreen suite is facilitating this change.



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SANscreen Suite

SANscreen's primary focus is on enabling storage managers to increase service quality, return on storage, and compliance by managing storage as a datacenter service operating in support of end-to-end business services. The SANscreen suite simplifies many of the basic "datacenter automation" tasks required in today's storage environment. These include tasks for:

- An agentless collection process that gathers configuration information from arrays and switches throughout the SAN – providing global visibility into the current environment.
- Data access path discovery and service monitoring that provides an independent feedback loop to verify that the devices are working together to provide the level of services required to support an application.
- Redundancy and replication policies to eliminate configuration mistakes that can cause or aggravate outages or service problems.
- Automated change tracking, trending and reporting capabilities to simplify compliance auditing, capacity planning and chargeback activities.

NetApp's SANscreen also provides specific capabilities for handling the increasing complexity of managing virtualized server environments connected to enterprise SANs. See Figure 1 below.

infrastructure virtualization will only increase the pace of change (not to mention business mergers and acquisitions).

To date most datacenter automation efforts have focused on server and application management tasks. Yet automation of network, database, and storage management are equally important because without a complete, end-to-end visibility of the entire infrastructure, service management will not be effective. NetApp's SANscreen provides the needed automation capabilities specifically for the storage environment.

SANscreen takes on another critical challenge. That is the effort required to convert streams of technical storage data into the key indicators that are understandable by and meaningful to the non-storage expert. Using the SANscreen suite of products, business or application managers need to know nothing about storage array metrics, yet can make sense of a traffic congestion map. SANscreen's dashboards uniquely provide this data-to-key indicator conversion capability, thereby allowing business managers, IT executives and storage managers to have intelligent service-oriented discussions about their storage infrastructure.

Finally, the SANscreen solution can provide data and information in as close to real-time as one can get today. Typically, IT staff make operational decisions using storage resource management (SRM) software whose data is between 12 and 24 hours old depending on the polling interval. This data is then compared and analyzed using offline spreadsheets further removing the operational value from the data. In word, current systems are batch reporting oriented vs. real time management focused. SANscreen's uniqueness comes from its ability to collect information in real time, model it in real time, and promptly provide recommendations for corrective action. The SANscreen suite separates itself from the competition in its ability to use timely information about what is happening to quickly head-off potential problems.

The Final Word

The unique combination of service-orientation, process support, and conversion of storage management data into understandable indicators are the three things that PNA believes make SANscreen more than a nifty tool for storage managers. It provides timely information in formats that are easily grasped by business and non-storage experts. The availability of this information encourages team interaction and improves the communication between storage and business types. Timeliness of information and clarity in communication all add to the power and value of SANscreen. It is not just another management tool with some simple twist or slight change – it is specifically designed and enhanced to work in today's dynamically changing and virtualized environment. It is a key component of an enterprise-wide business service management solution.

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About Ptak, Noel & Associates LLC

With a belief that business success and IT success are inseparable, Ptak, Noel & Associates LLC works with clients to identify, understand and respond to the implications of today's trends and innovations on the future of IT Operations.

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