Cisco Data Center Networking (DCN) Storage Assessment

Organizations are increasingly looking for ways to reduce the cost of storing and managing data, while the volume of data that needs to be stored is growing exponentially. Inflexible and inefficient storage designs have resulted in very low utilization of resources. Through migration of older environments and consolidation of dispersed storage area network (SAN) islands, a significant improvement in utilization and availability and reduction in complexity can be achieved. The use of SAN security and SAN management best practices can enhance the security and manageability of the SAN infrastructure.

SERVICE OVERVIEW

The Cisco® Storage Assessment analyzes the existing storage environment as well as the customer requirements and situation. Using this information, recommendations are provided. The Cisco Storage Assessment also provides a longer-term storage architecture blueprint and presents the potential next steps in this evolution.

LEADING CISCO STORAGE EXPERTISE

Cisco storage consultants and engineers have hands-on experience in every phase of the planning, design, implementation, operation, and optimization of storage environments. They hold industry certifications and have a broad range of experience from working with storage operations at many global Fortune 500 companies. The assessment covers topics such as storage consolidation, SAN island consolidation, business continuity and disaster recovery, storage security, IP SAN, and SAN architecture evolution.

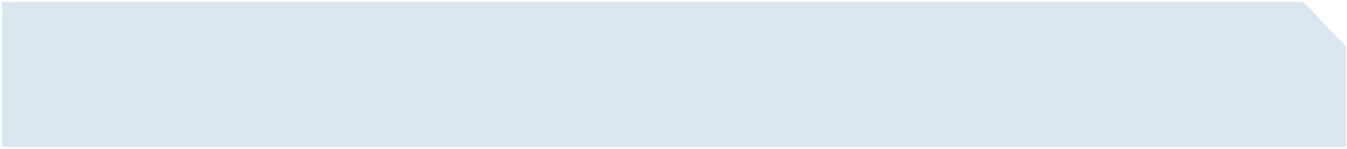Table 1 summarizes the topics and potential benefits of the Cisco Storage Assessment.

Table 1.　　Assessment Topics and Benefits

Cisco Storage Assessment Topics	Potential Benefits
General storage infrastructure and SAN consolidation	
• Utilization of storage resources • Direct attached storage (DAS) to SAN migration • SAN consolidation • Multisite interconnect and SAN extension • Consolidation through Small Computer System Interface over IP (iSCSI)	• Improve the use of storage resources. • Achieve cost saving through SAN island consolidation. • Improve the performance of the current SAN infrastructure.
Business continuity and disaster recovery	
• Availability and resiliency of current SAN infrastructure • Overall recovery time objective (RTO) and recovery point objective (RPO) • Data replication and mirroring	• Increase the availability of the storage environment. • Implement the latest and most cost-effective SAN solution to prepare for disaster recovery. • Analyze business continuity requirements and plan the necessary steps.
SAN security	
• Cisco MDS 9000 family SAN security features • Device authorization and traffic isolation • Data integrity and encryption • Virtual SAN (VSAN) roles	• Protect data integrity. • Avoid unauthorized access. • Provide a comprehensive SAN security solution.
SAN management and operation	
• SAN troubleshooting • SAN management tools • Processes and people (change management, etc.) • Skill profile and training requirements for SAN engineers	• Increase the manageability of the SAN infrastructure. • Enhance the skill profile of SAN engineers. • Analyze SAN security and plan steps to enhance it.
Storage architecture evolution and intelligent fabric applications	
• Advanced SAN features (VSAN, storage virtualization, etc.) • SAN architecture plan	• Reduce costs with the latest SAN technologies. • Define a clear SAN architecture plan and verify the implementation steps.

ASSESSMENT DELIVERY PROCESS

The Cisco Storage Assessment is delivered in a structured process that consists of the following phases:

1. **Data collection**—Cisco sends the customer a questionnaire to collect baseline data about the customer's storage and SAN infrastructure. The collected data helps Cisco assess what the customer requires and provide an assessment that is very specific and focused on the customer's needs. The high-level data collected provides information about the range of storage, server, and other data center networking devices. Baseline data related to SAN consolidation, business continuance, SAN security, and storage virtualization is collected as well.

2. **Storage workshop**—In this workshop, conducted at the customer site, the Cisco storage architect and customer IT team jointly review input from the questionnaire and collect data to determine the status of the data center infrastructure to outline requirements, constraints, processes, and future deployment strategies

3. **Analysis**—The Cisco storage architect analyzes the collected information and develops an initial draft of the Cisco Storage Assessment report. The initial draft is created by the Cisco storage team in conjunction with several members of the customer IT team. The intent of this report is to solicit feedback from the customer as to whether the draft recommendation meets the customer's general requirements.

4. **Completion of the report**—The Cisco storage architect evaluates and incorporates the feedback from the customer and Cisco storage architect team and continues to finalize the report. The final Cisco Storage Assessment Report has the following structure:

- I. Executive Summary
- II. Current Status of SAN Infrastructure
- III. Customer Requirements Analysis
- IV. Assessment Findings
- V. New Storage and SAN Architecture Proposal
- VI. Storage and SAN Architecture Evolution
- VII. Conclusions

5. **Review and final presentation**—Electronic copies of the Cisco Storage Assessment Report are sent to the customer for review prior to presentation of the report, in person, to the customer's management at the customer's location.

AVAILABILITY

The Cisco Storage Assessment is available in all Theaters.

SUMMARY

The Cisco Storage Assessment helps customers assess how their storage environment can benefit from migration to a more consolidated storage area network environment. The Cisco Storage Assessment is part of Cisco Advanced Services. Cisco Advanced Services helps speed the migration of advanced technologies into your network and offers support throughout the network lifecycle.

ORDERING

The Cisco Storage Assessment is a custom service offering and is ordered through a statement of work and purchase order.

FOR MORE INFORMATION

For more information about the Cisco Storage Assessment or Cisco Advanced Services, contact your Cisco Systems® representative.

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