

Gather valuable insights into existing servers, storage and network infrastructure. Consolidate and optimize while increasing agility with Infrastructure Audit Services from Hitachi Data Systems.

TRANSFORM VIRTUALIZATION ECONOMICS RELIABLE TRUSTED INNOVATE INFORMATION
GLOBAL CHANGE INTELLIGENT TECHNOLOGY SERVICES VALUE INSIGHT OPPORTUNITY
SOCIAL INFRASTRUCTURE INTEGRATE ANALYZE DISCOVER COMPETITIVE

Infrastructure Audit Services From Hitachi Data Systems

Evolving Complexity Increases Need for Thorough Understanding of Environment

IT Assessment Challenges

Information technology infrastructures have continued to grow in size and complexity. Servers, storage area networks (SANs), and network attached storage (NAS) landscapes have grown exponentially over time into both larger physical and virtual footprints. With the increase of size and complexity of virtualized server, storage and network infrastructures, organizations are often unable to collect data on their environments and compare it to best practices. As a result, organizations are challenged to identify how to optimize their IT operations. SANs are the backbone for the rapid, uninhibited delivery of data to applications. That means continuous SAN availability is a critical requirement for business success in many market segments. SANs are also becoming increasingly complex, virtualized, multivendor environments with embedded services. This complexity, coupled with

frequently changing infrastructure, has made “fabric blindness” a growing threat to information availability.

In planning an infrastructure, organizations should first answer the following types of questions:

- Does my virtualization plan include a single point of failure?
- Are all my applications supported in a virtual environment?
- How will domain controller placement work?
- What is the contingency plan if a host server dies?
- How much of an outage will my applications experience?
- What are the best storage systems and architecture to support my highest growth type of data: unstructured and semi-structured?

Without the ability to assess both existing infrastructure and visibility into the SAN, organizations cannot achieve overall objectives. Top objectives include reducing costs, improving efficiency, and becoming more flexible and aligned to their business.

BENEFITS AND VALUE PROPOSITION

- Quickly detect any potential NAS, SAN, server, storage performance, or storage availability issues.
- Reduce risk by identifying evolving issues before they become real problems.
- Obtain a detailed Fibre Channel latency analysis.
- Identify IP network latencies.

Comprehensive Infrastructure Solution

Infrastructure Audit Services from Hitachi Data Systems provide a detailed and comprehensive picture of your IT infrastructure. They assist with future planning, provide a comparison to best practices, and present the basis for designing future IT capabilities.

In these services, Hitachi Data Systems Global Solution Services (GSS) consultants collect and analyze configuration and capacity data for IT infrastructure, including the following areas:

- NAS environment and performance.
- Storage server and virtualized environment.
- Network footprint and performance.

Audit Capabilities for SAN Environments

SAN monitoring and management tools lack the critical physical layer information essential to effectively diagnose and prevent issues as well as improve the SAN infrastructure; it is difficult for these tools to identify hard-to-find and hidden issues, deteriorating devices, and links. With the capability to probe into the SAN infrastructure physical layer, Hitachi Data Systems is able to quickly identify performance and behavior anomalies and trouble spots on any SAN. The services:

- Scan all levels of connectivity to identify potential communication issues on the Fibre Channel network.
- Highlight potential issues that are on the verge of or have exceeded the Fibre Channel “rules of thumb” SAN infrastructure behavior.
- Provide a comprehensive report of analysis and findings at the conclusion of the service.

You can then choose to request additional services to provide detailed capacity planning or to assist in the resolution of issues found during the Infrastructure Audit Services.

The Infrastructure Audit Services employ the most advanced SAN monitoring and analysis tools available today. These are the same market-leading tools used by leading SAN

storage and switch vendors to develop and support their SAN devices. Completely invisible and nonintrusive to the SAN, fault-tolerant traffic analysis points (TAPs) provide access to the links. The TAPs are installed during the service and can remain in place for future use, providing a powerful new permanent non-disruptive diagnostic layer. This service is offered on demand or at regular predetermined intervals, based on your precise need.

Audit Capabilities for VMware and Storage Environment

One of the key motivations for organizations in adopting VMware is to improve server consolidation and resource utilization. A good measure of server consolidation is to quantify the number of virtual machines (VMs) running on each physical host. A higher number (often called VM density) directly points to better consolidation. With the Infrastructure Audit Services, Hitachi Data Systems provides reports on key metrics. These reports help to foster an understanding of capital efficiency and correlate the efficiencies with performance. The services:

- Provide ongoing insight into your virtualized server and storage infrastructure.
- Supply information and recommendations for your biggest concerns in terms of system performance tracking and the business impact in terms of capacity efficiency.

Information from the audit covers 3 different aspects: configuration, events and performance.

KEY DELIVERABLES

- Identification of performance and behavior anomalies and potential trouble spots.
- Characterization of existing and potential NAS, SAN, server and storage infrastructure issues with comparison against best practices.
- Recommendation for future actions.

Audit Capabilities for Additional Environments

Hitachi Data Systems will continue to add capabilities to the Infrastructure Audit Services for additional environments, such as NAS, in the future. The audit capability for NAS environments will provide a comprehensive view of key metrics to identify performance and overall capacity of your NAS systems. These metrics offer insight into how the storage system is supporting usage of unstructured data. The results are then compared to Hitachi Data Systems best practices. Through consulting with your storage team, our consultants can recommend how to improve your NAS environment.

Put Hitachi Data Systems to Work for You

Take the next step. Contact Hitachi Data Systems to see how we can reduce the cost and complexity of managing your virtual server, storage and SAN infrastructure and accelerate your success. For more information, visit us at www.HDS.com.

Hitachi Data Systems

Corporate Headquarters
2845 Lafayette Street
Santa Clara, CA 96050-2639 USA
www.HDS.com

Regional Contact Information
Americas: +1 408 970 1000 or info@hds.com
Europe, Middle East and Africa: +44 (0) 1753 618000 or info.emea@hds.com
Asia Pacific: +852 3189 7900 or hds.marketing.apac@hds.com

