

Effective Remote Office and Back Office Solutions

Hitachi Data Ingestor with Silver Peak offers a completely integrated, high-performance, edge-to-core storage solution for distributed consumers of IT.

A Seamlessly Scalable, Cost-effective Remote Office Storage Solution

Many business enterprises have remote operations to expand their reach into the global marketplace. However, if not managed well technology sprawl can occur at these remote operations and result in increasing complexity and escalating capital and operating expenditures (CAPEX and OPEX). Technology sprawl is typically caused by masking the real problem of getting data moved from the remote operation to the central repository.

Remote Office and Back Office

As experienced in the central data center, remote office data creation and storage of unstructured data has outpaced structured data. At the same time, there is an increasing requirement to back up and/or archive to a centralized location. Access to consolidated storage is typically achieved over wide area network (WAN) links, which are increasingly shared by data traffic as well as unified communications, such as voice over IP (VOIP) and video. Given these factors, remote offices are challenged with moving data over long-distance WANs, experiencing latency and failed operations that result in increased costs. To

mitigate these costs and limit impact to daily operations, more capital expense is applied to increase WAN bandwidth or invest in more hardware. Additionally, remote offices typically do not have onsite IT staff, thus putting more pressure on cost and operations.

The Solution

The combination of Hitachi Data Ingestor (HDI) and Hitachi Content Platform (HCP) with Silver Peak's WAN Optimization appliances offers a simple, cost-effective solution. By accelerating WAN performance and eliminating the most common WAN bottlenecks, this proven architecture enables remote offices to back up, archive and retrieve files quickly while avoiding technology sprawl, complexity and the need for onsite IT staffing. With HDI sending data to centralized HCP, remote office environments can reduce their dependence on local storage. In doing so, they can reduce the cost and complexity of management, backup, archiving and compliance. At core IT data centers, HCP ensures protection, security, reliable access, preservation, compliance, adherence to policies and a host of other capabilities that

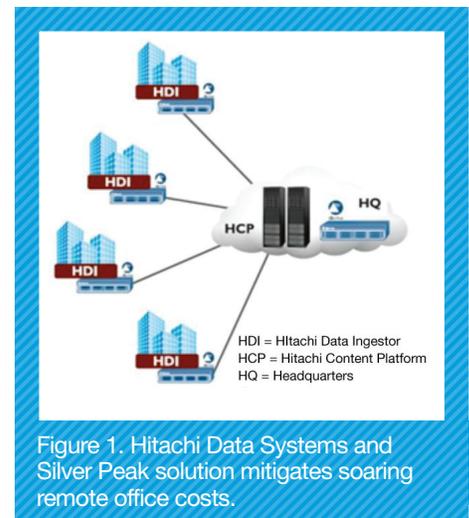


Figure 1. Hitachi Data Systems and Silver Peak solution mitigates soaring remote office costs.

simplify management through the automation of complex processes. Silver Peak appliances complement HDI by overcoming common WAN challenges while at the same time improving remote office user experiences with other applications running over the same shared WAN link, including video, VoIP, virtual device interface (VDI) and other applications.

By accelerating at the IP layer versus an application layer approach, Silver Peak appliances can uniquely help distributed enterprises with all applications running over the WAN. The result is significant cost containment producing savings across the business enterprise.

About HDS File and Content Services

Hitachi Content Platform (HCP)

Hitachi Content Platform is a multipurpose, distributed storage solution that addresses many challenges in the growth of unstructured data. An intelligent, content-based system, it supports multiple tiers of storage for a wide range of unstructured content, all in a single platform.

Other key HCP features include:

- Content immutability (WORM) capabilities
- Storage-layer content retention capabilities
- Encryption of data against unauthorized access
- De-duplication capabilities
- Replication services for disaster recovery
- A highly scalable architecture: up to 40PB
- NDMP offload to nearline resources

Hitachi Data Ingestor (HDI)

Hitachi Data Ingestor presents a standards-based file system interface that is tightly integrated with HCP to provide seamless access and a wide range of advanced storage features. Through a minimal footprint or virtual appliance, HDI sends data from the edge to a core infrastructure using HCP. HDI provides:

- An on-ramp to the cloud
- Encryption of data against unauthorized access
- Replication services for disaster recovery
- CIFS and/or NFS interface for HCP

OPTIMIZED EDGE-TO-CORE STORAGE SOLUTION FEATURES

Hitachi Data Systems file and content solutions and Silver Peak appliances deliver exceptional cost efficiency and savings by providing optimal performance for real time data transfer from remote operations to the centralized data center.

Hitachi Data Ingestor and Hitachi Content Platform Features and Benefits

- Superior data protection: write once, read many (WORM), object authentication, encryption, remote replication and RAID
- Infinite edge-to-core accessible capacity: up to 40PB
- Hardware-accelerated network storage: up to 1600MB/sec throughput for speedy archive and retrieval

Silver Peak Features and Benefits

- Network memory provides de-duplication and compression for WAN traffic. Repetitive data is delivered locally rather than sent across the WAN, resulting in greatly reduced WAN bandwidth.
- Network integrity addresses line conditions in remote office WAN connections, like packet loss and out of order packets, resulting in improved throughput. Quality of Service (QoS) prioritizes traffic based on class and type, allowing multiple types of traffic to share a common link without affecting quality.
- Network acceleration mitigates the impact of latency (distance) across the WAN through TCP and CIFS acceleration techniques.
- Secure Content Architecture keeps data secure with AES encryption for data at rest and IPsec for data in transit across the WAN.

Combined Features and Benefits

- Drastically reduce OPEX and CAPEX via WAN performance and scalable architecture.
- Scalable solution from a single box answers the challenges of a multifacility environment.

About Silver Peak

Silver Peak enables robust WAN acceleration that addresses bandwidth, latency, and packet loss and reordering issues that are common to most enterprise environments. Unique optimization techniques are performed in real time at the network (IP) layer to ensure maximum performance across the widest range of applications and WAN. Key features include:

- Network acceleration
- De-duplication and compression technology
- Forward error correction and packet reordering

- QoS policies prioritize WAN traffic
- 128 bit AES encryption, which protects all data stored on appliances
- Secure transmission (IPsec)

For More Information

For more information regarding effective remote office and back office solutions, please visit: www.hds.com.



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