The Eco Symbol is a label placed on products that meet NEC's prescribed environmental soundness standards. Eco Symbol products must be environmentally superior and assure transparency.

RoHS Compliance

This product complies with the European Union’s directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).

Environmental Compliance

- Eco Symbol
  - The Eco Symbol is a label placed on products that meet NEC's prescribed environmental soundness standards.
  - Eco Symbol products must be environmentally superior and assure transparency.

- REACH Compliance
  - This product complies with the European Union’s directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS).
Object Storage for the Age of Big Data Takes the Stage.

Daily customer analytics, log data (sensors etc.), medical/surveillance video data, email, voice recording... Is your storage environment up to the task of daily big data processing? If you’ve been looking for a solution capable of handling these new challenges, NEC Storage HS6 Object Storage is the ideal choice. The core technology of the popular NEC Storage HS series has been enhanced with the addition of Object Storage-oriented functionalities. Not only does this object storage appliance store your company’s big data safely and efficiently, but also provides instant access to that data when it is needed.

Usage Example ①

Simple and efficient storage for various types of business data

Storage requirements are constantly changing with the increase of unstructured data such as images, email or sensor logs. With NEC Storage HS6-50A, capacity can be increased as needed, and performance can also be upgraded when required. Freely scale-out in a way that best matches the traits of your business. Data management is handled as a single pool, so even when capacities move into the petabyte (PB) level, administration stays simple and capacity usage remains efficient.

[Objective]
Reduce the Cost of Storing Ever-Increasing Internal Data

- Cost of investment can be kept low initially, and capacity expanded when needed.
- Further reduction of storage costs through layering integration with tape devices.

[Solution]

Safely Store Valuable Data for the Long Term

- Automatic redistribution of data when replacing nodes.
- Data resiliency that can stand up to simultaneous failures.
- WORM and encryption features adapted for compliance.

High-speed Storage of Large Data Volumes

- Faster access through multi-node parallel processing.
- Instant compression & storage of images with High-Speed Image Compressor.

Usage Example ②

Notable reduction of storage costs through layered management

By taking advantage of specialized archive software, infrequently accessed data can be moved to the secondary storage. This not only frees up space on your primary storage, but also improves overall performance and shortens backup times. For even greater savings on storage costs, tape devices can also be layered in and used for data storage, and the entire process can be automated (by configuring policies in advance) to help reduce personnel workload.

Fully Loaded with the Newest Features for an Advanced Archive System

In recent years, much attention has been focused on the collection and analysis of big data being output by image and video sensors used in multiple sectors of industry. NEC has successfully developed an image compression engine that encompasses both excellent compression ratios and high performance. From a performance standpoint, it matches the high resolution and compression of JPEG 2000 at 10 to 40 times the speed. This innovative new technology is built in to the NEC Storage HS6, and allows extremely large image files to be stored using less space with no loss in quality, and in real-time.

Cutting edge high-speed image compression engine

<table>
<thead>
<tr>
<th>Compression Speed</th>
<th>Compression Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNG</td>
<td>JPG2000</td>
</tr>
<tr>
<td>JPG2000</td>
<td>JPEG-LS</td>
</tr>
<tr>
<td>High-Speed Image Compressor</td>
<td></td>
</tr>
</tbody>
</table>

Data requiring long term retention (medical or surveillance image data, designs, email, etc.) can be securely managed. By sequentially replacing old nodes with new nodes, data is automatically migrated to the new nodes. Because of this, no additional expense is needed for migration even when considering data at the terabyte/petabyte scale. When compared to everything involved with constructing a new system and migrating data, the associated time and costs required are significantly lower, providing a huge benefit to your ROI.

Secure and efficient management of data for long-term retention

In the age of big data it has become necessary to prepare for levels of data increase that are difficult to predict. NEC Storage HS6 is designed with an easy and flexible scale-out architecture which allows nodes to be added to increase performance and capacity. By starting small, and expanding only when needed to accommodate data growth, cost of investment can be optimized.

Scale-out architecture keeps investment costs under control

When archiving crucial business data, a higher level of reliability and availability is needed. The NEC Storage HS6 employs a redundant and distributed data structure that can withstand a simultaneous failure of 3 HDDs (can be configured to handle up to 6 HDDs), and with the automatic restoration function, reconstruction is performed in the shortest time possible. With this advanced technology, the risk of data loss is minimized to the lowest possible levels and provides a buffer of protection that surpasses RAID. Used in conjunction with the replication functionality to store a copy at a remote location, the risk of data loss from natural disasters can also be significantly mitigated.

Exceptionally dependable data protection

In addition to the encryption functionality that protects against data leaks, WORM support is available to protect your data against malicious or unauthorized file alteration. Furthermore, our data shredding method fully complies with U.S. DoD Standards (DoD 5220.22-M) to guarantee that when data is no longer needed, it is completely erased and unreadable.

Highly reliable functionality adapted for regulatory compliance

Performance

Expand Performance of Capacity when Needed

Capacity

Reconstruction: 24 hours
Reconstruction: 1 hour

Exceptional data protection and reliability

File I/O not included. (Test Image: 2560x2048 RGB 24-bit)

Evaluation Environment: Core i7-3960X 3.30GHz Windows7 64-bit utilizing a single thread.

Image Storage System Log Collection System

File Server

Primary storage NEC Storage HS6

Secondary storage Tape device

File server manages the layered structure between the primary storage and the tape device.