Hitachi TrueCopy™ Heterogeneous Remote Replication Software

For the Hitachi TagmaStore™ Universal Storage Platform and Network Storage Controller

For everyday uptime improvement and rapid recovery in the event of an outage, Hitachi TrueCopy Heterogeneous Remote Replication software duplicates data from any storage system to any other, across any distance.

Hitachi TrueCopy Remote Heterogeneous Replication Software—Replicate Across Any Distance

Hitachi Data Systems provides innovative, storage-based technology solutions for facilitating continuous business operations for all companies. Business continuity means partnering with you to gain an understanding of your key business challenges and requirements and providing robust, application-focused storage solutions that enhance operational efficiency and resilience.

In today's extremely competitive business climate, organizations of all sizes must have the ability to move data to a secondary site that can take over critical application processing if the primary site is compromised. Quick recovery time is crucial, but traditional data recovery processes are labor-intensive and can take days.

Hitachi TrueCopy™ Heterogeneous Remote Replication software automates the recovery process, enabling normal business operations to resume in a matter of minutes rather than hours or days. Leveraging the virtualization capabilities of the Hitachi TagmaStore™ Universal Storage Platform or the Network Storage Controller, TrueCopy software provides host-independent heterogeneous data replication across any distance, without affecting application performance. Copies generated by TrueCopy software can be used for production, rapid recovery following an outage, disaster recovery, data warehousing and mining, or migration applications.

Both synchronous and asynchronous versions of TrueCopy software are available for open systems and mainframe environments. TrueCopy software also can be integrated with Hitachi ShadowImage™ Heterogeneous In-System Replication software to enable robust business continuity solutions. In addition, TrueCopy software’s synchronous capabilities can complement Hitachi Universal Replicator software’s asynchronous replication solutions to provide advanced replication capabilities among multiple data centers.

Business Benefits

Ensure Business Continuity

- Reduces recovery time dramatically by replacing slow and expensive tape-based restores with continuously available online copies
- Improves business resilience by enabling frequent, nondisruptive disaster recovery testing with an online copy of current and accurate production data
- Provides centralized, automated, and host-independent data mirroring for mainframe, UNIX, and Microsoft Windows environments over any distance
- Reduces the frequency and duration of planned outage events, such as system maintenance and data backups
- Enables multiple, nondisruptive point-in-time copies up to the point of an outage
- Facilitates compliance with government mandates and regulations governing wide-area disaster tolerance
**Improve Productivity and Processes**

- Improves productivity and flexibility by providing replication between any two storage systems, including third-party storage, via the virtualized storage pools managed by the Universal Storage Platform or Network Storage Controller
- Improves service levels by reducing planned and unplanned downtime of customer-facing applications
- Optimizes resource utilization by offloading processing and data to alternate systems that can be located anywhere
- Performs backups on a secondary system while business operates at full capacity on a primary system
- Simplifies site maintenance and application development by replicating up-to-date data to a local or remote site without affecting production applications

**Feature Highlights**

**Synchronous and Asynchronous Modes**

- TrueCopy software with synchronous capabilities yields the highest degree of data integrity, at any distance because its real-time copies are the same as the originals.
- TrueCopy software with asynchronous capabilities delivers premier data integrity at any distance with minimal performance impact on the primary system. TrueCopy software supports fast restarts and recovery by ensuring proper database update sequences for each transaction during transmission.

**TrueCopy Software for the Universal Storage Platform and the Network Storage Controller**

TrueCopy software's synchronous capabilities can provide the highest levels of data integrity for local or metropolitan areas, while Universal Replicator software facilitates asynchronous replication between two Universal Storage Platforms or Network Storage controllers or any two storage systems attached externally to either one. Designed to significantly reduce resource consumption, Universal Replicator software sets a new standard for data protection and Application Optimized Storage™ solutions from Hitachi Data Systems.

**TrueCopy Software for the Hitachi Lightning Family Storage Systems**

TrueCopy software can replicate data between Lightning 9900V Series enterprise storage systems either locally, within the data center, or remotely, between geographically separated centers. Coupled with channel extension products from partners, including CNT, Cisco, and McDATA, TrueCopy software offers host-free data replication in multiple modes over any distance. Along with TrueCopy asynchronous consistency groups for IBM® z/OS® environments, unique NanoCopy™ disaster recovery manager technology from Hitachi Data Systems provides continuous, nondisruptive, and I/O-consistent point-in-time remote data copies that span multiple Hitachi storage systems. The result is an always-available, online, and rapidly restartable copy of key data as it existed prior to a disaster.

**Prerequisites**

**Quick Start Service for Hitachi TrueCopy Remote Replication Software**

This service is available for both open systems and mainframe environments. It takes a collaborative, hands-on approach to assist with project planning for and installation and configuration of TrueCopy software across your enterprise storage environment.

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<table>
<thead>
<tr>
<th>Platform</th>
<th>Hitachi Lightning 9900™ V Series Enterprise Storage Systems</th>
<th>Hitachi TagmaStore™ Universal Storage Platform® and TagmaStore Network Storage Controller</th>
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</thead>
<tbody>
<tr>
<td>Product</td>
<td>Hitachi TrueCopy™ Remote Replication software</td>
<td>Hitachi TrueCopy™ Heterogeneous Remote Replication software</td>
</tr>
<tr>
<td>Heterogeneous, any-to-any, replication</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Hosts supported</td>
<td>IBM z/OS® mainframe, most UNIX and Microsoft Windows operating systems</td>
<td>IBM z/OS® mainframe, most UNIX and Microsoft Windows operating systems</td>
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<tr>
<td>Hosts cycles required</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Host connectivity</td>
<td>ESCON/FICON, Fibre Channel</td>
<td>ESCON/FICON, Fibre Channel</td>
</tr>
<tr>
<td>Remote copy connectivity</td>
<td>ESCON, Fibre Channel</td>
<td>Fibre Channel</td>
</tr>
<tr>
<td>IP</td>
<td>Yes, via supported channel extenders</td>
<td>Yes, via supported channel extenders</td>
</tr>
<tr>
<td>Synchronous mode</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Asynchronous mode</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Maximum number of volume pairs</td>
<td>8,191</td>
<td>Up to 16,384</td>
</tr>
<tr>
<td>Consistency groups</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hitachi Compatible Replication Software for IBM XRC available**</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>PPRC and GDPS compatibility</td>
<td>Yes</td>
<td>Yes</td>
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</table>

* Please contact Hitachi Data Systems for general availability information.
** Please contact Hitachi for more details.

For information about TrueCopy software for Hitachi TagmaStore Adaptable Modular Storage and TagmaStore Workgroup Modular Storage, as well as Hitachi Thunder 9500™ V Series modular storage systems, see the separate data sheet on www.hds.com.

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**Complementary Solutions**

**Hitachi Compatible Replication Software for IBM XRC**

**Hitachi Universal Replicator Software**

**Hitachi ShadowImage Heterogeneous In-System Replication Software**

**Hitachi HiCommand® Replication Monitor Software**

**Hitachi Business Continuity Manager Software**

**Business Continuity Services**