

IBM Real-time Compression Appliance STN6800

*Optimize storage capacity with IBM Real-time
Compression technology*



Highlights

- Support mixed 10 GbE and 1 GbE environments with flexible port configurations
 - Support four 10 GbE NAS connections for maximum throughput, or two 10 GbE and four 1 GbE NAS connections for maximum flexibility
 - Deploy and administer quickly and easily
 - Leverage automated failover option for high-availability environments
 - Shrink primary, online data in real time, without performance degradation
-

Keep up to five times more information online with IBM's newest technology for storage efficiency

IBM Real-time Compression Appliances are the only storage compression solutions that can shrink primary, online data in real time, without performance degradation. By significantly reducing storage requirements, you can keep up to five times* more information online for analytics, use the improved efficiency to reduce storage costs, or achieve a combination of greater capacity and reduced cost. IBM Real-time Compression can help deliver improved user response time and overall throughput, because applications spend less time waiting for disk requests.

IBM Real-time Compression Appliance STN6800 increases the capacity of the existing storage infrastructure to help you meet the demands of rapid data growth while also enhancing storage performance and utilization. All IBM Real-time Compression Appliances apply IBM's patented real-time data compression techniques to primary and existing storage, delivering optimization and savings throughout the entire storage life cycle. The result is unprecedented cost savings and return on investment, along with operational and environmental efficiencies.



Random Access Compression Engine

IBM Real-time Compression's patented Random Access Compression Engine (RACE) technology is based on proven Lempel-Ziv (LZ) data compression algorithms. RACE enables IBM Real-time Compression Appliances to deliver real-time, random access, deterministic, and lossless data compression, maintaining reliable and consistent performance and data integrity.

High-availability technology

IBM Real-time Compression Appliances are fully redundant components and deploy seamlessly into high-availability environments. Enhanced monitoring capabilities enable greater visibility into high-availability environments.

Key benefits

Greater storage utilization

- Real-time data compression reduces storage utilization by up to 80 percent
- Maintains storage performance and data integrity
- Compression accelerator optimizes existing storage to reclaim capacity
- Less data stored, accessed and cached means enhanced storage throughput and resource utilization

Lower capital and operational costs

- Slows the growth of storage acquisition
- Reduces the amount of storage to be managed throughout the life cycle
- Allows for easy, transparent deployment

Complete transparency

- Easy installation and configuration—requires no change to your applications, servers, networks, or storage
- No configuration changes or software drivers required
- Supports CIFS and NFS protocols
- Agnostic to applications and storage



High availability

- Seamless deployment into existing high-availability configurations
- Enhanced monitoring for high-availability environments

Operational efficiencies

- Shortened backup/restore windows
- Reduced data replication bandwidth and cost
- Enhanced deduplication capabilities

System specifications

System

- Two 6 Core Intel® Xeon® 2.8 Ghz processors
- 72 GB of memory

Physical connectivity

- Network bridge personality
- Multiple 10 GbE and 1 GbE connections
- Two physical ports per each NAS port
 - One port connected to NAS
 - One port connected to network switch

File Service Protocol support

- Microsoft® CIFS
- NFS version 3 over TCP or UDP

Reliability

- Dual power supplies
- Hot-swappable fan modules, disks and power supplies
- Predictive Failure Analysis for hardware components

Availability

- Link aggregation (IEEE 802.3ad)
- Ethernet trunking (Cisco EtherChannel)
- Path failover
- High-availability transparent failover configuration option

Management

- Intuitive web GUI
- Command line interface (CLI) for management tasks
- Comprehensive SNMP MIB provides statistics information and alerts
- Active Directory integration supports external Syslog server for sending notifications and audit information

IBM Real-time Compression Appliance STN6800 at a glance

Model	2452-680
# 1 GbE ports	Up to 8
# 10 GbE ports	8, or 4 with mixed 1 GbE and 10 GbE option
ECC memory (GB)	72
Processor	Two 2.8 GHz six-core Intel Xeon processors with QuickPath Interconnect technology
Technical specifications	
Host interface	TCP/IP or UDP
Storage interface	NAS: Microsoft® CIFS and NFS version 3
Connectivity	10 GbE and 1 GbE options
Hot-swap components	Power supplies, fan modules, disks
Rack support	2 rack unit form factor
Management software	<ul style="list-style-type: none"> • Intuitive web GUI • Command line interface (CLI) for management tasks • Comprehensive SNMP MIB provides statistics information and alerts • Active Directory integration supports external Syslog server for sending notifications and audit information
High availability	<ul style="list-style-type: none"> • Transparent path failover, when deployed in pairs • Predictive Failure Analysis for hardware components • Link aggregation (IEEE 802.3ad) • Ethernet trunking (Cisco EtherChannel)

IBM Real-time Compression Appliance STN6800 at a glance

Warranty	1 year
Dimensions	Width: 444.5 mm (17.5 in) Depth: 698.5 mm (27.5 in) Height: 85.3 mm (3.36 in); 2U
Weight	24.9 kg (55.1 lb) maximum
Energy consumption efficiency	100 - 240 V ac 50 - 60 Hz 770 watts Notes: IBM Real-time Compression Appliances can significantly improve energy consumption efficiency by reducing the amount of disk space required for NAS data. IBM Real-time Compression Appliances have altitude- and temperature-controlled fans that adjust to compensate for changing thermal characteristics. At lower speeds they draw less power and suffer less wear. Temperature-controlled fans produce less ambient noise in the data center than if they were constantly running at full speed.
Thermal output	307-2627 BTU/hr
Operating environment:	
Operating temperature range	10 - 35° C; 50 - 95° F (up to 914.4 m/3,000 ft) 10 - 32° C; 50 - 90° F (914.4 m to 2,133 m/3,000 ft to 7,000 ft)
Maximum altitude	7,000 ft or 2,133 m
Compliance	RoHS-compliant
Safety/emissions	Russia/GOST ME01, IEC-60950-1, GOST R 51318.22-99, GOST R 51318.24-99, GOST R 51317.3.2-2006, GOST R 51317.3.3-99 IEC 60950-1 (CB Certificate and CB Test Report) CE Mark (EN55022 Class A, EN60950-1, EN55024, EN61000-3-2, EN61000-3-3) CISPR 22, Class A TUV-GS (EN60950-1/IEC60950-1, EK1-ITB2000)

For more information

To learn more about IBM Real-time Compression Appliances, please contact your IBM marketing representative or IBM Business Partner, or visit the following website: ibm.com/storage/rtc

Financing solutions from IBM Global Financing can enable effective cash management, protection from technology obsolescence, improved total cost of ownership and return on investment. Also, our Global Asset Recovery Services help address environmental concerns with new, more energy-efficient solutions. For more information on IBM Global Financing, visit: ibm.com/financing

IBM Real-time Compression Appliance STN6800 is powered by MCP (Mini-Control-Program) Linux. MCP is a purpose-optimized operating environment embedded within IBM products as diverse as high-throughput check scanners for the banking industry, storage area network volume controllers, and cryptographic co-processors.



© Copyright IBM Corporation 2010

IBM Systems and Technology Group
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
December 2010
All rights reserved

IBM, the IBM logo and ibm.com are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other product and service names might be trademarks of IBM or other companies.

The information contained in this document is provided for informational purposes only. While efforts were made to verify the completeness and accuracy of the information contained in this document, it is provided "as is" without warranty of any kind, express or implied. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, this document or any other documentation. Nothing contained in this document is intended to, nor shall have the effect of, creating any warranties or representations from IBM (or its suppliers or licensors), or altering the terms and conditions of any agreement or license governing the use of IBM products and/or software.

MB, GB and TB = 1,000,000, 1,000,000,000 and 1,000,000,000,000 bytes, respectively, when referring to storage capacity. Actual storage capacity will vary based upon many factors and may be less than stated.

*Compression data collected from installed systems. Compression rates vary by file type and content.



Please Recycle