IBM XIV Storage System

Fact Sheet

The IBM XIV® Storage System is a ground-breaking, high-end disk system, designed to support business requirements for a highly available information infrastructure. Built from a grid of standard Intel®/Linux® components, it is connected in an any-to-any topology by means of massively paralleled, non-blocking Gigabit Ethernet.

IBM XIV applies automated data distribution, unique caching, and other innovations to eliminate hotspots and deliver single-tier storage featuring high-end performance, reliability, availability, and scalability, at exceptionally low Total Cost of Ownership (TCO).

IBM XIV comes in easily scalable partial to full rack configurations, with full capabilities from the smallest configuration.

Physical Features (per rack - unless otherwise noted)

Disks

- Very High Density Slower Rotation (VHDSR) disk drives
- 7,200 RPM supported
- Capacity: 1 TB

Physical Specifications

- Dimensions: Height: 78.4 in/199.1 cm; Width: 23.6 in/60 cm; Depth: 45 in/114.2 cm
- Maximum weight: 1,949 lb/884 kg
- Clearance: Front: 47 in/120 cm; Rear: 39.4 in/100 cm

Power

- Input voltage: Nominal, 200-240 VAC, at 60A or 30A (+/- 10%)
- Redundant power feed
- Single-phase power feed

Operating Environment

- Temperature: 10-35°C
- Altitude: up to 7,000 ft/2,134 m
- Humidity: 25-80%, non-condensing

Capacity and Resources (per module)

Cache-to-disk bandwidth: 240 Gbps



Scales non-disruptively from partial to full configurations

IBM XIV Configurations											
# Modules	# Disks	Usable capacity*	Connectivity		Power usage			Internal (grid) switching (GBps)	# CPUs		Memory (GB)
			FC	iSCSI	kVA	kVA	kBTU		Single	Dual**	
			ports	ports	(peak)	(idle)					
6	72	27	8	0	3.5	3.1	11.9	30	6	9	48
9	108	43	16	4	5.1	4.5	17.5	48	9	15	72
10	120	50	16	4	5.7	5	19.4	52	10	16	80
11	132	56	16	4	6.2	5.5	21.3	56	11	17	88
12	144	61	20	6	6.8	6	23.2	60	12	18	96
13	156	67	20	6	7.4	6.5	25.1	64	13	19	104
14	168	73	24	6	7.9	7	27.0	68	14	20	112
15	180	79	24	6	8.5	7.5	29.0	72	15	21	120

* Usable capacity after factoring in disk space used by mirroring for redundancy, spares, and metadata

** Feature code 1101 provides interface modules containing dual CPUs



TEM



Functional Specifications

Data Protection

- Active-active with N+1 redundancy on disks, modules, switches and UPS units
- Non-disruptive hardware and firmware upgrades
- Remote mirroring and flexible restore
- Differential snapshots with near-zero performance overhead
 - Up to 16,000 snapshots
 - Instant create, modify, restore
 - Writable snapshots
 - "Snap on snap"
- Self-healing: Rapid rebuild time after disk and module failure

Features (fully bundled with hardware)

- LDAP authentication
- Thin provisioning
- Data migration
- Storage management
- Native multi-path support
- Support for Tivoli® Productivity Center 4.1 and Tivoli Storage Management (TSM 6.1 ACS, TSM 6.1 CS)

Host Connectivity

- Fibre Channel rates: 1 Gbps, 2 Gbps, 4 Gbps
- iSCSI over Gigabit Ethernet
- SCSI-3 protocol for both FC and iSCSI

For more information

To learn more about the IBM XIV Storage System, contact your IBM representative or IBM Business Partner, or visit:

www.xivstorage.com

© Copyright IBM Corporation 2009

IBM Systems and Technology Group Route 100

Somers, New York 10589

Produced in the United States of America July 2009

All Rights Reserved

IBM, the IBM logo, ibm.com and XIV 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. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at **ibm.com**/legal/copytrade.shtml.

Intel is a 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.

Other company, product and service names may be trademarks or service marks of others.

This document could include technical inaccuracies or typographical errors. IBM may make changes, improvements or alterations to the products, programs and services described in this document, including termination of such products, programs and services, at any time and without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. The information contained in this document is current as of the initial date of publication only and is subject to change without notice. IBM shall have no responsibility to update such information.



TSD03055-USEN-03

