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 ports	iSCSI ports	kVA (peak)	kVA (idle)	kBTU		Single	Dual**	
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

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 perform-ance 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

TSD03055-USEN-03