

Hitachi Unified Storage and Hitachi NAS Platform Specifications

LINE CARD



Hardware Specifics	Hitachi Unified Storage/ Hitachi NAS Platform 3080	Hitachi Unified Storage/ Hitachi NAS Platform 3090	Hitachi Unified Storage/ Hitachi NAS Platform 4040	Hitachi Unified Storage/ Hitachi NAS Platform 4060	Hitachi Unified Storage/ Hitachi NAS Platform 4080	Hitachi Unified Storage/ Hitachi NAS Platform 4100
Rack Height	3U	3U	3U	3U	3U	3U
Power Supply	Dual	Dual	Dual	Dual	Dual	Dual
Memory on Main FPGA Board (MFB)	22GB/2GB NVRAM	22GB/2GB NVRAM	22GB/2GB NVRAM	26GB/4GB NVRAM	26GB/4GB NVRAM	68GB/8GB NVRAM
Memory on Main Motherboard (MMB)	8GB	8GB	8GB	16GB	16GB	32GB
Performance						
Random I/O: Dual-Node ¹	80,279	189,994	130,000	147,957	209,519	293,128
Throughput: MB/sec (mixed workloads 75/25 read/write)	700	1,250	700	1,000	1,500	2,000
Power and Cooling²						
Number of Cooling Fans	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap
Number of Power Supplies	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap	2 – Hot Swap
Voltage Range	110 VAC – 2.3A/2.8A 208 VAC – 1.2A/1.5A 230 VAC – 1.1A/1.4A	110 VAC – 2.3A/2.8A 208 VAC – 1.2A/1.5A 230 VAC – 1.1A/1.4A	110 VAC – 2.3A / 2.8A 208 VAC – 1.2A / 1.5A 230 VAC – 1.1A / 1.4A	100 VAC – 3.5A 110 VAC – 3.2A 200 VAC – 1.8A 208 VAC – 1.7A 240 VAC – 1.5A	100 VAC – 3.5A 110 VAC – 3.2A 200 VAC – 1.8A 208 VAC – 1.7A 240 VAC – 1.5A	100 VAC – 3.5A 110 VAC – 3.2A 200 VAC – 1.8A 208 VAC – 1.7A 240 VAC – 1.5A
Power Supply Rating	450W	450W	450w	550W	550W	550W

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Network Limits for File Sharing						
Number of VLANS	256	256	256	256	256	256
1Gb Ethernet Ports	6	6	6	N/A	N/A	N/A
10Gb Ethernet Ports	2	2	0	4	4	4
Storage Management Utility (SMU) Limits						
External SMU: Number of Managed Entities	max. 5 ¹¹	max. 5 ¹¹	max. 5 ¹¹	max. 5 ¹¹	max. 5 ¹¹	max. 5 ¹¹
Internal SMU: Number of Managed Servers	1 - local only	1 - local only	1 - local only	1 - local only	1 - local only	1 - local only
Hitachi Storage Support						
Hitachi Adaptable Modular Storage 2000 family	Yes	Yes	Yes	Yes	Yes	Yes
Hitachi Unified Storage 100 Series	Yes	Yes	Yes	Yes	Yes	Yes
Hitachi Unified Storage VM	Yes	Yes	Yes	Yes	Yes	Yes
Hitachi Virtual Storage Platform	Yes ¹²	Yes ¹²	Yes ¹²	Yes ¹²	Yes ¹²	Yes ¹²
Included in Hitachi NAS Platform Operating System						
Protocol	NFS/SMB/FTP	NFS/SMB/FTP	NFS/SMB/FTP	NFS/SMB/FTP	NFS/SMB/FTP	NFS/SMB/FTP
Number of EVS	2	2	2	2	2	2
Replication	Optional	Optional	Optional	Optional	Optional	Optional
Storage Pool	Yes	Yes	Yes	Yes	Yes	Yes
Quick Snapshot Restore	Optional	Optional	Optional	Optional	Optional	Optional
File System Rollback (FSR)	Yes	Yes	Yes	Yes	Yes	Yes
Virtual Volume	Yes	Yes	Yes	Yes	Yes	Yes
WFS-2	Yes	Yes	Yes	Yes	Yes	Yes
TFS	Yes	Yes	Yes	Yes	Yes	Yes
File System Auditing	From v6.5	From v6.5	From v6.5	Yes	Yes	Yes
Dynamic Read/Write Balancing	Yes	Yes	Yes	Yes	Yes	Yes
Nondisruptive Cluster Upgrades (NDU)	Yes	Yes	Yes	Yes	Yes	Yes
Sparse File Reporting	Yes	Yes	Yes	Yes	Yes	Yes
RADIUS User Authentication	Yes	Yes	Yes	Yes	Yes	Yes
Optional Licenses						
Additional Protocol	Yes	Yes	Yes	Yes	Yes	Yes
Additional EVS	Yes	Yes	Yes	Yes	Yes	Yes
Replication	Yes	Yes	Yes	Yes	Yes	Yes

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File System Recover From Snapshot	Yes	Yes	Yes	Yes	Yes	Yes
WORM (write once, read many)	Yes	Yes	Yes	Yes	Yes	Yes
Quick Snapshot Restore	Yes	Yes	Yes	Yes	Yes	Yes
iSCSI	Yes	Yes	Yes	Yes	Yes	Yes
Hitachi Data Migrator Software	Yes	Yes	Yes	Yes	Yes	Yes
Cross Volume Link (XVL)	Yes	Yes	Yes	Yes	Yes	Yes
Hitachi Data Migrator to the Cloud	Yes	Yes	Yes	Yes	Yes	Yes
Primary Data Deduplication Premium	Yes	Yes	Yes	Yes	Yes	Yes
Cluster (High Availability, HA)	Yes	Yes	Yes	Yes	Yes	Yes
Cluster Name Space (CNS)	Yes	Yes	Yes	Yes	Yes	Yes
Cluster Read Cache	Yes	Yes	Yes	Yes	Yes	Yes
Server Farm Migration (SFM)	Yes	Yes	Yes	Yes	Yes	Yes
File Clone	Yes ⁸	Yes ⁸	Yes ⁸	Yes ⁸	Yes ⁸	Yes ⁸
Performance Accelerator	No	Yes ¹³	Yes ¹³	No	No	No
Synchronous Image Backup	Yes ⁸	Yes ⁸	Yes ⁸	Yes ⁸	Yes ⁸	Yes ⁸
EVS Security	Yes	Yes	Yes	Yes	Yes	Yes
Model Upgrade License	No	No	Yes	No	No	No
Upgrade Paths						
To HNAS 3080/HUS	—	—	—	System Swap	System Swap	System Swap
To HNAS 3090/HUS	System Swap	—	—	System Swap	System Swap	System Swap
To HNAS 4040	System Swap	System Swap	—	—	—	—
To HNAS 4060	System Swap	System Swap	System Swap	—	License Key	System Swap
To HNAS 4080	System Swap	System Swap	System Swap	License Key	—	System Swap
To HNAS 4100	System Swap	System Swap	System Swap	System Swap	System Swap	—

(1) Based on SPECsfs_2008 NFS v3 benchmark testing. Published results are available at www.spec.org/sfs2008/results/sfs2008nfs.html

(2) Power supply ratings for dual power supply in chassis.

(3) 128 file systems in a single entity configuration but only 125 file systems in a clustered configuration.

(4) Require storage LUN size greater than 16TB.

(5) Require storage LUN size greater than 32TB.

(6) Require storage LUN size greater than 60TB.

(7) 16M requires firmware 6.0 or higher.

(8) Requires WFS-2 as file system format, HNAS operating system v8.x or later, and it is limited only by the available free space on the file system.

(9) NAS operating system v8.x or later required.

(10) These are the single-node max. limits. The default values are set to half in order to ensure enough failover capacity in a clustered configuration. This is to protect a failover scenario (NVRAM mirroring).

A client connection is considered to be a mounted SMB share or NFS export from a physical client.

(11) Depending on the used SMU version or type, please refer to the SMU details sheet.

(12) NAS operating system v7.0.2050.x or later required.

(13) Requires HNAS operating system v10.0 or later.



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