

Technical Specification of Computer Storage (SAN) of 50 TB

Specification No. AIR Delhi/3/2022

Subject :Notice inviting comments on specification & Budgetary quote for Computer Storage (SAN) of 50 TB .

Office : AIR Delhi

Section: Engineering

File No: J-12013/38/2022-Engg-AIR Delhi (147024)

Please find attached a specification for Computer Storage of 50 TB. It is being circulated for wider publication and making the specification industry friendly. It is requested that specification may be seen and any comments regarding modification of specification may please be forwarded.

It is also requested that budgetary quote may also be provided for the specification.

Comments on specification & budgetary quote may be sent to E-mail (ddgenbh@prasarbharati.gov.in) latest by 07.01.2023.

Jitender Pruthi

DDG(AIR Delhi)

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TECHNICAL SPECIFICATIONS FOR COMPUTER STORAGE (SAN) 50 TB

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S.No	Technical Specifications		Compliance Yes/ No
1	Data Availability	1. Offered storage shall have 100% data availability guaranteed architecture.	
2	Operating System & Clustering Support	The storage array should support industry-leading Operating System platforms & clustering including: Windows Server 2019 / 2022, VMware 7, and Linux etc.	
3	Capacity Scalability &	1. Offered Array shall be scalable to at-least 200TB native raw capacity in a single storage system.	
		2. Offered array shall support at-least 100 drives.	
		3. Offered Storage array shall be supplied minimum with 50TB Usable Capacity using 30% SSD disk and 70% NL-SAS drives and shall be configured in Raid 6.	
		4. Offered storage shall support both SSD and HDD. HDD shall support both SAS and NL SAS drives.	
4	Storage Encryption	Vendor shall offer only the encrypted drives with appropriate encryption licenses .	
5	No. of Controllers	Offered Storage array shall be offered with at-least dual controller and all offered controllers shall be connected to a common backplane instead of loosely connecting to SAN Switches, Ethernet Switches or InfiniBand switches.	
6	Cache and CPU Processing Power	1. Offered Storage array should have at-least 256GB Global protected DRAM cache.	
		2. DRAM Cache shall be completely dynamic for read and write ratios and operations and vendor shall not offer any additional card / module / drive for write cache operations.	
		3. Offered storage shall be based upon latest generation CPUs.	
7	Processing Power - Parallel processing engine	1. Offered Storage shall have dedicated, separated parallel processing engines, apart from CPU cores for effectively handling Raid-Rebuilding and data striping, thin re-claim etc.	
8	Architecture & Processing Power	1. Controllers shall be true symmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning etc.	
		2. Offered storage array shall have native virtualization support so that Raid can be carved out from a logical space instead of dedicating separate physical disks for each application.	
9	No Single point of Failure	Offered Storage Array shall be configured in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.	
10	Host Ports and Back-end Ports	1. Offered Storage array shall have minimum of 4 x 32Gbps Fiber Channel ports & 4 x 25Gbps iSCSI ports. All offered ports shall have capability to work at line speed and fully populated with media.	
		2. Offered Storage array shall have minimum of 16 SAS PCI lanes in the back-end for disk connectivity running at 12Gbps speed.	
11	Global Hot Spare	1. offered Storage Array shall support distributed Global hot Spare for offered Disk drives.	
		2. Global hot spare shall be configure as per industry practice.	

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12	Firmware Upgrade	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives without any reboot of controller.	
13	Storage Management	Offered Storage array management console shall be able to manage at-least 8 arrays from a single console. Management console shall provide following functionalities:	
		a. Common Dashboard for all managed arrays through a single management console.	
		c. On-premise performance analysis, workload planning etc. through a single console.	
14	Warranty	5 Years	