

PRINCIPAL SEAT - JABALPUR

No. Reg(IT)(SA)/2025/1664

// CLARIFICATION //

Jabalpur, Dated: 09/10/2025

Sub:- Publication of clarification /reply of Pre-Bid meeting dated: 24th September, 2025 regarding tender for "Purchase of SAN Storage at High Court of Madhya Pradesh, Jabalpur" with reference to tender no. Reg(IT)(SA)/2025/1522, Dated: 17.09.2025.

Ref: - Pre-Bid Meeting dated: 24th September, 2025 and tender no. Reg(IT)(SA)/2025/1522, Dated: 17.09.2025.

Reply / clarifications to the pre-bid queries

On the basis of queries submitted by the bidders, the reply /clarifications are enumerated as per details given below for reference and further necessary action at vendor side:-

Query	RFP	Content of RFP Requiring	Query of the bidder / remarks of	Reply /
No.	Reference	Clarification	the bidder	clarification to
	(Section No.			the query
	/Page No.)			/remarks by the
				High Court
		1. M/s Business Automation	n (I) Private Limited & M/s NetApp	
1	Section –	1 PiB usable capacity: Using	1 PiB usable capacity: Using	No change. The
	VII/Technical	NVMe or equivalent Drives,	NVMe or equivalent Drives , with	vendor can quote
	Specification	with RAID 6 (8+2) or Erasure	RAID 6 (8+2) or Erasure Code or	higher side.
	s/"Minimum	Code or equivalent with dual	equivalent with dual parity to	
	Specification	parity to ensure data	ensure data protection	
	s – A/Page	protection methodology using	methodology using data	
	32 -	data replication. 100% read	replication. 100% read throughput	
	Configuration	throughput should be equal to	should be equal to or more than	
	and Pool	or more than 50GB/s. Also,	40 GB/s 50GB/s . Also, 100% write	
		100% write throughput should	throughput should be equal to	
		be equal to more than	more than 15 GBps 30GB/s . Read	
		30GB/s. OEM has to provide	write throughput should be 25	
		the evidence for the same	GBps at 50:50 RW ratio. All	
		from internal tool. System	performance has to be calculated	
		should offer more than or	with sequential workload at block	
		equivalent 5 Million IOPs on	size 32KB or above. OEM has to	
		4KiB random reads.	provide the evidence for the same	
		Controllers should have Dual	from internal tool. System should	
		AMD EPYC or higher with	offer more than or equivalent 2.5	
		1.5TB memory or higher.	Million IOPs on 4KiB random	
			reads. Controllers should have	
			Dual AMD EPYC / Intel or	
			equivalent or higher with 1.5TB 1	
			TB DRAM based memory or	
			higher per controller. Offered	



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storage shall offer Sub millisecond latency.

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Justification - We respectfully request the removal of the fixed RAID configuration of 8+2, as RAID sizing should be determined based on OEM best practices to meet the specified performance and capacity requirements. The department has already outlined the desired performance, capacity, and features; therefore, allowing OEMs the flexibility to design the RAID configuration is essential to achieving these goals effectively. Fixing a specific RAID size may inadvertently favor a particular OEM and limit competitive participation.

Additionally, we recommend that the storage media be specified as NVMe clearly, rather than SSD or equivalent. NVMe offers significantly superior performance compared to SSDs, and the two technologies are not directly comparable. Specifying SSDs may lead to suboptimal performance and misalignment with the intended use case.

We also wish to highlight that the throughput figures mentioned are extremely high and may not be realistically achievable without significantly increasing the cost of the solution. We have proposed a modest reduction in performance to make the solution more generic and cost-effective. These revised performance figures are aligned with NVIDIA's published reference architecture for AI solutions, which we encourage you to refer to for validation.

Pls refer https://www.netapp.com/media/13 6382-nva-1182-a90-ncp-ra.pdf Furthermore, it is important to



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			consider combined read/write performance also, as storage systems typically perform both operations simultaneously. In addition to throughput, submillisecond latency is a critical factor for efficient data access and responsiveness. Regarding cache specifications, the proposed 1.5 TB cache per controller appears to be proprietary and excessively high. We request that this be revised to 1 TB DRAM cache per controller to ensure broader OEM compatibility and enable fair participation. It is also important to note that controller memory should be DRAM-based, not NVMe or SSD-based, as the storage itself is NVMe. DRAM offers superior performance and is essential for maintaining the required cache hierarchy. We appreciate your consideration of these points and look forward to a revised specification that promotes fairness, feasibility, and alignment with industry best	
2	Section – VII/Technical Specification s/"Minimum Specification s – A/Page 32 - Interface	Provides native POSIX file system compatibility as well as support for common protocols including CIFS /SMB, NFS V3, NFS V4 from day1. In addition should support CSI integration with Redhat Open shift from day 1. It should be possible to deploy CSI driver using the Operator Lifecycle Manager of Open shift.	1	The vendor can quote better or higher side protocols.



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				requirements from the
				department, there is a clear need
				to incorporate NVMe-based
				protocols into our storage
				infrastructure. The request for
				NVMe drives makes it imperative
				to ensure that the storage solution
				supports end-to-end NVMe
				architecture, both at the front-end
				and back-end levels.
				Additionally, with the department
				seeking GPU access, it becomes
				crucial to enable protocols such as
				NVMe over Fabrics (NVMe-oFC
				and NVMe-oTCP) and GPU Direct
				Storage to ensure optimal
				performance and compatibility.
				To meet these performance and
				scalability expectations, we have
				proposed the following
				configuration:
				Front-End Connectivity: 4 ×
				100Gbps ports per node to
				support NVMe traffic.
				Back-End Connectivity: 2 ×
				100Gbps ports per node for high-
				speed interconnects.
				Disk Enclosures: All enclosures
				should be connected to controllers
				over 100Gbps NVMe back-end
				•
				links implementing the S3 protocol
				is essential for:File versioning to
				ensure data integrity and
				recovery, Unstructured data
				storage at scale, Tiering for
				efficient lifecycle management,
				Cloud connectivity for seamless
				integration and accessibility. FC &
				ISCSI are essential to utilize full
				open shift connectivity benefits
				and block storage and DB
				connectivity.
				This configuration ensures a high-
				throughput, low-latency storage
				environment that aligns with the
				departments technical and
				performance requirements.
3	Section -	Bidder should provide	e SDS	Bidder should provide SDS SDS or equivalent
	<u> </u>		. =	1



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	VII/Technical Specification s/"Minimum Specification s – A/Page 32 - SDS	(Software Define Storage) capabilities for existing Open shift cluster like ODF or equivalent for persistent volumes for both RWX and RWO protocols within the internal storage of nodes in the cluster from day1. Software should have capabilities of Data foundation like Unified storage services, HA & DR capabilities and Backup and restore capabilities.	(Software Define Storage) capabilities for existing Open shift cluster like ODF or equivalent for persistent volumes for both RWX and RWO protocols within the internal storage of nodes in the cluster from day1. Software should have capabilities of Data foundation like Unified storage services, HA & DR capabilities and Backup and restore capabilities. Justification - We request to remove the word SDS (Software defined storage) as this word is proprietary and used by few storage OEM only, removal of this proprietary word will not affect the functionalities asked by department in this point.	• •
4	Section – VII/Technical Specification s/"Minimum Specification s – A/Page 33 - Technical Capability	OEM is required to demonstrate the features of SDS positioned in current setup of RHOS cluster to showcase the capabilities and use case of the proposed storage device.	OEM is required to demonstrate the features of SDS positioned storage in current setup of RHOS cluster to showcase the capabilities and use case of the proposed storage device. Justification - We would like to formally request the removal of the term SDS (Software Defined Storage) from the referenced documentation. This terminology is proprietary and is commonly associated with specific OEMs, which may lead to ambiguity or unintended vendor bias. It is important to note that the removal of this term will not impact the functionalities or capabilities outlined by the department in the corresponding point. The technical requirements remain fully achievable without referencing SDS explicitly. We appreciate your understanding and support in ensuring the documentation remains vendorneutral and focused on functional outcomes.	No change.



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5 Spare Disks amounting to minimum Please clarify 5% dis	· · · · · · · · · · · · · · · · · · ·
Capacity 5% total capacity need to be additionally provided as spare capacity.	or not spare.
traffic. 2x1GbE for management and 4x 10GbE network ports for data access and protocol communication. The chassis supports up to 16 PCIe Gen 5 adapter slots for network and storage interface cards. The system supports high-speed PCIe Gen 5 adapters including multiple CX7 network cards capable of 200/400 Gb InfiniBand or Ethernet links. Up to four or higher PCIe Gen 5 x16 adapter slots per node can be used to install NVIDIA ConnectX-7 CX7 network cards to support 200Gb dual demonstrated from controllers and disks servers. Bidders with specify port required and cables to connect solution to the complete and cables to connect separate port for and network traffic. In management and 4x equivalent 400Gbps network ports per node can be used to install NVIDIA (across dual controllers and disks servers. Bidders with specify port required and cables to connect separate port for and network traffic. In management and 4x equivalent 400Gbps network ports per node can be used to install NVIDIA (across dual controllers and disks servers. Bidders with specify port required and cables to connect separate port for and network traffic. In management and 4x equivalent 400Gbps network ports per node can be used to install NVIDIA (across dual controllers and disks servers. Bidders with specify port required and cables to connect separate port for and network traffic. In management and 4x equivalent 400Gbps network ports per node can be used to install NVIDIA (across dual controllers and disks servers. Bidders with specify port required and cables to connect solution to the complex sol	Ethernet between I/O bottoller/node bbps. If bidder erver as per then they be ports on odes directly. If then they be ports on odes directly. If the storage not from I/O ill need to ements and transceivers of the storage a



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is not offering I/O server then these ports and configuration are applibale on storage controllers. I/O servers should be offered in HA. One I/O serverHA pair per storage controller HA pair. The inter controller bandwidth between storage controllers shall be 100Gbps in redundancy.

Justification - The changes requested in the referenced points are intended to provide clarity and alignment with the department's solution expectations. We would like to highlight the following key considerations:

I/O Server Connectivity:

The department has explicitly asked for I/O servers. It is critical to ensure that these servers are connected to compute nodes over 100Gbps links to maintain highspeed, end-to-end performance. support this architecture effectively, I/O servers must also he connected storage to controllers redundant over 100Gbps links.

Alternate Configurations:

In scenarios where I/O servers are not part of the solution, it becomes essential to provision 4 × 100GbE ports per node/controller to facilitate direct high-bandwidth connectivity between compute nodes and storage.

Use of Proprietary Terminology: We request the removal of proprietary terms such as Nvidia ConnectX-7 (CX7) from documentation. These refer to specific OEM adapters and may inadvertently restrict solution flexibility. The department's requirements can be met using equivalent, non-proprietary technologies.

Support for High-Speed Protocols:

node can be used to install NVIDIA ConnectX-7 CX7 network cards to support 200Gb dual port VPI (InfiniBand/Ethern et) or 400 Gb single port InfiniBand (IB) and RoCE.



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The department has indicated interest in 200Gbps and 400Gbps Infiniband connectivity. We recommend allowing equivalent Ethernet-based solutions such as RoCE (RDMA over Converged Ethernet) and NFS over RDMA, which offer comparable performance and are widely supported. Inter-Controller Bandwidth: To ensure seamless operation of the NVMe-based architecture, it is imperative to have 100Gbps intercontroller bandwidth. This will enable consistent performance across the storage solution and support the department's high-throughput requirements. We trust these clarifications will		2025/ <mark>1664</mark>	Jabalpur, Dated: (09/10/2025
help refine the solution design and ensure alignment with departmental expectations. The solution should be highly available. Storage system should be configured with no Single Point of Failure (SPOF) including but not limited to I/O servers (if required), Metadata servers (if required), Metadata servers (if required), management servers, HBA Cards, switches (if required) between I/O servers, storage controllers, Fan modules and Power supply. HBA Cards, switches (if required) between I/O servers should be offered in HA. One I/O servers (if required), management servers, Fan modules and Power supply. HBA Cards, switches (if required) between I/O servers should be offered in HA. One I/O servers (if required), between storage controller bandwidth between storage controller bandwidth between storage controllers shall be 100Gbps in redundancy. Justification - In reference to the department's required and high-performance solution, we would like to provide the following clarifications and	Section – VII/Technical Specification s/"Minimum Specification s – A/Page 33 - High	The solution should be highly available. Storage system should be configured with no Single Point of Failure (SPOF) including but not limited to I/O servers (if required), Metadata servers (if required), management servers, HBA Cards, switches (if required) between I/O servers, storage controllers, Fan modules and Power	The department has indicated interest in 200Gbps and 400Gbps Infiniband connectivity. We recommend allowing equivalent Ethernet-based solutions such as RoCE (RDMA over Converged Ethernet) and NFS over RDMA, which offer comparable performance and are widely supported. Inter-Controller Bandwidth: To ensure seamless operation of the NVMe-based architecture, it is imperative to have 100Gbps intercontroller bandwidth. This will enable consistent performance across the storage solution and support the department's high-throughput requirements. We trust these clarifications will help refine the solution design and ensure alignment with departmental expectations. The solution should be highly available. Storage system should be configured with no Single Point of Failure (SPOF) including but not limited to I/O servers (if required), Metadata servers (if required), management servers, HBA Cards, switches (if required) between I/O servers, storage controllers, Fan modules and Power supply./O servers should be offered in HA. One I/O serverHA pair per storage controller bandwidth between storage controllers shall be 100Gbps in redundancy. Justification - In reference to the department's request for a scalable and high-performance solution, we would like to provide the following clarifications and	"The solution should be highly available. Storage system should be configured with no Single Point of Failure (SPOF) including but not limited to I/O servers (if required), Metadata servers (if required), management servers, HBA Cards, switches between I/O servers, storage controllers, Fan modules and



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			To ensure nSPOF without compromising performance, it is essential to provision 2 × I/O servers per HA controller pair. This configuration supports redundancy and maintains throughput under failover conditions.	
			Scalability Considerations: As scalability is a key requirement from the department, it is imperative to use appropriately sized building blocks that can support future growth without architectural limitations. Inter-Controller Bandwidth:	
			For seamless operation of the NVMe-based architecture, a 100Gbps inter-controller bandwidth is mandatory. This ensures consistent performance across the storage solution and supports the department's high-throughput demands. We trust these recommendations will help align the solution design with the department's expectations and ensure a robust,	
8	Section – VII/Technical Specification s/"Minimum Specification s – A/Page 34 - Replication	System should support both replication modes for onpremises or hybrid cloud disaster recovery setups with flexibility in latency and performance trade-offs from day1. Ensures replication between geographically dispersed systems and cloud environments to ensure high availability and disaster recovery.	scalable, and high-performance infrastructure. System should support both replication & tiering modes for onpremises or hybrid cloud disaster recovery setups with flexibility in latency and performance tradeoffs from day1. Ensures replication between geographically dispersed systems and cloud environments to ensure high availability and disaster recovery. Justification - Along with replication tiering is important factor and same is also asked by department in point 5 above.	No change. The vendor can quote higher side.
9	Section – VII/Technical Specification s/"Minimum	Proposed solution should have capabilities like: 1. Immutable Storage (Write-once-read-many) filesets. 2.	Proposed solution should have capabilities like: 1. Immutable Storage (Write-once-read-many) filesets. 2. Point-in-time	No change.



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Specification s – A/Page 34 - Data Resiliency & Role based access Point-in-time snapshots data that is immutable and protected against ransomware or accidental deletion. 3. To ensure regulatory compliance and data immutability retention periods should be set on immutable files & snapshots. Should have integrated with role-based access controls for secure administrative handlings.

of data that snapshots immutable and protected against ransomware (it should be possible to detect, prevent & recover from ransomware attacks) or accidental deletion. 3. To ensure regulatory compliance and data immutability retention periods should be set on immutable files & snapshots. 4. Should have integrated with role-based access controls for secure administrative handlings.

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Justification - We would like to bring to attention that tiering, in addition to replication, is a critical factor in designing an efficient and scalable storage solution. This requirement has also been highlighted by the department in Point 5 of the referenced document.

Tiering enables intelligent data placement across performance and capacity tiers, optimizing resource utilization and costefficiency. When combined with replication, it ensures both data protection and performance optimization, which are essential for meeting the department's operational and scalability goals. We recommend that tiering be explicitly considered in the solution architecture to ensure with alignment departmental expectations ransomware protection and accidental deletion are separate concerns and must be addressed independently.

Immutable snapshots help prevent accidental deletion but are not sufficient for ransomware protection. Since snapshots are taken at intervals, any attack between snapshots may go undetected and unrecoverable. Hence, full ransomware protection



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			should include: Detection, Prevention, Recovery. This ensures comprehensive data security beyond basic snapshot- based safeguards.		
	2.	. M/s vdainfosolutions and IB	M Technology Sales, North India		
1	Minimum Specification s -A/ SI No.2/Capacit y/Pg 32	1 PiB usable capacity (Scalable up to 50PB)	Please confirm that both the storage systems (each 1PiB usable capacity) should be available as a single global namespace.	"1PiB usable capacity (Scalable up to 5PB) Two separate storage systems, each providing 1 PiB of usable capacity."	
2	Minimum Specification s -A/ SI No.3/Configu ration and Pool/Pg 32	1 PiB usable capacity: Using NVMe or equivalent Drives, with RAID 6 (8+2) or Erasure Code or equivalent with dual parity to ensure data protection methodology using data replication. 100% read throughput should be equal to or more than 50GB/s. Also, 100% write throughput should be equal to more than 30GB/s. OEM has to provide the evidence for the same from internal tool. System should offer more than or equivalent 5 Million IOPs on 4KiB random reads. Controllers should have Dual AMD EPYC or higher with 1.5TB memory or higher.	1 PiB usable capacity: Using NVMe or equivalent Drives, with RAID 6 (8+2) or Erasure Code or equivalent with dual parity to ensure data protection methodology. 100% read throughput should be equal to or more than 50GB/s. Also, 100% write throughput should be equal to more than 30GB/s. OEM has to provide the evidence for the same from internal tool. System should offer more than or equivalent 5 Million IOPs on 4KiB random reads. Controllers should have Dual AMD EPYC or higher with 1.5TB memory or higher. (Request to remove "data replication" as data protection will be using 8+2P).	1 PiB usable capacity: Using NVMe or equivalent Drives, with RAID 6 (8+2) or Erasure Code or equivalent with dual parity to ensure data protection methodology using data replication. 100% read throughput should be equal to or more than 50GB/s. Also, 100% write throughput should be equal to more than 30GB/s. OEM has to provide the evidence for the same from internal tool. System should offer more than or equivalent 5 Million IOPs on 4KiB random reads. Controllers should have Dual AMD EPYC / Intel or higher with	



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				1.5TB memory or higher.
3	Minimum Specification s -A/ SI No.6/SDS/Pg 32,33	Bidder should provide SDS (Software Define Storage) capabilities for existing Open shift cluster like ODF or equivalent for persistent volumes for both RWX and RWO protocols within the internal storage of nodes in the cluster from day1. Software should have capabilities of Data foundation like Unified storage services, HA & DR capabilities and Backup and restore capabilities.	Please provide details of the current Openshift Environment: 1) No. of worker nodes/Control nodes/ infra nodes 2) No. of cores and memory in each node 3) No. and capacity of disks in each node 4) Network ports in each node 5) Openshift version 6) Approx number of VMs and containers in the cluster.	1) No. of worker nodes /Control nodes / infra nodes 14. 2) No. of cores and memory in each node 64 core and 1TB. 3) No. and capacity of disks in each node 5No. of 1.92TB. 4) Network ports in each node 2. 5) Openshift version 4.17.35. 6) Approx number of VMs and containers in the cluster 12VM, 50Container.
4	Minimum Specification s -A/ SI No.11/Coonn ectivity/Pg 33	Connectivity from I/O servers to worker/compute nodes must be on minimum 100GbE Ethernet interconnect. Bidders will need to specify port requirements and provide the required transceivers and cables to connect the storage solution to the compute network. Each node should have separate port for management and network traffic. 2x1GbE for management and 4x 10GbE network ports for data access and protocol communication. The chassis supports up to 16 PCIe Gen 5 adapter slots for network and storage interface cards. The system supports high-speed PCIe Gen 5 adapters including multiple CX7	Request for modification as below: "Connectivity from I/O servers to worker/compute nodes must be on minimum 100GbE Ethernet interconnect. Bidders will need to specify port requirements and provide the required transceivers and cables to connect the storage solution to the compute network. Each node should have separate ports for management and network traffic. 2x1GbE for management and 4x100/200GbE network ports for data access and protocol communication. The nodes should support PCIe Gen 4/5 adapter slots for network and storage interface cards. The system should support highspeed adapters including multiple CX7 network cards	Already clarified above.



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network cards capable of 200/400 Gb 200/400 Gb 10finiBand or Ethernet links. Up to four or higher PCIe Gen 5 x16 adapter slots per node can be used to install NVIDIA ConnectX-7 CX7 network cards to support 20005 dual port VPI (InfiniBand/Ethernet) or 400 Gb single port InfiniBand (IB) and RoCE. 5 Switch, Page Number 35 Point in a high-availability (HA) configuration, each with a minimum of 48 multi-speed ports supporting speeds up to 100 GbE and 200 GbE. Each switch must have at least two dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Veare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, PFS or HPC based / Section – VII/Clause: 1/Page : 32 - Type 2 Page No. 33 1 PiB usable capacity: Using NVMe or equivalent (Changes Tither) (Changes With Land) above.					,,
Number 21. configuration, each with a minimum of 48 multi-speed ports supporting speeds up to 100 GbE and 200 GbE. Each switch must have at least two dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, / Section – VII/Clause: 1/Page : 32 - Type Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already Clarified		Switch, Page	network cards capable of 200/400 Gb InfiniBand or Ethernet links. Up to four or higher PCIe Gen 5 x16 adapter slots per node can be used to install NVIDIA ConnectX-7 CX7 network cards to support 200Gb dual port VPI (InfiniBand/Ethernet) or 400 Gb single port InfiniBand (IB) and RoCE.	InfiniBand or Ethernet links. Sufficient adapter cards to be provisioned to meet the required performance and throughput. Please change the ports from 48	No change.
Number 21. configuration, each with a minimum of 48 multi-speed ports supporting speeds up to 100 GbE and 200 GbE. Each switch must have at least two dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, / Section – VII/Clause: 1/Page : 32 - Type Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already Clarified		Point	in a high-availability (HA)		
minimum of 48 multi-speed ports supporting speeds up to 100 GbE and 200 GbE. Each switch must have at least two dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, PFS or HPC based Request you to Please allow S3 Object also as option & Change asked clause as "PFS or HPC based or N3 Object also as option & Change asked clause as "PFS or HPC based or the specifications mentioned in this RFP, the use case here is to deploy Storage for Openshift / Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified				•	
100 GbE and 200 GbE. Each switch must have at least two dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, / Section - VII/Clause: 1/Page : 32 - Type				•	
switch must have at least two dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, / Section – VIII/Clause: 1/Page : 32 - Type Prype Prype Request you to Please allow S3 Object also as option & Change asked clause as "PFS or HPC based or S3 Object ". Justification - We Understand as per the specifications mentioned in this RFP, the use case here is to deploy Storage for Openshift / Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified				save cost and prevent customer	
dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, / Section – VII/Clause: 1/Page : 32 - Type PFS or HPC based Request you to Please allow S3 Object also as option & Change asked clause as "PFS or HPC based or S3 Object ". Justification - We Understand as per the specifications mentioned in this RFP, the use case here is to deploy Storage for Openshift / Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified				•	
The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33,				J	
sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, PFS or HPC based Object also as option & Change asked clause as "PFS or HPC based or S3 Object". 1/Page : 32 - Type Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified				switches.	
storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Centre network. The switch should be fully populated with all required fiber cables from Day 01. 3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33, / Section — VII/Clause: 1/Page : 32 - Type Preserved as Person HPC based or S3 Object ". Justification - We Understand as per the specifications mentioned in this RFP, the use case here is to deploy Storage for Openshift / Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified			•		
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Day 01. Day 01.					
3. M/s HP Enterprise India Pvt.Ltd., M/s Vcare InfoTech Limited & M/s XtraNet Technologies Limited 1 Page No. 33,			1		
1 Page No. 33,	2 M	/c UD Enterpris		Took Limited 2 M/s YtraNet Tooks	alagias Limitad
/ Section – VII/Clause: 1/Page : 32 - Type Object also as option & Change asked clause as "PFS or HPC based or \$3 Object". Justification - We Understand as per the specifications mentioned in this RFP, the use case here is to deploy Storage for Openshift / Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified			· · · · · · · · · · · · · · · · · · ·	<u> </u>	
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1/Page : 32 - Type based or S3 Object ". Justification - We Understand as per the specifications mentioned in this RFP, the use case here is to deploy Storage for Openshift / Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified					
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to deploy Storage for Openshift / Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified				per the specifications mentioned	
Container environment with PVC mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified					
mode as ROW & RWX. Please allow bidder to offer solution Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified					
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Object storage with bucket class access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified					
access mode to deliver same features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified					
features as ROW RWX. 2 Page No. 33 1 PiB usable capacity: Change Request: Please allow Already clarified					
/ Section – Using NVMe or equivalent Controllers with intel /AMD based above.	2	Page No. 33	1 PiB usable capacity:	Change Request: Please allow	Already clarified
		/ Section -	Using NVMe or equivalent	Controllers with intel /AMD based	above.



PRINCIPAL SEAT – JABALPUR

	Reg(IT)(SA)/	⁷ 2025/ <mark>1664</mark>	Jabalpur, Dated: (09/10/2025
No. I	VII/Clause: 1/Page : 32 - Configuration and Pool	Drives, with RAID 6 (8+2) or Erasure Code or equivalent with dual parity to ensure data protection methodology using data replication. 100% read throughput should be equal to or more than 50GB/s. Also, 100% write throughput should be equal to more than 30GB/s. OEM has to provide the evidence for the same from internal tool. System should offer more than or equivalent 5 Million IOPs on 4KiB random reads. Controllers should have Dual AMD EPYC or higher with 1.5TB memory or higher.	architecture. Please Change Clause as " 1 PiB usable capacity: Using NVMe or equivalent Drives, with RAID 6 (8+2) or Erasure Code or equivalent with dual parity to ensure data protection methodology using data replication. 100% read throughput should be equal to or more than 50GB/s. Also, 100% write throughput should be equal to more than 30GB/s. OEM has to provide the evidence for the same from internal tool. System should offer more than or equivalent 5 Million IOPs on 4KiB random reads. Controllers should have Dual / single AMD EPYC or better Intel architecture or higher as per OEM architecture with 1.5TB memory in total or higher." Justification: For Vider participation, Pls allow Controllers with Dual /single Intel/AMD based architecture or as per OEM	J9/10/2025
3	Page No. 33 / Section — VII/Clause: 1/Page : 32 - Interface	Provides native POSIX file system compatibility as well as support for common protocols including CIFS/SMB, NFS V3, NFS V4 from day1. In addition should support CSI integration with Redhat Open shift from day1. It should be possible to deploy CSI driver using the Operator Lifecycle Manager of Open shift.	CSI/COSI integration with	Already clarified above.



PRINCIPAL SEAT – JABALPUR

No. R	eg(IT)(SA)/	['] 2025/ <mark>1664</mark>	Jabalpur, Dated: (09/10/2025
			Kubernetes/ Openshift environment. Pls allow COSI Driver for Vider participacion Also please provide Flesability in asked Protocol Type CIFS/SMB/NFS3/NFS4.	
4	Page No. 33 / Section — VII/Clause: 1/Page : 32 - Performance features	'	Please Change asked Clause as "Based on access patterns and the "heat" of a file, the file should automatically move from HDD to Flash pool and vice versa without any administrator's intervention. The CSI /COSI driver should allow Open Shift pods and VMs to dynamically provision and attach Persistent Volumes (PVs) and Persistent Volume Claims (PVCs) enabling persistent, high performance storage for stateful applications on open shift environment. The storage system should support deployment of container native storage access, to work in conjunction with the CSI/COSI driver for RWX and RWO protocols. Support scalable performance with parallel access from multiple nodes /clients. Justification - 1. Since asked is ALL Falsh /NVME architecture for 1PB capacity, Pls Remove asked Feature of "automatically move from HDD to Flash pool and vice versa without any administrator's intervention" 2. Please allow COSI Driver for	No change.
5	Page No. 34 / Section – VII/Clause: 1/Page: 33 - Connectivity	Connectivity from I/O servers to worker/compute nodes must be on minimum 100GbE Ethernet interconnect. Bidders will need to specify port requirements and provide the required transceivers and cables to connect the storage solution to the	Vider participation, Please Change asked Clause as " Connectivity from I/O servers to worker/compute nodes must be on minimum 100GbE Ethernet interconnect. Please ask - 1*1 G Management & 4*10/25 G NIC port per node Controller for I/O or 4*100G for Future Upgrade option. Bidders will need to specify port	Already clarified above.



PRINCIPAL SEAT – JABALPUR

No. Reg(IT)(SA)/2025/1664			Jabalpur, Dated: (09/10/2025
	3()()	compute network. Each node should have separate port for management and network traffic. 2x1GbE for management and 4x 10GbE network ports for data access and protocol communication. The chassis supports up to 16 PCle Gen 5 adapter slots for network and storage interface cards. The system supports high-speed PCle Gen 5 adapters including multiple CX7 network cards capable of 200/400 Gb InfiniBand or Ethernet links. Up to four or higher PCle Gen 5 x16 adapter slots per node can be used to install NVIDIA ConnectX-7 CX7 network cards to support 200Gb dual port VPI (InfiniBand/Ethernet) or 400 Gb single port InfiniBand (IB)	requirements and provide the required transceivers and cables to connect the storage solution to the compute network." Justification: We Understand Network & Servers with Openshift environment is already established & Now Storage need to be added in existing environment. New Upcoming storage need to be Integrated in existing network on 10/25G with Option of 100G Proposed here is "Each storage node will be with 1*1 G Management Port & 4*10/25G NIC Port- which can be further Upgradable to 4*100G Ethernet Port.	
6	Page No. 35 /Section — VII/Clause: 1/Page : 34 - Data Resiliency & Role based access	and RoCE. Proposed solution should have capabilities like: 1.Immutable Storage (Write-once-read-many) filesets. 2. Point-in-time snapshots of data that is immutable and protected against ransomware or accidental deletion. 3. To ensure regulatory compliance and data immutability retention periods should be set on immutable files & snapshots. 4. Should have integrated with role-based access controls for secure administrative handlings.	Please Change asked Clause as: Proposed solution should have capabilities like: 1. Immutable Storage (Write-once-read-many) file sets. 2. Point-in-time snapshots / S3 Version feature to support of data that is immutable and protected against ransomware or accidental deletion. 3. To ensure regulatory compliance and data immutability retention periods should be set on immutable files & snapshots. 4. Should have integrated with role-based access controls for secure administrative handlings. Justification: Please allow S3 Version Feature as option to Snapshot to deliver asked Feature of data protection.	Already clarified above.



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No. Reg(IT)(SA)/2025/1664			Jabalpur, Dated: (09/10/2025
No. R (Page No. 36 / Section – VII/Clause: 1/Page: 34 - Switch		Please Change asked Clause as: The bidder /OEM shall provide two Ethernet switches in a high-availability (HA) configuration, each with a minimum of 32 multi-speed ports supporting speeds up to 100 GbE and 200 GbE. Each switch must have at least one /two dedicated management ports. The pair of switches shall be sufficient to interconnect three storage systems, each of 1 PiB capacity, and provide uplink connectivity to the High Court's Data Center network. The switch should be fully populated with all required fiber cables from Day 01. Justifications: Switch are with One Management port, 100G/200 G	Already clarified
8	M/s Vcare InfoTech Limited - Section – II/ Clause 2.15.2 (ii) / Page: 10	(ii) Experience in Supply, Installation, commissioning of High End Servers, SAN Storage/ NAS Storage during last 05 years ending last day of month previous to the month of publication of this tender, should be either of the following:- (a) Three similar completed work costing not less than the amount equal to 40% of the estimated cost. OR (b) Two similar completed work costing not less than the amount equal to 50% of the estimated cost. OR (c) One similar completed work costing not less than the amount equal to 80% of the estimated cost. Similar works means: Supply,	Port switch are with 32Port as Standard - 48 Port switch are with 10/48 Port as standard with OEMs For Vider participation, Pls allow asked changes in switch. We would like to seek your clarification regarding the similar experience. We currently have a single order valued at ₹11.33 Crore, along with an additional order of ₹0.94 Cr issued in reference to the same. This brings the total order value to ₹12.27 Crore. Since the additional order is directly linked to the original one, we would like to confirm whether the combined value will be considered together. The scope of the order is for the SITC of the Storage Solution (DC & DR)	Quote as per the tender document.



PRINCIPAL SEAT – JABALPUR

Jabalpur, Dated: 09/10/2025

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		installation and System Integration of High End Servers, SAN Storage / NAS		
		Storage.	4 4d 9 M/o Llitophi Vontoro	
		,	t. Ltd. & M/s Hitachi Vantara	N 20 1
1	Clause No. 2.5 EARNEST MONEY DEPOSIT (EMD):-	2.5.1 The proposal should be submitted along with online application fee of Rs.10,000/- (Rs. Ten Thousand Only) and online Earnest Money Deposit (EMD) of Rs.30 Lakh/- (Rupees Thirty Lakh Only) in the form of online mode through e-procurement tender portal www.mptenders.gov.in in favour of "Registrar General, High Court of Madhya Pradesh, Jabalpur" valid for the period of 06 months. The Bid submitted without EMD and/or the application fee/tender fees shall be summarily rejected.	We request your kind consideration to modify the existing EMD submission requirement of Rs.30 Lakh/- to permit submission either through Online Payment or via Bank Guarantee in favor of "Registrar General of High Court Madhya Pradesh, Jabalpur." Justification:- The tender process at the Hon'ble High Court, including final order determination and subsequent release of the EMD, typically spans around six months. Requiring bidders, particularly MSME participants, to block such a substantial amount entirely in cash for this extended duration imposes a significant financial burden. We therefore humbly request the Hon'ble High Court to kindly permit Bank Guarantee as an alternative option for EMD submission, in the interest of fair competition and broader participation.	Yes permitted.
2	Clause No. 2.15.2, Page No.10 & 11	(ii) Experience in Supply, Installation, commissioning of High End Servers, SAN Storage/ NAS Storage during last 05 years ending last day of month previous to the month of publication of this tender, should be either of the following:- (a) Three similar completed work costing not less than the amount equal to 40% of the estimated cost. OR (b) Two similar completed work costing not less than the amount equal to 50% of the estimated cost. OR	We would like to submit our request that During the Covid-19 pandemic and subsequent years, most Government Departments and PSUs significantly reduced procurement of on-premise, high-value IT infrastructure such as Servers and Storage. Instead, they shifted focus towards Cloud-based storage and service-oriented models. This shift has substantially reduced the availability of large-value projects of the type specified in the current tender. Also, we would request to kindly extend the experience period to 07 years so, as to allow	•



PRINCIPAL SEAT – JABALPUR

No. Reg(IT)(SA)/2025/<mark>1664</mark>

No. Re	eg(IT)(SA)/	['] 2025/ <mark>1664</mark>	Jabalpur, Dated: (09/10/2025
No. Re	eg(IT)(SA)/	(c) One similar completed work costing not less than the amount equal to 80% of the estimated cost. Similar works means: Supply, installation and System Integration of High End Servers, SAN Storage / NAS Storage.	more eligible and competitive bidders to participate in the tender. As a result, many competent and experienced bidders who have executed multiple medium-to-large projects may find it difficult to qualify under the current criteria, even though they possess the technical expertise and execution capabilities required. Request for Change:- We humbly request the Hon'ble Committee to relax and amend the eligibility criteria as follows: (ii) Experience in Supply, Installation, commissioning of High End Servers, SAN Storage/NAS Storage during last 07 years ending last day of month previous to the month of publication of this tender, should be either of the following:- (a) Three similar completed work costing not less than the amount equal to 20% of the estimated cost. OR (b) Two similar completed work costing not less than the amount equal to 30% of the estimated cost. OR (c) One similar completed work costing not less than the amount equal to 50% of the estimated cost. OR	09/10/2025
			costing not less than the amount	
3	4.8 Time Schedule To Complete The Contract:-	4.8.1 The successful bidder shall complete the assignment within 30 days from the date of issue of Letter of Acceptance/ Letter of Intent.	As the quoted products are commercial products and will be procured back-to-back from the OEM as per the order received, we request to kindly amend the delivery and supply timeline from 30 days to 60 days to ensure smooth procurement, supply, installation, and testing without	Yes allowed.



PRINCIPAL SEAT – JABALPUR

Jabalpur, Dated: **09/10/2025**

	-9(=-)(),	2023/1004	Japaipui, Dateu.	27, 20, 2020
	"Minimum Spec	cifications – A" SAN Storage (I	compromising quality. Kindly amend the clause as per below:- 4.8.1 The successful bidder shall complete the assignment within 60 days from the date of issue of Letter of Acceptance/ Letter of Intent. High Performance Storage)	
4	Configuration	1 PiB usable capacity:	Request for Change:- We would	Already clarified
	and Pool	Using NVMe or equivalent Drives, with RAID 6 (8+2) or Erasure Code or equivalent with dual parity to ensure data protection methodology using data replication. 100% read throughput should be equal to or more than 50GB/s. Also, 100% write throughput should be equal to more than 30GB/s. OEM has to provide the evidence for the same from internal tool. System should offer more than or equivalent 5 Million IOPs on 4KiB random reads. Controllers should have Dual AMD EPYC or higher with 1.5TB memory or higher.	request to kindly amend the clause as below:- 1 PiB usable capacity:	
5	Interface	Provides native POSIX file system compatibility as well as support for common protocols including CIFS/SMB, NFS V3, NFS V4 from day1. In addition should support CSI integration with Redhat Open shift from day1. It	configuration. We would like to submit our request that Each OEM follows a different architecture to ensure data availability and hardware configuration. Request for Change:- We would request to kindly amend the clause as below:- Provides native POSIX file	The vendor can quote better or higher side protocols.



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6	SUS	should be possible to deploy CSI driver using the Operator Lifecycle Manager of Open shift.	system compatibility as well as support for common protocols including CIFS/SMB, PFS, Luster, GPFS, NFS V3, NFS V4 from day1. In addition should support CSI integration with Redhat Open shift from day1. It should be possible to deploy CSI driver using the Operator Lifecycle Manager of Open shift. Justification:- The required throughput of 50 GB/s for reads and 30 GB/s for writes, or higher, can be achieved using parallel file system protocols such as Lustre or GPFS. Red Hat OpenShift supports integration with parallel file systems such as Lustre or GPFS.	Already clarified
6	SDS	Bidder should provide SDS (Software Define Storage) capabilities for existing Open shift cluster like ODF or equivalent for persistent volumes for both RWX and RWO protocols within the internal storage of nodes in the cluster from day1. Software should have capabilities of Data foundation like Unified storage services, HA & DR capabilities and Backup and restore capabilities.	We kindly request clarification on whether the Hon'ble High Court is specifically seeking a software-defined storage solution based on Red Hat ODF (proprietary), or if bidders may propose alternate solutions that comply with COTS offerings. Please confirm if the department intends to deploy an SDS solution (e.g., Red Hat ODF) using servers with internal drives, or if it is open to COTS-based solutions designed for parallel file systems such as Lustre, WEKA, etc. Justification:- Red Hat OpenShift Data Foundation (ODF) has scalability limitations and cannot support deployments beyond 500 TB capacity.	Already clarified above.
7	Rebuild Time	RAID priority rebuild time should be less than 12 hrs while the system is live	We would request to Kindly include Erasure Coding (EC) alongside RAID, as EC is a modern, highly efficient data protection method that provides superior storage efficiency and greater fault tolerance by splitting data, adding parity, and distributing fragments across	rebuild time should



PRINCIPAL SEAT – JABALPUR

No. Re		2025/ <mark>1664</mark>	Jabalpur, Dated: (09/10/2025
8	Connectivity	Connectivity from I/O	multiple nodes. Kindly amend the clause and as below:- "RAID/EC priority rebuild time should be less than 12 hrs while the system is live." Justifications:- Erasure Coding (EC) is a more advanced technique that splits data into multiple fragments, adds parity blocks, and distributes them across a network of storage nodes for highly efficient data protection with greater fault tolerance. Also, EC provides a more flexible, object-level approach that offers better storage efficiency and resilience against multiple drive and even node failures. We would request to kindly amend	Already clarified
8	Connectivity	servers to worker/compute nodes must be on minimum 100GbE Ethernet interconnect. Bidders will need to specify port requirements and provide the required transceivers and cables to connect the storage solution to the compute network. Each node should have separate port for management and network traffic. 2x1GbE for management and 4x 10GbE network ports for data access and protocol communication. The chassis supports up to 16 PCIe Gen 5 adapter slots for network and storage interface cards. The system supports high-speed PCIe Gen 5 adapters including multiple CX7 network cards capable of 200/400 Gb InfiniBand or Ethernet links. Up to four or higher PCIe Gen 5 x16 adapter slots per	the clasue as below:- Connectivity from I/O servers to worker/compute nodes must be on minimum 2x200/100GbE Ethernet interconnect per node. Each node should have separate port for management and network traffic 2x1GbE for management. Bidders will need to specify port requirements and provide the required transceivers and cables to connect the storage solution to the compute network. Justification:- The requested number of ports per node is OEM-specific and cannot be supported as a standard feature.	above.



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No. R		/2025/ <mark>1664</mark>	Jabalpur, Dated: (09/10/2025
		node can be used to install NVIDIA ConnectX-7 CX7 network cards to support 200Gb dual port VPI (InfiniBand/Ethernet) or 400 Gb single port InfiniBand (IB) and RoCE.		
9	Replication	System should support both replication modes for on- premises or hybrid cloud disaster recovery setups with flexibility in latency and performance trade-offs from day1. Ensures replication between geographically dispersed systems and cloud environments to ensure high availability and disaster recovery.	Kindly clarify whether the Hon'ble High Court of Madhya Pradesh plans to replicate active data between the DC and DR. If so, please indicate whether this replication will be implemented onpremises or via a cloud service provider (CSP- AWS, Google, Azure, Sify, NTT, Nextra and NIC etc)." Justification:- As per our knowledge Hon'ble High Court is a autonomus system which does not uses Cloud/Hyperscalers for their primary & secondary data storages. So, allowing a OEM to provide hybrid or cloud disaster recovery would be detrimental to the High Court because t+D16:D17he Ecosystem for cloud and on premise can be very very different and if a OEM provides hybrid cloud disaster recovery setup it might not be any use to Hon'ble High Court.	No change. The vendor can quote higher side / extra features / applications. Replication will be implemented on-premises.
10	Data Resiliency & Role based access	Proposed solution should have capabilities like: 1. Immutable Storage (Write-once-read-many) filesets. 2. Point-in-time snapshots of data that is immutable and protected against ransomware or accidental deletion. 3. To ensure regulatory compliance and data immutability retention periods should be set on immutable files & snapshots. 4. Should have integrated	We would request to kindly amend the clause as below:- 1. Point-in-time snapshots of data that is immutable and protected against ransomware or accidental deletion. 2. To ensure regulatory compliance and data immutability retention periods should be set on immutable files & snapshots. 3. Should have integrated with role-based access controls for secure administrative handlings. Justification:- Immutable Storage for the PFS solution is specific to One OEM only. We comply with	Already clarified above.



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		with role-based access	point in time snapshot of data	
		controls for secure	which is immutable and protected	
		administrative handlings.	against ransomware or accidental	
		E M/o Poll T	deletion.	
1	Minimum	PFS or HPC based	echnologies	No shanga
l	Specificatio	PFS of HPC based	PFS/HPC/scale out storage. Justification - Please allow Scale	No change.
	ns – A"/		out NAS storage as well since	
	Clause No.		most of the requirement asked in	
	1/ Type		RFP points to scale out NAS	
	ii Type		storage requirement.	
2	Minimum	1 PiB usable capacity:	1 PiB usable capacity:	Already clarified
_	Specificatio	Using NVMe or equivalent	Using NVMe or equivalent	•
	ns – A/	Drives, with RAID 6 (8+2)	Drives, with RAID 6 (8+2) or	
	Clause No.	or Erasure Code or	Erasure Code or equivalent with	
	3/	equivalent with dual parity	dual parity to ensure data	
	Configuratio	to ensure data protection	protection methodology using	
	n and Pool	methodology using data	data replication.	
		replication.	100% read throughput should be	
		100% read throughput should	equal to or more than 50GB/s.	
		be equal to or more than	Also, 100% write throughput	
		50GB/s. Also, 100% write	should be equal to more than	
		throughput should be equal to	10GB/s. OEM has to provide the	
		more than 30GB/s. OEM has	evidence for the same from	
		to provide the evidence for	internal tool. System should offer	
		the same from internal tool.	more than or equivalent 5 Million	
		System should offer more	IOPs on 4KiB random reads.	
		than or equivalent 5 Million	Controllers should have Dual AMD	
		IOPs on 4KiB random reads. Controllers should have Dual	EPYC or higher with 1.5TB	
		AMD EPYC or higher with	memory or higher. Justification - We have intel CPU	
		1.5TB memory or higher.	based controllers, most of storage	
		1.010 memory of fligher.	vendor does not use AMD based	
			CPU and storage performance	
			and reliability is CPU agnostic,	
			hence please allow intel based	
			CPU for wider participation.	
			Since the requirement is of file	
			workload, 3performance in terms	
			of IOPS not relevant, its only for	
			block workload hence requested	
			to remove the same.	
			Write performance is moderated	
			to be closer to 20% of read	
			performance which is usually the	
	Ministra	Dravidae netice DOCIV file	Case.	Almonda, almifical
3	Minimum	Provides native POSIX file	Provides native POSIX/ file	Already clarified
	Specificatio	system compatibility as well	system compatibility as well as	above.



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ns – A/ as support for common support for common protocols Clause No. protocols including including CIFS/SMB, NFS V3,	
4/ Interface CIFS/SMB, NFS V3, NFS V4 from day1. In addition should support CSI integration with Redhat Open shift from day1. It should be possible to deploy CSI driver using the Operator Lifecycle Manager of Open shift. Amount of Open shift of Open shift. Winimature Open day1. In addition should support CSI integration with Redhat Open shift from day1. It should be possible to deploy CSI driver using the Operator Lifecycle Manager of Open shift. Justification - POSIX file system is only provided by specific vendors, for other storages data access can be provided by other protocols like CIFS/SMB, NFS etc please also include Simultaneous multi-protocol (NFS/SMB/S3) access support.	wifi o d
Minimum Specificatio ns – A/ Clause No. 6/SDS Minimum Storage) Storage) Capabilities Storage) Capabilities Storage) Capabilities Storage) Capabilities Storage Storage) Capabilities Storage Capabilities Cap	rified
Specificatio ns – A/ Clause No. 7/ Technical Capability Specificatio ns – A/ Clause No. The chaical of the proposed storage device. Specificatio ns – A/ Clause No. The chaical of the proposed storage device. Specificatio demonstrate the features of Specification of Specification of the features of Specification of S	rified
6 Minimum RAID priority rebuild time RAID priority Data rebuild time Already clai	rifi a d



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	Specificatio ns – A/ Clause No. 9/ Rebuild	should be less than 12 hrs while the system is live	should be less than 12 hrs while the system is live. Justification - Not all storage vendors use RAID, We support	above.
	Time		erasure coding hence request to remove RAID or allow erasure coding.	
7	Minimum Specificatio ns – A/ Clause No. 11/ Connectivit y	Connectivity from I/O servers to worker /compute nodes must be on minimum 100 GbE Ethernet interconnects. Bidders will need to specify port requirements and provide the required transceivers and cables to connect the storage solution to the compute network. Each node should have separate port for management and network traffic. 2x1GbE for management and 4x10GbE network ports for data access and protocol communication. The chassis supports up to 16 PCleGen 5 adapter slots for network and storage interface cards. The system supports high-speed PCle Gen 5 adapters including multiple CX7 network cards capable of 200/400Gb InfiniBand or Ethernet links. Up to four or higher PCle Gen 5 x16 adapter slots per node		-
		can be used to install NVIDIA ConnectX-7 CX7 network cards to support 200Gb dual port VPI (InfiniBand/Ethernet) or 400 Gb single port InfiniBand (IB) and RoCE.	ConnectX-7 CX7 network cards to support 200Gb dual port VPI (InfiniBand/Ethernet) or 400Gb single port InfiniBand (IB) and RoCE. Justification - Management port does not need to be redundant (per node), hence request it be changed to 1 qty of management port per node. Kindly ask the ports/port speed which is needed. Explicitly specifying NIC card make and PCIe generation would limit	



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			competition.	
8	Minimum		Since 2 storage has been asked	Both storage to be
	Specificatio		in RFP, Assuming its going to be	deployed in DC.
	ns – A/ Not		deployed in DC/DR, Please	
	Applicable/		specify the replication requirement	
	General		and license to be included.	
	T		Technologies Limited	
1	2.5 Earnest	The proposal should be	For any large tenders, normally	_
	Money	submitted along with online	the EMD is asked in form of DD /	clarified above.
	Deposit	application fee of Rs.10,000/-	Online / BG (Bank Guarantee), but	
	(EMD)	(Rs. Ten Thousand Only) and	we could not find the acceptance	
	Page no 7	online Earnest Money Deposit	of EMD in form of BG in the said	
	9	(EMD) of Rs.30 Lakh/-	RFP.	
		(Rupees Thirty Lakh Only) in		
		the form of online mode	- We hereby request Authority to	
			· · · · · · · · · · · · · · · · · · ·	
		through e-procurement tender	kindly allow bidder to submit the	
		portal	EMD in any of the mode (DD/On	
		www.mptenders.gov.in in	line / NEFT/RTGS/Bank	
		favour of "Registrar General,	Guarantee)	
		High Court of Madhya		
		Pradesh, Jabalpur" valid for		
		the period of 06 months. The		
		Bid submitted without EMD		
		and/or the application		
		fee/tender fees shall be		
		summarily rejected		
2	2.15	(ii) Experience in Supply,	1) We understand that the	Already clarified
_	Eligibility/	Installation, commissioning of	qualified projects are the projects	above.
	Pre-	High End Servers, SAN	whose completion date of project	abovo.
	Qualification	Storage/ NAS Storage during	(tenure) was within last 05 years	
			, ,	
	Criteria:-	last 05 years ending last day	ending last day of month previous	
	Page no 10	of month previous to the	to the month of publication of this	
	&11	month of publication of this	tender	
		tender,	- Kindly confirm	
		should be either of the	2) We also understand that the	
		following:-	onging projects (go-live declared	
		(a) Three similar completed	and currently under O&M /	
		work costing not less than the	Maintenance phase), will also be	
		amount equal to 40% of the	accepted.	
		estimated cost. OR		
		(b) Two similar completed		
		work costing not less than the		
		amount equal to 50% of the		
		estimated cost. OR		
		(c) One similar completed		
		work costing not less than the		
		1		
		amount equal to 80% of the		
		estimated cost.		



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		Similar works means: Supply, installation and System Integration of High End Servers, SAN Storage / NAS Storage.		
3	2.20 General Instructions To The Bidders:- Page no 14	2.20.3 Successful bidder must ensure his establishment in India and in the State of Madhya Pradesh for post-installation services and support of the SAN Storage system.	We understand that the either the bidder should have their office in Madhya Pradesh OR should ensure that bidder will set-up the support office in Madhya Pradesh within stipulated time i.e. 45 days, if bidder is awarded the bid. In such a case, the bidder may provide an undertaking in their technical bid to establish a support office in Madhya Pradesh within the stipulated 45 days Kindly confirm Kindly confirm	Yes allowed / changed.
4	4.8 Time Schedule To Complete The Contract:- Page no 21	4.8.1 The successful bidder shall complete the assignment within 30 days from the date of issue of Letter of Acceptance/ Letter of Intent	The given timeline for supplying a new product is very strict. Considering the OEM's supply chain process, the delivery would take at least 6 to 8 weeks' time, we kindly request you to extend the timeline by at least 45–60 days.	Already clarified above.

All above specifications should be read as equivalent or better / higher side. The vendor may quote equivalent or better / higher specifications and please mention the same in compliance column of compliance sheet. In finalization of specifications' the decision of the High Court of Madhya Pradesh, Jabalpur will be final and binding on all.

Note:-

- The High Court of Madhya Pradesh shall have full rights to accept or reject any bid, without assigning any reason thereof.
- 2. The above clarifications / addendum are for all the prospective bidders' for their tender reference.
- 3. All future correspondence/ clarifications/ addendum/ corrigendum shall be available on the website of the High Court of Madhya Pradesh i.e. www.mphc.gov.in and Government e-Procurement portal www.mptenders.gov.in.



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- 4. All the pages of the bids and Annexure's are to be sealed and signed by the authorized officers of the company / vendor.
- 5. All prospective bidders are requested to submit the bid with all relevant documents in sequenced manner, without fail.
- 6. In case of further query /clarification, please visit at High Court of Madhya Pradesh, Jabalpur.
- 7. On introduction of new levy / taxes / duties the rate / price of items shall be changed in same proportionate.
- 8. The total price of commercial bid inclusive of all taxes & expenses for 05 (Five) years on-site maintenance & support shall be taken as the basis for evaluation of commercial bids In case of any discrepancy in the tax factor, the basic product price shall be taken in to consideration for finalization of bids.
- 9. Tender to be submitted along with all requisite documents. If any of the required documents are not found along with the bid, then the same shall be summarily rejected.

Sd/PRINCIPAL REGISTRAR (ILR & EXAM)

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