

## Corrigendum

### OCAC-NEGP-INFRA-0010-2022-22048

**“RFP for IT Infrastructure Equipment’s (SAN Switches, Storage and Backup Software) for OSDC Bhubaneswar”**

S.N.	RFP Clause	Description (in RFP)	Amended Clause
1	3.1. SAN Switches, Sl No. 4	Switch should be rack mountable 1U size and should be supplied with mounting kit.	Switch should be rack mountable 2U size and should be supplied with mounting kit.
2	3.1. SAN Switches, Sl No. 13	Switch must support out-band management protocols like SNMP v1, v2 and v3, SMI-S, Telnet, FTP & TFTP/SFTP	Switch must support out-band management protocols like SNMP (v1,& v3), SMI-S, Telnet/SSH, SFTP
3	3.2. Enterprise Storage, SL no 4	1) Minimum Four Storage controllers/ Nodes configured in Symmetric Active-Active mode, where all the volumes and LUN's shall be active from all the controllers, should support RAID6 or equivalent with automatic failover. Failure of any controller should not affect the path availability and working connectivity between storage system and devices. 2) Offered system should be configured in such a way that entire offered cache should be available for all volumes. Once restored the system should auto restore to its original way of functioning. 3) Offered storage shall be an enterprise storage array & 100% data availability guaranteed architecture and All Flash cloud native end to end NVMe array only. Shall be marketed / Publish as All NVMe array on the vendor web site.	1) Minimum Four Storage controllers/ Nodes configured in Symmetric Active-Active mode, where all the volumes and LUN's shall be active from all the controllers, should support RAID6 or equivalent with automatic failover. Failure of any controller should not affect the path availability and working connectivity between storage system and devices. 2) Offered system should be configured in such a way that entire offered cache should be available for all volumes. Once restored the system should auto restore to its original way of functioning. 3) Offered storage shall be an enterprise storage array & 99.9999% data availability guaranteed architecture and All Flash cloud native end to end NVMe array only. Shall be marketed / Publish as All NVMe array on the vendor web site.
4	3.2. Enterprise Storage, SL no 5	Storage solution should be supplied with minimum port configuration as follows: a) FC Ports: 16 x 32 Gb b) iSCSI ports: 16 x 10Gb c) 4 * 10 Gb SFP+ ports for NAS connectivity (Bidder needs to propose minimum dual NAS controller incase offered system doesn't natively support NAS functionality). d) 8 x 10Gbps ports for replication, incase storage doesn't have native ports for replication then FCIP router shall be provided at no extra cost to SDC.	Storage solution should be supplied with minimum port configuration as follows from day1: a) FC Ports: 32 x 32 Gb b) iSCSI ports: 16 x 10Gb c) 4 * 10 Gb SFP+ ports for NAS connectivity (Bidder needs to propose minimum dual NAS controller incase offered system doesn't natively support NAS functionality). d) 8 x 10 Gbps ports for replication, incase storage doesn't have native ports for replication then FCIP router shall be provided at no extra cost to SDC.
5	3.2. Enterprise Storage, Sl. No. 24	a) OEM should be ranked within top 3 as per IDC report for any one of the previous four quarter in India for storage OR The proposed Storage OEM must be rated as Leader's in the latest magic quadrants for General Purpose Disk Arrays by Gartner.	a) OEM should be ranked within top 3 as per IDC report for any one of the previous four quarter in India for storage OR The proposed Storage OEM must be rated as Leader's in the latest magic quadrants for Primary Storage by Gartner.

S.N.	RFP Clause	Description (in RFP)	Amended Clause
		b) OEM shall have their own GST registered spare depot/ center in the state of Odisha (GST details in the name of OEM to be submitted)	b) - <i>Clause Dropped</i>
6	3.3. File and Object Storage, Sl. No. 1	Storage solution should be supplied with minimum 500 TB usable capacity. For highest level of data security, OS of storage solutions should not be based on general purpose OS like linux. Storage should not be based on general purpose servers	Storage solution should be supplied with minimum 500 TB usable capacity.
7	3.3. File and Object Storage, Sl. No. 2	Storage should be in symmetric and distributed clustered architecture. Must be configured with at least four controllers/ Nodes. Each storage controller/ Nodes should be supplied with four no's of 10/25 Gbps SFP+ ports with 25 Gbps SFP28 transceivers.	Storage should be in—symmetric OR distributed clustered architecture.  a) Must be configured with at least four controllers/ Nodes. Each storage controller/ Nodes should be supplied with four no's of 10/25 Gbps SFP+ ports with 25 Gbps SFP28 SR transceivers.  OR b) Must be configured with at least four controllers/ Nodes. Each storage controller/ Nodes should be supplied with four no's of 10/25 Gbps SFP+ ports with 10 Gbps SR transceivers and suitable redundant switch with dual power supply having 10G Fibre port for Controller/ Nodes connectivity and 4 nos. minimum 40Gbps SFP+ port with 40 Gbps SR transceivers for uplink.
8	3.3. File and Object Storage, Sl. No. 3	Storage controllers should be configured with more than 700 GB global coherent DRAM based cache across Storage controller/ Storage node configured for read and write operations. In addition, storage should have 12TB SSD based cache, If SSD cache not available then storage should supplied with 1.5TB of DRAM based cache.	Storage controllers should be configured with more than 512 GB global coherent DRAM based cache across Storage controller/ Storage node configured for read and write operations. In addition, storage should have 12TB SSD/ NVMe based cache, If SSD cache not available then storage should supplied with 1.5TB of DRAM based cache.
9	3.3. File and Object Storage, Sl. No. 6	<ul style="list-style-type: none"> <li>• Network protocol Support:</li> <li>• Must provide access for a variety of operating systems (UNIX, Mac, Linux, and Windows) using all standard protocols: NFS3, NFS4, NFS4.1, SMB, HTTP, FTP, S3, REST. All protocols MUST be native to the storage, and be included without additional softwares and hardware.</li> <li>• Should support user multiple security mechanisms like AD, LDAP at the same time</li> </ul>	<ul style="list-style-type: none"> <li>• Network protocol support:</li> <li>• Must provide access for a variety of operating systems (UNIX, Mac, Linux, and Windows) using all standard protocols: NFS3, NFS4/NFS4.1, SMB, HTTP, FTP, S3, REST. All protocols MUST be native to the storage, and be included without additional softwares and hardware.</li> <li>• Should support user multiple security mechanisms like AD, LDAP at the same time.</li> </ul>

S.N.	RFP Clause	Description (in RFP)	Amended Clause
		<ul style="list-style-type: none"> <li>Storage solution must support multiple protocols at the same time on the same piece of hardware including but not limited to CIFS, NFS.</li> </ul>	<ul style="list-style-type: none"> <li>Storage solution must support multiple protocols including but not limited to CIFS, NFS.</li> </ul>
10	3.3. File and Object Storage, Sl. No. 7	Proposed object storage should support NL-SAS, SATA and SSD, NVMe drives.	Proposed object storage should support NL-SAS, SATA and SSD/NVMe drives.
11	3.4. Backup Software, Sl. No 2	<p>Proposed backup software should be available on various OS platforms like Windows, Linux, IBM AIX, Solaris etc. The backup server must be compatible to run on both Windows and Linux OS platforms</p> <p>The software must provide single graphical web view for complete backup and historical data archival.</p> <p>Proposed software should have feature to replicate backup copy to one or multiple sites in proposed license.</p>	<p>Proposed backup software should be available on various OS platforms like Windows, Linux, IBM AIX, Solaris etc. The backup server must be compatible to run on both Windows and Linux OS platforms.</p> <p>The software must provide single graphical web view for complete backup and historical data archival</p> <p>“OR”</p> <p>The software must provide single graphical web view for complete backup and data stored for Long Term Retention.</p> <p>Proposed software should have feature to replicate backup copy to one or multiple sites in proposed license.</p>
12	3.4. Backup Software, Sl. No 5	<p>Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like VMware, Hyper-V, Redhat OpenStack, Redhat OpenShift, OpenShift, KVM and Nutanix AHV and support de-duplication on any storage target.</p> <p>It should be able to backup data to tapes (like LTO) as well for long term retention.</p>	<p>Backup Solution should be Hardware Agnostic software and it should support snapshot integration with hypervisors like VMware, Hyper-V, Redhat OpenStack, Redhat OpenShift, OpenShift, KVM and Nutanix AHV and support de-duplication on any storage target.</p> <p>It should be also able to backup data to tapes for VMware, Hyper-V, Redhat OpenStack, KVM and Nutanix AHV for long term retention.</p>
13	3.4. Backup Software, Sl. No 6	The proposed backup software should be able to integrate with anti-virus software and scan before recovery of VMs and ensure that any infected VM is not restored or restore it with disabled network adapters to prevent any infection to spread through the network	- Clause Dropped.
	3.4. Backup Software, Sl. No 6	Proposed backup software should have the ability to perform staged restores to enable admins to comply to regulations by selectively deleting files / records which should not be restored from the backup copies. This will help in complying with "right to be forgotten" regulations like GDPR, where user data is deleted from restored backup copies in an auditable manner.	- Clause Dropped.

S.N.	RFP Clause	Description (in RFP)	Amended Clause
	3.4. Backup Software, Sl. No 6	Backup software should support instant file share recovery in NAS storages to allow users to access files fast after disaster.	Backup solution should support file share recovery in NAS storages to allow users to access files after disaster.
14	3.4. Backup Software, Sl. No 10	Supplied with compatible IEC C13/C14 3pin power cord suitable for PDU (if required).	- <i>Clause Dropped.</i>

**Note: Bid Submission and Opening Date & Time Extended as per below schedule**

**Bid Submission Date and Time: 15 December 2022 by 02:00 PM**

**Bid Opening Date and Time: 15 December 2022 at 04:00 PM**