



# INDIAN STATISTICAL INSTITUTE

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Kolkata 700108

Ref. No.: CSSC/2021-22/03

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## **Notice Inviting Expression of Interest**

Indian Statistical Institute (ISI) is seeking Expression of Interest (EOI) from reputed companies/agencies for the procurement of Network Attached Storage solution to be installed at the Computer & Statistical Service Centre (CSSC) of the Institute to replace its existing storage system. The scope of work includes supply, installation and testing of the storage system, including migration of data from the existing storage system to the new one.

### **Overview of Existing Storage System:**

Parameter	Specification
Make	Dell
Model	Isilon X400-4U-Dual-96GB-2x1GE-2x10GE SFP+-144TB
Number of Nodes	03 (configured in RAID5)
Capacity per Node	130 TB
Filesystem Protocol	NFSv3 (OS: OneFS)
Usable Capacity	260 TB
Present Usage	About 180 TB

The existing storage system is being used as a centralized storage for all physical and virtual server infrastructure installed at CSSC. Four Cisco Blade servers connected and managed by Cisco FI and Cisco UCSM respectively are installed with VMware vSphere 6.5 and managed by VMware vCenter server appliance. These VMs are connected with the existing storage system using VMWare datastore technology with 10Gbps bandwidth for the virtual machine Operating System and all the VM data. Other servers are standalone servers and the storage is mounted on each of these servers through the Ethernet network using the NFSv3 protocol. Data stored in the storage system includes VM datastore and data from all the users of our web, email and computational servers.

## **Technical Specifications of Proposed Storage Solution:**

<b>Parameter</b>	<b>Specification</b>
Usable Storage Capacity	325 TB with RAID5
Number of Nodes	Minimum 05 (five)
Scalability	Expandable upto 650 TB (Usable)
Filesystem Protocols	NFSv3 and NFSv4
Disk Type	Hybrid (SSD + NL-SAS)
Throughput	Minimum 2 Gbps
Front-end I/O Modules	Minimum 2x10 GBE + 2x10GB SFP+ Ports
Warranty	5 Years Onsite Comprehensive
Extended Support	Additional 5 Years after the completion of warranty period in the form of extended warranty or AMC (i.e., the system should be supported by the OEM for at least 10 years from the date of procurement.)
Controller Configuration	Minimum 64 GB RAM, minimum 12 cores, 24 MB L3 Cache, 3GHz processor per node (Intel Xeon Gold series or higher)
Accessories	Accessories required for inter node connectivity and connection with our existing Ethernet network must be included.

**Data Migration:** Migration of data (around 180 TB) from the existing storage system will be the essential part of the new storage solution. It includes complete migration of VMware datastore and configuration files present in our existing storage, user data, and web & email server related data.

Interested companies/agencies are requested to send the **techno-commercial (budgetary) proposal of their storage solution** along with the related literature to [headcssc@isical.ac.in](mailto:headcssc@isical.ac.in), with a copy to [csscservice@isical.ac.in](mailto:csscservice@isical.ac.in) within **5:00 PM of 02 July 2021**. Respective OEMs will also be required to give a presentation on their proposed solution. The date for the same will be communicated over email in due course.



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