

Due date: 14th August, 2012

1. Introduction

Sealed quotation/bids are invited from interested vendor for the supply and installation of Network Unified Storage preferred reputed manufacture having multinationals presence, technical specification given below. Technical and commercial bids in two sealed separate envelopes shall be submitted to the below address.

2. Submission details

- The offer should be deposited or send by super subscribing "Quotation for Network Unified Storage on the sealed & separate envelope and it should addressed to the Registrar IIIT- Delhi latest by 14th August, 2012 up to 4.00 P.M. at the following address

Address: Indraprastha Institute of Information Technology Delhi
Okhla Phase III, (Near Govindpuri Metro Station)
New Delhi - 110020

Time, Date and Venue for opening of Technical bid:
Date: 14 August 2012 and Time: 4 PM (IIIT-Delhi, Okhla)

Technical Bid – Envelop ‘A’

2 Specifications

Item	Specifications	Qty.	Unit Cost INR ₹
NUS	<ol style="list-style-type: none">Controller: Must have two controllers working simultaneously to handle separate workload and at the same time must support automatic failover in case of any one of controllers fails. The takeover must be seamless and instant without any additional reconfiguration.CPU: Each controller must have minimum 64 bit multicore CPUs.Memory: Each controller must have at least 16 GB usable protected memory.Flash memory: Storage should have 512GB flash cache / SSD to improve read and write performance.Operating system: Storage should have an OS (latest version) which is optimized for managing data efficiently.Protocol support: Network protocol Support: FC, iSCSI, CIFS, TCP/IP, NFS Version 3,4 over UDP and TCP, SNMP, Telnet, Network time protocol (NTP), HTTP. All the licenses for abovementioned protocols should be provided.	1	

- 7. Ports:** The storage system should have at least 2 # GbE ports, 2 # 10G ports, 2 # FC port per controller. Should be configured with SAS ports for disk connectivity.
- 8. Disk scalability:** The storage should be scalable and support more than **400+ drives without controller upgrade.**
- 9. Redundancy:** Redundant and hot swappable modules: disk drive, power supply, fans. Should be able to support simultaneous double disk failure. There should not be any single point of failure. Non-disruptive microcode update and parts replacement should be supported.
- 10. Storage functionality:**
 - a. Standard features must include: snapshots without performance degradation, clone, email alert
 - b. Should have virtualization capability of combining multiple RAID group into a single pool
 - c. Should be capable of non-disruptive data migration across volumes
 - d. Thin provisioning must be the default feature. License for the same for full capacity should be provided.
 - e. Should have De-duplication or compression feature. Full license should be provided.
 - f. Standard file access features: active directory, LDAP, hierarchical management should be included
 - g. All the features mentioned above must have full capacity licenses.**
- 11. Raid levels:** RAID levels to support: 0, 1, 4/5, 6. Simultaneous two disk failure recovery on same RAID group should be demonstrated at the time of installation. Filesystem to support checksum to avoid silent data corruption
- 12. Storage feature:** Storage system (disk shelves) should support SSD, SATA, SAS disks simultaneously with different speed (15k RPM, 10k RPM, 7.2k RPM). Storage back end connectivity should be **6Gbps or more.**
- 13. Capacity: SAS disks. 15 TB** of effective (usable) storage on high speed disk (15k/10k RPM, 3.5"/2.5", 600GB each) and **20 TB** of usable storage on high capacity low RPM (7.2k RPM, 1 TB) disk, assuming that **RAID 6 with double parity with at least 2 hot spare disks** in each group is incorporated. All disks must have at least 6Gbps throughput (SAS 2 or above)

	<p>14. Storage Management: Should have GUI as well as command line interfacing. Must include real time performance monitoring tools giving information on CPU utilization, volume throughput, I/O rate and latency etc. Tools to provide performance optimization measures are desirable</p> <p>15. OS support: All industry leading OS must be supported – Linux, MS Windows, HP-UX, Solaris, VMWare, AIX etc.</p> <p>16. Warranty and support: At least 5 years, 24x7, 24 hours parts replacement Customer site warranty of hardware components and all update/ upgrade of system software (including software, firmware, patches etc.). The warranty must be effective from the date of successful installation and demonstration. There should be option of extension of warranty.</p> <p>17. Mount: Standard 19” rack mountable</p> <p>18. Manufacturer: The make of the system must come from reputed IT infrastructure companies having multinational presence.</p> <p>19. Installation, demonstration: The installation and deployment of hardware and software has to be done by the vendor at IIIT-Delhi premises. The institute (IIIT-Delhi) will provide power points and network connectivity port (switch port). The rack frames will also be provided by IIIT-Delhi. Power adapters, connecting cables/wires, fittings etc. must be provided by the vendor. Proper functioning of the system has to be demonstrated by the vendor showing double disk failure recovery process.</p>		
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Price Bid – Envelop ‘B’

Terms & Conditions:

The IIITD reserves the right to accept/reject any or all the tenders party or fully without assigning any reasons thereof.

Prices: Quoted prices shall remain valid till 90 days from the date of receipt by us and include all cost should be F.O.R. IIIT- Delhi Okhla in INR or equal to US Dollar The Institute is exempted from payment of Custom Duty. .No Price variation shall be paid.

Earnest Money:- The quotation shall be accompanied by Earnest Money Deposit of Rs. 1 Lakh EMD in the form of bank draft/ bank guarantee in favour of IIIT- Delhi. EMD Shall is kept valid for a period of 2 months from the data of bid opening. Bids without EMD are liable to rejected.

Delivery: You are requested to supply and deliver the above mentioned items within 6 weeks from the P.O. date. If you fail to supply and deliver the ordered items within this stipulated period, the order may cancel or the liquidated damages will be calculated and the same will be recovered from you. Liquidated Damages: L.D. for the late deliver will be 0.5% per fortnight subject to maximum of 5% value of the order

Taxes: Vat / CST extra as applicable

Warranty: - 5 years 24x7, **24 hours parts replacement** customer site warranty. The warranty will count from the date of installation

Warranty: 1st Year.....
2nd Year.....
3rd Year.....
4th Year.....
5th Year.....

Consignee: Indraprastha Institute of Information Technology, Delhi. G.B. Pant Polytechnic Extension Okhla Phase III, (Near Govindpuri Metro Station) New Delhi - 110020

Payment 100% within 30 days after successful installation/ commissioning and inspection of the material at our end in good working condition.

5. .No other charges will be paid by IIIT – Delhi.