



University of Calcutta

87/1, College Street, Kolkata-700 073

WEBSITE E-TENDER NOTIFICATION

E-Tender No. - CS/TENDER/03/2019-2020(2ndcall)

Date: 01.10.2020

Notice inviting e-Tender for the purchase of Server & Storage for the University Of Calcutta.

Please visit <https://wbtenders.gov.in/nicgep/app> & https://www.caluniv.ac.in/tender/tender_news.html

Tender ID: - 2020_CU_299240_1

Bid Submission Start Date- 01-Oct-2020 06:00 PM

Bid Submission End Date:- 14-Oct-2020 02:00 PM

A handwritten signature in black ink, appearing to read "Rejoy Chatterjee".

Department of Computer Science and Engineering,

C.U.





University of Calcutta

University of Calcutta, Block JD-2, Sector – III, Salt Lake, Kolkata – 700106

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Notice inviting e-Tender for the purchase of Server & Storage for the **University Of Calcutta**.

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3. Supporting Equipment
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1. Introduction

The objective is to set up an Open source virtualization for multidisciplinary scientific research in Computer Science and



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Engineering. The new system should be on x86 based architecture with Open Source based Linux Operating System for 64 bit high performance processor. The technical specification is attached here.

2. Scope of Work :

The bidder should install the servers, implement the open source virtualization and install all the libraries and software's as mentioned in the technical specification. Installation should be completed within maximum 60 days after delivery of the consignment and site readiness. Details mentioned in Annexure IV

3. Supporting Equipment :

If equipment will require indigenous supporting instruments/accessories (computer, printer, online UPS etc.) at the time of the installation, the same should be quoted in separate quotation.

4. Acceptance :

After commissioning, the bidder shall conduct acceptance test of the supplied solution at the installation site and demonstrate the functionalities as per specifications.

5. Warranty :

The bidder should provide 3(Three) years for servers and Storage - onsite warranty support from OEM for respective products. During warranty period, the vendor should do preventive maintenance at appropriate interval. OS and software (reinstallation, updates, bug-fixing etc.) support should be provided during warranty period. Date of commencement of the



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warranty will be only after official acceptance of the system by CU. This clause is non-negotiable and submission of bid presumes acceptance of this clause. The bidder shall warrant that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier shall further warrant that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's Specifications) or from any act or commission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination. The warranty should be comprehensive and on site.

The necessary warranty certificate/declaration in this effect should be furnished along with the delivery if require

Technical Specifications

1. Server – 1 Unit

Sl.	Component	Description	Compliance	Remarks, if any
		Specify make & model		
1	Processor	2 x Intel Xeon Silver 4215 Processor (11M Cache, 2.5 GHz, 8 Cores)		
2	Chipset	Intel C620		
3	Memory	4 x 32GB, 2400MHz or higher		
4	IO slots	Up to 2 x PCIe Gen 3 slots all x16		
5	Storage	SAS 12Gbps 2.5in 2 x 600GB 10K rpm SAS, with RAID controller of 8GB cache on single controller		
6	Connectivity	Dual Port 1GbE BASE, Dual port 10GbE & Dual Port 16 Gbps FC HBA		
7	Management	Virtual Media, Virtual Folders, Remote File Share, Virtual Console, Directory services (AD, LDAP), two-factor authentication & single sign-on, Monitoring fan, power supply, memory, CPU, RAID, NIC for impending failure		



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8	Security	Silicon-based hardware root of trust, automatic secure BIOS recovery & cryptographically signed firmware update, configuration and firmware drift detection, protection against compromised firmware execution before the OS boot, Persistent event logging including user activity, Intrusion alert in case of chassis being opened, Configuration and firmware drift detection		
9	Power Supply	550W Redundant hot-plug power supplies		
10	Operating System	Open Source(Like CentOS)		
11	Compliance	Linux, Windows, certified		
12	Market presence	Server OEM should have been one of the top three server vendors (by market revenue share in IDC or Gartner report) in any of the previous 2 quarters		
13	Warranty	3 years OEM onsite warranty with next-business-day resolution		
14	Form Factor	Max 2U rack-mount with rail-kit and other required accessories		

2. Storage – 1 Unit

Sr. No.	Component	Specifications	Compliance	Remarks
1	SAN Storage Model	The proposed storage should be configured with dual active controllers. The architecture should allow modular upgrades of hardware and software for investment protection.		
2	Storage Capacity	Storage should be 20 TB Usable on RAID 5 configuration using 1.8TB 10K RPM SAS drives		
2	Spindle Flexibility	The array should support the following spindles: • NLSAS 7.2K 2.5" – 2TB, 2TB SED • SAS 10K 2.5" – 1.2TB, 1.8TB, 2.4TB, 2.4TB SED • SAS 15K 2.5" – 900GB, 900GB SED • SAS SSD – 480GB, 960GB, 1.92TB, 1.92TB SED, 3.84TB • SDD and HDD: FIPS-certified SEDs. Mix and match of different type of spindles should be supported by the		



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		same pair of controllers.		
3	Array Architecture	The array should be equipped with N+N (with minimum of 2 array controllers) Nos. of array controllers for better performance redundancy.		
		The storage system should be provided with 16 GB Cache Memory across SAN controllers		
		The storage system should support, Fibre Channel, iSCSI or SAS front End connectivity.		
		The Storage system should be provided with 8 x 16Gbps FC ports.		
		The storage system should support minimum 2 x 12Gbps back-end each of 12 Gbps or above without performing any controller upgrades		
		The Storage array should support Auto-tiering & Asynchronous replication feature		
		Should support RAID 0,1,5,6,10, 50.		
4	Array Features (If any of the features mentioned requires license the same should be included as part of the BOM)	The Storage to include licenses for Snapshots/ Virtual disk copy & Thin Provisioning. Storage should support taking 1024 Snapshots.		
		The SAN must allow any LUN provided to a system configured with both types of server connectivity (fiber channel or iSCSI)		
5	Storage capacity	20TB usable after RAID 5 using 1.8TB 10k rpm SAS drives		
6	Storage scalability	The array should be scalable to a minimum of 276 disks of the offered configuration of the disk count behind the same controller pair by adding the appropriate number of spindles and disk shelves. Storage should be scalable to 3 PB Raw.		



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7	No single point of failure Architecture	Storage Array should be configured in a No-Single-Point-of-Failure Architecture.		
8	OS Support	Should support Windows , RHEL, SLES, Vmware 6.0 & 6.5.		
9	Array Management	Entire system must be manageable from a web-based HTML5 single, secure interface without requirements for a separate management device or server.		
10	Warranty	3 Years 24x7 warranty .		
11	Cables	4nos. of 2Mtr LC-LC Optical fiber cable for host connectivity		

Name of the Item	Earnest Money (Rs.)	Delivery Period in Days	Bid Validity Days	Name of the Concerned Department
Server Storage	Rs.30,000.00 (To be deposited online)	Days 90 days	Days 120 days	Computer Science and Engineering, C.U. JD-2, Sector – III, Saltlake City, Kolkata-700106

EMD will be exempted if Bidder is enrolled with MSME/NSIC. Certificate for the same needs to be submitted along with the Bid.

Earnest Money (EMD):- Intending bidders are requested to deposit Rs.**30,000** /- (to be deposited online by each bidder) only to be deposited by the bidder concerned electronically: online – through his net banking enabled bank account, maintained at any bank or: offline – through any bank generating NEFT/RTGS Challan from the e–tendering portal. Intending bidder will get the beneficiary details from e–tender portal with the help of Digital Signature Certificate and may transfer the EMD from their respective Bank as per the Beneficiary Name & Account No., Amount, Beneficiary Bank name (ICICI Bank) & IFSC Code and e–Proc Ref No. Intending bidder who wants to transfer EMD through NEFT/RTGS must read the instruction of the Challan generated from E–Procurement site.



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Bidders are also advised to submit EMD of their bid, at least 3 working days before the closing date for bid submission as it requires considerable time for processing of Payment for EMD.

For availing exemption of EMD: -

- 1) *Bidders are requested to upload the **NSIC / MSME Registered Certificate** for getting exemption of EMD. For that they need to select the EMD page as Yes and provide the exemption type as fixed and put the actual EMD amount in Rupees and upload the exemption document.*

N.B.: During evaluation, the bidders may be invited and clarification/ information or additional documents or original hard copy of any of the documents already submitted may be sought from them & if these are not produced within the stipulated time frame, their bid will be liable to rejection.

A. Important Dates:

Sl. No.	Items	Publishing Date (s)
1	Date of uploading of N.I.T. & Tender documents (online) from this end	01/10/2020 ; 06:00 pm
2	Starting of Documents download (online)	01/10/2020 ; 06:00 pm
3	Bid Submission starting (online)	01/10/2020 ; 06:00 pm
4	Bid submission closing date (online)	14/10/2020 ; 02:00 pm
5	Bid opening date for Technical Proposal (online)	16/10/2020 ; 02:00 pm
6	Date of uploading list for Technically qualified Bidder (online)	To be communicated later
7	Date and Place for opening of Financial Proposal (online)	To be communicated later
8	Date of uploading of list of bidders along with the approved rate	To be communicated later



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INSTRUCTIONS TO BIDDERS

Instructions / Guidelines for electronic submission of tenders have been annexed for assisting the contractors to participate in e- tendering.

- I. Registration of Bidder:** - Any bidder willing to take part in the process of e –tender will have to be enrolled & registered with the Government e – Procurement system through logging on to <https://wbtenders.gov.in>.The bidder is to click on the link for e – Tendering site as given on the web portal.
- II. Digital Signature Certificate (DSC):** - Each bidder is required to obtain a class - II or class – III Digital Signature Certificate (DSC) for submission of tenders from the approved service provider.
- III. Collection of Tender documents:** - The bidder can search & download NIT & Tender documents electronically from computer once he logs on to the website mentioned Clause 1 using the Digital Signature Certificate. This is the only mode of collection of Tender documents.
- IV. Cost of Earnest Money (EMD)**

Name of the Item	Earnest Money (EMD) Quoted INR
Server and Storage	Rs.30,000/-

V. Submission of Tenders:-

- a. General process of submission:** - Tenders are to be submitted through online to the website <https://wbtenders.gov.in> in two folders at a time for each work, one is Technical bid and other is Financial Bid before the prescribed date and time using the Digital Signature Certificates.
- b. Technical Bid:-** Technical Bid contain scanned copies of the followings further in two cover (folder)
- c. Online bid submission (Bidder/Contractor) process in <https://wbtenders.gov.in> portal, download the pdf file.**

<https://wbtenders.gov.in/nicgep/app?component=%24DirectLink&page=BiddersManualKit&service=direct&session=T&sp=Swb> **Online Bidder presentation NetBanking and NEFT.pdf**

VI. Statutory Cover Containing

- i) NIT and Corrigendum if any (Download the NIT and upload the same by digitally sign).

VII. NON-STATUTORY/MY DOCUMENTS containing the following documents:

Sl.No.	Category	Sub Category	Sub-Category Description
A.	Certificates	Certificates	1. PAN Card
			2. Professional Tax Registration Certificate



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		3. GST Registration Certificate
		4. Valid Trade License
		5. ISO Certificate
		6. Last 3 years Balance Sheet.
		7.NSIC/MSME Certificate for EMD Exemption
B.	Credential	1. Manufacturer’s Authorization Form.2.Similar Purchase order.

Note: Failure of submission of any of the above mentioned documents will render the tender liable to summarily rejected for both statutory & non statutory cover.

VIII. Financial Bid:- BOQ in INR (in excel sheet)

- i) The financial bid should contain the following documents in one cover (folder) i.e. Bill of Quantities (BOQ). The contractor is to quote the rate through on line in the space marked for quoting rate in the BOQ.
- ii) Only downloaded copies of the above documents are to be uploaded, virus scanned & digitally signed by the contractor.

IX. Opening & Evaluation of Tender:-

Opening of Technical Bid:

- i) Technical bid will be opened by the University of Calcutta Officials. Intending bidders may remain present if they so desire. Statutory Cover (folder) would be opened first & if found in order and correct Non Statutory Cover (folder) will be opened. If there is any deficiency in the Statutory & Non statutory documents the tender will summarily be rejected.
- ii) Decrypted (transformed in to readable formats) documents of the non statutory cover will be downloaded & handed over to the evaluation committee.
- iii) List of technically qualified bidders would be uploaded.

NB: While evaluation, the committee may invite the bidders & seek clarification/ information or additional documents or original hard copy of any of the documents already submitted & if they are not produced within the stipulated time frame, their bid will liable for rejection.

X. Opening and evaluation of Financial Bid:

Financial bid of bidders declared technically eligible by the Committee will be opened electronically from the web Portal on the prescribed date and time.

XI. Penalty for suppression / distortion of facts:

Submission of false document by bidder is strictly prohibited and will be liable for rejection of the tender.

XII. Additional information to the bidders:

Eligibility Criteria of OEM & Bidders

A) Server OEM should have at least Ten (10) entries in current lists of the TOP500 Supercomputers worldwide maintained by www.top500.org



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- B) Server OEM should have at least One (2) entry in current list of Top Supercomputers-India maintained by CDAC.
- C) The bidder should submit list of customers to whom similar equipment's were supplied in recent past at least during the last 3 years along with names & full addresses of the customers indicating order reference etc. Bidder should submit minimum 2 orders of 30 Lakhs
- D) Bidder and OEM Should have local support centre
- E) Bidder and OEM Should be in same line of business for last 10 years in India.
- F) Must have minimum turnover of 20 Crore & Bidder should be a profitable organization for the last 3 years. Relevant copies of audited balance sheet must be provided along with bid.
- G) Requirement of power cooling and space for the proposed solution should be mentioned in the bid. A solution with less space, less form factor, less power and cooling requirement will be given preference.
- H) Bidder should have server and virtualization software certified service personnel on its payroll.
- I) Bidder should share credentials for last 3 years. (Annexure – III)
- J) Server and storage should be from same OEM.

XII. General Instruction to Bidder:

- 1) Tenderer who do not comply with any of the conditions are liable to be rejected. No tenderer shall be entitled for any compensation whatsoever for rejection/non consideration of the tender.
- 2) During technical evaluation if one bidder is found technically not qualified, the said bid will not be considered & the bidder will be intimated accordingly. The price bid will also be returned in closed condition.
- 3) If any information furnished by the tenderer is found incorrect or false at a later stage he/she shall be liable to be debarred from tendering/ ordering.
- 4) Technical bid should contain a “Compliance Certificate” duly signed by the manufacturer or bidder.
- 5) Installation, testing, commissioning, and integration of the components/equipment purchased is to be done by supplier(s) at our premises. Charges on account of installation and commissioning, if any, should be quoted separately. Otherwise it will be treated that all the charges for the same is included in quoted price
- 6) Tender Specific Authorization from respective OEM for participation for this Tender for each category



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- 7) Bidder and OEM must not be blacklisted at CU or any Government Organization in Country
- 8) Consortium is not allowed and No Partial Quote will be accepted.
- 9) Please note that CU reserves the right to select the Vendor for placing Work Order and lowest quotation does not guarantee selection of Vendor
- 10) Payment Eighty percent (90%) of the total price of all the goods given in the purchase order shall be paid by CU to the supplier against delivery & inspection at site in good condition and the balance Ten percent (10%) payment will be released after successful installation, commissioning, testing and acceptance. Institute will make the payment through electronic transfer i.e. RTGS / NEFT for which details (Name of the Bank, Branch name, Account Number, IFSC & MICR Code) shall be provided by the supplier.
- 11) For Compute nodes, the quantities may be varied at the time of ordering. However, L1 bidder will be determined based on the quantities asked for in the tender
- 12) The tender/contract/order shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to Kolkata jurisdiction.
- 13) The Supplier / Manufacturer should ensure supply of kits of parts, components & spare parts of the equipment for a period of at least 7 years.
- 14) Warranty as mentioned in the above BOQ after successful installation & commissioning of the equipment. In case of any replacement during warranty period the same shall be replaced free of cost on CIF, Kolkata basis. (Already mentioned in the tech. spec.)
- 15) Packing:** The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination i.e. CU. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. The packing, making and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract.
- 16) Insurance: For delivery of goods at site, the insurance shall be obtained by the supplier at their own cost from warehouse of the supplier to the final destinations of installation defined as project site on “All Risks” basis including war risks and strikes. It will be the sole responsibility of the supplier to file the claim, if any, with the Insurance Company immediately after delivery of goods at project sites. CU shall not be responsible for any loss to the Supplier.
- 17) Tender should be strictly as per Technical Specifications elaborated in the Tender documents, no deviations will be accepted.
- 18) Tenderer (s) should sign on all the pages of the Technical & Price bid.



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- 19) After sales service/facilities are to be elaborated clearly.
- 20) Tender documents can be downloaded from our website www.caluniv.ac.in or ePublishing system. The downloaded document shall be treated as valid document for participation in the tender.
- 21) Price Bid will be open only of the technically eligible bidders.
- 22) CU reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders.
- 24) It will be the responsibility of the bidders to check website <http://www.caluniv.ac.in> for any amendment through corrigendum in the tender document. In case of any amendment, bidders will have to incorporate the amendments in their bid accordingly. No separate corrigendum will be published in the newspapers/ CPP Portal.
- 25) If any corrigendum published in our website, bidders are requested to attach the same with seal & signature while quoting the rates and submit this corrigendum sheet along with the technical bid of tender document.
- 27) Therefore, interested bidders need to visit the CU web site on a regular basis for updates.
- 28) The delivery, installation, testing & commissioning of above shall be made/completed within four months from the date of receipt of the Purchase/Work Order.
- 29) The bidders are requested to mention their complete address, Fax number, Phone Number and email ID in the bid.
- 30) Server and Storage will be from same OEM.
- 31) Valid NSIC registered firms (for the tendered items), valid Ancillary Units of the Purchaser (for the tendered items) and Micro and Small Enterprises [MSEs] (for the tendered items) are exempted from submission of EMD.
- 32) The bidders are requested to offer Educational Institutional Price for Equipment. The price quoted shall be considered firm and no price escalation will be permitted.**

A handwritten signature in black ink, appearing to read 'Rajib Kumar'.

Department of Computer Science and Engineering,

C.U.



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Annexure-I

MANUFACTURERS' AUTHORIZATION FORM

Dated _____

To
The Registrar,
University of Calcutta,
87/1, College street Campus
Kolkata – 700073, India

Dear Sir:

I/We ----- who are established and reputable manufacturers and having production facilities at ----- do hereby authorize ----- located at ----- (herein, the “Bidder”) to submit a bid of the quoted product produced by us for the supply requirement associated with the invitation for bids.

When resold by ----- these products are subject to applicable warranty terms of this NIT with back to back arrangement with ----- (OEM).

We assure you that if the bidder ----- not being able to fulfil its obligations as our Sales & Service Provider in respect of this NIT, we would continue to meet the terms stated in the above mentioned NIT through alternate arrangements.

We also undertake to assure you the availability of spares for the products for 3 years from the date of end of sale of the offered products.

Yours faithfully,
(Name & signature)
(Name of manufacturer)



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Annexure-II

BIDDER'S PERFORMANCE STATEMENT FORM **(For a Period of Last 3 Years)**

Order placed by (full address with Tel. No., & e-mail address of purchaser)	Date Of purchase	Order Value	Ordered Value

Place :

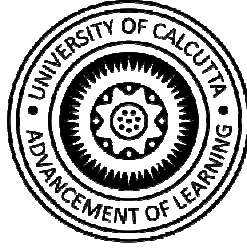
Signature :

Date :

Office stamp

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Annexure-III

TECHNICAL COMPLIANCE

The item wise technical compliance should be given as per the below table.

(Documents contain technical specification from OEM should be attached along with this format)

Component	Item Description	Compliance (Yes/No)	Remarks if Any

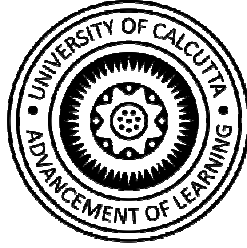
Signature and Seal of the manufacturer/Bidder

Place :

Date :

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Annexure-IV

Scope of Work	<ul style="list-style-type: none">• Mounting of Servers and Storage on Rack• Connecting all required Power & Network cables• Power on testing of all equipment's• BIOS/Firmware up-gradation• Hardware Management web gui configuration• Hypervisor installation on both the servers• Configuration of shared volume from SAN.• Hypervisor Manager installation and configuration• Hypervisor two node cluster configuration using shared storage• Dynamic Live VM migration from one server to another and Fail over• VM monitoring tool configuration• Patch fixing & update on Live servers using snapshot• VM integration with University Network• VM Reporting tool configuration• Training on newly installed landscape• Documentation of current landscape• Knowledge transfer to university officials.• Sign-off from University official.
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Signature and Seal of the manufacturer/Bidder

Place :

Date :