

Tender for Procurement of Blade Enclosure, Server & Storage

In cancellation of our earlier tender no IT/GOV/1295 dated 29th July 2009, WBIDC is inviting bids for procurement of servers and server related hardware and software as per **Annexure-I**. The eligible vendors may bid for the above mentioned items as per the mentioned specification. The details of the tender are tabulated below:

Items	Last Date of Receipt	Date of opening	Contact for Enquiries
As per Annexure-I	13.11.2009 before 2 p.m.	13.11.2009 at 4 p.m.	Sri Surojit D' Rozario System Administrator WBIDC 5, Council House Street Kolkata - 700001 Phone:22428908 it@wbidc.com

I. Eligibility : The vendors with the following eligibility criteria may submit price bid

- a) The vendor must be an authorized dealer/distributor/partner of the quoted item
- b) The vendor must not be disqualified / blacklisted from any government organization.

II. Bid Process :

- a) WBIDC may accept/reject any bid or part thereof without ascertaining any reason what so ever.
- b) Documents in support of eligibility must also be attached along with the bid including letter from the parent manufacturer authorizing the bid.
- c) Brochures and any other documents may also be attached.
- d) Bid must be submitted as per the enclosed format (PRICE BID)
- e) An EMD of Rs. 10,000 (Rupees ten thousand) only payable to West Bengal Industrial Development Corporation Limited have to be submitted with the price bid. The amount will be refunded to the unsuccessful bidders. The EMD of the successful bidder would be returned along with the payments for ordered items.
- f) Payments would be made within 15 days from the date of installation and configuration to the satisfaction of WBIDC.

Annexure-I

- A) Number of Blade Enclosures to be procured: 01 (one)**
- B) Number of Blade Servers to be procured: 04(four)**
- C) UPS: 01 (one)**
- D) Backup software: 01**
- E) SAN SWITCH – 02**
- F) Tape Library – 01**
- G) UPS - 01**
- H) Rack: 01**

Items (A and B), Item C, Item D, Item E and Item F can be treated separately in the bidding process

Blade Enclosure	As per attached specification
Blade Server	As per attached specification
Storage	As per attached specification
SAN Switch	As per attached specification
Tape Library	As per attached specification
Back Up software	As per attached specification
Power	Online UPS with Backup-5 KVA with 30 mins backup (3 yrs warranty)
Rack	42U APW Cyber rack with accessories

PRICE BID FORMAT

- a) A compliance sheet for detailed specification to be attached for all the quoted products.
- b) All prices must be inclusive of installation, configuration, delivery and all taxes

PRICE BID

ITEM	UNIT PRICE	TOTAL PRICE
Blade Enclosure		
Blade Server		
Storage		
SAN Switch		
Tape Library		
Back Up software		
Power		
Rack		

(A) BLADE ENCLOSURE

Item	Description of Requirement	COMPLIANCE (YES/NO)
Blade Chassis	Solution to house at least 6 full height blade servers , occupying a max of 10U rack height	
	Same enclosure should support Intel Xeon,AMD Opteron	
	Should support Hot Pluggable & Redundant Management Modules.	
	Should provide an highly reliable and high performance mid-plane/back-plane design in the blade enclosure. Should provide detailed technical information.	
	Should be able to accommodate the blade servers mentioned in the sections below in the proposed blade enclosures. The proposals must offer the most dense packaging possible for the blade servers in the enclosure and maximum headroom for future expansion in the offered enclosures.	
	Support simultaneous remote access for different servers in the enclosure.	
Interconnect	Should support simultaneous housing of Ethernet, FC/ SAS interconnect fabrics offering Hot Pluggable & Redundancy as a feature	
Blade Server Interconnect to LAN/ Network	The enclosure should be populated with 2 nos of Ethernet Pass thru modules for connectivity to external switch and 2 nos of Fiber Channel Pass thru modules for connectivity to external SAN switch	
Power Supply	The enclosure should be populated fully with power supplies of the highest capacity available with the vendor. Power supplies should support N+N as well as N+1 redundancy configuration, where N is greater than 1.	
Cooling	Each blade enclosure should have a cooling subsystem consisting of redundant hot pluggable fans or blowers enabled with technologies for improved power consumption and acoustics	
Warranty	3 year warranty. Comprehensive onsite warranty (24 X 7)	
System Software	Management/controlling softwares have to be from the OEM itself.	
Management	All required System software has to be from the OEM itself.	
	Complete GUI with view of the individual blade chassis, multiple chassis in a rack, blade servers, power consumption at chassis level and blade level, intake air temperature and temperature of various thermal zones within the server.	
	Deployment - GUI, console-based deployment server to set up multiple OSan d application configurations and Drag-and-drop servers into configurations, with Built-in pxe services and pxe image tools and script generation and editing. Grouping of blade servers in the console by physical location of rack/enclosure/bay should be possible.	
	Management – Comprehensive web enabled system management tool that monitors the system health, environment, critical action etc, With its own data engine to store status reports, alerts and error notifications.	
Availability	The blade servers should have the capability to be configured as an online spare blade. This spare blade automatically comes up in case one of the primary blade servers fails, when configured so.	
Deployment & Remote Management	Complete Hardware based Remote Administration from a standard web-browser with Event logging, detailed server status, Logs, Alert Forwarding, virtual control, remote graphical console, Remote Power Control / Shutdown, Virtual Media for Remote boot and configuration, Virtual Text and Graphical Control, Automatic IP configuration with 128 bit SSL Encryption Security. The blade system should have the capability of managing all the blades in the same enclosure simultaneously.	

(B) BLADE SERVER

Item	Description of Requirement	COMPLIANCE(YES/NO)
Processor	Latest generation x86-64 processor , 2* Intel Quad Core processors with 2.66 Ghz clock speed or higher clock frequency available , based on Intel 5500 chipset, offering 8MB shared L3 cache	
Memory	16 GB scalable at least upto 96GB, using PC3-8500 DDR3Registered (RDIMM) memory modules	
Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring and memory lockstep mode	
Hard disk drive	2 * 146 GB 10K rpm hot plug SFF SAS drives	
Controller	Integrated SAS Raid Controller with RAID 0, 1	
Networking features	Embedded Dual Port 10GbE Multifunction Server Adapter. Additional 2 nos of Gigabit ports for cluster heart beat One additional 10/100 NIC dedicated for remote management.	
Ports	Minimum of 1 * internal USB 2.0 port and 1* internal SD card slot	
Blade Server Connectivity to SAN	Dual port Fiber Channel HBA internal to the Server Blade.	
Blade Server Interconnect to LAN/ Network	Should have the capability to connect each of the NIC cards on the blades to the network switch provided in the data center with the help of Ethernet Pass thru modules	
Bus Slots	Minimum of 2 PCI-e slots supporting Ethernet, FC adapters	
Graphics	Integrated, 1600x1280x64K 16M color (32 MB DDR1 memory)/ 8 MB VRAM	
Industry Standard Compliance	ACPI 2.0 Compliant; PCI 2.2 Compliant; WOL Support; Microsoft® Logo certifications; USB 2.0 Support	
OS Support	Should support Microsoft Windows Server, Windows Server Hyper-V, RedHat Enterprise Linux, SuSE Linux Enterprise Server, Oracle Enterprise Linux	
Warranty	3 year warranty. Comprehensive onsite warranty (24 X 7)	
Manageability	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.	
Remote Management	Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer)	
	Integrated management ASIC	
	Hardware based and OS independent remote management. Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same.	
	Should be possible to remotely manage each blade server individually. Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time.	
	Should support 128 Bit SSL encryption	

(C) STORAGE

Paramater	Functionality	COMPLIANCE(YES/NO)
Operating System & Clustering Support	<ol style="list-style-type: none"> 1. The storage array should support industry-leading Operating System platforms including: <i>Windows Server 2003/2008 Standard/ Enterprise Edition and Linux.</i> 2. Offered Storage Shall support all above operating systems in Clustering. 	
Capacity & Scalability	<ol style="list-style-type: none"> 1. The Storage Array shall be offered with 8 nos of 146GB SAS drives. 2. Storage shall be scalable to minimum of 48 number of SAS/SATA drives 	
Architecture & Processing Power	<ol style="list-style-type: none"> 1. The storage array should support dual, redundant, hot-pluggable, active-active array controllers for high performance and reliability 2. Storage array shall support Sustained sequential throughput of more than 800MB/sec from Disk. 3. Storage array shall support at-least 90000 IOPS from Cache. 	
No Single point of Failure	Offered Storage Array shall be configurable in a No Single Point of configuration including Array Controller card, Cache memory, FAN, Power supply etc.	
Disk Drive Support	Offered Storage Array shall support minimum 146/ 300 / 450GB hot-pluggable Enterprise SAS hard drives along with S-ATA (500GB / 750GB / 1000GB) drives.	
Cache	Offerd Storage Array shall be given with Minimum of 1GB cache per controller in a single unit. Cache shall be backed up in case of power failure for indefinite time either using batteries or capacitors or any other equivalent technology.	
Raid Support	Offered Storage Subsystem shall support Raid 0, 1 , 1+0 , 3, 5, 5+0 and Raid 6 with Dual Parity Protection	
Point in time and clone copy	<ol style="list-style-type: none"> 1. Offered Storage array shall have array based support of (With the help of optional license) Both Snapshot and clone functionality. 2. Offered Storage array shall support at-least 255 point in time copies (Snapshots) and 128 clone copies. 	
Ports	Offered Storage subsystem shall be offered with Dual 4Gbps FC ports per controller.	
Global Hot Spare	<ol style="list-style-type: none"> 1. offered Storage Array shall support Global hot Spare for offered Disk drives. 2. Atleast 2 Global hot spare drive shall be configured for every 30 drives. 	
Logical Volume	Storage Subsystem shall support minimum of 256 Logical Units. Storage Array shall also support creation of more than 2TB volume at controller level.	
(D) SAN Switch:		
Ports	<ol style="list-style-type: none"> 1. SAN Switch shall be offered with 8 ports and shall be scalable to 24 Ports. 2. Offered SAN switch shall have 8Gbps ports and shall be backward compatible with 2Gbps / 4Gbps technology. 	
Bandwidth	Offered SAN Switch shall support bandwidth of 128Gigabit / sec.	
Hot code activation	Offered SAN Switch shall support non disruptive hot code activation feature.	
Management	Offered SAN switch shall be manageable through Web, IP, CLI and SNMP.	
Other Features	<ol style="list-style-type: none"> 1. Shall otionally support trunking when adding multiple switches in the same fabric. 2. Shall support Zoning. 3. Shall be supplied with LC-LC cables for all populated ports. 	

- For all offered products, UL/FCC/ROHS Certification should be submitted.
- Page references of supporting documentation to be provided for required products & features

(E) Tape Library: Cartridge Tape Library

Sl. No.	Required minimum specification	Compliance (Yes/No)	Page reference of supporting document for the product / feature
I	Model:		Specific product model number to be provided with base system part number
II	Should be configured with. LTO Ultrium 4, 1 drives with native 4Gbps FC interface to connect to SAN fabric		
III	Should have integrated support for Tape Encryption		
IV	Should have integrated support for WORM Cartridges		
V	Should include barcode reader		
VII	Should included support for Remote Management via web interface for library control and configuration		
VIII	Should be configured with hot-swappable & redundant Power Supplies		
IX	LTO drive should connect to the SAN fabric		
X	Tape library should support GUI for monitoring and management		
XI	Should support Windows, Linux & UNIX (Solaris, HP-UX & AIX) operating systems		

(F) Back Up Software:

Specs	Features	Compliance (Yes/No)	Remarks
	Should be available on various OS platforms such as Windows , Linux and UNIX platforms and be capable of supporting backup / restores from various platforms including Windows, Unix and Linux. Both Server and Client software should be capable of running on all these platforms.		
	Backup software must have built-in centralized, policy driven management feature by which all Backup servers can be managed from central location without any additional licenses.		
	Ability to backup data from one platform and restore it from another (limited to genera of operating systems(Unix to Unix, Windows to Windows) to eliminate dependence on a particular OS machine and for disaster recovery purposes.		
	Software should support cross platform Device & Media sharing in SAN environment.		
	Software must have integrated true Disk Staging feature without requiring any additional agent, wherein the backup continues to take place even when the disk space allocated is full. The backup software must be intelligent enough to flush out the data from the disk and migrate the same to the tape automatically based on the user defined threshold & will not affect the backup operations.		
	The Backup software must also be capable of reorganizing the data onto tapes within the library by migrating data from one set of tapes into another, so that the space available is utilized to the maximum. The software must be capable of setting this utilization threshold for tapes.		
	The Backup software must ensure rapid restoration during a recovery need, by reducing the number of tapes to be mounted onto the drives in the library by not taking repeated full backups.		
	The backup software must support SAN based LAN-FREE Backup. The migration from a LAN based backup to the LAN-FREE backup must only effect purchasing/installing additional modules, and not warrant any installation/licensing charges/changes on the base backup software.		
	The Backup software should be able to integrate with the Flashcopy feature of the hardware and completely automate the flashcopy based backup process.		

	The licensing for the Backup software must be done in such a way that the migration of operating systems and/or databases/mail servers of servers/clients must not warrant a change in license. The licensing must be independent of the server processor, whether it is RISC based or SISC based processors.		
	The backup software must allow network-efficient backup of remote users' data on WAN		
	The backup software must include encryption of the backed up data and even on archived data.		
	The Backup software must not have any restrictions on the number of drives that can be attached in the tape library. There should be no additional licensing if the number of tape drives is increased in order to reduce the backup window.		
	Should have cross platform Domain Architecture for User management.		
	Ability to perform "Hot-Online" backup for different type of Databases such as Oracle, MS SQL, DB2 etc. on various platforms.		
	Software should have an inbuilt feature for Tape to tape copy feature (cloning, within the tape library) to make multiple copies of the tapes without affecting the clients for sending tapes offsite as part of disaster recovery strategy.		
	Should support different levels of User access, Administrator, User, Operator, so that only the authorized personnel can make changes or view the status based on the rights they have.		
	Should provide details logs on both the Clients as well as the Server to support in advanced troubleshooting without any performance implications.		
	Backup software must have inbuilt scheduling feature from centralized console for automated data backup. Also must have capability like preschedule & postschedule options to run specific job before & after the backup		