Department of Management Studies

Date: 05/09/2011
Due date: 27/09/2011

Notice Inviting Quotations (NIQ)

On behalf of the duly constituted purchase committee, sealed quotations are invited for the purchase of Blade Server & OS as described below.

Performa for Technical Bid

1	Technical Specification

S.No.	Item	Description with Specification	Yes/No
1	Blade Chassis		
1.1	Description	To provide common resources for the Blade Servers like power, System Management, Cabling, Ethernet Management and extension, External fiber Channel Storage switching and connectivity. Chassis with all redundancy features. All components to be provided by the OEM and to be fully redundant	
1.2	Blade Bays and I/O bays	Sufficient Chassis to be provided to accommodate min 16 hot pluggable half height blades servers with SAS hard disks. Minimum 6 I/O bays with minimum 3 fabric support.	
1.3	Blade arrangement	Blade chassis should be able to support full and half height blades in combination without limitations on slots. I.e. Full- height blade should be able to sit adjacent to half height blades.	
1.4	Mid-Plane	Passive mid-plane for providing two-way communication paths for Ethernet, Fiber Channel, KVM Switches, Power Supply and Management Signals and should be able to support with minimum throughput of 5 Tb/s	
1.5	Ethernet Switch Module and fiber channel	2 No's of Gigabit switches supporting Layer 2 and 3 Ethernet Switch Module with minimum 4 up-link ports each. The switches shall have internal ports for communication to all the blades populated in the Blade Chassis. Internal switches shall have optional 10GbE uplinks &/or stacking connectors Manage/configure multiple switches as one w/ stacking.	
1.6	Management Modules	Dual redundant management modules to communicate with the system management processors on the blade server. The Management Modules shall be capable of providing KVM Connectivity for the Blade servers housed inside the chassis, Real time, actual power cons. Status/Inventory/Alerting for Blades, Chassis Infrastructure, & IOMs; Centralized Configuration;GUI & CLI; SSL/SSH ; Power/Thermal Monitoring; Dynamic power engagement; Temperature monitoring; Persistent WWN/MAC - Should allow customers to lock a WWN/MAC address into a specific blade slot. A unique pool of WWN/MAC's are stored in the Chassis IP address per remote management card; Virtual Media & vKVM; Security - Local & AD. Management modules should be fully redundant with no common components/modules. Failure of any component should not compromise management capability.	
1.7	Cooling	Dual hot swap variable speed blowers/fans for Cooling the chassis fully redundant and all populated	
1.8	Power Module	6 no's or higher hot swappable power supplies, which shall be supplied in adequate numbers so as to ensure n+n redundancy for completely populated chassis with 16 numbers of half height servers with SAS hard disks or 8 numbers of full height server.	
1.9	Form Factor	Up to 10U - 19 "Rack Mountable with 28" depths.	
1.10	Blade connectivity	Blades servers should have pins on the blades (Male Connector) and pin socket on the backplane (Female Connector).	
1.11	System Management	Shall provide support for remote console management, power on/off blades, modules shall monitor power status, operating system, temperature, disks, blowers, power modules system diagnostic programs provided through the management s/w. Real Time Power/Thermal Monitoring and Management	
1.11.1		Real Time System AC Power Consumption with reset-able peak and minimum values System level power limiting and slot based power prioritization Manages Dynamic Power Engagement functionality Manages fan speed control. Real time, actual power consumption (aggregate chassis & individual blade) High/Low "watermarks"	
1.11.2		Selectable chassis "power ceiling" with policies Alert on Ceiling – sends an alert if ceiling is reached Throttle on Ceiling – lower proc/memory frequency to reduce consumption Slot Based Power Prioritization Customizable Prioritization for power ceiling	
1.12	System Panel	Interactive color rotatable LCD/LED panel for local trouble shooting & wizard based set up. Control panel display to show health of the systems including power-on, over temperature, other information and system error conditions. Front Control Panel to allow one KVM connection for all blades	
1.13	Ports	Front VGA & 2 USB ports for KVM	
1.14	Optical Disk	Chassis based or USB based DVD Drive to be configured which can be shared among all blade servers	
1.15	Dimensions	44.0cm(17.3")H x 44.7cm(17.6")W x 75.4cm(29.7")D	

S.No.	Item	Description with Specification	Yes/No
2	**Blade Servers**		
2.1	Processor	2 x Six core Intel® Xeon® Processor E5649 2.53GHz, 12MB Cache, 5.86 GT/s QPI,	
2.2	Chipset	Intel 5520	
2.3	Memory	24 GB DDR-III ECC Memory expandable to 96 GB	
2.4	HDD	2 x 300 GB hot plug SAS HDD with support for RAID 1	
2.5	HDD Bays	Minimum 2	
2.6	HDD Upgradeability	Should be able to support hot swap SSD drives	
2.7	I/O Slots	Minimum 2 PCIe x8 slots mezzanine daughter cards	
2.8	Ethernet	Minimum 4 no's of 10/100/1000 gigabit Ethernet with failover and load balancing, iSCSI offload accelerator and iSCSI Firmware Boot	
2.9	Form Factor	Blade	
2.10	Management	Integrated remote management card for Out of Band alerting, status, inventory, and troubleshooting via Secure Web GUI / CLI (telnet/SSH),Remote Virtual Media (vMedia) and Virtual KVM (vKVM),IPMI 2.0 support, Chassis Management w/redundant dedicated NICs; A microcontroller should be responsible for acting as an interface or gateway between the host system (i.e., server management software) and the periphery devices.; Should support web GUI,HW update, Firmware rollback, OS Deployment, Life Cycle Log, View hardware sensors (temperature, voltage, presence, error sensors),Error alerts (server reset, critical sensor values, etc.) using email traps, paging, etc.,IPv6,WS-MAN/SMASH-CLP	
2.11	Remote Server Management Utility	The server should be capable of being remotely managed, including starting, stopping and installation of software. Hardware / Software for Server/Client, if any, required for this functionality must be included	
2.12	Operating System compatibility	Red hat Linux 4.5 or above, Win 2008 standard and enterprise, SuSe Enterprise server 10, Windows 2003 standard and enterprise edition	
2.13	Operating System license	One server should be preloaded with Red Hat Enterprise Linux v6.0, x86_64, 2 Sockets, Unlimited Guest, 3 yr Red Hat Network	
2.14	Server Warranty	3 yrs - 24/7 support for all parts; Replacement of parts within 4 hours of issue; Issue resolution on all working days and holidays.	
3	**OS**		
3.1	Operating System license	One server should be preloaded with Red Hat Enterprise Linux v6.0, x86_64, 2 Sockets, Unlimited Guest, 3 yr Red Hat Network	
3.2	OS support	3 year onsite maintenance and support for OS (Linux)	
4	**Installation & service Support**		
4.1		Installation & service Support of Windows Server 2008 OS for 3 Years onsite. Windows 2008 Server will be provided by the Institute. Windows 2008 Server will have to be installed on 7 servers & also configured & mantained for 3 Years	
4.2		All the applications should be installed on the 8 servers i.e. CMIE, SPSS, LINDO, IMPRESS,e-learning etc. & mantained for 3 Years onsite. These applications will be provided by the institute	

Performa for Financial Bid

S.No.	Item	Description with Specification	Yes/No	Unit Price	Total Cost
1	**Blade Chassis**				
1.1	Description	To provide common resources for the Blade Servers like power, System Management, Cabling, Ethernet Management and extension, External fiber Channel Storage switching and connectivity. Chassis with all redundancy features. All components to be provided by the OEM and to be fully redundant			
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1.5	Ethernet Switch Module and fiber channel	2 No's of Gigabit switches supporting Layer 2 and 3 Ethernet Switch Module with minimum 4 up-link ports each. The switches shall have internal ports for communication to all the blades populated in the Blade Chassis. Internal switches shall have optional 10GbE uplinks &/or stacking connectors Manage/configure multiple switches as one w/ stacking.			
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		Total (including of all taxes and installation charges) (Rs.)			

Terms and Conditions:

Technical and Commercial bids must be submitted separately in 2 sealed envelopes, super-subscribed with "Technical Bid" or "Commercial Bid" and then both bids should be put together in one envelope superscripted "Bid for Server & OS" addressed to

Prof. M. P. Gupta
Department of Management Studies
Indian Institute of Technology Delhi
4th Floor, Vishwakarma Bhawan, Saheed Jeet Singh Marg,
New Delhi-110016

1. Quote only INR. Prices must be quoted inclusive of all sales and service taxes as applicable and including installation charges.
2. Quotation validity should be clearly mentioned in the quotations.
3. Delivery period must be mentioned.
4. Technical Bid should include a letter of authority from the manufacturer for this particular tender (in case the authorized dealers are quoting on behalf of the manufacturer).

5. The proposed servers should have published SPEC benchmark ratings
6. Bidder to provide post-delivery local technical support and maintenance. Cost for the above mentioned services should be mentioned seperately / bundeled in the cost of Servers.
7. Bidder should provide Training / workshop on the system
8. Payment will be made as per Institute rules.
9. Printed broucher & user manual should be provided.
10. The institute reserves the right to accept or reject any or all the quotations without assigning any reason thereof.
11. Other terms and conditions (if any), should be specified.
12. Quotation must mention the warranty period as applicable.
13. Next upgrade (version), if within six months should automatically be given. Without additional charges.