Department of Electrical Engineering

Enquiry No.: EE/YSC/2017/01

Opening Date: 3rd Jan., 2017
Closing Date: 11th Jan., 2017

Sub.: Purchase of branded Rack Mount Server

Please send sealed quotation, to undersigned, for the same.

Configuration	Description of Requirement
Chassis	1 U Rack Mountable
CPU	Two numbers of Intel E5-2687Wv4 (3.0GHz) Processors
CPU L3 CACHE Memory	30MB L3 cache
Motherboard	Intel® C610 Series Chipset
Memory	128 GB Scalable at least upto 768GB, using DDR4 RDIMM memory modules. Should be capable of identifying and reporting whether genuine OEM memory is installed.
Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode
HDD Bays	Up to 10 SFF/4 LFF max, HDD/SSD. The drive carrier should have intuitive icon based display along with "DO NOT REMOVE" caution indicator that gets activated automatically in order to avoid data loss/downtime due to wrong drive removal.
Hard disk drive	2* 500GB 12G SAS 7.2K 2.5inch
Controller	PCIe 3.0 based 12Gb/s SAS Raid Controller with RAID 0/1/1+0/5/50/6/60/1 Advanced Data Mirroring/10 Advanced Data Mirroring with 2GB battery backed write cache (onboard or in a PCI Express slot)
Networking features	Server should support networking cards with below features: 1. 1Gb 4-port network adaptor supporting advanced features such as Large Send offload capability, TCP checksum and segmentation, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMware NetQueue and Microsoft VMQ. 2. 10Gb 2-port Ethernet adaptor supporting enterprise class features such as VLAN tagging, adaptive interrupt coalescing, MSI-X, NIC teaming (bonding), Receive Side Scaling (RSS), jumbo frames, PXE boot and virtualization features such as VMware NetQueue and Microsoft VMQ. 3. 10Gb 2-port Adapter providing Ethernet and iSCSI or Fibre Channel Over Ethernet (FCoE) connectivity using Converged Enhanced Ethernet (CEE) standards. This adaptor should support Hardware acceleration and offloads for stateless TCP/IP, TCP Offload Engine (TOE), Fibre Channel over Ethernet (FCoE), Jumbo frames and iSCSI.

	4. 10Gb 2-port provide up to 40Gb bi-directional bandwidth, Converges FCoE or RoCE with LAN traffic on a single 10 GbE wire, Tunnel Offload support for VXLAN and NVGRE, RDMA over Converged Ethernet (RoCE)
Interfaces	Serial - 1 Micro SD Internal Secure - 1 USB 3.0 support With Up to 5 total: 2 rear, 1 front, 2 internal
Bus Slots	Three PCI-Express 3.0 slots, at least two x16 slots
Power Supply	Redundant platinum Power Supplies
Fans	Redundant hot-plug system fans
Graphics	Integrated Matrox G200 video standard 1280 x 1024 (32 bpp) 1920 x 1200 (16 bpp)
Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 3.0 Support Energy Star ASHRAE A3/A4
Embedded system management	Should support monitoring ongoing management, service alerting, reporting and remote management with embedded Gigabit out of band management port Server should support configuring and booting securely with industry standard Unified Extensible Firmware System should support RESTful API integration System management should support provisioning servers by discovering and deploying 1 to few servers with Intelligent Provisioning System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support
Security	Power-on password Serial interface control Administrator's password UEFI Should support up to 12 customizable user accounts on out of band management port and SSL encryption Should also support directory services integration TPM 1.2
Operating Systems and Virtualization Software	Microsoft Windows Server Canonical Ubuntu Red Hat Enterprise Linux (RHEL)

Support	SUSE Linux Enterprise Server (SLES) Oracle Solaris VMware Citrix XenServer
Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.
Warranty	Server Warranty must include 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response.
Provisioning	Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server. There should be a built -in Update manager that can update firmware of system by connecting online.
Remote Management	1. System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication. 2. Server should have dedicated 1Gbps remote management port. Remote management port should have 4GB NAND flash with 1GB available for user access. NAND flash should be used for keeping system logs and downloading firmware from HP website or internal repository 3. Server should support agentless management using the out-of-band remote management port. 4. The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur. 5. Applications to access the server remotely using popular handheld devices based on Android or Apple IOS should be available. 6. Remote console sharing up to 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support. Should provide support for AES and 3DES on browser. Should provide remote firmware update functionality. Should provide support for Java free graphical remote console. 7. Should support managing multiple servers as one via Group Power Control Group Power Capping Group Firmware Update Group Configuration

	Group Virtual Media Group License Activation
Server Management	The Systems Management software should provide Role-based security
	Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. Should support automatic event handling that allows configuring policies to notify failures via e-mail, pager, or SMS gateway or automatic execution of scripts.
	Should provide an online portal that can be accessible from anywhere. The portal should provide one stop, online access to the product, support information and provide information to track warranties, support contracts and status. The Portal should also provide a Personalized dashboard to monitor device heath, hardware events, contract and warranty status. Should provide a visual status of individual devices and device groups. The Portal should be accessible on premise (at customer location - console based) or off premise (using internet).
	Should support scheduled execution of OS commands, batch files, scripts, and command line apps on remote nodes
	Should be able to perform comprehensive system data collection and enable users to quickly produce detailed inventory reports for managed devices. Should support the reports to be saved in HTML, CSV or XML format.
	Should help to proactively identify out-of-date BIOS, drivers, and Server Management agents and enable the remote update of system software/firmware components.
	The Server Management Software should be of the same brand as of the server supplier.
	Infra Platform /Infra Software to support a variety of different hypervisors, such as VMware, Microsoft Hyper-V, Red Hat KVM, and HP Integrity VM
	Solution available to Deploy a fast and easy installation via software appliance delivery mode. With its own OS and Database to provide infra and lifecycle management
	Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and RedHat RHEV
Firm's authorization	1. The bidder must be authorized by the manufacturer or OEM to supply, install and maintain the system. 2. The firm should have successfully delivered and installed at least 25 nos. similar systems in any Central Govt. Organization, preferable R&D and Premier Educational Institutions (attach proof).

Note:

1. Your quotation shall contain Authorization Letter from manufacturer specifically for this tender.

2. Quotation must be valid for 90 days.
3. Delivery period should not be more than 6 **weeks**.
4. Send complete detail of the product(s) including brochure etc.
5. All prices are to be FOR IIT Kanpur.

Dr. Yogesh Singh Chauhan
Associate Professor
Department of Electrical Engineering
IIT Kanpur
Kanpur, U.P. – 208016, India
Email: chauhan@iitk.ac.in
Phone No.: +91-512-2597257