PONDICHERRY UNIVERSITY

DEPARTMENT OF PHYSICS

SCHOOL OF PHYSICAL, CHEMICAL AND APPLIED SCIENCES

QUOTATION INVITATION FOR THE PURCHASE OF PROCESSOR SERVER

Ref: DST Project **"Solitons and Modulational Instability in Nonlinear Optical Systems"**

Quotations are invited towards the purchase of processor server with the following configuration (see the attached list) in the above mentioned sponsored project. The sealed quotations may be sent to **Prof. K. Porsezian, Principal Investigator, Department of Physics, Pondicherry University, Pondicherry 605 014** (e-mail: ponzsol@yahoo.com) **on or before Date.**

Date: 29-06-2016
Place: Puducherry

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Specifications	
Make	**HP**
Chassis	2 U Rack Mountable
CPU	Dual Intel Xeon E5-4620v3 series Processors Server should provide an two intelligent socket that would ease the installation of CPU to avoid errors caused by mis-inserting processors during install or upgrade.
CPU Scalability	should to scalable upto 4 CPU
CPU L3 CACHE Memory	25MB (1 x 25 MB) L3 cache (MAX) - 15 MB (1 x 15 MB) L3 cache (MIN) depending upon processor model
Motherboard	Intel® C610 Series Chipset
Memory	64GB (8x8GB) DIMMS scalable to at least up to 3TB, using DDR4 Load Reduced/Registered DIMM (LRDIMM/RDIMM) memory modules. Should be capable of identifying and reporting whether genuine OEM memory is installed. Each LRDIMM should work at 2133MHz, 1. 2V even after populating all the DIMMs in the channel.
Memory Protection	Advanced ECC with multi-bit error protection, memory mirroring and memory online spare mode
HDD Bays	Up to 8 SFF max and should be capable expanding by adding disk enclosures, HDD/SSD
Optical drive Bay	One optical drive bay to install DVD-RW .
Hard disk drive	3 x600GB 10K RPM SAS Ent HDD
Controller	Embedded 6Gb/s SATA controller RAID controller with RAID 0/1/10/5 for SATA Disk.
Networking features	Server should support one of the following:
	1. 1Gb 2-port network adaptor supporting advanced features such as TCP segmentation offload, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMDQ.
	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.
Interfaces	Video - 1
	4 USB ports (standard)
	Micro SD slot - 1 (internal)
Bus Slots	Six PCI-Express 3.0 slots
Power Supply	1200W Redundant power supply
Fans	Redundant hot-plug system fans
Graphics	Integrated Matrox G200 video standard
	1280 x 1024 (32 bpp)
	1920 x 1200 (16 bpp)
Industry	ACPI 2.0b Compliant

Standard Compliance	PCIe 3.0 Compliant
	PXE Support
	WOL Support
	Microsoft® Logo certifications
	USB 3.0 Support
	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
	TPM 1.2
	UEFI
Operating Systems and Virtualization Software Support	Microsoft Windows Server
	Red Hat Enterprise Linux (RHEL)
	SUSE Linux Enterprise Server (SLES)
	Oracle Solaris
	VMware
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.
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 2 GB 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 agent less 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 upto 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 contrast 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
Warranty	Minimum Compressive onsite 4Hrs response time, 24x7 support with 3 years (Labor + Spares + onsite) Warranty