

**Revised Specifications for supply, installation and commissioning of  
Computer Servers with mounting Racks, Monitors and Port Switches  
against Tender No.44(67)2016-Pur/T-168 dated 03/03/2017**

**Specification for Master Node - No -1**

	Specification for Master Node
Server:	Two CPU server
Item	Description of Requirement
CPU	Two No's of (Intel® Xeon® Processor E5-2667 v4 25M Cache, 3.20 GHz) Processors
CACHE Memory	25 MB L3 cache
Motherboard	Intel® C610/612 Series Chipset or equivalent
Memory	256 GB DDR4 2400 MHz shall be with 64x4, scalable to at least up to 1.54 TB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules with 24 DIMM slots.
Optical drive	DVD-RW +
Hard disk drive	16 x 1.2 TB 12Gbps SAS 10K rpm SFF (2.5-inch) Hot pluggable Hard Drives, the chassis shall be expandable up to 24 bays
Controller	Controller: PCIe 3.0 based 12Gb/s SAS Raid Controller with RAID /1+0/5/50/6/60 Advanced Data Mirroring with 2GB or/ 4GB battery backed write cache (onboard or in a PCI Express slot)
Networking features	10Gbps port network adaptor supporting advanced features such as Large Send offload capability, TCP checksum and segmentation, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588
Interfaces	USB 3.0 or USB 2.0 total upto 5
Bus Slots	Six PCI-Express 3.0 slots, at least two x16 and four x8 slots
Power Supply	Minimum 94%efficient Hot pluggable Redundant Power Supplies
Fans	Redundant hot-plug system fans
Graphics	1 No. NVIDA 3D Graphic Controller with 4Gb DDR5 memory (PCI Express 3.0 x 16 Bus Type, 1 DL-DVI(I) & 1 Display port Interfaces)
Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 3.0 Support USB 2.0 Support Energy Star UEFI (Unified Extensible Firmware Interface Forum)
Operating Systems and Virtualization Software Support	Microsoft Windows Server Canonical Ubuntu Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware Citrix XenServer
Warranty	Product shall be under 3years warranty with Next business day support
Provisioning	Provisioning: Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server.
Remote Management	Server should have dedicated 1Gbps remote management port
Server Management	Provision to monitor all critical hardware with valid notifications.
Chasis	2 U Rack Mountable
	USB Keyboard & Mouse

Specifications for Compute Nodes – No - 9

Chassis	1 U Rack Mountable
CPU	Two No's of Intel® Xeon® Processor E5-2667 v4 25M Cache, 3.20 GHz) Processors
CPU L3 CACHE Memory	25MB (1 x 25 MB) L3 cache
Motherboard	Intel® C610 or 612 Series Chipset or equivalent
Memory	256 GB DDR4 2400 MHz shall be with 64x4, scalable to at least upto 1.54 TB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules with 24 DIMM slots.
Hard disk drive	2 x 1.2 TB 12Gbps SAS 10K rpm SFF (2.5-inch) Hot pluggable Hard Drives, the chassis shall be expandable up to 8 bays
Optical drive	DVD-RW +
Controller	Controller: PCIe 3.0 based 12Gb/s SAS Raid Controller with RAID /1+0/5/50/6/60 Advanced Data Mirroring with 2GB or/ 4GB battery backed write cache (onboard or in a PCI Express slot)
Networking features	10Gbps port network adaptor supporting advanced features such as Large Send offload capability, TCP checksum and segmentation, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588
Interfaces	USB 3.0 or USB 2.0 total up to 5
Bus Slots	Bus Slots: TWO or MORE, PCI-Express 3.0 slots, at least two x16 slots
Power Supply	Redundant platinum Power Supplies
Fans	Redundant hot-plug system fans
Graphics	Graphics: ASPEED AST2400 BMC or equivalent Resolution: 1920 x 1200 Memory: 1G DDR3 Ethernet PHY: 1G
Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 3.0 Support Energy Star
Operating Systems and Virtualization Software Support	Microsoft Windows Server Canonical Ubuntu Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) VMware Citrix XenServer
Warranty	Product shall be under 3years warranty with Next business day support
Provisioning	Provisioning: Essential tools, drivers, agents to setup, deploy and maintain the server should be embedded inside the server.
Remote Management	Server should have dedicated 1Gbps remote management port.
Server Management	Provision to monitor all critical hardware with valid notifications.
	USB Key board & Mouse

Specifications for Monitors

Specification for Monitor	
Monitor	24- inch Widescreen LED Backlit Display with the following minimum specifications · Panel Type-IPS Gen 2 ·24" Wide Viewable Area (diagonal) Aspect Ratio -16:10 ·178° V x H Viewing Angle; ·Brightness-250 cd/m2 ·Contrast Ratio-Static: 1000:1; Dynamic: 5,000,000:1 ·Response rate-5 ms gray to gray ·Standard Resolution@ 60 Hz-1920 x 1200 ·Inputs: 1 DisplayPort, 1 DVI-D, 1 VGA (analog) ·4-Port USB Hub ·4 Way Adjustments: Minimum required -Tilt:-5°to +30°; Swivel: 360°; 0-120mm Height;90° Pivot Rotation
Warranty: Three Years Comprehensive Onsite Warranty.	

Specification for 12 port 1GB/s Switch

12Ports at 1000Mbps (1Gbps) each 250W Max Power IEEE 802.3az Energy Efficient Ethernet (EEE) 19 Rack-Mountable Auto-MDI/MD-X
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Specification for 12 port 10 GB/s Switch

1U Rack Mount 10GB/s 12 Ports at (10Gbps) each 250W Max Power IEEE 802.3ad link Aggregation/CACP Rack-Mountable
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