Bid Document

Bid Details	
Bid End Date/Time	27-04-2020 15:00:00
Bid Life Cycle (From Publish Date)	90 (Days)
Bid Offer Validity (From End Date)	65 (Days)
Ministry/State Name	Punjab
Department Name	Governance Reforms Department Punjab
Organisation Name	N/a
Office Name	Punjab State E-governance Society, Mohali Hq, Punjab
Total Quantity	36
Item Category	Virtualisation & Cloud software (Version 2.0) , Server
Bidder Turnover (Last 3 Years)	153 Lakh (s)
Experience Criteria	3 Year (s)
MSE Exemption For Years Of Experience And Turnover	No
Startup Exemption For Years Of Experience And Turnover	No
Document required from seller	Experience Criteria,Bidder Turnover,Certificate (Requested in ATC),OEM Authorization Certificate *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Bid to RA enabled	Yes
Primary product category	Server

EMD Detail

Advisory Bank	State Bank of India
EMD Percentage(%)	1.00
EMD Amount	306900

ePBG Detail

Advisory Bank	State Bank of India
ePBG Percentage(%)	7.50

Duration of ePBG required (Months).	62

(a). EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.

(b). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

Beneficiary:
Member Secretary
Punjab State e-Governance Society, O/o Governance Reforms Department Punjab, Plot No. D-241, Phase 8B, Industrial Area, Sector-74, Mohali - 160071
(Psegs)

Splitting

Bid splitting not applied.

1. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of years as indicated in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the category of primary product having highest value should meet this criterion.

Virtualisation & Cloud Software (Version 2.0) (30 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
BASIC INFORMATION	**Domain**	Virtualisation & Cloud software	Virtualisation & Cloud software
	Scope of the offered product	1. Virtualisation of various IT Hardware namely Server, Network, Storage etc.	*
	Components/Module s of Virtualisation Software	1. SERVER VIRTUALISATION	1. SERVER VIRTUALISATION

	Name of Software	-	*
	OEM Model / Part No	-	*
	Software Description	-	*
	Software Version & Date of Launch of Version	-	*
SCOPE OF LICENCE	**Types of Licence**	1.Perpetual	1.Perpetual
	" Duration of Subscription (in Years) (Hint : Select '0' if not applicable)"	0	0 - 5
	OEM Licensing policy	1. Per physical CPU(Socket)	1. Per physical CPU(Socket)
	Valid Licence/ Subscription copy to be provided	YES	*
	Installation and demonstration	No	Yes, No
	The offered product have support from OEM for	1. Unlimited updation for Patches and Bug fixes within support period.,2. Unlimited upgradation of version within support period	1. Unlimited updation for Patches and Bug fixes within support period., 2. Unlimited upgradation of version within support period, 3. NA
	Number of Years upto which support is available from OEM for Updation (Patches and Bug fixes) within support period	3	3
	Number of Years upto which support is available from OEM for Upgradation of version within support period	3	3
	No of days Training Provided at Site (for maximum batch of 10)	0	0, upto to 5, 6 to 10, 11 to 20, 21 to 30
SERVER VIRTUALISATION	**Server Virtualisation features**	1.Virtualisation layer installed directly on the bare metal server hardware with no dependence on a general purpose OS,2. Capability of all virtual machines running on	*

		the servers to migrate another physical server in case of one server failure and live migration of virtual machines with no disruption.,3. Capability to Hot Add resources(for live Virtual Machines) like CPU, memory, devices for windows as well as linux Virtual machines.,4. Comprehensive, universal API support across all cloud platforms enabling full management of all system objects through the API.	
	Capability to enables efficient replication of data over the LAN or WAN, and simplifies management by	3. NA	*
	Capability for seamless migration of virtual machines across different	4. NA	1. CPUs,, 2. Clusters, 3. Hybrid cloud, 4. NA
	Capability to protect virtual environments by integrating Hypervisor Introspection via Direct Inspect APIs from	5. NA	*
	Availability of DR Automation Features in the offered products	8. NA	*
	Performance monitoring capability for Physical Host / Virtual Machine	1.Monitoring Of CPU,	*
NETWORK VIRTUALISATION	**Network Virtualisation Features**	12. NA	*
	Availability of functionality of Logical Switching in a virtual environment (decoupled from underlying hardware) for	3. NA	1. L2 switching, 2. L3 switching, 3. NA

CLOUD VIRTUALISATION	Cloud Virtualisation Features 1	13. NA	*
	Provision for automation of compute, network, storage, applications and custom services through	4. NA	*
	"Capability to provide automation and orchestration solution without any manual intervention for "	4. NA	*
STORAGE VIRTUALISATION	**STORAGE VIRTUALISATION Features**	7. NA	1. Capabilities for Software defined Storage., 2. Capable to pools together server attached flash devices and hard disks to provide shared datastore., 3. Combine storage capacity available with servers and allow the combined storage to use as Storage Area Network., 4. Ability to support all flash / hybrid nodes from any server manufacturer & support mixing of different compatible server brands in same cluster., 5. Storage virtualization support VM-Centric controls for managing storage service levels for capacity, IOPS, availability QoS by storage policy-based management., 6. Capable to scale up by adding disk in the node without any additional licenses, 7. NA
	" Capable to support features through erasure coding for "	6. NA	1. Rack awareness, 2. Deduplication, 3. Compression, 4. RAID 5 (or equivalent), 5. RAID 6 (or equivalent), 6. NA
MINIMUM HARDWARE REQUIREMENT	Minimum Server configuration	-	*
	Minimum Network	-	*

	interface card per server		
	Minimum disk required per server	-	*
	Minimum Nodes required for HCI solution	-	*
	Hyper link to Data sheet	-	*

 * Specifications highlighted in bold are the Golden Parameters.
 * Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement (allowed Values) by the Buyer.

Additional Specification Documents

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Gurpreet Singh	160062,Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	30	45

Server (6 pieces)

Technical Specifications

[* As per GeM Category Specification](#)

Specification	Specification Name	Values	Bid Requirement (Allowed Values)
Chassis	Form Factor	Rack	*
	Size (RU)	2	*
Processor	Processor Architecture	CISC(X86)	*
	Processor Make	Intel	Intel
	Number of Cores per Processor	22	22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 64 Or higher
	Processor Base Frequency (GHz)	2.1	*
	Processor Turbo Frequency (GHz)	3.7	*
	Total Cache	30.25	30.25 - 64.0 Or higher

	(L1+L2+L3)(MB)		
	Processor Description/ Number	Intel Xeon Gold 6238	*
Motherboard	Chipset compatible with CPU	Intel C621	*
	Expansion Slots Gen 3 (PCIe x1)	0	*
	Expansion Slots Gen 3 (PCIe x4)	0	*
	Expansion Slots Gen 3 (PCIe x8)	2	*
	Expansion Slots Gen 3 (PCIe x16)	3	*
	Maximum number of Sockets available on Server	2	*
	Maximum number of Sockets populated with Processors available on Server	2	*
Co Processor / GPU	**Availability of Co Processor /GPU**	No	Yes, No Or higher
	If Yes, Maximum Number of Slots available for Co-Processor/GPU	0	*
	If Yes, Maximum Number of slots populated with Co processor/GPU	0	*
	If Yes, Co Processor /GPU Description	NA	*
Memory	**Type of RAM**	DDR4 SDRAM with ECC	DDR4 SDRAM with ECC, DDR4 NVRAM (Persistent Memory)
	Total Number of DIMM Slots available	24	*
	Number of DIMM Slots populated with DDR SDRAM	16	*
	Number of DIMM Slots populated with DDR NVRAM	0	*
	DDR SDRAM Size(GB)	2048	0 - 6144
	DDR NVRAM Size (GB)	0	0 - 1600

	DDR SDRAM upgradable upto using spare DIMM Slots (GB)	1024	*
	DDR NVRAM upgradable upto using spare DIMM Slots (GB)	0	*
SSD Storage	**Type of Interface for SSD**	SATA	SATA
	Type of SATA SSD	Read Intensive	*
	SATA SSD Hot Swappable	Yes	*
	Endurance for SATA SSD (DWPD - Drive Writes Per Day) (X)	1	*
	Total Number of Slots available for SATA SSD	8	*
	Number of Slot Populated with SATA SSD	2	*
	Capacity offered per SATA SSD (GB)	1920	*
	Total Capacity Offered with SATA SSD (GB)	3840	More than 3840.0 Or higher
	Type of SAS SSD	NA	*
	SAS SSD Hot Swappable	NA	*
	Endurance for SAS SSD (DWPD - Drive Writes Per Day) (X)	0	*
	Total Number of Slots available for SAS SSD	0	*
	Number of Slots populated with SAS SSD	0	*
	Capacity Offered per SAS SSD (GB)	0	*
	Total Capacity Offered with SAS SSD (GB)	0	Any applicable numeric value
	Type of NVMe SSD	NA	*
	NVMe SSD Hot Swappable	NA	*
	Endurance for NVMe SSD (DWPD - Drive Writes Per Day) (X)	0	*

	Total Number of Slots available for NVMe SSD	0	*
	Number of Slots populated with NVMe SSD	0	*
	Capacity Offered per NVMe SSD (GB)	0	*
	Total Capacity Offered with NVMe SSD (GB)	0	Any applicable numeric value
HDD Storage	**Type of Interface for Hard Disk Drive**	NA	SATA, SAS, NL SAS, NA
	Total number of Slots available for SATA Drive	0	*
	Number of Slots populated with SATA Drive	0	*
	Capacity offered per SATA Drive (GB)	0	*
	SATA drive speed (hot plug or better) (RPM)	NA	*
	Total Storage Capacity offered with SATA Drive (GB)	0	Any applicable numeric value
	Total number of slots available for SAS drive	0	*
	Number of Slots populated with SAS Drive	0	*
	Capacity offered per SAS Drive (GB)	0	*
	SAS drive Speed (Hot plug or better) (RPM)	NA	*
	Total Storage Capacity offered with SAS Drive (GB)	0	Any applicable numeric value
	Total number of slots available for NL SAS drive	0	*
	Number of Slots populated with NL SAS Drive	0	*
	Capacity offered per NL SAS Drive	0	*
	NL SAS drive speed (hot plug or better) (RPM)	NA	*

	Total Storage Capacity offered with NL SAS Drive (GB)	0	Any applicable numeric value
RAID	RAID level	1	*
	No of RAID Controller Ports	8	2, 3, 4, 5, 6, 7, 8 Or higher
	Speed of RAID Controller Ports (Gbps)	12	6, 12 Or higher
	RAID Controller Cache (GB)	2	*
Ports & Interfaces	Network Card Supported	1G,10G	*
	Number of Networking Interface Cards (LAN)	1	2, 3, 4, 5, 6, 7, 8, 1 Or higher
	Whether Network Interface Card Embedded	Yes	*
	Number of Ports Per Network Interface Card	4x10G with SFP+	*
	Networking Interface Card Features	Asset Feature Tracking,Security Management	*
	Server Network Ports should Support SR-IOV Feature	No	*
	Server network ports should support DPDK and it should deliver zero packet loss as per RFC 2544 and deliver 100% line rate for all the packet sizes over 64 Bytes, Vendor to submit latest DPDK test report for the same	No	*
	Number of Single port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	Number of Dual port FC HBA card	1	0, 1, 2, 3, 4 Or higher
	Number of Quad port FC HBA card	0	0, 1, 2, 3, 4 Or higher
	FC HBA Speed (Gbps)	16	8, 16, 32, NA Or higher
	vHBA Card Features Supported	No	*

	Number of Converged Network Adaptor (CNA)	0	0, 1, 2, 3, 4 Or higher
	Number of Ports per CNA card	NA	Dual Port, Quad Port, NA Or higher
	CNA Port Speed (Gbps)	0	10, 25, 40, 50, 100, 200, 0 Or higher
	Length of LC-LC Cable per SFP+ Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per HBA Port (meter)	0	5, 10, 15, 0 Or higher
	Length of LC-LC Cable per CNA Port (meter)	0	5, 10, 15, 0 Or higher
	Length of Twinax Breakout Cables per Port (meter)	0	*
	Video Controller (support VGA or above resolution)	Yes	*
	Keyboard Port	No	*
	Mouse Port	No	*
	DVD ROM (Internal/Exrternal)	Yes	*
	USB Ports (version 2point0/3point0)	4	*
	Total number of Spare Bays Available for Future Upgradation (Internal)	6	*
	Total number of Spare Bays Available for Future Upgradation (Hot Plugable)	0	*
Certifications	**Certifications/Compliance (OS)**	Windows,Red Hat Linux,Suse Linux,Ubuntu	Windows, Red Hat Linux, Suse Linux, Ubuntu, Cent OS, Debian, AIX
	Certification/Compliance (Virtualization/Cloud Platform)	VM ware,HyperV,Oracle Virtualization,Red Hat Virtualization,Xen,KVM	*
Features	**Management Features-1**	Remoter power On/ Shutdown of server,,Remote Management of Server over LAN & WAN with SSL encryption through	Remoter power On/ Shutdown of server,, Remote Management of Server over LAN & WAN with SSL encryption through

		gigabit management port,,Should have virtual Media support with all required licenses.,Remote KVM,Server Health Logging,Out of Band Management	gigabit management port,, Should have virtual Media support with all required licenses., Remote KVM, Server Health Logging, Out of Band Management
	Management Features-2	Management of multiple Servers from single console with single source of truth for multiple sites.,Automated infrastructure management for patch upgrades, version upgrades ,etc.,Simplified management with analytics driven actionable intelligence.,System tagging giving admin flexibility to provide metadata tags to each System to enable users to filter and sort systems based on user-assigned attributes,Hardware Profile based deployment to multiple Servers simultaneously,Policy template for deployment of single policy to multiple Servers simultaneously,Platfro m inventory and helath status,Server utilization statistics collection (including firmware updates and diagnostic tools),Should provide an alert in case the system is not part of OEM hardware complatibilty test,Solution should be open and programmable providing Rest API, SDK for programming lanugaes like Python , power shell scripts	*

		etc.,Should have customizable dashboard to show overall faults/health/inventory for all managed infrastructure the solution should provide option to create unique dashboards for individual users.the user should be flexibility to select name for dshasboards and widgets (viz. health, utilization etc),Single pane of glass for auto Provisioning across Multi vendor & multi hypervisor platform,Self service portal deployment for automated provisioning,Real-time out-of-band hardware performance monitoring & alerting	
	Security Features-1	Secure Boot(Firmware and Bios Level Security),Provision to lock the system on breach,Hardware root of trust/Dual Root of Trust,Server should provide policy based security,Server should provide server intrusion detection,	Secure Boot(Firmware and Bios Level Security), Provision to lock the system on breach, Hardware root of trust/Dual Root of Trust, Server should provide policy based security, Server should provide server intrusion detection,, "Malicious Code Free design" (to be certified by OEM)
	Security Features-2	Provision for Cryptographic firmware updates,Capability to stop execution of Application/Hyperviser/ Operating System on predefined security breach,Secure /Automatic BIOS recovery,Network Card secure firmware boot,In case of any security breach system should provide the lock down feature	*

	Server scalability to be achived within the box & without adding nodes	Yes	*	
	support for high availability clustering and virtualization	Yes	*	
Generic	Redundant Power Supply	Yes	*	
	Hot Swappable (Redundant Power Supply)	Yes	*	
	Power Supply Efficiency	Platinum	Gold, Platinum, Titanium Or higher	
	Redundant Fan	Yes	*	
	Hot Swappable (Redundant Fan)	Yes	*	
	Server Main Supply	230 +/- 10%Vac	*	
Benchmark	**SPEC int_rate_base 2017 for the product (must be available on SPEC dot ORG before evaluation)**	0	Any applicable numeric value	
	SPEC fp_rate_2017 for the product (must be available on SPEC dot ORG before evaluation)	0	Any applicable numeric value	
	SPEC int_speed_base 2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*	
	SPEC fp_speed_2017 for the product (must be available on SPEC dot ORG before evaluation)	0	*	
Miscellaneous	Maximum power consumption of the system (Watts)	1100	*	
	BIS Registration under CRS of MeitY	Yes	*	
	BIS Registration Number Under CRS of MeitY and its validity	-	*	
	Other Certifications Available	UL,FCC	*	
	RoHS Compliance	Yes	*	

	Availability of the type test report from Central Government / NABL / ILAC acredited laboratory covering verification of all features & functional parameters & environmental tests sequence	No	*
	a) Dry heat:test - for 16 hrs at 45 deg C as per IS: 9000/pt-3/sec-5/1977 b) Cold test - for 4 hrs at 0 deg C as per IS: 9000/pt-2/sec-4/1977 c) Damp Heat Cyclic Test - for 2 cycles of 24 hrs at 40 deg C & 95% RH as per IS: 9000/pt-5/sec-1/1981	NA	*
	The server has been checked for all the parameters before conditioning, After completion of the environmental tests sequence, with a recovery period of 1 to 2 hrs, the server found to be functional	NA	*
	Test Report Number & date	-	*
	Name & Address of Lab	-	*
Scope of Supply	Installation and Commissioning shall be included in the scope of supply	Yes	*
Warranty	**On Site OEM Warranty (Year)**	5	5, 7 Or higher

  * Specifications highlighted in bold are the Golden Parameters.

  * Bidders may note that In respect of non-golden Parameters, the specifications 'Values' chosen by Buyer will generally be preferred over 'Bid requirement (allowed Values) by the Buyer.

Additional Specification Documents

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporti	Address	Quantity	Delivery Days

	ng Officer			
1	Gurpreet Singh	160062,Department of Governance Reforms, Plot No D-241, Industrial Area, Near QuarkCity, Phase 8B, Sector 74, Mohali (Punjab) - 160062	6	45

Bid Specific Additional Terms and Conditions

1. Experience Criteria: The Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for 3 years before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the year. In case of bunch bids, the primary product having highest value should meet this criterion.

2. Malicious Code Certificate:

   The seller should upload following certificate in the bid:-
   (a) This is to certify that the Hardware and the Software being offered, as part of the contract, does not contain Embedded Malicious code that would activate procedures to :-
     (i) Inhibit the desires and designed function of the equipment.
     (ii) Cause physical damage to the user or equipment during the exploitation.
     (iii) Tap information resident or transient in the equipment/network.
   (b) The firm will be considered to be in breach of the procurement contract, in case physical damage, loss of information or infringements related to copyright and Intellectual Property Right (IPRs) are caused due to activation of any such malicious code in embedded software.

3. Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)
4. IMPORTED PRODUCTS: In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.
5. Dedicated /toll Free Telephone No. for Service Support : BIDDER/OEM must have Dedicated/toll Free Telephone No. for Service Support.
6. Escalation Matrix For Service Support : Bidder/OEM must provide Escalation Matrix of Telephone Numbers for Service Support.
7. ISO 9001: The bidder must have ISO 9001 certification.

This Bid is also governed by the General Terms and Conditions

---Thank You---