



Ref no: ICTS/TIFR/RFQ/45/2018-19

Date: 20/09/2018

ENQUIRY

To,

Dear Sir,

Subject: Enquiry for the supply of Server

Tender Criteria:

- The bidder should be VMware certified partner (preferred - highest level partnership)
- The bidder should have at least two engineers with vCAP Certification.
- The bidder should be Veeam certified partner (preferred - highest level partnership)
- The bidder should have at least two engineers with VMTSP certification & VMCE Training/Certification.

ICTS-TIFR is looking for a solution that can provide availability for its modern datacenter built on VMware Production Data Center. The Backup & Replication solution must be able to provide full protection of the virtual infrastructure including a disaster recovery and business continuity abilities.

The solution must adhere to the following minimal requirements illustrated as the breakdown below.

Please let us have your lowest Quote for the following:

Sl. No	Item Description	HSN/SAC Code	Qty	Rate per unit Rs.	Amount Rs.
1.	Server with the specification of the make Dell PowerEdge R640 or equivalent. Specifications: <ul style="list-style-type: none">• 2 X Intel Xeon Silver 4116 with minimum 2.1G clock speed (minimum 12 cores/socket or above) or better• Minimum 128GB ECC DDR4- 2666MHz or better RAM in balanced configuration for optimizing the memory bandwidth.• 2 x 300GB SAS Hot Swappable HDD 10000 rpm with RAID-1 for OS (Hard disk: Hitachi Ultrastar, Western Digital or equivalent)• RAID controller with support for Hardware RAID 0, 1, 5• 4 x 1 Gbps Ethernet ports		1 No.		





<ul style="list-style-type: none">• 4 x 10 Gbps Ethernet ports (SFP+ ports with modules to connect to switch)• IPMI 2.0 or iDrac advanced or equivalent support with KVM and Media over LAN features. Must include any licenses, if required for using these features• Redundant Power Supply• Rack mountable chassis with railings• 80 Plus Platinum or better certified power supply• All required cables• 2 No. additional 2 x 10 Gbps Ethernet ports (SFP+ ports with 7 meter DAC cables to connect to switch) <p>Warranty: 5 years comprehensive onsite warranty (same day 4-hour pro-support)</p> <p>Scope of work: Dell Server VMware:</p> <ul style="list-style-type: none">• Bill of material Check on Product delivery.• Rack and Stack of Dell Server.• Connectivity of the server to EMC VNXe storage.• Diagnostics check of the server.• IDRAC configuration.• RAID installation and logical volume configuration.• VMware ESXi installation and configuration.• Storage Mapping to the New ESXi server to make it as shared storage.• Update the cluster configuration with VMware HA and Administration control policy. <p>VMware vSphere Upgradation (existing infrastructure):</p> <ul style="list-style-type: none">• vCenter Server upgradation from 6.0 to 6.5 U2 (N-1) version.• ESXi upgradation from 6.0 to 6.5 U2 without any downtime.• VMware Tools upgradation on the Virtual machines.				
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2.	<p>Backup solution for VMware infrastructure with the specifications of Veeam Backup Essentials Enterprise 2 socket bundle, Limit of 6 sockets of Veeam Backup Essentials (any hypervisor, any edition) or equivalent</p> <p>General Requirements</p> <ul style="list-style-type: none"> • Backup Solution should work with VMware infrastructure based on version 4.0, 4.1, 5.0, 5.1, 5.5 Latest 6.0 and upcoming 6.5 /or Microsoft Hyper-V 2008 R2 SP1, Hyper-V 2012 and Hyper-V 2012 R2 and Hyper-V 2016. • The solution should support backing up all operating systems that are supported by VMware or Hyper-V • The solution should incorporate Virtual Machines image level backup and Virtual Machines host-based replication to Disaster Recovery site technologies managed from the single console. • The solution must allow automation through a RESTFUL API or PowerShell SDK. <p>Architecture:</p> <ul style="list-style-type: none"> • The solution must be agentless and able to backup Virtual Servers including OS and Applications. • The solution should support any type of Diskbased storage (DAS/NAS/SAN) • The solution should provide a self-sufficient backup file format to avoid catalog loss risk. • The solution should be scalable provide an easy and cost-efficient way to adhere to infrastructure growth without affecting backup windows. • The solution should support multiple backup consoles and provide a central point for managing these consoles • The solution should incorporate Virtual Machines image level Virtual Machines host based replication to Disaster Recovery site technologies managed from the single console. 		1 No.		
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	<p>Data Loss Avoidance:</p> <ul style="list-style-type: none"> • The Solution must comply with a minimum 15 minutes Restore Point Objective • Solution should use VMware vStorage API for Data Protection and take advantage of Change Block Tracking • Solution must be able to automatically backup all configurations and provide easy restore abilities for the backup infrastructure in case of failure • Solution should be able to provide a change block tracking mechanism for Hyper-V allowing faster incremental backups • Solution must support parallel processing of VMs backup to reduce backup window. • Solution must support Reverse, Forward, and Forever Forward incremental backup modes with support for Full Synthetic to reduce impact on production infrastructure • Solution should be able to perform agentless Application Aware Image Level Backups including full integration with Microsoft VSS and giving the ability to truncate Exchange and SQL transaction logs • Solution must provide built-in Deduplication, Compression and swap exclusion abilities in order to reduce size of backup storage requirements and save on cost. • Solution must provide a built-in Backup I/O control mechanism to avoid high storage latency during backup time. The solution should provide latency control both globally as well as per individual Datastore • Solution must be able to detect orphaned snapshots and be able to consolidate them properly • Solution must be able to create a copy of all or selected VMs to a secondary 				
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	<p>backup storage onsite or offsite automatically with the possibility of validation and remediation.</p> <ul style="list-style-type: none"> • Backup Copy should support GFS retention policies • Solution must provide end-to-end encryption for backup files on different Media and network communications associated using AES 256 encryption with Zero-Impact on backup operations speed. • Solution must provide Intelligent VM Failover mechanism, which includes automated Re-IP and network mapping of VMs on DR site and a failback technology, which transfers only changed blocks back to production site. • Solution must support Replication from backup files to avoid overhead on production • Solution must include Failover Orchestration allowing a 1-click failover to avoid long downtimes and provide near to High Availability. • Solution must support EMC Data domain DD boost, EXgarid, Quantum, HP Store Once functionality (in case of Dedupe Appliance as backup target for longer archive of Backup Data) <p>High Speed Recovery</p> <ul style="list-style-type: none"> • Solution must comply with maximum 15 minutes Restore Time Objective RTO • Solution should be able to instantly restore multiple VM's any machine running any OS of any size directly from the backup from any available restore point on the Disk based backup • Solution must support VM configuration and Virtual Hard Disk restore • Solution must provide easy way to restore Guest OS File including but not limited to Windows, Linux, UNIX, and BSD. • Solution must provide Granular restore capabilities directly from the backup for all Virtualized applications 				
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	<p>without the need to perform additional agent based backups. This functionality should include Active Directory, MS SQL, MS Exchange, and MS SharePoint, Oracle , Universal Item restore of any Virtualize Application .</p> <ul style="list-style-type: none"> • Solution must have a self-service mechanism that allows delegation for application owners to restore their own files and VMs. <p>Backup – Replication & Disaster Recovery Compliance</p> <ul style="list-style-type: none"> • Solution must provide automated test and verification of each backup or replica to assure recoverability in case of production failure. The verification must include VM files, OS, and Applications including custom testing using scripts • Solution should be able to create test environments by running one or more VMs directly from backup or replicas inside an isolated environment for the use of testing, development or training without the need to invest in additional computing or storage <p>Scope of work: Veeam Installation:</p> <ul style="list-style-type: none"> • Installation of Veeam backup and replication in one of the windows servers 2012 R2/2016. • Configuration of Veeam licenses. • Configuration of Backup Repository from the existing NAS server. • Configuration of Veeam backup proxy. • Configuration of VMware vSphere as infrastructure component. • Configuration of Veeam Virtual lab for Sure backup. • Configuration of VM backups based on the given schedules. • Backup Copy configuration if another storage in another location is provided. • Veeam Surebackup configuration and 				
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	<p>schedule the sure backup for the Virtual Machines.</p> <p>Restoration tests:</p> <ul style="list-style-type: none"> • Entire VM restoration. • Instant VM restoration. • VM file and VMDK restoration. • Instant file restoration. • Veeam Explorers of Microsoft SQL, AD, Exchange and Oracle Applications (If applications are there) <p>Additional warranty:</p> <ul style="list-style-type: none"> • 2 additional years of Basic maintenance prepaid for Veeam Backup Essentials Enterprise 2 socket bundle • Option: 2 additional years of Production (24/7) maintenance prepaid for Veeam Backup Essentials Enterprise 2 socket bundle (includes first years 24/7 uplift) or better 				
	Sub Total				
	Add: GST				
	Total Amount in Rupees				

Terms & Conditions:

The center being public funded research institution is entitled for GST @ 5% vide notification No. 47/2017-Integrated Tax (Rate) and No.45/2017-Central Tax dated 14-11-2017. Necessary Certificate will be provided along with the order.

The bids/ quotation addressed to “**International Centre for Theoretical Sciences – TIFR**”. You are requested to superscribe our enquiry number and due date on the envelope.

All duties, taxes, surcharge and cess as currently applicable must be stated in your quotations, separately. Otherwise your quote is liable to be rejected.

- 1) **DUE DATE FOR SUBMISSION OF QUOTATION AGAINST THIS ENQUIRY IS 05/10/2018 till 15.00 Hours.**
- 2) **QUOTATIONS RECEIVED AFTER THE DUE DATE SHALL BE REJECTED.**
- 3) Vendors can quote in USD also.
- 4) The Validity of your quotation should be for 60 days from the date.



- 5) The bidder should submit the MAF (Manufacturer's Authorization Form) Certificate.
- 6) Delivery to be made to ICTS-TIFR (at vendor's own arrangement). Transit Insurance should be done up to International Centre for Theoretical Sciences-TIFR, Survey No. 151, Shivakote Village, Hesaraghatta Hobli, Bangalore North – 560089.
- 7) Delivery Period: 6 weeks from the date of acceptance of the purchase order and Installation within 2 weeks from delivery.
- 8) Liquidated damage: In case the item is not supplied within the agreed delivery schedule and after a grace period of 07 days, then liquidated damages will be imposed automatically and will be deducted from the bill of the vendor at the rate of 0.5% per week, subject to a maximum of 10% of the order value.
- 9) **Payment:** within 15 days after delivery, acceptance & satisfactory installation.
- 10) Any dispute or differences that may arise between the parties shall be referred to the sole arbitration of the Centre Director or his nominees. The decision of the arbitrator shall be final and binding on the parties. The venue for arbitration shall be Bangalore. The provisions of the Arbitration and Conciliation Act, 1996 as amended from time to time shall apply. The Courts in Bangalore shall have exclusive jurisdiction to deal with any or all disputes between the parties.

For and on behalf of International Centre for Theoretical Sciences-TIFR

Authorized Signatory

Administrative Officer - 'C'
International Centre for Theoretical Sciences
Tata Institute of Fundamental Research
Survey No. 151, Shivakote,
Hesaraghatta Hobli, Bangalore - 560 089.