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Dated : 09.01.19

CORRIGENDUM

Tender No. IITM/SPS/CC/HYPERCONVERGED/007/2018-19

Tender ID: 2018_IITM_20120_1

Purchase of Hardware and Software for “Hyper Converged Infrastructure and Private Cloud”

In the tender document,

a) In Page No. 12 & 26 in Vendor Eligibility Criteria (Annexure A & B) – Sl.No. 1.4 & 1.9 may be read as

Sl.No.	Technical Specification
1.4	The solution provider must have executed minimum of 1 such project for the propose solution and the value of such projects should be greater than 1 crore in any Government/PSU/IIT's/Large Enterprise Customers.
1.9	Each HCI solution provider can nominate only one third party vendor
Instead of	
1.4	The solution provider must have executed minimum of 1 such project for the propose solution and the value of such projects should be greater than 1 crore in any Government/PSU/IIT's.
1.9	Each OEM should nominate only one solution provider for this tender.

b) In Page No. 12 ,13,14, 26,27 & 28 in Solution Specification (Annexure A & B) – Sl.No. 2.3, 2.9, 2.11,2.26 & 2.29 may be read as

Sl.No.	Technical Specification
2.3	The Proposed Server Nodes, appliance should be in Leader Gartner/Forrester Latest report. Should be in top 5 in Gartner Quadrant(Exception for Make and Model Mentioned in the Technical Specification)
2.9	The HCI solution should provide seamless upgrade for Firmware, Hypervisor, SDS software, BIOS and other such functions which are required in the HCI platform. The upgrade should be online and should not mandate any kind of OEM engagement
2.11	The HCI Solution should provide a backup catalog to allow any Virtual Server to be recovered to any specific point-in-time; Data recovery should be the part of the solution.
2.26	HCI solution should include infrastructure performance management tool quoted as part of the solution to visualize the operations and the infrastructure performance.
2.29	HCI solution should be capable of automatically increase/decrease the resources such as (RAM, CPU and storage) online.
Instead of	
2.3	The Proposed Server Nodes, appliance, Hypervisor software & HCI Software should be in Leader Gartner/Forrester Latest report. Should be in top 5 in Gartner Quadrant

2.9	The HCI solution should provide seamless upgrade for Firmware, Hypervisor, Storage OS, SDS software, BIOS and other such functions which are required in the HCI platform. The upgrade should be online and should not mandate any kind of OEM engagement
2.11	The HCI Solution should provide a backup catalog to allow any Virtual Server to be recovered to any specific point-in-time; Data recovery process should be simple with an RTO within 5 minutes.
2.26	HCI solution should include an application and infrastructure performance management tool quoted as part of the solution to improve operations and provide deep infrastructure performance insight.
2.29	HCI solution should be capable of increasing the resources such as (RAM, CPU and storage) online.

c) In Page No. 15,16,17,18,29, 30,31&32 in III.(a) Technical Specification for Data Centre Server & (b) Disaster Recovery Server – Minimum Hardware Specification – X86 (Annexure A & B) – SI.No. 4,5,11,18,20 & 21 may be read as

Sl.No.	Technical Specification	
Make & Model	Make & model : LENOVA/NUTANIX/CISCO/DELL/HPE/FUJITSU/BOSTON/NETAPP The proposed server OEM should be in Leaders Quadrant in Latest of Gartner Modular Servers.	
4	Memory slots	Minimum 24 DDR4 DIMM slots RDIMMS supporting speeds of min 2666 MHz
5	Memory configured	Minimum 320GBDDR42666 Mhz RAM scalable to 1TBRAM Minimum
11	Ethernetports	4x1GbpsBase-Tports(Optional), 4 x 10Gbps or 2 x 40Gbps ports, 1 Dedicated Management port (optional)
18	Configuration & Management (Optional)	Agent or agentless monitoring and alerting. Driver updates and configuration, Power monitoring and capping, Monitoring of overall system health.
20	HTML5support	HTML5 support for virtual console & virtual media.
21	Server security	Should provide effective protection using: a. Secure default passwords Persistent event logging including user activity or Hardware root of trust b. Secure / Failure alerting c. BIOS Recovery d. Policy based approach e. Systemerase

Instead of

Sl.No.	Technical Specification	
Make & Model	Make & model : LENOVA/NUTANIX/CISCO/DELL/HPE/FUJITSU The proposed server OEM should be in Leaders Quadrant in Latest of Gartner Modular Servers.	
4	Memory slots	Minimum 24 TruDDR4 DIMM slots RDIMMS supporting speeds of min 2666 MHz
5	Memory configured	320GBDDR42666 MhzRAMscalable to 1TBRAM Minimum
11	Ethernetports	4x1GbpsBase-Tports(Optional), 4 x 10Gbps Base-T Ports, 1 Dedicated Management port (optional)
18	Configuration & Management (Optional)	Real-time out-of-band hardware performance monitoring & alerting Agent-free monitoring, driver updates & configuration, power monitoring & capping, RAID management, external storage management, monitoring of FC, HBA & CNA & system health Out-of-band hardware & firmware inventory Virtual IO management / stateless computing system health

20	HTML5support	HTML5 support for virtual console & virtual media without using Java or ActiveX plugins
21	Server security	Should provide effective protection, reliable detection & rapid recovery using: a. Secure default passwords b. Persistent event logging including user activity c. Secure alerting d. Automatic BIOS recovery e. Rapid OS recovery f. Systemerase

d) In Page No. 19 & 35 in V. ToR Switch (Annexure A & B) – SI.No 1 may be read as

Sl.No.	Part No.	Technical Specification
1.	N9K-C93108TC-FX	Equivalent manageable switch is relaxed
Instead of		
1.	N9K-C93108TC-FX	Cisco Nexus 9300 with 48p 10G - T, 6p 100G QSFP, MACsec, UP

e) In Page No. 19,20,21,35 - 38 in VI. Hypervisor (Annexure A & B) – SI.No. 5,17,28 & 32 may be read as

Sl.No.	Technical Specification
5	Exempted from Gartner (Software should be proven solution with reputed customers).
17	Hypervisor software should have the provision to provide minimum downtime, low data loss and high availability for the applications running in virtual machines in the event of physical host failure without the cost and complexity of traditional hardware or software clustering solutions. This option should be supported for up to 4 virtual CPU per virtual machine.
28	The Hypervisor software should provide in-built Replication capability which will enable efficient array-agnostic replication of virtual machine data over the LAN or WAN. This Replication should simplify management enabling replication at the virtual machine level.
32	Alternate ways of implementing this feature is acceptable.
Instead of	
5	Hypervisor software shall be in leader quadrant of 2017 Gartner Magic Quadrant for x86 Server Hypervisor infrastructure of Continuous last 5 years
17	Hypervisor software should have the provision to provide zero downtime, zero data loss and continuous availability for the application's running in virtual machines in the event of physical host failure without the cost and complexity of traditional hardware or software clustering solutions. This option should be supported for up to 4 virtual CPU per virtual machine
28	The Hypervisor software should provide in-built Replication capability which will enable efficient array-agnostic replication of virtual machine data over the LAN or WAN. This Replication should simplify management enabling replication at the virtual machine level and enabling RPOs as low as 5 minutes.
32	Solution should provide link aggregation feature in the virtual switch which will provide choice in hashing algorithms on which link aggregation is decided and this should also provide multiple link aggregation groups to be provided in a single host (64 groups per physical host).

f) In Page No. 23,41 & 42 in VIII Software Defined Storage (Annexure A & B) – Sl.No. 1,6,11,12, 14, 16 & 23 may be read as

Sl.No.	Technical Specification
1	The proposed solution shall provide software based enterprise class storage services on Appliance certified x86 servers."
6	Should be integrated with Hypervisor, any additional software should be the part of the solution.
11	The software defined storage solution should support Data Locality/Distributed data`
12	Proposed HCI Appliance based solution should be Hardware independent to provide flexibility of choosing hardware from any server manufacturer"
14	Proposed HCI Appliance based solution Should support mixing of different compatible Server brands in same Cluster."
16	The solution should be proven in the market. Should have atleast 15 reputed customers across in India.
23	The solution should be able to use hypervisor/VM based replication to asynchronously replicate VMs across sites of RPO in minutes.
	Instead of
1	The proposed solution shall provide software based enterprise class storage services on commodity x86 servers
6	Should be integrated with Hypervisor and No additional VM/Appliance/software should be required to install
11	The software defined storage solution should support Data Locality
12	Should be Hardware independent to provide flexibility of choosing hardware from any server manufacturer
14	Should support mixing of different compatible Server brands in same Cluster.
16	The solution should be proven in the market. Should have more than 25 customers across in India.
23	The solution should be able to use hypervisor/VM based replication to asynchronously replicate VMs across sites based on configurable schedules of up to 5 minutes RPO

g) In Page No. 24, 42 in IX. Rack (Annexure A & B) – Sl.No. 2 may be read as

Sl.No.	Technical Specification
2	OEM Make is relaxed
	Instead of
2	RACK should be same make as that of server make i.e. OEM make

h) In Page No. 23 in X. Back Up (Annexure A & B) – Sl.No. 4 may be read as

Sl.No.	Technical Specification
4	Solution provider should supply 50TB Backup storage or appliance and should support expandability upto 200TB
	Instead of
4	Solution provider should supply 50TB NAS Storage for Backup purpose and should to expandable to 200 TB at any point of time and brand should as server brand

Sd/-
Deputy Registrar (S & P)