INDIAN INSTITUTE OF TROPICAL METEOROLOGY
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PS/128/16/2017   February 12, 2018

Sub: **Minutes of the Pre-bid meeting for "Supply and Installation of Consolidated Server Infrastructure Solution" Qty – 01 Set. held on 12/02/2018 at IITM, Pune.**

In response to our Tender Notice No.PS/128/16/2017, representatives of the following prospective bidders / firms / companies / OEM were attended the meeting.

i)   M/s. Dell International Services India Pvt. Ltd., Mumbai
ii)   M/s. Hewlett Packard Enterprise India Pvt. Ltd., Pune.
iii)   M/s. Hitachi Systems Micro Clinic Pvt. Ltd., Pune.
iv)   M/s. VMWare Software India Pvt. Ltd., Mumbai.

The queries received from M/s. Dell International Services India Pvt. Ltd., Mumbai vide e-mail dated 12th February, 2018 and the queries raised by all the bidders and their responses have been discussed, the major change requests, clarifications agreed/recommended by the committee are as follows and as per Annexure-1:

1.   Point No. 10 (Page No. 42) Unified Disk storage: Should not take more than a 12 hrs. to rebuild failed disk on an idle RAID6 group

Reply : Upon request by the bidders it is clarified that "Unified Disk storage : Should not take more than a **36 hrs.** to rebuild failed disk on an idle RAID6 group".

2.   Point No. E (Page No. 42) SAN Switch - Leading Industry Standard SAN Switch with minimum 24 port 16Gbps?

Reply : Upon request by the bidders it is clarified that all ports should be active on SAN switches.

3.   Top of Rack switch?

Reply : Upon request by the bidders it is clarified that Redundant L3 switches may be considered as per solution requirement.

4.   Point No. (G) page 43: Hypervisor and Management Node's Software?

Reply: Upon request by the bidders it is clarified Hypervisor and management node's software should provide VM Level encryption. It should also protect unauthorized data access.

All other terms and condition of the tender document remains unchanged. The meeting ended with vote of thanks to the members.

(A) Queries of M/s. Dell.

Sr.	Section	Page no	Specification	Query	Modification requested	IITM's Reply
1	(B) 2* 600 GB SSD (for OS) and 6 TB (usable) NL SAS or better	41	(B) 2* 600 GB SSD (for OS) and 6 TB (usable) NL SAS or better	storage of 6TB in each node is required for any specific purpose??	We suggest to keep storage at SAN level	As per tender
2	(B)Redundant Hot Plug High Efficiency Platinum Power Supply	41	(B)Redundant Hot Plug High Efficiency Platinum Power Supply	Does IITM needs only RPS or RPS and Redundant Fans also	We suggest to add redundant Fans as well	RPS & Redundant Fan also
3	.(E) Unified Disk storage Point 10. Should not take more than a 12 hrs. to rebuild failed disk on an idle RAID6 group	42	Should not take more than a 12 hrs. to rebuild failed disk on an idle RAID6 group	the complete infra is virutilized and data is protected and striped across drives to give HA.	We request IITM to remove this point as committing a rebuild time is dependent on various variables like disk density and RAID 6 group	Should not take more than a **36 hrs.** to rebuild failed disk on an idle RAID6 group
4	.(E) SAN Switch - Leading Industry Standard SAN Switch with minimum 24 port 16Gbps	42	Leading Industry Standard SAN Switch with minimum 24 port 16Gbps	does IITM need all active ports on SAN switch	Request IITM to clearly suggest the required active ports as it will impact cost	All ports should be active on SAN switches
5	(F) - Backup Solution Specification Point 15 Back up SW Support : Tape Library to support leading Backup software.	43	Back up SW Support : Tape Library to support leading Backup software.	does IITM need a backup software as well??	Please Clarify	As per tender
6	General Query	NA	Top of Rack switch	will IITM provide the TOR switch, if yes kindly share the details of exsisiting TOR switch	Please Clarify	Redundant L3 switches may be considered as per solution requirement

7	(G) Hypervisor and Management Node's Software	43	"Hypervisor and Management Node's Software"	Must get the proven industry leading virtualization software	Request to Add the specification "Virtualization software shall be in Leaders Quadrant of 2016 Gartner Magic Quadrant for x86 Server Virtualization Infrastructure for continuous last 5 years"	As per tender
8	(G) Hypervisor and Management Node's Software	43	"Hypervisor and Management Node's Software"	Have flexibility with the different physical hardware as part of your infrastructure in the long term	"Virtualization software should support live Virtual Machine migration between different generations of CPUs in the same cluster and without the need for shared storage option"	As per tender
9	(G) Hypervisor and Management Node's Software	43	"Hypervisor and Management Node's Software"	Continue using your existing physical storage integrated with the new virtual environment	"Hypervisor should have capability similar of Virtual Volumes which enables abstraction for external storage (SAN and NAS) devices making them Virtualization aware Virtualization software should allow common management across storage tiers and dynamic storage class of service automation via a policy-driven control plane"	As per tender
10	(G) Hypervisor and Management Node's Software	43	"Hypervisor and Management Node's Software"	Security is crucial for a data center and you must Ensure security of your virtual infrastructure	"Virtualization software should provide VM-level encryption protects unauthorized data access both at-rest and in-motion"	Software should provide VM Level encryption. It should also protect unauthorized data access

| 11 | (G) Hypervisor and Management Node's Software | 43 | "Hypervisor and Management Node's Software" | Have more insight to the health of your virtual infrastructure and able to do a proactive monitoring and optimize the resources utilization without any downtime | 1) The solution should provide in-built enhanced host-level packet capture tool which will provide functionalities like SPAN, RSPAN, ERSPAN and will capture traffic at uplink, virtual switch port and virtual NIC level. It should also be able to capture dropped packets and trace the path of a packet with time stamp details 2) The solution should provide prebuilt and configurable operations dashboards to provide real-time insight into infrastructure behavior, upcoming problems, and opportunities for efficiency improvements 3) The solution should provide capability to automatically analyze monitoring data to be expressed as health, risk and efficiency measures that enable IT to detect potential issues in the environment more easily | As per tender |

(B) Queries of M/s. HPE

Sr.	Section	Page no	Specification	Clarification requested	IITM's Reply
1	Page No. 42/pt 1	42	FC, iSCSI, SAS based controllers/servers	Either all three types of connectivity are required or either one type of connectivity is required	As per tender FC / iSCSI/SAS
2	Page No. 42/pt 3	42	Minimum 64 GB cache per controller with battery back up	Can we look at 64GB cache across Controller	As per tender
3	Page No. 43/pt 8	43	The tape library should be configured with redundant robotics	Please remove redundant robotics as same is not available in entry level tape library.	The tape library should be configured with required robotics