

					Annexure -II
SL#NO	Item	Description	Comments	Questions	Response
1	Platform	HCI Appliance/Block should be a standard product offering from OEM, not custom configured as per specifications from discrete building blocks	Vendor Lock Alert	If the appliance/block is from a specific OEM wouldn't it would be proprietary solution locking down the expansion possibilities in the hardware level to a particular HW OEM?	We asked for a standard product and not any specific one and the question of proprietary doesn't arise
		The proposed solution must be on existing desktops with Virtual client booting option and all necessary customization options available under VDI environment including security, authentication, access rights management etc.	Need more clarification	Please clarify what would you mean on existing desktops?	Existing Desktops working at NGRI
2	Software	Per Node Controller VM	Architecture causing overhead	If the storage/HCI - control/management runs in a VM on every node/host and can consume resources sometimes up to 50% of the host's physical resources before the 1st workload VM is powered on. Wouldn't that be a huge overhead and an architecture flaw in the overall deployment of the solution?	No there will not be a any overhead
		Distributed File System (Native from OEM and not disparate Software products),	Architecture causing overhead	If the file system works separately not integrated to the Hypervisor a management engine is needed to redirect/manage the IO. Wouldn't that cause more overhead in terms of CPU/Memory resources?	No there will not be a any overhead
11	Hyper Converged Infrastructure - Essential Functionalities /Features	Hardware and Software to be from the same, single OEM and not third party licensed/non-licensed	Architecture causing Vendor Lockin/Proprietary	If HW and software is from a same OEM wouldn't it would be proprietary solution locking down the expansion possibilities in the hardware level to a particular HW OEM?	We asked for a single OEM not a preferred OEM so the question of propretary doesnot arise
		Identical configuration of Nodes regardless of size of deployment	Architecture causing less ROI / Prove to be more expensive	If the hardware needs to be always on the same configuration even in future there can be logistics and economic challenges in procuring the same. Also if the configuration needs to be always the same it will lead to a proprietary solution.	No can be scalable and same with any OEMs
1	Software Licenses / Features	Virtual Desktop / Application	Comments	Questions	
1 - 5		The solution must support session based desktop virtualization on Linux operating systems with support for RHEL, Suse and CentOS distributions		Could you explain the use case here as single Linux Desktop can be created with 1 vCPU and 512MB RAM providing a consolidation of 1core:10 Users? Same result can be achieved with a different method	We stand by our requirement

1 - 6		The solution must support Linux based application virtualization with support for RHEL, Suse and CentOS distributions		Could you explain the use case here as what Application we need to publish on Linux Platform?	We stand by our requirement
1 - 7		The solution should support redirection for any USB 2, USB 3 and USB-C port based devices used in the organization.		Could you explain why a USB - C device to be supported at this date, as there are hardly any peripheral devices available for on USB - C port today.	We stand by our requirement
1 - 8		The solution should support redirection for any LPT/Parallel port based device used in the organization		Does the environment has other parallel port connect devices than printer and Scanner devices?	Yes
3		Cloud Support			
3 - 1		Solution should support having DR of the setup on Microsoft Azure Public Cloud		Why is DR specifically in Azure Cloud as same functionality and cost effective DR can be provided on many other providers. Wouldn't this point be proprietary favoring only Azure?	either azure or amazon or equivalent
3 - 2		Solution should support having DR of the setup on Amazon AWS Public Cloud.		Why is DR specifically in AWS Cloud as same functionality and cost effective DR can be provided on many other providers. Wouldn't this point be proprietary favoring only AWS?	either azure or amazon or equivalent
3 - 3		It should be possible to burst the existing on premise setup onto Azure or AWS public cloud. i.e. phase 2 of the deployment can happen on the cloud while phase 1 remains on-premise all while maintaining a single setup from management and reporting perspective		Why is cloud burst is restricted to only on AWS/Azure Cloud as same functionality and cost effective DR can be provided on many other providers. Wouldn't this point be proprietary favoring only two public cloud providers?	either azure or amazon or equivalent
7		Management & Reporting			
7 - 1		The solution should have a separate console for desktop/application virtualization management and user support		As industry practice and for ease of management its always recommended a single pane of glass for management of desktops and applications. Hence is there a reason why a separate console for Desktops and Application? Wouldn't it add more overhead to the managing staff?	We stand by our requirement
8		Network Parameters			
8 - 1		The solution should take no more than 35kpbs bandwidth per desktop when a virtual desktop is being delivered. Additional WAN optimization devices may be quoted to achieve this.		Can we modify the statement to Average Bandwidth instead.	OK
8 - 2		The solution should take no more than 16kpbs bandwidth when a virtual application is being delivered. Additional WAN optimization devices may be quoted to achieve this.		Can we modify the statement to Average Bandwidth instead.	OK

8 - 3		The solution should be capable of running on high latency links like VSAT. The solution should run without any challenges on links with latency as high as 1800ms		How many sites are connected with VSAT Links and how many users are expected to access the environment over VSAT? User experience of a virtual desktop solution is the most important aspect and that would be hampered heavily in a VSAN network irrespective of the solution used wouldn't that be a negative factor?	No VSAT users as of now
8 - 6		VSAT links with varying latencies		How many sites are connected with VSAT Links and how many users are expected to access the environment over VSAT? User experience of a virtual desktop solution is the most important aspect and that would be hampered heavily in a VSAN network irrespective of the solution used wouldn't that be a negative factor?	No VSAT users as of now
8 - 12		The solution should be compatible with all the network elements currently deployed at the organization.		Please define if there is anything deployed out of standard network protocols currently in use in the industry in the environment	Existing Network has standard protocols only

No.		Description	Changes required	Justificaiton	Response
1					
	Platform:-	· 2 U, Hyper Converged Infrastructure Appliance/Block/ Enclosure with 3 Compute Nodes and 1 free bay/slot	· 2 U, Hyper Converged Infrastructure Appliance/Block/ Enclosure/individual with 3 Compute Nodes.	Proporitary to one OEM.	We asked for a standard product with minimal rack space,optimal utilization of power,cooling etc., not any specific one and the question of proprietary doesn't arise.
3.3.	Main Memory	6 x 16GB DDR4-2400 Memory Module (per node)	Please amend to "256GB (16 x 16GB) DDR4-2400 Memory Module (per node)".	HyperConverged systems are with software defined compute, network and storage processing all network & storage operations using Hosts' CPU and memory. Considering this, it's recommended to configure 256GB memory per host for better performance	we stand by our requirement
3.5.	Hard Disk Drives	2x 8TB, 3.5" (PER NODE)	Each node to be proposed 5* 1.92 TB or higher SSD drives	VDI workload is very storage intensive with boot storm and other bottlenecks associated, to meet desktop equivalent performance it's recommended to consider all flash	we stand by our requirement
3.6.	Solid State Disks	1 x480GB, 3.5" (PER NODE)			we stand by our requirement
3.7.	Network Interfaces	10 GbE Dual Base-T Network Adapter (Per node)		Please clarify "Clause 3.7 is requesting for 10 Base-T adapter which is normal copper RJ45 interface and Clause 6 is requesting for SFP+ fiber cables; both Adapter and cables are not compatible with each other, please clarify, Server Interface, Switch Int	Consider 10Base-T as default
6	Cables	Cable 3 metres SFP+ to SFP+, 2 per Node, Power Supply Cables with appropriate terminations		Please clarify "Clause 3.7 is requesting for 10 Base-T adapter which is normal copper RJ45 interface and Clause 6 is requesting for SFP+ fiber cables; both Adapter and cables are not compatible with each other, please clarify, Server Interface, Switch Interface and Cable should be either 10 BaseT / 10G SFP+ interfaces / DAC cables".	Consider 10Base-T as default
10	Linear Scale Out	Up to 64 nodes in a cluster	Up to 32 nodes in a cluster	For better performance / efficiency / management it is recommended to have 32 Nodes clusters	we stand by our requirement
		· Simplified No-RAID, LUN Architecture	· Simplified No-RAID, LUN Architecture	Resiliency in HyperConverged system is very important considering the software defined stoareg and data availability in the event of a drive or node failure. Hence its highly recommended to consider RAID within a node which will take care of drive failure without affecting any performance	we stand by our requirement
		Block Level Support for real-time data storage tiering between SSD and HDD disks to maintain optimal performance	All flash HyperConverged nodes	Considering the performacne, it's recommended to have all-flash HCI node	we stand by our requirement

		Capability to assign virtual machines to tier-0 of storage, in order to offer Quality Of Service to specific VMs / Workloads	All flash HyperConverged nodes	Considering the performacne, it's recommended to have all-flash HCI node	we stand by our requirement
		· Erasure coding support	Request you to amend to "Erasure coding / data replication technology support".	To make all OEM's on level play.	we stand by our requirement
		· Storage Thin Provisioning	Request you to amend to "Storage Thin Provisioning / Thick provisioning as per the solution offered".		we stand by our requirement
		· Must have capability to integrate with leading public cloud service providers and have stated roadmap for cross-cloud workload mobility	To be deleted	Proporitary to one OEM.	we stand by our requirement
VDI SOLUTION Software and Licenses					
Sl. No.	Item	Description	Changes required	Justificaiton	
3	Cloud Support	Solution should support having DR of the setup on Amazon AWS Public Cloud.	To be deleted	Proporitary to one OEM.	either Amazon or Azure or equivalent
1	Software licenses	SQLSvrStd SNGL SA OLP NL Acdbc- Microsoft®SQL Server Standard Edition Sngl Software Assurance Academic OLP 1License No Level - 1 Qty		Please clarify the need for this software license.	Database requirement of NGRI
Storage and Servers					
Serial No.	Sub Serial. No.	Category	Changes required	Justificaiton	
1	Storage and Servers				
		The proposed solution should be hypervisor agnostic and should support hypervisors like VmwareESXi, Microsoft Hyper-V, KVM	The proposed solution should be hypervisor agnostic and should support hypervisors like VmwareESXi, Microsoft Hyper-V	For critical projects like this, we recommend proven and popular hypervisors like VMware, Hyper-V and hence rquesting to change	we stand by our requirement
		2 The proposed HCI solution should be 100% software defined and should not use any hardware bases RAID or compression or de-duplication	The proposed HCI solution should be software defined and should use software or hardware based RAID or compression or de- duplication	Resiliency in HyperConverged system is very important considering the software defined storage and data availability in the event of a drive or node failure. Hence its highly recommended to consider HW RAID within a node which will take care of drive failure without affecting any performance	we stand by our requirement

	13	Shall support maximum host cluster sizes for VMWare vSphere , Hyper-V and Open KVM	Shall support maximum host cluster sizes for VMWare vSphere and Hyper-V	For critical projects like this, we recommend proven and popular hypervisors like VMware, Hyper-V and hence requesting to change	we stand by our requirement
	20	The solution should support Erasure Coding for disk space optimization	The solution should support Erasure Coding / data replication for disk space optimization	Proporitary to one OEM. Every OEM has their own Architecture.	we stand by our requirement
	21	The platform should support encryption at disk level with third party software support	The platform should support encryption at disk level or disk controller level with third party software support	Proporitary to one OEM. Every OEM has their own Architecture.	we stand by our requirement
	22	The platform should support stretch cluster with in 100KM radius with less than 5ms response across site		The 5ms response depends on the rate of change data on the DC site.	we stand by our requirement
	29	The proposed solution must support NVM-e SSDs	Request you to delete this clause.	Proporitary to one OEM.	we stand by our requirement
	30	The proposed nodes should support 10G SFP+ & Copper connectivity. Each node should support at least 4 x 10G Ports.	The proposed nodes should support 10G SFP+ & Copper connectivity. Each node should support at least 4 x 10G SFP+ Ports with Transceivers.	Please specify bidder to offer 10G BaseT Copper or 10G SFP+ or DAC Cable as per the solution requirement.	Consider 10Base-T as default
	31	The HCI solution should support One-Click Hypervisor conversion without data destruction or need for backup restoration	Request you to delete this clause.	Proporitary to one OEM.	we stand by our requirement
Data	3	Proposed HCI solution should support fault tolerance of 1 node or 2 node failure within a cluster. The solution should support configuration of this feature on per application basis within the cluster.	Proposed HCI solution should support fault tolerance of 1 node failure within a cluster. The solution should support configuration of this feature on per application basis within the cluster.	For the current requirement the two node cluster will offer the HCI to meet the requirement of VDI 50 users.	we stand by our requirement
DR & Replication	2	The solution should support backup to cloud with leading cloud provider like Amazon, Azure	The solution should support backup to cloud with leading cloud provider like Amazon or Azure	Proporitary to one OEM.	either azure or amazon or equivalent
	5	The proposed HCI solution must natively support cross Hypervisor VM level replication without the use of any third party softwares or application dependency.	Request you to delete this clause.	Proporitary to one OEM.	we stand by our requirement