Adigrat University Virtual Desktop Infrastructure (VDI) National Bid 2009 E.C

Rno	ITEM		Minimum Requirement	Unit	Qty	Unit price	Total Price	Remark
1	**Virtual desktop management platform**	Basic features	The virtualization platform and desktop cloud platform must have the same brand. The virtualization platform and desktop cloud platform must have independent intellectual property rights and provide proofs.	set	1			
			The bidder must be a member of international mainstream cloud computing organizations (such as Xen and OpenStack) and provide related proofs.					
			To keep quality, the virtualization platform, server, storage should be listed in Gartner Magic Quadrant, provide related proofs.					
		Requirement	The desktop cloud system can support centralized management of more than 20,000 desktops. The VM can supports a maximum of 1 TB memory The VM can supports a maximum of 64 VCPUs. The VM can supports a maximum of 64TB disk. The VM can supports a maximum of 12 virtual NICs.					
2	**Host Blade Servers Chassis**	I/O Module	Maximum 4 slots switch modules Switching capability of 15.6 Tbit/s. Four types of interfaces must be supported: GE, 10GE, FC, and IB.	set	2			
		I/O port	A maximum of 128 I/O ports must be supported. 6 pieces of 16*10GE Switch Module should be provided					
		Management module	6					
		Blade type	Maximum 16 half-width slots or 8 full-width slots; supports flexible configurations of single-slot, dual-slot, full-width, and half-width nodes					
3	**Host Blade Servers Type**	CPU	X86 series,FCLGA2011,2500MHz,1.8V,64bit,120000mW, Haswell EP Xeon E5-2670 v3,12Core	pcs	24			
		Number of CPUs	2 CPUs should be provided.					
		Memory type	1.5TB memory is supported. 1.5TBshould be supported.					
		Hard disk type	2.5-inch SAS, SATA, and SSD hot-swappable hard disks must be used. 10*2.5-inch 600GB SAS should be provided for each server.					
		Driver bay	2pcs-300GB-SAS-10000rpm-2.5 Hot Swappable hard disk should be provided					
4	**Storage System**	Storage processors	Multi-core processors	set	2			
		System cache per controller	Maximum 128GB, 48GB should be provided					
		number of controllers	Maximum 8 controller should be supported and should be provided redundant controllers as per the standard.					
		Front-end port types	1 Gbit/s Ethernet, 10 Gbit/s FCoE, 10 Gbit/s TOE, 16 Gbit/s Fibre Channel, 56 Gbit/s InfiniBand supported, 8*GE port should be provided					
		Disk Bay	45*2.5-inch 900GB 10K RPM SAS hard disk with related disk enclosure should be configured 30*3.5-inch 4TB 7.2K NL-SAS hard disk with related disk enclosure would be configured					
		Max. capacity of a single file	256 TB					

		Key Software Features	Device Management, LUN copy, LUN clone, Snapshot,Thin provisioning, Multi-tenant, Migration, tMotion, QoS, SSD cache, Cache partitioning, Storage tiering Data destruction, Volume mirroring should be provided					
5	Thin client (TC) with 17'' monitor for Cloud VDI library	One or more GE ports (RJ-45) must be provided.		pcs	1545			The thin clients should be with monitor and all other accessories.
		Low-power-consumption ARM dual-core processors must be used, with the frequency being 1.5 GHz or higher.						
		NandFlash is supported, with the capacity being 4 GB or larger.						
		When the same content is displayed on DVI and VGA, the maximum resolution must be 1920 x 1200@60 Hz.						
6	48 port Switch	Switching capacity	200Gbit/s	set	36			
		Forwarding performance	78Mpps					
		Fixed ports	48x10/100/1000BASE-T ports and 4x10G SFP+ ports.					
7	Server and Storage access switch	Port requirement	48x10G SFP+ ports. Or 2/4/6 FC Ports 4*40GE QSFP+ ports;Stackable should be included	set	2			
		Switching capacity	1200Gbps					
		Forwarding performa	960 Mpps					
8	UPS （6KVA） (F or switches) and accessory power distribution	Standard battery set offers 30 minutes runtime at half load (2700W) and 15 minutes at full load (5400W)		pcs	6			
		All mounting accessories for 4 post rackmount installation.						
9	UPS （20KVA, for Monitor and TCs) and accessory power distribution	Standard battery set offers 30 minutes runtime at half load (9000W) and 15 minutes at full load (18000W)		pcs	12			
		All mounting accessories for 4 post rackmount installation.						
10	Electric Equipment	circuit breaker(63A)	63A	pcs	21			
		Electrical Wire 2.5 m	Red color (10 roll)	roll	30			Elswedy or other equivalent is recommended.
			Green Color (10 roll)	roll	30			
			Blue Color (10 roll)	roll	30			
			Yellow Color (10 roll)	roll	30			
			Brown Color (10 roll)	roll	30			
			Black color (10 roll)	roll	30			
		Electrical cable	Electrical cable 5x6 mm2 from main distribution to sub distribution board	Meter	400			
		Circuit Breaker	Circuit breaker of 63A	pcs	15			Chint or equivalent.
		Connector	With 0.9 mm2 diameter	pkt	60			1 packet=100 pcs.
		Twin socket flush mo	10-16A/1P twin socket outlet	Pcs	1750			
		Distribution board	Flush mounting distribution board SDB-A1 in sheet steer enclosure with lockable door and with phase, neutral and earth bus-bars of 63A rating consists of • 1Pcs main MCB of 63A/3P • 12Pcs MCB of 25A/1P • 25% reserve pitches	pcs	15			
			Flush mounting distribution board SDB-A1 in sheet steer enclosure with lockable door and with phase, neutral and earth bus-bars of 40A rating consists of • 1Pcs main MCB of 40A/3P • 8Pcs MCB of 25A/1P 25% reserve pitches	pcs	9			
		End tap	To close the end part of the trunk	Pcs	25			
		plastic tape		Pcs	20			
		Trunk	100mm*50mm double compartment PVCI truncking/pc	Pcs	400			
		Divider	Power divider with 6 ports	Pcs	15			
		Elbow	T type	pcs	300			
			L type	pcs	200			
		Junction box or Scato	With a diameter of 65mm2	Pcs	1750			

		Cable tie	• Beaded cable ties: cable to be releasable and reusable. Standard black. • Self-locking cable ties with specially designed end for easier insertion into the lock • Flame resistance, Tensile strength, Good resistance to chemicals, Black version for outdoor use. Length more than 140 mm	pcs	1000			
11	**Furniture**	Computer Table	Computer table(Mahagony)-computer table, all parts to be made up of high pressure laminated (HPL) chip wood material and laminated with mahogany veneer material to form the panels having a minimum thickness of 20mm. Exposed parts will be covered by mohagony shelf and sliding keypad Tryon rollers will NOT be provided, caster wheel will not be provided. The depth stand should be 250 mm far from the rear side of the table. The table should have three standard holes of 100mm diameter in the rear view with in the 150 mm distance from it. The holes should be at the middle of the table with distance of 170mm between them. Size: 800mmx500mmx750mm. More clarification can be obtained from the customer	pcs	1550			Import standard
		Chair (Grey)	Chair (Grey) – chair to be provided will be without arm set, deep cushioned and back upholster with thickness of 30mm foam and packed by plastic or plywood, covered with high quality fabric, constructed with 20*20*15mm squire pipe support with rubber foot, gray, 460*420*450.	pcs	1550			Import standard
12	**Accessories**	All accessories such as docoration, furnitures, carpets, electrical equipments, fiber related componenets, UTP cable and related units, Network equipment, installations and other relevant materials for successsful deployment of the solution should be considered.		set				
13	Installation, Commissioning, and testing	Successful Bidders are required to install, commission, and test all VDI facilities after delivery. Successful Bidders are required to extend the optic fiber lines to the VDI rooms from the near by building or the university data center. They are also required to make necessary splicing and expansion of fiber lines. Any form of deformations or changes to the building or other facilities during installation, commissioning, and testing must be patched or repaired or restored by the supplier/winner.		set				
12	Relevant Trainings & Visits	On-Site Trainings	Successful Bidders are required to arrange germane onsite trainings for the AdU-ICT staffs covering all concomitant expenses during & after installation & commissioning.	pcs	5			
		On-factory Trainings & Visits	Successful Bidders are required to arrange visits to factories and on-factory trainings (on Facilities installation, configuration, & management) & certifications prior to the start of installation works covering all concomitant expenses (per-dime + certification fees + Air transport fares).	pcs	2			
						Total Price		