Adigrat University Virtual Desktop Infrastructure (VDI) National Bid for 2010 E.C Lot:2

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	1			
		I/O port	A maximum of 128 I/O ports must be supported. 6 pieces of 16*10GE Switch Module should be provided					
		Switch module	multi-plane switch module: 4x10GE+12xGE+8x8G FC uplink, 32xGE+16x8G FC downlink					
		Management module	Complies with IPMI v2.0 and supports management functions such as remote startup, shutdown, reset, logging, hardware monitoring, SOL, KVM over IP, virtual media, fan module monitoring, and PSM monitoring Supports 1+1 redundancy Provides a local KVM port for server management					

		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,Has well EP Xeon E5-2670 v3,12Core	pcs	8				
		Number of CPUs	2 CPUs should be provided.						
		Memory type	1.5TB memory is supported.						
		Hard disk type	2.5-inch SAS, SATA, and SSD hot-swappable hard disks must be used. 4*2.5-inch 600GB SAS should be provided for each server.						
		RAID support	RAID 0, 1, 10, 5, 50, 6, and 60. 1 GB RAID cache						
		Driver bay	2pcs-300GB-SAS-10000rpm-2.5 Hot Swappable hard disk should be provided						
4	**Storage System**	Storage processors	Multi-core processors	set	1				
		System cache per controller	Maximum 128GB, 48GB should be provided						
		number of controllers	Maximum 8 controller should be supported.						
		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	25*2.5-inch 900GB 10K RPM SAS hard disk with related disk enclosure should be configured 10*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 with all Accessories**	One or more GE ports (RJ-45) must be provided.		pcs	700			
		Thin Client,Hisilicon 3716C 1.5GHz(Dual Core),1G DDR3,4G eMMC,no,1000M,(DVI-I),Linux English free version, With DVI-I to VGA Adapter and a Hanging Thing						
		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.						
		The thin clients should be with monitor and all other accessories.						
		When the same content is displayed on DVI and VGA, the maximum resolution must be 1920 x 1200@60 Hz.						
6	**Electric Equipment**	circuit breaker(63A)	63A	pcs	10			
		Electrical Wire 2.5 mm2 with	Red color (10 roll)	roll	15			Elswedy or other equivalent is recommended
			Green Color (10 roll)	roll	15			
			Blue Color (10 roll)	roll	15			
			Yellow Color (10 roll)	roll	15			
			Brown Color (10 roll)	roll	15			
			Black color (10 roll)	roll	15			
		Electrical cable	Electrical cable 5x6 mm2 from main distribution to sub distribution board	Meter	200			
		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 mountable	10-16A/1P twin socket outlet	Pcs	700			
		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	5			
			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	4			
		End tap	To close the end part of the trunk	Pcs	25			

		Trunk	100mm*50mm double compartment PVCI truncking/pcs. Each piece should be 2 meters.	Pcs	2500			
		Divider	Power divider with 6 ports	Pcs	15			
		Elbow	T type	pcs	100			
			L type	pcs	50			
		Junction box or Scatola	With a diameter of 65mm2	Pcs	550			
		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	200			
7	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	700			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	700			Import standard
8	Accessories	All accessories such as docoration, furnitures, carpets, electrical		set	1			

				set					
9	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	1				
10	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	5				
					Total Price				

NB:-

1) The winner will be determined according the grand total of price but only if the provider meets the minimum technical requirments (see a separate evaluation criterea document).

2) Bidders shall present two copies of technical and finacial douments.

3) consider as a set (including all minimum requirements for the solution). Any missed item for the solution is the responsiblity of the winner.

4) Put total cost for installation, training for at least Five university ICT staffs for this purpose.

5) The winner is expected to conduct the installation as per the request of the university. (The winner is responsible to install all the listed items as per the requast of the University)

6) Bidders should conduct site survey to provide appropriate solution and should get final approval from AdU ICT. The site survey(mandatory) will be conducted on May 21, 2018 and May 23, 2018 10:00 AM at the university.

7) The on-factory training should be conducted ahead of material delivery to the university.