



REPUBLIC OF KENYA

MINISTRY OF EDUCATION
STATE DEPARTMENT OF VOCATIONAL AND TECHNICAL TRAINING

ADDENDUM 2:- RESPONSE TO QUERIES/CLARIFICATIONS
GoK/AfDB TVET II PROJECT

TENDER FOR THE SUPPLY, DELIVERY, INSTALLATION, CALIBRATION, COMMISSIONING AND TRAINING ON THE USE AND MAINTENANCE OF LEARNING MANAGEMENT SYSTEM (LMS) HARDWARE FOR THE NATIONAL TVET ODEL CENTER AT THE KENYA SCHOOL OF TVET

TENDER NUMBER: OCBN/TVET PHASE II/EQUIP/ODEL/23-24

DATE: 19TH AUGUST 2024

TECHNICAL CLARIFICATIONS/QUERIES			
NO.	ITEM NAME	QUERY/INQUIRY	RESPONSE/CLARIFICATION
ODEL 01	Server	We would like to seek clarification on the server requirements provided on page 90 of the RFP document (ODEL 01), the specifications are pointing towards a specific OEM, kindly confirm if we can propose alternative equivalent solutions.	These are minimum specifications. Bidders are allowed to propose any brand which meets specifications.
		What network cards and host bus adapters (HBA) should be configured i.e. a. x no of 10Gb/s Network card (NIC) and whether BASE-T (Copper) or SFP+ (Fiber)?? b. x no of 32Gb/s FC ? Also indicate the number of ports for each of the above	4x10Gb/s BaseT 2x10/25Gb/s with transceivers 2x32Gb/s dual port FC card

		e.g. single port, dual port, quad port etc	
		The requested VSphere essentials kit is no longer being sold by VMware; The kit available is Essentials Plus; please advise if this request should be changed to VMware vSphere Essentials Plus or other available editions such as VMware vSphere Standard (VVS), VMware vSphere Foundation (VVF) etc.	Quote vSphere essentials plus with 1-year subscription
		OEM Remote Engineer Services	OEM Remote Engineer Support Services is 6 Months
ODEL 02	Shared Storage	Array Enclosure - A 2U Disk Processor Enclosure (DPE) with twenty-five 2.5" drives Min. 6 SSDs or 10 HDDs / Max. 750 Drive Enclosure (DAE - Disk Array Enclosure) Support 2.5" drives in the 2U twenty-five drive tray. The required enclosure Disk Processor Enclosure (DPE) is proprietary. Enclosure for Dell Unity 480F/480. Is the tender only restricted to Dell or other bidders can participate?	These are minimum specifications. Bidders are allowed to propose any brand/technology that meets specifications
		The price of SSD has significantly gone down. HDD cannot guarantee today's requirements. Can other bidders provide purely SSD? maximum of 25 drives per enclosure is a limitation to future expansion. "	This is minimum requirement, bidders can provide higher specifications that meet required usable capacity of 40TB spread across SSD and SAS
		Management Software - Unisphere: Element Manager. Unisphere Central: Consolidated dashboard and alerting Cloud-based storage analytics, Thin Provisioning Proactive Assist Quality of Service (Block and vVols) Remote Protection The proposed management softwares are only restricted to Dell Unity 480F/480 storage. Can bidders provide equivalent to achieve the desired management?	These are minimum required management features; Bidders are allowed to provide equivalent management features to the requested features
		"Integrated unified architecture for block, file, and VMware vVols with concurrent support for native NAS, iSCSI, and Fibre Channel protocols."	Bidders are allowed to provide VMWARE APIs which support the following unified functionalities as a minimum -block (FC/iscsi), file (CIFS/NFS), vVOLS
		Unlike Dell's VMware partnership, other bidders	

		<p>provide Storage with plugins for VMware virtualization. "2 x dual-socket Intel CPUs, 32 cores per Array, 1.8GHz" Is the required process only Intel or bidders can provide alternative processors with higher specifications?</p>	<p>The required storage controller CPUs is minimum dual socket Bidders should provide Intel or latest CPUs with at least 1.8GHZ</p>
		<p>On shared storage which drive type should be used for usable capacity -SSD or SAS? What ports and number of ports should be configured on storage; 32Gb/s FC or 10Gb/s iscsi? Also indicate the number of ports</p>	<p>Mix of both SSDs and SAS i.e minimum 10TB usable on SSD and 30TB usable on SAS The minimum ports to be configured on the storage are: 8x10Gb/s and 8x32Gb/s FC with transceivers/SFPs</p>
		<p>With regards to the OEM deployment services under "shared storage" section on page 92 of the document (pdf page 98) i.e. "Perform LUN/Volume migration from existing setup to new storage", to be able to quantify the time and effort required, could you share how the existing setup is with regards to the following:</p> <ol style="list-style-type: none"> Type of server and/or storage currently in place and the connectivity in place Details of the workloads to be migrated The size of data to be migrated 	<p>This is a new installation with no existing setup. Volume Data Migration not a required</p>
		<p>Which drive type should be used for usable capacity - SSD or SAS?</p>	<p>Mix of both SSDs and SAS at least 10TB usable on SSD and 30TB usable on SAS</p>
		<p>What network cards and FC cards should be configured i.e.</p> <ol style="list-style-type: none"> x no of 10Gb/s Network card (NIC) and whether BASE-T (Copper) or SFP+ (Fiber)? x no of 32Gb/s FC ? <p>Also indicate the number of ports for each of the above e.g. single port, dual port, quad port etc</p>	<p>On server 4x10Gb/s BaseT + 2x10/25Gb/s with transceivers and 2x32Gb/s dual port FC card The minimum ports to be configured on the storage are: 8x10Gb/s and 8x32Gb/s FC with transceivers/SFPs</p>
		<p>OEM Remote Engineer Services</p>	<p>OEM Remote Engineer Support Services is 6 Months</p>
ODeL 04	24-Port Switch	<p>Stacking - Should the access switches support stacking? If so, how many stack ports should the switch have?</p>	<p>The switch should support at least eight switches in a single stack</p>

		<p>Layer 3 protocols - Does the switch need to support layer 3 features? If so, which protocols need to be supported?</p>	<p>Should support minimum Layer 2 features</p>
		<p>Redundancy</p> <ul style="list-style-type: none"> • IEEE 802.1s/w Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP) provide rapid spanning-tree convergence independent of spanning-tree timers and also offer the benefits of Layer 2 load balancing and distributed processing. • Per-VLAN Rapid Spanning Tree (PVRST+) allows rapid spanning-tree reconvergence on a per-VLAN spanning-tree basis, without requiring the implementation of spanning-tree instances. • Switch-port auto-recovery (error disable) automatically attempts to reactivate a link that is disabled because of a network error. • Link state tracking binds the link state of multiple interfaces. • The server Network Interface Cards (NICs) form a group to provide redundancy in the network. When the link is lost on the primary interface, network connectivity is transparently changed to the secondary interface 	<p>Bidders should ignore this requirement.</p>
		<p>MAC Address entries - To help determine the forwarding capability of the switch, how many MAC address entries - does the switch need to support?</p>	<p>Forwarding Capability has been provided in the Tender document</p>
		<p>Quality Assurance, Integration Compliance and Support Guarantee for switches, access points and controller - To guarantee SLA and service quality assurance, it is critical to proposed industrial recognized products. Is a reference report for quality control mandatory? If Yes which such report is required?</p>	<p>Reference report not required, however all supplied active equipment should be sourced from the authorized channel with valid and verifiable OEM warranty and support.</p>
<p>ODeL 06</p>	<p>Router</p>	<p>Cisco Umbrella® Secure Internet Gateway (SIG) (Secure Access Service Edge [SASE]) - Vendor specific language. Can we propose an equivalent security feature?</p>	<p>Equivalent Security feature is allowed.</p>

		1 integrated GE WAN port (copper) and 1 GE combo port (copper/fiber)" - For network scalability, should the WAN ports have an option to support 10GE capability?	This are minimum requirements; Bidders are allowed to propose higher specifications.
		Switching Capacity and Forwarding Performance - Considering the router will route huge amounts of traffic from multiple LAN access switches, its forwarding performance should be capable of handling this data. Whats the expected performance?	The set up consist of a single LAN access switch.
		Fanless - Is it acceptable to proposed a router with built-in fan modules as long as it supports intelligent airflow with low power consumption?	Bidders are required to comply with specifications