



WORK ORDER

DELIVERY DUE DATE: 6/13/21

Procurement Unit
Tel No.: 045-606-8142/606-8157

Supplier : **IP SOLUTIONS, INC.**
Address : Unit 502 Solare Bldg., Capri Oasis, Pasig Dr. Sixto Antonio Ave., Maybunga, Pasig City
TIN: 008-924-552-000 VAT Reg.
Tel. No. : (02) 514-4575/ 505-2946/ 643-8944

Work Order No.: 2021-052
Date : 3/24/2021
JO No. : 2020-078
Date : 9/16/2020
Mode of Procurement: Public Bidding
Mode of Payment: N/30

SIR/MADAM:

You are hereby advised to accomplish/deliver the following job/work within **Sixty (60)** Calendar days upon receipt of the Notice of Award as per quotation submitted by you duly approved by the TSU Committee on Bids and Awards and the President of the Agency

QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
1	lot	<p>SUPPLY, DELIVERY, INSTALLATION, COMMISSIONING AND CONFIGURATION OF HYPER-CONVERGED INFRASTRUCTURE FOR TSU</p> <p>Scope of Work - The project covers the acquisition and implementation of Supply, Delivery, Installation, Commissioning and Configuration of Hyper-Converged Infrastructure for the university's network unit</p> <p>Technical Specifications:</p> <p>A. Bidder must have at least one (1) full time certified engineer to manage and supervise the implementation of the project with certification issued by the product's manufacturer/principal.</p> <p>B. Bidder must be an authorized product reseller and/or installer certified by the product's manufacturer.</p> <p>C. The supplier must provide a solution from a brand that has global presence and has a local office in the Philippines.</p> <p>D. Bidder must present a certificate that their product has an In-country depot signed by the company and the product's manufacturer authorization.</p> <p>E. The project implementer from principal must be CISSP certified.</p> <p>F. The software must be CMMI L5 certified, in order to ensure the maturity of solution technology.</p> <p>G. The technical requirements and evaluation parameters are as follows:</p> <p>1. SERVER PC, PowerEdge R740, Specifications: 2x Intel Xeon Gold 6132 2.6G, 14C/28T, 128G (32Gx4) Memory, 8x3.5in/16x2.5in disk slots, 240G OS disk, 6xGE, 2x10GE, no cache disk or data disk, 3yr ProSupport Plus & Mission Critical: (7x24) 4- hour Onsite Service</p>	4,850,900.00	<u>4,850,900.00</u>

COMMISSION ON AUDIT- TSU
RECEIVED
By: [Signature] Date: 16 APR 2021

(Please read carefully at the back hereof)

Charge to: 03
ROA No.: 206 441 2021-03-0008

CONFIRME & RECEIVE COPY:

[Signature]
IP SOLUTIONS, INC.
Firm/Dealer/Supplier/Contractor

FUNDS AVAILABLE:

[Signature]
ELENA MAY T. TEOFILO
Head, Budget Office

APPROVED:

[Signature]
DR. MYRNA S. MALLARI
President
Authorized Official

Date: _____
Bank Account Name: _____
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QTY.	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
		Total No of Physical Cores: 56 Cores Physical Cores per Server: 28 Cores Total No of Virtual Cores: 112 Cores Virtual Cores per Server: 56 Cores, (Qty: 2) 2. MEMORY , 32GB 2666MHz DDR4 RDIMM ECC Total Memory Capacity: 512GB Memory Per Server Capacity: 256GB, (Qty: 14) 3. SOLID STATE DRIVE , 1.9 TB, 3D NAND TLC SSD 2.5", SATA 3.0 6Gbps, (Qty: 4) 4. HARD DRIVE , 4TB 7.2K RPM NLSAS 12Gbps 512n 3.5in Hot-plug Hard Drive, (Qty: 12) 5. NETWORK TRANSCEIVER , SFP+ 10GE Multimode Optical Module, for short distance transmission (850nm, 300M), (Qty: 4) 6. USB VIRTUAL KEY , USB Key for license activation, one key per cluster, please do specify the quantity, mandatory item, (Qty: 1) 7. NEW COMPONENT , LC-LC, Multi-mode, 3 meters, (Qty: 3) 8. SOFTWARE , Sangfor HCI Solution Software, aSV (Compute Virtualization License per Physical CPU) Server virtualization, HA, DRS, Automated Hot Add, backup, clone, (Qty: 4) 9. SOFTWARE , Sangfor HCI Solution Software, aNet (Network Virtualization License per Physical CPU) Network virtualization, Distributed Firewall, Drawable topology, visualized network, aSwitch, aRouter, (Qty: 4) 10. SOFTWARE , Sangfor HCI Solution Software, aSAN (Storage Virtualization License per Physical CPU) Storage virtualization, 2-3 copies, SSD read and write acceleration, data locality, (Qty: 4) 12. Further specifications: -The Solution must start with two servers without sacrificing scalability.		

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		-The solution must be hardware-agnostic, able to reside on any brand or unbranded server, the product must be able to cluster servers with different brands together and still be workable. -Must have a distributed firewall to offer micro-segmentation and segregation of VMs to ensure the lateral security. -Must be able to continue operation even with two (2) simultaneous power supply unit (PSU) failures -Must have the capability to move virtual machines from one physical appliance server to another in case of physical appliance server failure. This capability shall be either automatic or manually controlled. -The management platform must be integrated with no license and separated installation. -The storage virtualization component must be embedded into the hypervisor instead of installing storage VMs, for better performance and simpler management. -The management console must be integrated inside hypervisor with a single Graphical User Interface (not separated component) to manage the network, storage, compute, security. The production diagram must be able to be designed via drawable and modifiable topology by drag draw. The management console shall have the following minimum capabilities: Create/Destroy VMs, Create/Manage the network between VLANs and VMs, Manage storage, Manage the physical appliance (server), Monitor network, storage and computer, Create VM snapshots, VM templates and VM copies, Manage the virtual firewall -Rated line voltage of physical appliance: 100 to 240 VAC		

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ROA No.: 206441-2021-03-0008

CONFIRM & RECEIVE COPY:

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IP SOLUTIONS, INC.
Firm/Dealer/Supplier/Contractor

Date _____
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Bank Name: _____
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		-The HCI solution must be in standard rack-mounted form not exceeding 6U. All the accessories to deploy the solution in the Server Room must be included -The solution has the capability to automatically extend resources (CPU, RAM, storage) with the supportability of guest OS once critical level is reached -The solution must be able to conduct one click health check to locate the problem and offer workaround -The solution must provide an embedded backup system and snapshot that utilizes historical snapshots of VMs -In case of future expansion, the solution should be ready to add additional security components such Virtual Next Generation Firewall (Not traditional UTM) with Botnet Detection and Defense, virtual WAN optimization, virtual SSL VPN, virtual bandwidth manager with the same brand by adding the license -The HCI must have end to end security functionality 1. Distributed firewall to offer micro-segmentation for VMs 2. Web Application Firewall for the platform 3. Virtual Next Generation Application Firewall (Ready to activate as needed thru license) *****		

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