





## ፩፻፲፭ ዓ.ም በኋላ ማኅበር ደንብ

አዲስ አበባ: የኢትዮጵያውያን ሚኒስቴር የመጀመሪያ ጥቅም ደንብ በኋላ ማኅበር ደንብ

መጀመሪያ ደንብ መሆኑ:

(IUL)196-C/1/2024/25

የማኅበር ደንብ መሆኑ:

2024 ዓ.ም 09

የማኅበር ደንብ መሆኑ:

፡ የሸፍትዎች ማረጋገጫ አለበት ተስፋይ ይችላል፡

፡ ጥሩ የ

• የሸፍትዎች ማረጋገጫ አለበት ተስፋይ ይችላል፡

#	Requirements
<b>1 HCI Node Upgrade</b>	
Qty	Description
1	HPE SimpliVity 380 Gen10 G Node
2	Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) Processor
2	HPE SimpliVity 128G (8x16G) RDIMM Kit
8	HPE SimpliVity 1.92TB SATA 6G Read Intensive SFF SC SSD
1	HPE Ethernet 10/25Gb 2-port SFP28 Adapter
1	HPE Ethernet 10/25Gb 2-port FLR-SFP28 Adapter
4	HPE 25Gb SFP28 Transceiver with 5m Fiber Optic Cable
1	HPE NS204i-p x2 Lanes NVMe PCIe3 x8 OS Boot Device
1	HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit
1	HPE Smart Array P816i-a SR Gen10 12G SAS Modular Controller
2	HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply
1	HPE iLO Advanced 1-server License
1	HPE SimpliVity 380 2 Processors 10TB Software
1	HPE Gen10 2U Bezel Kit
1	HPE 2U Small Form Factor Easy Install Rail Kit
1	HPE Simplivity 380 Hardware Startup Service
2	HPE SimpliVity Remote Software and Firmware Update Service
1	HPE SimpliVity for VMware Remote Software Startup Service
1	HPE Startup VMware VSphere Essl-Std Service
1	HPE Simplivity Workload Migration Service
1	HPE 3Y Tech Care Essential Service
1	HPE SVT 380 Gen10 Node (1 Node) Support
1	HPE SVT 380 OmniStack 2P 10TB SW Support
96	VMware vSphere Standard - 1-Year Prepaid Commit - Per Core
1	Installation and Configuration Service

#### **Warranty and Support:**

- Coverage: 3-Year hardware and software support
- Direct connect to product specialist
- 24x7 access to online self-serve and self-solve capabilities, 24x7 incident logging
- Remote Problem Diagnosis: Technical support assistance for problem diagnosis

#	Requirements
	<ul style="list-style-type: none"> <li>• Proactive Notification: Alerts and notifications for important product updates and issues</li> <li>• Software Update Access: Access to software updates and patches</li> <li>• 3-Year Local Technical Support</li> </ul>
	<p><b>Installation and Professional Service Overview</b></p> <p>The desired vendor MUST have at minimum the following full time OEM Certified Professional/Engineer under its payroll to provide all required professional services. All relevant engineer(s) certificates and supporting documents shall be included with the proposal. The engineer(s) shall be available onsite for the duration of the service.</p> <ul style="list-style-type: none"> <li>- HPE Storage Certified</li> <li>- HPE SimpliVity Certified</li> <li>- VMware Certified</li> </ul> <p><b>HPE Simplivity 380 Hardware Startup Service:</b></p> <ul style="list-style-type: none"> <li>• Installation of the HPE SimpliVity hardware: Unpacking the server, inspecting it for damage, and installing it according to product specification</li> <li>• Rack mount the hardware, power cabling and cable management</li> <li>• Installation of any included hardware options.</li> <li>• Provide physical connection of the product to a LAN or WAN</li> <li>• Perform maintenance-related tasks such as firmware updates and HPE iLO configuration.</li> <li>• Do power-on self-tests (POSTs); verification of product operation; and verification that the current device software and firmware are loaded.</li> </ul> <p><b>HPE SimpliVity Remote Software and Firmware Update Service:</b></p> <ul style="list-style-type: none"> <li>• The service is required for existing two nodes</li> <li>• Verification of the hypervisor, hardware, software, driver, and environmental prerequisites required for the update of HPE SimpliVity system.</li> <li>• Software and firmware assistance</li> <li>• HPE OmniStack Software</li> <li>• HPE SimpliVity — Arbiter Software</li> <li>• For VMware® environments</li> <li>• HPE SimpliVity plug-in for vCenter Extension server firmware</li> <li>• VMware ESXi™</li> </ul> <p><b>HPE SimpliVity for VMware Remote Software Startup Service:</b></p> <ul style="list-style-type: none"> <li>• Verification of the hypervisor, hardware, software, driver, and environmental prerequisites required for the installation of HPE SimpliVity 380 System</li> <li>• Remote setup, installation, and configuration assistance.</li> <li>• Software installed <ul style="list-style-type: none"> <li>- Supported VMware® ESXi™ version on the HPE SimpliVity node</li> <li>- Supported HPE OmniStack software</li> <li>- HPE SimpliVity and VMware® vCenter™ extension</li> <li>- Server firmware</li> <li>- HPE SimpliVity Arbiter</li> <li>- HPE SimpliVity Deployment Manager</li> </ul> </li> <li>• The configuration of the HPE SimpliVity cluster(s)</li> <li>• Assist with production configuration and activation, and perform post-deployment checks to validate the proper health and operation of the HPE SimpliVity 380 implementation.</li> </ul>

#	Requirements
	<p><u>HPE Startup VMware VSphere Essl-Std Service:</u></p> <ul style="list-style-type: none"> <li>• Plan all the necessary activities, including the identification of any prerequisites.</li> <li>• Installation of one VMware vCenter Server® Appliance™</li> <li>• Installation of up to four VMware ESXi™ Servers at a single Customer location</li> <li>• Creation and configuration of one virtual machine (VM)</li> <li>• Run verification test on the SimpliVity node</li> </ul> <p><u>HPE Simplivity Workload Migration Service:</u></p> <ul style="list-style-type: none"> <li>• Plan all the necessary activities, including the identification of any prerequisites.</li> <li>• Migrate existing VMware workload up to 20 VMs on external SAN to the SimpliVity cluster.</li> <li>• Ensure load balancing on the cluster</li> <li>• Run verification test on the migrated workload</li> </ul> <p><u>Knowledge Transfer and Documentation:</u></p> <ul style="list-style-type: none"> <li>• Conduct orientation session on the HPE SimpliVity product and/or technology, including information on basic hardware product usage and hardware features.</li> <li>• Share best practices for maintaining and optimizing the system.</li> <li>• Provide knowledge transfer sessions to the IT team, for the delivered professional services.</li> <li>• Document the implemented solution, including the configuration details, network diagrams, and any customized settings.</li> <li>• Provide user manuals or guides for day-to-day operations and troubleshooting.</li> </ul> <p><u>Support and Maintenance:</u></p> <ul style="list-style-type: none"> <li>• Provide on the job training on the support and maintenance processes for the implemented solution.</li> <li>• Coordinate with OEM support services to ensure seamless support and timely resolution of issues.</li> <li>• Assist with firmware upgrades, patch upgrades, and provide recommendations for software and hardware upgrades.</li> </ul>
2	<h2>HCI Core Network Upgrade</h2>
	<p><b>02 No's x Core Switch</b></p> <p>Preferred Brands: Cisco, Aruba</p> <p>Interfaces:</p> <ul style="list-style-type: none"> <li>- 24-port 10 Gigabit SFP+ Managed Switch</li> <li>- 4 x 10 Gigabit copper ports</li> <li>- 1 x GE Out of Band Management Port</li> </ul> <p>Performance:</p> <ul style="list-style-type: none"> <li>- The device shall support minimum 480Gbps switching capacity</li> <li>- The device shall support minimum 240mpps throughput</li> <li>- The device shall have minimum 3MB packet buffers</li> <li>- The device shall have minimum 256MB flash and 512MB DRAM</li> </ul> <p>Layer 2 Features and Protocols:</p> <ul style="list-style-type: none"> <li>- STP, RTSP, MSTP,PVST, IEEE 802.3ad LAG</li> <li>- 802.1Q VLAN, Voice VLAN</li> <li>- DHCP Relay, IGMP</li> </ul> <p>Layer 3 Features and Protocols:</p> <ul style="list-style-type: none"> <li>- IPv4 and IPv6 static routing, 128 IP interfaces</li> </ul>

#	Requirements
	<ul style="list-style-type: none"> <li>- CIDR, RIP v2, Policy-Based Routing, DHCP Server</li> </ul> <p><b>Security and Management:</b></p> <ul style="list-style-type: none"> <li>- SSH v1 and v2, SCP, SSL, IEEE 802.1X, Web based authentication</li> <li>- Secure web management and configuration, mobile app</li> <li>- SNMP v1, 2c and 3</li> <li>- Dual images for resilient firmware upgrades</li> </ul> <p>Form factor: 1 RU, rack mounting accessories should be included 20 No's x 10GE SFP+ SR transceiver module with 5m Multimode fiber optic cable shall be included.</p> <p><b>Warranty and Support:</b></p> <ul style="list-style-type: none"> <li>• Coverage: 3-Year hardware and software support</li> <li>• 24x7 access to online self-serve and self-solve capabilities, 24x7 incident logging</li> <li>• Remote Problem Diagnosis: Technical support assistance for problem diagnosis</li> <li>• Software Update Access: Access to software updates and patches</li> <li>• 3-Year Local Technical Support by certified engineers</li> </ul>
	<p><b>Installation and Configuration</b></p> <p><b>Installation:</b></p> <ul style="list-style-type: none"> <li>• Installation and configuration service shall be by vendor certified engineers</li> <li>• The installation team should consist of minimum one OEM certified professional engineer with Cisco CCNA or CCNP Certified engineer</li> <li>• The installation team should consist of one OEM certified engineer for Fortinet products that need to be integrated for network security</li> <li>• The engineers shall be available onsite for the duration of the installation</li> <li>• Rack mounting of the switches in designated racks within the premises.</li> <li>• Install uplink cables to hosting switches.</li> </ul> <p><b>Configuration:</b></p> <ul style="list-style-type: none"> <li>• Provision and configuration of management</li> <li>• Configuration of VLANs to segregate network traffic and enhance security and performance.</li> <li>• Configure redundant SAN storage network, HCI storage network, DC LAN networks.</li> <li>• Configuration of link aggregation (LACP) where applicable for increased bandwidth and redundancy.</li> <li>• Setup of Quality of Service (QoS) policies to prioritize network traffic and optimize performance.</li> <li>• Implementation of security features including port security, MAC address filtering, and access control lists (ACLs).</li> <li>• Integration with existing network security and routing devices to ensure optimal security and proper routing.</li> <li>• Configure uplinks for distribution switches</li> </ul> <p><b>Documentation and Training:</b></p> <ul style="list-style-type: none"> <li>• Provision of detailed documentation outlining network topology, device configurations, VLAN assignments, and security policies.</li> <li>• On-the-job training for technical staff on basic network operations, monitoring, and troubleshooting procedures.</li> </ul>



3.6	<p>هذى نشرة توقيع وثائق تأمين على ممتلكاتكم، يرجى توقيع كل جنح على ملخص المحتوى.</p>
3.7	<p>صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم، سمعة الجهة المنشورة، سمعة الجهة المنشورة، سمعة الجهة المنشورة، سمعة الجهة المنشورة.</p>
3.8	<p>هذا نشرة توقيع وثائق تأمين على ممتلكاتكم، يرجى توقيع كل جنح على ملخص المحتوى.</p>
3.9	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.10	<p>صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.11	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.12	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.13	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.14	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.15	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.16	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>
3.17	<p>بيانات إضافية في نشرة توقيع وثائق تأمين على ممتلكاتكم، صيغة نشرة توقيع وثائق تأمين على ممتلكاتكم.</p>



መመሪያ 2: የዕለታዊ የሆነዎችን ተከተል.

#	መመሪያ
	የስራውን ማረጋገጫ እና ማመልከት ስለመሆኑ መመሪያ ምክንያት የሚመለከት ስለመሆኑ ጥሩ ይመለከል ስለመሆኑ መመሪያ የስራውን ማረጋገጫ ስለመሆኑ.
1	አሳይና ማስቀመጥ ስለመሆኑ ዘመን (80 ፎርማዎች) • ስራውን አሳይና ማስቀመጥ ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ስራውን አሳይና ማስቀመጥ ስለመሆኑ ዘመን በአሳይና ማስቀመጥ ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ.
2	አሳይና ማስቀመጥ ስለመሆኑ (10 ፎርማዎች) ሁራውን አሳይና ማስቀመጥ ስለመሆኑ ዘመን (10 ፎርማዎች) × 10 (አሳይና ማስቀመጥ ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ) በአሳይና ማስቀመጥ ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ.
3	ሙሉ ማረጋገጫ ማመልከት ስለመሆኑ (10 ፎርማዎች) • ማረጋገጫ ማመልከት ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ዘመን ስለመሆኑ ስራውን ማረጋገጫ ስለመሆኑ ዘመን የሚመለከት ዘመን ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ. • ማረጋገጫ ማመልከት ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ዘመን ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ዘመን ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ዘመን (አሳይና ማስቀመጥ ስለመሆኑ). • ማረጋገጫ ማመልከት ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ ዘመን ስለመሆኑ ዘመን የሚመለከት ስለመሆኑ.

١. حَوْسِنُ رَسَرَرُوْ قَبَّهُمُوْ دَدَهُمُوْ صِهِ:

حَوْسِنُ رَسَرَرُوْ قَبَّهُمُوْ سَرَنْ: (وَهَوْ قَبَّهُمُوْ مَعْصَمَهُ بَيْ سَرَنْ)

حَوْسِنُ رَسَرَرُوْ قَبَّهُمُوْ دَدَهُمُوْ:

حَوْسِنُ رَسَرَرُوْ قَبَّهُمُوْ دَدَهُمُوْ نَسَنْ رَسَنْ صَهَرَرَجَ قَبَّهُمُوْ قُبَّهُرَحَ سَرَنْ:

حَوْسِنُ قَبَّهُمُوْ سَرَنْ صَهِ:

بَلْدَهُرَهُ دَدَهُمُوْ:

٢. وَهَوْ قَبَّهُمُوْ مَعْصَمَهُ بَيْ سَفَهَرَرِ دَدَهُمُوْ صِهِ:

وَهَوْ قَبَّهُمُوْ مَعْصَمَهُ بَيْ دَدَهُمُوْ قَبَّهُرَوْ سَرَنْ:

حَنْدَهُ دَهْ وَهَسَرَهُ دَهْ سَرَجَ وَهَنَسَهُ سَرَنْ صَهِ:

حَرَهُرَهُمُوْ قَهَرَهُهُ سَهِهِ قَهَرَهُهُ وَهَنَسَهُ سَهِهِ سَهِهِ سَهِهِ سَهِهِ:

عَهْ

سَهِهِ

- ٣. حَوْسِنُ رَسَرَرُوْ سَهِهِهِ صِهِ:

هَسَهَرَهُ سَهِهِهِ دَهْ وَهَسَهَهُ دَهْ حَرَهُهُ:

حَسَهَهُهُ سَهِهِهِ رَسَرَرُوْ دَهْ حَرَهُهُ: (هَسَهَرَهُ قَهَرَهُهُ سَهِهِهِ سَهِهِهِ)

حَسَهَهُهُ سَهِهِهِ رَسَرَرُوْ دَهْ: (حَرَهُهُ سَهِهِهِ سَهِهِهِ):

حَوْسِنُ عَهْرَهُهُ:

نَسَنْ قَبَّهُمُوْ مَعْصَمَهُ بَيْ سَهِهِهِ سَهِهِهِ:

سَرَنْ:

هَسَهَهُ دَهْ سَرَنْ صَهِ:

مَهِهِهِ:

دَهْ: