



## Technical Requirement and Scope of works

Item #	QTY	Details
<b>1</b>	<b>1</b>	<b>Server &amp; Storage Upgrade</b> (Supply, Install, upgrade and migration service for HPE SimpliVity HCI Cluster)

#	Requirement
<b>1</b>	<b>Supply, Install, Upgrade and Migration Service for HPE SimpliVity HCI Cluster</b>
	02 Nos x Intel Xeon-Silver 4216 (2.1GHz/16-core/100W) Processor
	02 Nos x HPE SimpliVity 128G (8x16G) RDIMM Kit
	02 Nos x HPE SimpliVity 380 G Additional Processor 1.92TB 8-pack SSD Upgrade E-LTU
	02 Nos x HPE SimpliVity 380 G 1 Processor 1.92TB 6-pack to 8-pack SSD Upgrade E-LTU
	04 Nos x HPE 1.9TB 6G Mixed Use SFF SSD
	02 Nos x HPE SimpliVity 380 Gen10 G Expansion Kit
	02 Nos x HPE DL380 Gen10 High Performance Heat Sink Kit
	12 Nos x HPE ProLiant Add On Options Install Service
	01 Nos x HPE 3Year Tech Care Essential Service
	02 Nos x HPE STV 380G 1P 1.92TB 6-8 E-LTU Support
	02 Nos x HPE STV 380G +1P 1.92TB x8 LTU Support
	01 Nos x HPE Startup VMware VSphere Essl-Std Service
	02 Nos x HPE SVT Remote SW and FW Update Service
	02 Nos x HPE SimpliVity Expansion Service
	02 Nos x HPE SimpliVity Workload Migration Service
	02 Nos x HPE FlexFabric 10Gb 2-port FLR-SFP+ 57810S Adapter
	01 Nos x Aruba 8-port 1G/10GbE SFP+ MACsec v3 zl2 Module
	02 Nos x Aruba 10G SFP+ LC LR 10km SMF Transceiver
	04 Nos x Aruba 10G SFP+ LC SR 300m OM3 MMF Transceiver

<b>Installation, Configuration, Migration and Training</b>	
<b>Overview</b>	
	<p>The purpose of this project is to expand the existing HPE SimpliVity cluster by upgrading the cluster, deploying VMware virtual machines (VMs) on the cluster, and migrating workloads to the new VMs. Additionally, the scope also includes upgrading the existing data center core switch to upgrade the connectivity for the SimpliVity infrastructure. The scope of work includes the following tasks:</p> <ul style="list-style-type: none"> <li>• Evaluate the current environment to ensure compatibility with the upgrades, VMware, and workload migration</li> <li>• Plan the upgrade, VMware deployment, and workload migration to minimize disruption to the production environment</li> <li>• Plan the data center core switch upgrades</li> <li>• Configure and upgrade the nodes</li> <li>• Configure and upgrade data center core switch</li> <li>• Install and configure VMware on the cluster</li> <li>• Create VM templates and deploy VMs</li> <li>• Migrate workloads to the new VMs</li> <li>• Verify and test the cluster, VMs, and migrated workloads after expansion, deployment, and migration</li> <li>• Shall provide direct OEM SimpliVity software and firmware upgrade service for all existing nodes</li> <li>• Shall provide direct OEM SimpliVity expansion service for all existing nodes</li> <li>• Shall provide direct OEM workload migration service for all existing production workload VMs</li> <li>• Shall provide direct OEM service for VMware VSphere cluster deployment</li> <li>• The vendor MUST have at minimum the following OEM Certified Professional/Engineer to provide installation, configuration, and migration 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 and additionally shall provide 03 months post installation remote support service. <ul style="list-style-type: none"> <li>- HPE SimpliVity Certified</li> <li>- HPE Storage Certified</li> </ul> </li> </ul>
<b>Evaluation</b>	
	<p>The existing HPE SimpliVity cluster will be evaluated to ensure compatibility with the upgrades, VMware, and workload migration. This will include the following tasks:</p> <ul style="list-style-type: none"> <li>• Reviewing the current hardware and software configuration</li> <li>• Confirming that the new upgrades meet the minimum requirements for the cluster, VMware, and workload migration</li> <li>• Review and confirm the compatibility of the accessories required for data center core switch upgrades</li> <li>• Checking compatibility with the existing network and storage infrastructure</li> </ul>

	<b>Planning</b>
	<p>The upgrade, VMware deployment, and workload migration will be planned to minimize disruption to the production environment. This will include the following tasks:</p> <ul style="list-style-type: none"> <li>• Determining the best time for the upgrades, VMware deployment, and workload migration to occur</li> <li>• Determine the best time for data center core switch upgrades</li> <li>• Identifying any potential risks and developing a risk mitigation plan</li> <li>• Creating a detailed project plan that includes timelines and milestones</li> </ul>
	<b>Configuration and Deployment</b>
	<p>The upgrades will be configured and deployed according to the project plan. This will include the following tasks:</p> <ul style="list-style-type: none"> <li>• Configuring network and storage settings</li> <li>• Installing the HPE SimpliVity software where required</li> <li>• Joining the upgraded nodes to the existing cluster</li> <li>• Verifying the configuration of the upgraded nodes</li> <li>• Installing VMware on the cluster</li> <li>• Configuring VMware settings</li> <li>• Creating VM templates</li> <li>• Deploying VMs according to the project plan</li> <li>• Install required network modules for the data center core switch upgrade</li> <li>• Migrate existing storage, core network and cluster network to the new upgraded connectivity</li> <li>• Configure all relevant network segmentation on the core switch, VMware, existing Fortigate Firewall and any other network device where required.</li> <li>• Configure all relevant network security policies on existing Fortigate firewall</li> </ul>
	<b>Workload Migration</b>
	<p>Workloads will be migrated to the new VMs according to the project plan. This will include the following tasks:</p> <ul style="list-style-type: none"> <li>• Identifying the workloads to be migrated</li> <li>• Planning the migration process</li> <li>• Migrating the workloads to the new VMs</li> <li>• Verifying that the migrated workloads are functioning properly</li> </ul>
	<b>Verification and Testing</b>
	<p>The cluster, VMs, migrated workloads and core switch upgrades will be verified and tested after upgrades, deployment, and migration to ensure that they are functioning properly. This will include the following tasks:</p> <ul style="list-style-type: none"> <li>• Verifying the data synchronization</li> <li>• Testing the failover and disaster recovery capabilities of the cluster</li> <li>• Checking the performance of the cluster, VMs, and migrated workloads under load</li> <li>• Documenting the test results and providing a summary report</li> </ul>

	<b>Project Management</b>
	<p>The project will be managed according to the following principles:</p> <ul style="list-style-type: none"> <li>• A project manager shall be assigned to oversee the entire project</li> <li>• Regular communication will be maintained</li> <li>• Any issues or risks will be promptly addressed and documented</li> <li>• The project will be closed out with a final report summarizing the results</li> </ul>
	<b>Deliverables</b>
	<p>The following deliverables will be provided upon completion of the project:</p> <ul style="list-style-type: none"> <li>• A detailed project plan with timelines and milestones</li> <li>• A report detailing the evaluation of the existing cluster</li> <li>• Configuration and deployment documentation for the new nodes, VMware, and workload migration</li> <li>• A report summarizing the VM templates and deployed VMs</li> <li>• A report summarizing the workload migration process and migrated work</li> <li>• On the job training for up to 02 technical person on Install, configure, manage and troubleshoot the system</li> </ul>
	<b>Warranty and Support Service</b>
	Manufacturer Warranty and Support Service: 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response
	24x7 access to online self-serve and self-solve capabilities, 24x7 incident logging
	Local Technical Support: 3-Year local technical support by OEM certified engineers

Bid submitter must be an **HPE Authorized Distributor** and should provide appropriate documentations (Certificates/Document/Letter from HPE) along with the Bid.



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שאלה מס' 2: סדרת האיברים נתונה.

#	הנדרש
	<p>למצוא את האיבר ה-80 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p>
1	<p>מצוא את האיבר ה-80 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p>
	<p>• מצוא את האיבר ה-80 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p>
2	<p>מצוא את האיבר ה-10 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p>
	<p>מצוא את האיבר ה-10 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p>
3	<p>מצוא את האיבר ה-10 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p>
	<p>• מצוא את האיבר ה-10 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p> <p>• מצוא את האיבר ה-10 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p> <p>• מצוא את האיבר ה-10 בסדרת האיברים הנ"ל. <math>a_1 = 1</math>, <math>d = 2</math>.</p>

1. مَوَسِّرُ زَمْرَةٍ وَمَكْرَهِيهَا وَدَوْرَتَا هَا:

مَوَسِّرُ زَمْرَةٍ وَمَكْرَهِيهَا سَمِيحٌ (وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ)

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مَوَسِّرُ زَمْرَةٍ وَمَكْرَهِيهَا أَمَّا سَمِيحٌ:

.....

مَوَسِّرُ زَمْرَةٍ وَمَكْرَهِيهَا سَمِيحٌ سَمِيحٌ سَمِيحٌ وَمَكْرَهِيهَا وَمَكْرَهِيهَا سَمِيحٌ:

.....

دَعَا سَمِيحٌ سَمِيحٌ سَمِيحٌ.....

أَمَّا سَمِيحٌ أَمَّا سَمِيحٌ.....

2. وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ:

مَكْرَهِيهَا وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ:

.....

أَمَّا سَمِيحٌ أَمَّا سَمِيحٌ وَأَمَّا سَمِيحٌ سَمِيحٌ.....

مَكْرَهِيهَا مَكْرَهِيهَا مَكْرَهِيهَا وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ:

سَمِيحٌ

سَمِيحٌ

3- أَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ:

أَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ.....

أَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ.....

أَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ وَأَمَّا مَكْرَهِيهَا فَسَمِيحٌ.....

مَوَسِّرُ زَمْرَةٍ:

مَوَسِّرُ زَمْرَةٍ أَمَّا مَكْرَهِيهَا فَسَمِيحٌ بِسَمِيحٍ

سَمِيحٌ:

أَمَّا سَمِيحٌ أَمَّا سَمِيحٌ:

سَمِيحٌ:

مَوَسِّرُ زَمْرَةٍ: