



ਸਰਕਾਰੀ ਨੰ: (IUL)196-C/1/2025/7

ਗੈਰੀ

ਗੈਰੀ ਵਿੱਚ ਸ਼ਾਮਲ ਕੀਤੇ ਗਏ ਸਨ। ਸਰਕਾਰੀ ਨੰ: (IUL)196-C/1/2025/7

- ਸ਼ਾਮਲ ਕੀਤੇ ਗਏ ਸਨ: 11 ਨਵੰਬਰ 2025, 10:00 ਤੱਕ
 - ਸ਼ਾਮਲ ਕੀਤੇ ਗਏ ਸਨ: 12 ਨਵੰਬਰ 2025, 10:00 ਤੱਕ
 - ਸ਼ਾਮਲ ਕੀਤੇ ਗਏ ਸਨ: 12 ਨਵੰਬਰ 2025, 10:00 ਤੱਕ
- ਸਰਕਾਰੀ ਨੰ: (IUL)196-C/1/2025/7
- procurement@pgoffice.gov.mv

ਗੈਰੀ ਵਿੱਚ ਸ਼ਾਮਲ ਕੀਤੇ ਗਏ ਸਨ। ਸਰਕਾਰੀ ਨੰ: (IUL)196-C/1/2025/7

ਗੈਰੀ ਵਿੱਚ ਸ਼ਾਮਲ ਕੀਤੇ ਗਏ ਸਨ। ਸਰਕਾਰੀ ਨੰ: (IUL)196-C/1/2025/7

ਗੈਰੀ ਵਿੱਚ ਸ਼ਾਮਲ ਕੀਤੇ ਗਏ ਸਨ। ਸਰਕਾਰੀ ਨੰ: (IUL)196-C/1/2025/7

30 ਮਾਰਚ 2025

30 ਨਵੰਬਰ 2025





پیشگی واپس لینے کی درخواست

HPE SimpliVity Expansion & Storage Upgrade

پیشگی واپس لینے کی درخواست:

(IUL)196-C/1/2025/7

پیشگی واپس لینے کی درخواست:

30 جولائی 2025

پیشگی واپس لینے کی درخواست:

Technical Specification and Scope of Work: Supply, Installation and Configuration of HPE SimpliVity Expansion and Storage Upgrade

#	Requirements														
1	HPE SimpliVity Expansion														
1.1	<p>01 Nos x HPE SimpliVity Expansion</p> <table border="1"> <thead> <tr> <th>Qty</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>12</td> <td>HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 Registered Smart Memory Kit</td> </tr> <tr> <td>3</td> <td>HPE SimpliVity Remote SW and FW Update Service</td> </tr> <tr> <td>1</td> <td>HPE Performance Analysis Compute Option 1 SVC</td> </tr> <tr> <td>1</td> <td>HPE Storage Firmware Remote Service</td> </tr> <tr> <td>3</td> <td>HPE Add On Options Install Service</td> </tr> <tr> <td>2</td> <td>HPE 1 Year Tech Care Essential Service – Renewal (for existing nodes)</td> </tr> </tbody> </table>	Qty	Description	12	HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 Registered Smart Memory Kit	3	HPE SimpliVity Remote SW and FW Update Service	1	HPE Performance Analysis Compute Option 1 SVC	1	HPE Storage Firmware Remote Service	3	HPE Add On Options Install Service	2	HPE 1 Year Tech Care Essential Service – Renewal (for existing nodes)
Qty	Description														
12	HPE 16GB (1x16GB) Single Rank x4 DDR4-2933 Registered Smart Memory Kit														
3	HPE SimpliVity Remote SW and FW Update Service														
1	HPE Performance Analysis Compute Option 1 SVC														
1	HPE Storage Firmware Remote Service														
3	HPE Add On Options Install Service														
2	HPE 1 Year Tech Care Essential Service – Renewal (for existing nodes)														
1.2	<p>Installation and Configuration Service</p> <p><u>Overview</u></p> <p>The vendor MUST have at minimum the following OEM Certified Professional/Engineer 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"> • HPE Storage Certified • Implementing HPE Composable Infrastructure Solutions • HPE SimpliVity System Administration • VMware Certified <p>All of the following services shall be delivered as part of the scope of work</p> <p><u>HPE SimpliVity Remote Software and Firmware Update Service</u></p> <ul style="list-style-type: none"> • Planning: <ul style="list-style-type: none"> ○ Assessment of the current software and firmware versions in the current HCI cluster. ○ Validation of update prerequisites and compatibility with the existing infrastructure. • Update Deployment: <ul style="list-style-type: none"> ○ Installation of approved software and firmware updates for SimpliVity nodes. ○ Coordination of updates to minimize disruption to ongoing operations. ○ Update associated SimpliVity deployment manager and any additional related software. ○ Verification of system functionality and performance post-update. ○ Testing of core features, including data deduplication, backup, and recovery. • Documentation and Training: <ul style="list-style-type: none"> ○ Comprehensive documentation of updated versions and configurations. ○ Summary report of the update process and any recommendations. 														

#

RequirementsHPE Performance Analysis Compute Option 1 Service

- **Deployment:**
 - Review of the existing compute infrastructure, including hardware and software inventory.
 - Detailed analysis of server utilization, CPU, memory, and I/O performance metrics.
 - Identification of underperforming or overutilized resources.
 - Assessment of system configurations and firmware levels affecting performance.
 - Suggestions for hardware and software upgrades to meet current and future workloads.
 - Guidance on tuning system parameters for improved resource efficiency.
 - Recommendations for workload balancing and resource allocation strategies.
- **Documentation and Knowledge Transfer:**
 - Comprehensive document detailing findings.
 - Actionable recommendations prioritized by impact and feasibility.

HPE Storage Firmware Remote Service

- **Planning**
 - Validation of system compatibility with the proposed firmware update versions.
 - Documentation of existing storage system configurations and firmware levels.
 - Confirmation of data backups and redundancy plans prior to the update.
- **Deployment:**
 - Installation of the latest firmware for HPE storage systems.
 - Application of any required prerequisite updates or patches.
 - Post-update testing to verify operational functionality and performance stability.
- **Documentation and Training:**
 - Comprehensive update report detailing the firmware version applied, update activities, and any issues resolved.
 - Recommendations for future maintenance or additional updates to enhance system longevity and performance

HPE Add On Options Install Service

- **Planning:**
 - Verification of compatibility between the memory modules and the target servers.
 - Documentation of the current server configuration, including existing memory capacity and layout.
 - Review of BIOS and firmware levels to ensure compatibility with the upgraded memory.
 - Confirmation of backup procedures to safeguard data integrity during the installation process.
- **Deployment:**
 - **Memory Module Installation:**
 - Proper handling and installation of HPE-certified memory modules into designated servers.
 - Adherence to HPE best practices for handling and seating memory components to ensure system reliability.
 - **System Configuration and Optimization:**
 - Verification of BIOS settings to enable and optimize new memory configurations.
 - Reconfiguration of system parameters to leverage the additional memory capacity effectively.
 - Execution of diagnostic tests to validate the successful integration and functionality of the newly installed memory.

#	Requirements																																																						
2	Storage Upgrade																																																						
2.1	<p><u>Minimum Requirement</u></p> <table border="1"> <thead> <tr> <th>Qty</th> <th>Description</th> </tr> </thead> <tbody> <tr><td>1</td><td>HPE ProLiant DL380 Gen11 12LFF NC Configure-to-order Server</td></tr> <tr><td>2</td><td>Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W Processor</td></tr> <tr><td>8</td><td>HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 Registered Smart Memory Kit</td></tr> <tr><td>2</td><td>HPE 960GB NVMe Gen4 Mainstream Performance RI SFF BC U.3 Static V2 SSD</td></tr> <tr><td>12</td><td>HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e HDD</td></tr> <tr><td>1</td><td>Broadcom Ethernet 10/25Gb 2-port SFP28 Adapter for HPE</td></tr> <tr><td>1</td><td>HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit</td></tr> <tr><td>1</td><td>HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller</td></tr> <tr><td>1</td><td>Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE</td></tr> <tr><td>2</td><td>HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit</td></tr> <tr><td>1</td><td>HPE iLO Advanced 1-server License</td></tr> <tr><td>1</td><td>HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit</td></tr> <tr><td>1</td><td>HPE Gen11 2U Bezel Kit</td></tr> <tr><td>1</td><td>HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device</td></tr> <tr><td>1</td><td>HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit</td></tr> <tr><td>1</td><td>HPE Compute Ops Management Enhanced 3-year Upfront ProLiant SaaS</td></tr> <tr><td>1</td><td>HPE 3Year Tech Care Essential Service</td></tr> <tr><td>1</td><td>Scality AOT per Person 3-day Advanced Operation Training Service</td></tr> <tr><td>1</td><td>Scality ARTESCA 1 Server Standard Remote Installation Service</td></tr> <tr><td>55</td><td>Scality ARTESCA Single Site per TB 3-year E-LTU</td></tr> <tr><td>55</td><td>New Cluster Subscription</td></tr> <tr><td>2</td><td>HPE 10Gb SFP+ SR Transceiver with 3m LC Duplex Fiber Optic Patch Cord</td></tr> <tr><td>1</td><td>HPE ProLiant DL/ML Startup Service</td></tr> <tr><td>1</td><td>HPE Onsite Network Configuration Service</td></tr> <tr><td>1</td><td>HPE Compute FW Update Implantation Remote Service</td></tr> <tr><td>1</td><td>HPE Perf Analysis for Storage</td></tr> </tbody> </table>	Qty	Description	1	HPE ProLiant DL380 Gen11 12LFF NC Configure-to-order Server	2	Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W Processor	8	HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 Registered Smart Memory Kit	2	HPE 960GB NVMe Gen4 Mainstream Performance RI SFF BC U.3 Static V2 SSD	12	HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e HDD	1	Broadcom Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	1	HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit	1	HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller	1	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	2	HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit	1	HPE iLO Advanced 1-server License	1	HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit	1	HPE Gen11 2U Bezel Kit	1	HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device	1	HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit	1	HPE Compute Ops Management Enhanced 3-year Upfront ProLiant SaaS	1	HPE 3Year Tech Care Essential Service	1	Scality AOT per Person 3-day Advanced Operation Training Service	1	Scality ARTESCA 1 Server Standard Remote Installation Service	55	Scality ARTESCA Single Site per TB 3-year E-LTU	55	New Cluster Subscription	2	HPE 10Gb SFP+ SR Transceiver with 3m LC Duplex Fiber Optic Patch Cord	1	HPE ProLiant DL/ML Startup Service	1	HPE Onsite Network Configuration Service	1	HPE Compute FW Update Implantation Remote Service	1	HPE Perf Analysis for Storage
Qty	Description																																																						
1	HPE ProLiant DL380 Gen11 12LFF NC Configure-to-order Server																																																						
2	Intel Xeon-Silver 4410Y 2.0GHz 12-core 150W Processor																																																						
8	HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 Registered Smart Memory Kit																																																						
2	HPE 960GB NVMe Gen4 Mainstream Performance RI SFF BC U.3 Static V2 SSD																																																						
12	HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e HDD																																																						
1	Broadcom Ethernet 10/25Gb 2-port SFP28 Adapter for HPE																																																						
1	HPE 96W Smart Storage Lithium-ion Battery with 145mm Cable Kit																																																						
1	HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller																																																						
1	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE																																																						
2	HPE 1000W Flex Slot Titanium Hot Plug Power Supply Kit																																																						
1	HPE iLO Advanced 1-server License																																																						
1	HPE ProLiant DL380/DL560 Gen11 2U High Performance Fan Kit																																																						
1	HPE Gen11 2U Bezel Kit																																																						
1	HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device																																																						
1	HPE ProLiant DL3XX Gen11 Easy Install Rail 3 Kit																																																						
1	HPE Compute Ops Management Enhanced 3-year Upfront ProLiant SaaS																																																						
1	HPE 3Year Tech Care Essential Service																																																						
1	Scality AOT per Person 3-day Advanced Operation Training Service																																																						
1	Scality ARTESCA 1 Server Standard Remote Installation Service																																																						
55	Scality ARTESCA Single Site per TB 3-year E-LTU																																																						
55	New Cluster Subscription																																																						
2	HPE 10Gb SFP+ SR Transceiver with 3m LC Duplex Fiber Optic Patch Cord																																																						
1	HPE ProLiant DL/ML Startup Service																																																						
1	HPE Onsite Network Configuration Service																																																						
1	HPE Compute FW Update Implantation Remote Service																																																						
1	HPE Perf Analysis for Storage																																																						
2.2	<p><u>Warranty</u></p> <ul style="list-style-type: none"> • Should have Access to 3 years 24x7 Manufacturer's Customer Service and Support over the phone/remote TAC for troubleshooting assistance of Product. • Hardware Warranty shall include 3-Year Parts, Labor & Onsite support with 24*7 4 Hours response. 																																																						
2.3	<p><u>Installation and Configuration Service</u></p> <p><u>Overview</u></p> <p>The vendor MUST have at minimum the following OEM Certified Professional/Engineer 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"> • HPE Storage Certified • Scality Certified Architect • VMware Certified <p>All of the following services shall be delivered as part of the scope of work</p> <p><u>Scality ARTESCA 1 Server Standard Remote Installation Service</u></p> <ul style="list-style-type: none"> • Planning: <ul style="list-style-type: none"> ○ Validation of hardware compatibility and readiness for Scality ARTESCA deployment. ○ Confirmation of network connectivity and required IP addressing schemes. ○ Documentation of access credentials for remote installation. 																																																						

#

Requirements

- **Service Deliverables:**

- Deployment of Scality ARTESCA software on the target server.
- Configuration of the server to establish connection with management systems and client environments.
- Post-installation validation of software functionality and integration.
- Provision of operational documentation and basic guidance on software usage.
- Provision of a detailed documentation outlining the installation and configuration activities performed.

HPE ProLiant DL/ML Startup Service

- **Planning:**

- Confirmation of hardware and related add-on if any.
- Availability of required network and power configurations.
- Validation of system requirements and software compatibility.

- **Deliverables:**

- Assembly and physical installation of server hardware.
- Configuration of BIOS settings and RAID as per customer requirements.
- Installation of operating systems and basic software, if included.
- Basic system testing to ensure hardware and software readiness.
- Provision of a detailed documentation outlining the installation and configuration activities performed.

HPE Onsite Network Configuration Service

- **Planning:**

- Review and validation of network architecture and design.
- Documentation of existing network configurations.
- Availability of necessary network hardware and cabling.

- **Deliverables:**

- Configuration of existing network switches, routers, and security devices.
- Implementation of VLANs, routing protocols, and security settings.
- Verification of network connectivity and performance.
- Provision of a detailed documentation outlining the design and configuration activities performed.
-

HPE Compute Firmware Update Implementation Remote Service

- **Planning:**

- Documentation of current firmware versions and server configurations.
- Verification of backup procedures to prevent data loss.

- **Deliverables:**

- Installation of the latest firmware versions on target systems.
- Validation of compatibility and performance post-update.
- Provision of a detailed documentation outlining the installation and configuration activities performed.

HPE Performance Analysis for Storage

- **Planning:**

- Documentation of current storage configurations and performance metrics.

- **Deliverables:**

- Collection and analysis of performance data.
- Identification of performance inefficiencies and bottlenecks.

#	Requirements
	<ul style="list-style-type: none">○ Delivery of a detailed documentation with optimization recommendations.○ Post-analysis support to implement suggested changes.○ Provision of a detailed documentation outlining the installation and configuration activities performed.

שאלה מס' 2: סדרת האיברים הנ"ל.

#	הנ"ל
	<p>סדרת האיברים הנ"ל היא סדרת חשבונית. מצאו את האיבר ה-80.</p>
1	<p>סדרת האיברים הנ"ל היא סדרת חשבונית (80 איברים).</p>
	<p>• האיבר ה-80 של סדרת האיברים הנ"ל הוא 80 (האיבר ה-80 של סדרת האיברים הנ"ל הוא 80).</p>
2	<p>סדרת האיברים הנ"ל היא סדרת חשבונית (10 איברים).</p>
	<p>סדרת האיברים הנ"ל היא סדרת חשבונית (10 איברים) (האיבר ה-10 של סדרת האיברים הנ"ל הוא 10).</p>
3	<p>סדרת האיברים הנ"ל היא סדרת חשבונית (10 איברים).</p>
	<p>• סדרת האיברים הנ"ל היא סדרת חשבונית (10 איברים) (האיבר ה-10 של סדרת האיברים הנ"ל הוא 10).</p> <p>• סדרת האיברים הנ"ל היא סדרת חשבונית (10 איברים) (האיבר ה-10 של סדרת האיברים הנ"ל הוא 10).</p> <p>• סדרת האיברים הנ"ל היא סדרת חשבונית (10 איברים) (האיבר ה-10 של סדרת האיברים הנ"ל הוא 10).</p>

1. مَوَسِّرُ زَمْرَةٍ وَمَكْرَهُهَا وَدَوَائِدُهَا:

مَوَسِّرُ زَمْرَةٍ وَمَكْرَهُهَا سُرْمٌ: (وَأَمَّا قَبْرٌ مَجْرُوحٌ بِسُرْمٍ)

.....

مَوَسِّرُ زَمْرَةٍ وَمَكْرَهُهَا أَرِيَّةٌ سُرْمٌ:

.....

مَوَسِّرُ زَمْرَةٍ وَمَكْرَهُهَا مَوَدِّي لَأَسْرَأَسْرَ مَوْرَجٍ وَمَكْرَهُهَا قَبْرٌ سُرْمٌ:

.....

دَعَاةٌ قَبْرٌ سُرْمٌ:.....

أَرِيَّةٌ أَرِيَّةٌ سُرْمٌ:.....

2. وَأَمَّا قَبْرٌ مَجْرُوحٌ بِسُرْمٍ أَوْ دَوَائِدُهَا:

وَأَمَّا قَبْرٌ مَجْرُوحٌ بِسُرْمٍ نَأْمُوقٍ سُرْمٌ:

.....

عَلَمٌ قَبْرٌ أَرِيَّةٌ سُرْمٌ وَأَسْمَةٌ سُرْمٌ:.....

تَرْدُومٌ قَبْرٌ لَأَسْرَأَسْرَ قَبْرٌ سُرْمٌ وَأَسْمَةٌ سُرْمٌ سُرْمٌ سُرْمٌ:

عَلَمٌ

سُرْمٌ

3- أَرِيَّةٌ زَمْرَةٍ مَجْرُوحَةٍ:

أَرِيَّةٌ سُرْمٌ رَسْمٌ قَبْرٌ سُرْمٌ:.....

رَسْمٌ لَأَسْرَأَسْرَ زَمْرَةٍ دَوَائِدُهَا: (أَسْمَةٌ قَبْرٌ سُرْمٌ رَسْمٌ سُرْمٌ)

رَسْمٌ لَأَسْرَأَسْرَ زَمْرَةٍ أَرِيَّةٌ (قَبْرٌ مَجْرُوحٌ سُرْمٌ):.....

مَوَسِّرُ قَبْرٍ:

نَأْمُوقٌ أَرِيَّةٌ مَجْرُوحٌ سُرْمٌ

سُرْمٌ:

أَرِيَّةٌ سُرْمٌ سُرْمٌ:

سُرْمٌ:

مَجْرُوحٌ: