

Specificații tehnice

Numărul procedurii de achiziție: ocds-b3wdp1-MD-1721217778613 din 04 octombrie 2024.

Denumirea procedurii de achiziție: Servere și sisteme de stocare (perioada 2024-2025).

Denumirea bunurilor	Denumirea modelului	Țara de origine	Producătorul	Specificarea tehnică deplină solicitată de către autoritatea contractantă	Specificarea tehnică deplină propusă de către ofertant																																																																																				
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Lotul nr. 5 Sisteme de stocare Full flash tip 1	Ocean Storage Dorado 8000 V6	China	Huawei	<p>Echipment nou și nerecondiționat, produs minim trim. I anul 2024, corespunzător tipului de dispozitive de nivel Enterprise, produs de producători renumiți (Brand name internațional). Configurația echipamentului trebuie să fie compusă din componente reciproc compatibile și să asigure funcționarea optimă a sistemului în ansamblu.</p> <p>Type: Enterprise Storage Full Flash Form Factor: min. 2U Rack mounting included; Availability: The equipment must be working in Symmetric Active-Active mode, which means that in the case of 100% utilization, ensures:</p> <ul style="list-style-type: none"> - obtaining high availability at 99,9999%; - lack of decrease in the required equipment efficiency in the event of a failure of half of the controllers; - lack of decrease in the required performance in the event of a failure of half of the controllers; - 100% full capacity reading; - The system must have built-in mechanisms for updating program versions without compromising its availability and loss of access to data. <p>The data must be available in cases of:</p> <ul style="list-style-type: none"> - failure of one power supply line, - failure of any controller, - failures of any two user data carriers, - failures of any port of FC/ISCSI, 	<table border="1"> <thead> <tr> <th>No.</th> <th>Part Number</th> <th>Model</th> <th>Description</th> <th>Unit Qty.</th> <th>Qty.</th> </tr> </thead> <tbody> <tr> <td colspan="6">Storage Equipment-OceanStor Dorado 8000 V6</td> </tr> <tr> <td>1</td> <td colspan="3">OceanStor Dorado 8000 V6</td> <td></td> <td>2</td> </tr> <tr> <td>1.1</td> <td colspan="3">OceanStor Dorado 8000 V6</td> <td></td> <td></td> </tr> <tr> <td>1.1.1</td> <td colspan="3">OceanStor Dorado 8000 V6 Main Equipment</td> <td></td> <td></td> </tr> <tr> <td colspan="6">Controller Enclosure 0 (Controller Enclosure,Interface Module,Disk,Disk Enclosure,Bay And Auxiliary Materials)</td> </tr> <tr> <td colspan="6">NVMe Controller Enclosure</td> </tr> <tr> <td></td> <td>02355 HBM</td> <td>D8V6-4C-1T-NEU</td> <td>Dorado 8000 V6 Controller Enclosure(4U,Four Ctrl,NVMe,AC\240V HVDC,1TB Cache,SPE74C0400)</td> <td>1</td> <td>2</td> </tr> <tr> <td colspan="6">Expand Interface Module</td> </tr> <tr> <td></td> <td>03050 GYB</td> <td>DV6-SMARTI O4*32FC-H</td> <td>4 ports SmartIO I/O module(SFP28,32Gb FC)</td> <td>2</td> <td>4</td> </tr> <tr> <td></td> <td>03050 GYL</td> <td>Scale-RDMA-H</td> <td>2 ports 100Gb RDMA I/O module(QSFP28,Scale-out)</td> <td>4</td> <td>8</td> </tr> <tr> <td></td> <td>03050 GYM</td> <td>H-RDMA-BE</td> <td>2 ports 100Gb RDMA I/O module(QSFP28,for Back-End)</td> <td>10</td> <td>20</td> </tr> <tr> <td colspan="6">NVMe Disk Components</td> </tr> <tr> <td></td> <td>02356 G GK</td> <td>D8V6-SED-</td> <td>15.36TB SSD NVMe Palm Encryption Disk Unit(7")</td> <td>25</td> <td>50</td> </tr> </tbody> </table>	No.	Part Number	Model	Description	Unit Qty.	Qty.	Storage Equipment-OceanStor Dorado 8000 V6						1	OceanStor Dorado 8000 V6				2	1.1	OceanStor Dorado 8000 V6					1.1.1	OceanStor Dorado 8000 V6 Main Equipment					Controller Enclosure 0 (Controller Enclosure,Interface Module,Disk,Disk Enclosure,Bay And Auxiliary Materials)						NVMe Controller Enclosure							02355 HBM	D8V6-4C-1T-NEU	Dorado 8000 V6 Controller Enclosure(4U,Four Ctrl,NVMe,AC\240V HVDC,1TB Cache,SPE74C0400)	1	2	Expand Interface Module							03050 GYB	DV6-SMARTI O4*32FC-H	4 ports SmartIO I/O module(SFP28,32Gb FC)	2	4		03050 GYL	Scale-RDMA-H	2 ports 100Gb RDMA I/O module(QSFP28,Scale-out)	4	8		03050 GYM	H-RDMA-BE	2 ports 100Gb RDMA I/O module(QSFP28,for Back-End)	10	20	NVMe Disk Components							02356 G GK	D8V6-SED-	15.36TB SSD NVMe Palm Encryption Disk Unit(7")	25	50
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Extinderea memoriei (ram) și a capacității de stocare nu trebuie să includă limitări hardware sau software.

Lotul nr. 6 Sisteme de stocare SAS SSD tip 2

<p>Lotul nr. 6 Sisteme de stocare SAS SSD tip 2</p>	<p>Ocean Storage Dorado 8000 V6</p>	<p>China</p>	<p>Huawei</p>	<p>Echipament nou și nerecondiționat, produs minim trim. I anul 2024, corespunzător tipului de dispozitive de nivel Enterprise, produs de producători renumiți (Brand name internațional). Configurația echipamentului trebuie să fie compusă din componente reciproc compatibile și să asigure funcționarea optimă a sistemului în ansamblu. Type: Enterprise Storage SAS SSD Form Factor: min. 2U Rack mounting included; Availability: The equipment must be working in Symmetric Active-Active mode, which means that in the case of 100% utilization, ensures: - obtaining high availability at 99,9999%, - lack of decrease in the required equipment efficiency in the event of a failure of half of the controllers, - lack of decrease in the required performance in the event of a failure of half of the controllers, - 100% full capacity reading, - The system must have built-in mechanisms for updating program versions without compromising its availability and loss of access to data. The data must be available in cases of: - failure of one power supply line, - failure of any controller, - failures of any two user data carriers, - failures of any port of FC/ISCSI, - failure of any RAM module or any controller processor. - The equipment must allow hot replacement (without stopping access to data) of the following components: controllers, power supplies, fans, front-end and back-end ports, drives. - The equipment must have been resistant to a simultaneous failure of a minimum of any two drives/NVMe/flash, regardless of the scale and configuration of the solution. In the event of a breakdown of two carriers, the device must provide uninterrupted access to all data on the device. - The equipment must allow to safely disable the device that does not cause user data loss.</p>	<table border="1"> <thead> <tr> <th>No.</th> <th>Part Number</th> <th>Model</th> <th>Description</th> <th>Unit Qty.</th> <th>Qty.</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="5">Dorado 8000 V6 NVMe 7.68</td> </tr> <tr> <td>1</td> <td colspan="4">OceanStor Dorado 8000 V6</td> <td>2</td> </tr> <tr> <td>1.1</td> <td colspan="4">OceanStor Dorado 8000 V6</td> <td></td> </tr> <tr> <td>1.1.1</td> <td colspan="4">OceanStor Dorado 8000 V6 Main Equipment</td> <td></td> </tr> <tr> <td></td> <td colspan="5">Controller Enclosure 0 (Controller Enclosure,Interface Module,Disk,Disk Enclosure,Bay And Auxiliary Materials)</td> </tr> <tr> <td></td> <td colspan="5">NVMe Controller Enclosure</td> </tr> <tr> <td></td> <td>02355HBM</td> <td>D8V6-4C-1T-NEU</td> <td>Dorado 8000 V6 Controller Enclosure(4U, Four Ctrl,NVMe,AC\240V HVDC,1TB Cache,SPE74 C0400)</td> <td>1</td> <td>2</td> </tr> <tr> <td></td> <td colspan="5">Expand Interface Module</td> </tr> <tr> <td></td> <td>03050GYB</td> <td>DV6-SMARTIO4*32FC-H</td> <td>4 ports SmartIO I/O module(SFP2 8,32Gb FC)</td> <td>4</td> <td>8</td> </tr> <tr> <td></td> <td>03050GYM</td> <td>H-RDMA-BE</td> <td>2 ports 100Gb RDMA I/O module(QSFP 28,for Back-End)</td> <td>10</td> <td>20</td> </tr> <tr> <td></td> <td colspan="5">NVMe Disk Components</td> </tr> <tr> <td></td> <td>02356GGC</td> <td>D8V6-NVMe-7.68T-E</td> <td>7.68TB SSD NVMe Palm Encryption Disk Unit(7")</td> <td>34</td> <td>68</td> </tr> <tr> <td></td> <td colspan="5">Smart NVMe Disk Enclosure</td> </tr> <tr> <td></td> <td>02355XUQ</td> <td>D8-NVM36-2U-E-ACpEU</td> <td>Smart NVMe Disk Enclosure(2U, AC\240V HVDC,Palm, Expansion Module,100Gb RDMA,36 Disk Slots,Without Disk Units,DAE73 625U2)</td> <td>5</td> <td>10</td> </tr> <tr> <td>1.1.2</td> <td colspan="4">Installation Material</td> <td></td> </tr> </tbody> </table>						No.	Part Number	Model	Description	Unit Qty.	Qty.		Dorado 8000 V6 NVMe 7.68					1	OceanStor Dorado 8000 V6				2	1.1	OceanStor Dorado 8000 V6					1.1.1	OceanStor Dorado 8000 V6 Main Equipment						Controller Enclosure 0 (Controller Enclosure,Interface Module,Disk,Disk Enclosure,Bay And Auxiliary Materials)						NVMe Controller Enclosure						02355HBM	D8V6-4C-1T-NEU	Dorado 8000 V6 Controller Enclosure(4U, Four Ctrl,NVMe,AC\240V HVDC,1TB Cache,SPE74 C0400)	1	2		Expand Interface Module						03050GYB	DV6-SMARTIO4*32FC-H	4 ports SmartIO I/O module(SFP2 8,32Gb FC)	4	8		03050GYM	H-RDMA-BE	2 ports 100Gb RDMA I/O module(QSFP 28,for Back-End)	10	20		NVMe Disk Components						02356GGC	D8V6-NVMe-7.68T-E	7.68TB SSD NVMe Palm Encryption Disk Unit(7")	34	68		Smart NVMe Disk Enclosure						02355XUQ	D8-NVM36-2U-E-ACpEU	Smart NVMe Disk Enclosure(2U, AC\240V HVDC,Palm, Expansion Module,100Gb RDMA,36 Disk Slots,Without Disk Units,DAE73 625U2)	5	10	1.1.2	Installation Material				
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			<p>- iSCSI,</p> <p>Futures:</p> <ul style="list-style-type: none"> - The system must include dedicated interfaces for system management (management). <p>Deduplication:</p> <ul style="list-style-type: none"> - The equipment must enable deduplication functionality for volumes accessible at block level (iSCSI/FC LUN) volumes and globally for each system. - The equipment must enable compression functionality for block-level volumes (iSCSI/FC LUN). - The deduplication and compression functionality will not impose restrictions on the simultaneous use of other functions, such as: data replication, thin provisioning, backups, volume cloning. - The equipment must have the data deduplication mechanism in In-Line mode. Deduplication cannot be stopped in any way or possible to exclude the system administrator (optional). - All of the listed functionality must be licensed (if applicable by vendor provisions) & included in offer and supported by the storage system in its maximum configuration level. <p>Compression:</p> <ul style="list-style-type: none"> - The equipment must have a data compression mechanism in In-Line mode. - Compression must be an integral part of the device and cannot be in any way possible to be turned off by the administrator or the manufacturer's service (optional). <p>Snapshot:</p> <ul style="list-style-type: none"> - The system must provide snapshot functionality in Safe mode; - Snapshot functionality must be applicable at least at the LUN level; - The system must provide at least 300 snapshots for each shared volume; -The system must provide efficient snapshot functionality so that its use does not impact system performance by more than 10%. - Snapshot functionality should be applicable to at least LUNs, without imposing restrictions on the use of other functions. 	<table border="1"> <thead> <tr> <th colspan="2">1.2</th> <th colspan="2">Technical Support Service</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>88134UGQ-4XN</td> <td>02356GGC_88134UGQ-4XN_60</td> <td>7.68TB SSD NVMe Palm Encryption Disk Unit(7")_Co-Care Standard Dorado 8000 6.4TB-7.68TB SSD_60Month(s)</td> <td>34</td> <td>68</td> <td></td> </tr> <tr> <td>88134UGQ-4XH</td> <td>02355HBM_88134UGQ-4XH_60</td> <td>Dorado 8000 V6 Controller Enclosure(4U, Four Ctrl,NVMe,AC/240V HVDC,1TB Cache,SPE74C0400)_Co-Care Standard Dorado 8000 V6 Engine(Four Controller)_60Month(s)</td> <td>1</td> <td>2</td> <td></td> </tr> <tr> <td>88134UHK-1AR</td> <td>88035UWL_88134UHK-1AR_60</td> <td>Basic Software Licenses (Including DeviceManager,SmartThin, SmartMigration,HyperSnap,HyperReplication,HyperClone,SmartQoS, SmartErase, DME IQ)_Hi-Care Application Software Upgrade Support Service OceanStor Dorado 8000 V6 Basic Software Licenses_60 Month(s)</td> <td>1</td> <td>2</td> <td></td> </tr> </tbody> </table>	1.2		Technical Support Service				88134UGQ-4XN	02356GGC_88134UGQ-4XN_60	7.68TB SSD NVMe Palm Encryption Disk Unit(7")_Co-Care Standard Dorado 8000 6.4TB-7.68TB SSD_60Month(s)	34	68		88134UGQ-4XH	02355HBM_88134UGQ-4XH_60	Dorado 8000 V6 Controller Enclosure(4U, Four Ctrl,NVMe,AC/240V HVDC,1TB Cache,SPE74C0400)_Co-Care Standard Dorado 8000 V6 Engine(Four Controller)_60Month(s)	1	2		88134UHK-1AR	88035UWL_88134UHK-1AR_60	Basic Software Licenses (Including DeviceManager,SmartThin, SmartMigration,HyperSnap,HyperReplication,HyperClone,SmartQoS, SmartErase, DME IQ)_Hi-Care Application Software Upgrade Support Service OceanStor Dorado 8000 V6 Basic Software Licenses_60 Month(s)	1	2	
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			<p>- Snapshot functionality should be cost-effective so that snapshot copies take up minimal space when created (only on the difference with original data).</p> <p>- The system must include a performance monitoring and prioritization mechanism for Storage QoS applied at the volume and LUN levels.</p> <p>Encryption: The solution must be able to encrypt all stored data with the minimum the AES-256 or stronger algorithm and encrypt all drives/NVMe/flash supported in the device. Data encryption cannot affect the performance of the solution. The encryption key must be stored by default on the equipment and generated in a way that prevents the data from reading from the drives/NVMe/flash removed from the device.</p> <p>Monitoring: The equipment must have an analytical platform or VM in the form of a portal available via a web browser. The platform should automatically collect logs from the device and present them in the form of graphs and reports:</p> <ul style="list-style-type: none"> - Monitoring of the used space with a data reduction indicator based on deduplication algorithms and compression without thin provisioning if is used; globally for the device and locally for the LUN's. - The platform must enable the prediction of space growth along with the analysis of future expansion. - The system must include an application component and/or hardware, as appropriate, for monitoring, reporting and detailed event collection of at least the following physical and logical components: <ul style="list-style-type: none"> - The portal must have the performance history and real time data of individual resources, taking into account the parameters: latency, Read & Write IOPS, and bandwidth; globally for the device and locally for the LUN. - The system must include a performance monitoring and prioritization mechanism for Storage QoS applied at the volume and LUN levels. - The portal must have function to create reports from capacity, performance, prediction of future space, 		88134UGQ-4XA	02355XUQ_8 8134UGQ-4XA_60	Smart NVMe Disk Enclosure(2U, AC\240V HVDC,Palm, Expansion Module,100Gb RDMA,36 Disk Slots,Without Disk Units,DAE73 625U2)_Co-Care Standard Dorado V6 Disk Enclosure-36_60Month(s)	5	10
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				<p>authorization logs to the device, level and technical support time.</p> <ul style="list-style-type: none"> - Displaying the status of performed operations such as snapshots, synchronous replication etc. - Displaying warnings about threats to information about logging users and performed executing commands. - The portal must enable the simulation of capacity increase depending on the type of application. - Algorithm for verifying the correct configuration and the possibilities of upgrading device/cluster. - Displaying system consumption with optimization guidelines. <p>NICs included: Min 1 x 1GE management; min. 2 x 32Gb FC SFP+, identical, with SFP+ SR MM module included;</p> <p>Supported operating environments: Microsoft Windows Server; Red Hat Enterprise Linux; VMware (VMware ESXi);</p> <p>Power supplies included: Min. 2 hot-plug PSU with support for min. 1+1 redundancy with power cables c13-c14(0.6 m);</p> <p>Cerințe obligatorii pentru prestarea garanției și a serviciilor de suport (deservire) - conform Anexei la Anunțul de participare.</p> <p>Termeni și condiții: Toate cerințele sunt minime și obligatorii; O cerință nu trebuie să limiteze o altă cerință; Toate componentele trebuie să fie actuale și să nu fie promovate ca EOS (sfârșitul vânzării/suportului) / EOL (sfârșitul duratei de viață); Extinderea memoriei (ram) și a capacității de stocare nu trebuie să includă limitări hardware sau software.</p>	
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Lotul nr. 7 Sisteme de stocare SAS SSD tip 3

<p>Lotul nr. 7 Sisteme de stocare SAS SSD tip 3</p>	<p>Ocean Storage Dorado 5000 V6</p>			<p>Echipament nou și nerecondiționat, produs minim trim. I anul 2024, corespunzător tipului de dispozitive de nivel Enterprise, produs de producători renumiți (Brand name internațional). Configurația echipamentului trebuie să fie compusă din componente reciproc compatibile și să asigure funcționarea optimă a sistemului în ansamblu.</p> <p>Type: Enterprise Storage SAS SSD</p>	<table border="1"> <thead> <tr> <th>No.</th> <th>Part Number</th> <th>Model</th> <th>Description</th> <th>Unit Qty.</th> <th>Qty.</th> </tr> </thead> <tbody> <tr> <td></td> <td colspan="3">OceanStor Dorado 5000 V6</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td colspan="3">OceanStor Dorado 5000 V6</td> <td></td> <td>2</td> </tr> <tr> <td>1.1</td> <td colspan="3">OceanStor Dorado 5000 V6</td> <td></td> <td></td> </tr> <tr> <td>1.1.1</td> <td colspan="3">OceanStor Dorado 5000 V6 Main Equipment</td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="3">Dual-Controller Unit 1</td> <td></td> <td></td> </tr> <tr> <td></td> <td colspan="3">NVMe Controller Enclosure</td> <td></td> <td></td> </tr> </tbody> </table>	No.	Part Number	Model	Description	Unit Qty.	Qty.		OceanStor Dorado 5000 V6					1	OceanStor Dorado 5000 V6				2	1.1	OceanStor Dorado 5000 V6					1.1.1	OceanStor Dorado 5000 V6 Main Equipment						Dual-Controller Unit 1						NVMe Controller Enclosure				
						No.	Part Number	Model	Description	Unit Qty.	Qty.																																				
	OceanStor Dorado 5000 V6																																														
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	NVMe Controller Enclosure																																														



				<p>Form Factor: min. 2U Rack mounting included;</p> <p>Availability: The equipment must be working in Symmetric Active-Active mode, which means that in the case of 100% utilization, ensures:</p> <ul style="list-style-type: none"> - obtaining high availability at 99,9999%, - lack of decrease in the required equipment efficiency in the event of a failure of half of the controllers, - lack of decrease in the required performance in the event of a failure of half of the controllers, - 100% full capacity reading, - The system must have built-in mechanisms for updating program versions without compromising its availability and loss of access to data. <p>The data must be available in cases of:</p> <ul style="list-style-type: none"> - failure of one power supply line, - failure of any controller, - failures of any two user data carriers, - failures of any port of FC/ISCSI, - failure of any RAM module or any controller processor. <p>- The equipment must allow hot replacement (without stopping access to data) of the following components: controllers, power supplies, fans, front-end and back-end ports, drives.</p> <p>- The equipment must have been resistant to a simultaneous failure of a minimum of any two drives/NVMe/flash, regardless of the scale and configuration of the solution. In the event of a breakdown of two carriers, the device must provide uninterrupted access to all data on the device.</p> <p>- The equipment must allow you to safely disable the device that does not cause user data loss.</p> <p>Type Drives: SAS SSD.</p> <p>Capacity: Min. usable space 30 TB (considering min. RAID 6), Hot Spare optional (If the equipment may not contain spare components that are not used during the operation of the device (e.g. spare controller, Hot Spare disk).</p> <p>RAID(if the equipment involves the use of RAID):</p> <ul style="list-style-type: none"> - Support Pass-through mode; - RAID 6, 10. 		
	02355 GXL	D5V6-256G-NVMeEU	OceanStor Dorado 5000 V6(2U,Dual Ctrl,NVMe,AC\240 V HVDC,256GB Cache,4*100Gb RDMA,36*Palm,SP E63C0236,Applicable to 1.2m-Depth Cabinets)	1	2	
	Expanding Interface Module					
	03050 GXP	DV6-SMARTIO4*16 FC-ML	4 ports SmartIO I/O module(SFP+,16Gb FC)	2	4	
	03050 GXQ	DV6-SMARTIO4*32 FC-ML	4 ports SmartIO I/O module(SFP28,32Gb FC)	2	4	
	03050 GXU	Scale-25RDMA-M	4 ports 25Gb RDMA I/O module(SFP28,Scale-out)	2	4	
	NVMe Disk Components					
	02356 DDL	D5V6-NVMe-3.84T-E	3.84TB SSD NVMe Palm Encryption Disk Unit(7")	16	32	
	Dual-Controller Unit 2					
	NVMe Controller Enclosure					
	02355 GXL	D5V6-256G-NVMeEU	OceanStor Dorado 5000 V6(2U,Dual Ctrl,NVMe,AC\240 V HVDC,256GB Cache,4*100Gb RDMA,36*Palm,SP E63C0236,Applicable to 1.2m-Depth Cabinets)	1	2	
	Expanding Interface Module					
	03050 GXP	DV6-SMARTIO4*16 FC-ML	4 ports SmartIO I/O module(SFP+,16Gb FC)	2	4	
	03050 GXQ	DV6-SMARTIO4*32 FC-ML	4 ports SmartIO I/O module(SFP28,32Gb FC)	2	4	
	03050 GXU	Scale-25RDMA-M	4 ports 25Gb RDMA I/O module(SFP28,Scale-out)	2	4	
	NVMe Disk Components					
	02356 DDL	D5V6-NVMe-3.84T-E	3.84TB SSD NVMe Palm Encryption Disk Unit(7")	16	32	
1.1.2	Installation Material					



			<ul style="list-style-type: none"> - The deduplication and compression functionality will not impose restrictions on the simultaneous use of other functions, such as: data replication, thin provisioning, backups, volume cloning. - The equipment must have the data deduplication mechanism in In-Line mode. Deduplication cannot be stopped in any way or possible to exclude the system administrator (optional). - All of the listed functionality must be licensed (if any) & included in offer and supported by the storage system in its maximum configuration level. <p>Compression:</p> <ul style="list-style-type: none"> - The equipment must have a data compression mechanism in In-Line mode. - Compression must be an integral part of the device and cannot be in any way possible to be turned off by the administrator or the manufacturer's service (optional). <p>Snapshot:</p> <ul style="list-style-type: none"> - The system must provide snapshot functionality in Safe mode; - Snapshot functionality must be applicable at least at the LUN level; - The system must provide at least 300 snapshots for each shared volume; - The system must provide efficient snapshot functionality so that its use does not impact system performance by more than 10%. - Snapshot functionality should be applicable to at least LUNs, without imposing restrictions on the use of other functions. - Snapshot functionality should be cost-effective so that snapshot copies take up minimal space when created (only on the difference with original data). - The system must include a performance monitoring and prioritization mechanism for Storage QoS applied at the volume and LUN levels. <p>Encryption:</p> <p>The solution must be able to encrypt all stored data with the minimum the AES-256 or stronger algorithm and encrypt all drives/NVMe/flash supported in the device.</p> <p>Data encryption cannot affect the performance of the solution.</p>				Care Standard Dorado 5000 3.6TB-4TB SSD 60Month(s)		



			<p>The encryption key must be stored by default on the equipment and generated in a way that prevents the data from reading from the drives/NVMe/flash removed from the device.</p> <p>Monitoring:</p> <p>The equipment must have an analytical platform or VM in the form of a portal available via a web browser.</p> <ul style="list-style-type: none"> - The platform should automatically collect logs from the device and present them in the form of graphs and reports: <ul style="list-style-type: none"> - Monitoring of the used space with a data reduction indicator based on deduplication algorithms and compression without thin provisioning if is used; globally for the device and locally for the LUN's. - The platform must enable the prediction of space growth along with the analysis of future expansion. - The system must include an application component and/or hardware, as appropriate, for monitoring, reporting and detailed event collection of at least the following physical and logical components: <ul style="list-style-type: none"> - The portal must have the performance history and real time data of individual resources, taking into account the parameters: latency, Read & Write IOPS, and bandwidth; globally for the device and locally for the LUN; - The system must include a performance monitoring and prioritization mechanism for Storage QoS applied at the volume and LUN levels; - The portal must have function to create reports from capacity, performance, prediction of future space, authorization logs to the device, level and technical support time. - Displaying the status of performed operations such as snapshots, synchronous replication etc. - Displaying warnings about threats to information about logging users and performed executing commands. - The portal must enable the simulation of capacity increase depending on the type of application. <ul style="list-style-type: none"> - Algorithm for verifying the correct configuration and the possibilities of upgrading device/cluster. - Displaying system consumption with optimization guidelines. <p>NICs included:</p> <p>Min. 1 x IGE management;</p>	
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				<p>min. 2 x 32Gb FC SFP+, identical, with SFP+ SR MM module included;</p> <p>Supported operating environments:</p> <ol style="list-style-type: none"> 1. Microsoft Windows Server; 2. Red Hat Enterprise Linux; 3. VMware (VMware ESXi); <p>Power supplies included: min. 2 hot-plug PSU with support for min. 1+1 redundancy with power cables c13-c14(0.6 m);</p> <p>Cerințe obligatorii pentru prestarea garanției și a serviciilor de suport (deservire) - conform Anexei la Anunțul de participare.</p> <p>Termeni și condiții:</p> <p>Toate cerințele sunt minime și obligatorii; O cerință nu trebuie să limiteze o altă cerință; Toate componentele trebuie să fie actuale și să nu fie promovate ca EOS (sfârșitul vânzării/suportului) / EOL (sfârșitul duratei de viață); Extinderea memoriei (ram) și a capacității de stocare nu trebuie să includă limitări hardware sau software.</p>	
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Link-uri de pe site-ul Huawei pentru fiecare model de echipament oferat per lot:

#Lot	Link 1	Link 2
5	https://e.huawei.com/en/products/storage/all-flash-storage/dorado-8000-18000-v6	https://carrier.huawei.com/~media/cnbgv2/download/products/it-new/en/huawei-oceanstor-dorado-8000-and-18000-all-flash-storage-systems-data-sheet.pdf
6	https://e.huawei.com/en/products/storage/all-flash-storage/dorado-8000-18000-v6	https://carrier.huawei.com/~media/cnbgv2/download/products/it-new/en/huawei-oceanstor-dorado-8000-and-18000-all-flash-storage-systems-data-sheet.pdf
7	https://e.huawei.com/en/products/storage/all-flash-storage/dorado-5000-6000-v6	https://carrier.huawei.com/~media/cnbgv2/download/products/it-new/en/huawei-oceanstor-dorado-5000-and-6000-all-flash-storage-systems-data-sheet.pdf

Semnat:

Numele, Prenumele: **Alexandr Dașchevici** În calitate de: **Administrator**

Ofertantul: **Î.C.S. „Noventiq International” S.R.L.** Adresa: **MD-2004, mun. Chișinău, bd. Ștefan cel Mare și Sfânt nr. 202**