

**Caiet de sarcini**

<b>Technical specifications per server.</b>		
<b>1.1</b>	<b>Type</b>	Enterprise Server, Quantity = 16pcs.
<b>1.2</b>	<b>Form factor</b>	Rack mount, max 2U (rail-kit included).
<b>1.3</b>	<b>CPU included</b>	<p><i>Quantity:</i> 2 x CPU per server.</p> <p><i>Cores:</i> 32cores per CPU.</p> <p><i>Threads:</i> 64 threads per CPU.</p> <p><i>Base Clock Speed:</i> Min. 2.60 GHz.</p> <p><i>Cache:</i> Min. 50 MB.</p> <p><i>Launch Date:</i> Not earlier than Q1'2023.</p>
<b>1.4</b>	<b>Memory</b>	Min. 32 DDR5 slots.
<b>1.5</b>	<b>Memory included</b>	Min. 12 x 64GB DDR5.
<b>1.6</b>	<b>Min. drive bays included</b>	<p>Min. 24 bays 2.5" for data, Support Hot-Swap drives.</p> <p>Min. 2 bays for OS boot, RAID 1, Support Hot-Swap drives.</p>
<b>1.7</b>	<b>Drives included</b>	<p>Min. 2 x 1.6TB SSD, Caching Tier, Endurance Class D , Performance Class F, SAS 24Gb/s, Hot-Swap.</p> <p>Min. 14 x 3.84TB SSD, Capacity Tier, Endurance Class D min.15000TBW, Performance Class F, SAS 24Gb/s, Hot-Swap.</p> <p>Drives SSD for vSAN should support min. vSAN releases 7.0U3-8.0U2.</p> <p>Min. 2 x 240GB M2 SSD for OS boot, Hot-Swap.</p>

<b>1.8</b>	<b>Storage Adapters included</b>	<p>Should support Pass-through mode for all bays.</p> <p>Should be in vSAN compatibility guide.</p> <p>Should be compatible with min. vSAN releases 7.0U3-8.0U1.</p> <p>1 x RAID controller for OS boot, 2 x M.2 SSD, RAID-1.</p>
<b>1.9</b>	<b>NICs, ports, modules included (Server side)</b>	<p>Min. 2 x NIC's, 2 x 10/25GbE ports, identical NIC's models.</p> <p>NIC's should support network virtualization offload.</p> <p>NIC's should be in vSAN compatibility guide.</p> <p>NIC's should support min. vSAN releases 7.0U3-8.0U1.</p> <p>Min. 4 x SFP-10G-SR SFP+ MM modules.</p> <p>Min. 1 x Dedicated 1Gb/s Ethernet Port for remote management.</p>
<b>1.10</b>	<b>Modules included (Switch side)</b>	<p>Min. 4 x SFP-10G-SR SFP+ MM (Cisco Compatible).</p>
<b>1.11</b>	<b>Interfaces included</b>	<p>Min. 2 x USB ports.</p> <p>Min. 1 x VGA port.</p>
<b>1.12</b>	<b>Options included</b>	<p>Trusted Platform Module 2.0.</p>
<b>1.13</b>	<b>Supported operating environments</b>	<p>Microsoft Windows Server®.</p> <p>Microsoft Hyper-V®.</p> <p>Red Hat® Enterprise Linux.</p> <p>VMware® (VMware® vSphere, VMware® vSAN 7.0U3-8.0U1).</p>
<b>1.14</b>	<b>Power supplies included</b>	<p>2 Hot-Swap PSU with support for 1+1 redundancy.</p> <p>Power cables c13-c14(0.6 m).</p>
<b>1.15</b>	<b>Fan Modules included</b>	<p>Hot-Swap with N+1 redundancy.</p>

<b>1.16</b>	<b>Management included</b>	<p>A web-based solution for KVM must be included with full functionality for manage and monitoring, including at least:</p> <ul style="list-style-type: none"> <li>- View information about the state of the managed server;</li> <li>- Inventory and monitoring of network adapters and data storage subsystems without software agents in the OS;</li> <li>- View inventory information;</li> <li>- View information from sensors;</li> <li>- Monitoring and control of electricity consumption;</li> </ul>
		<ul style="list-style-type: none"> <li>- Turn on/off the server;</li> <li>- Remote update of BIOS, firmware of network and RAID controllers;</li> <li>- Virtual console, virtual media devices;</li> <li>- OS installation from virtual media devices and through network shared folders.</li> </ul> <p>Centralized resource management solution for hardware management must be included, with full functionality, that provides agent-free management, automates discovery, inventory, tracking, updates, monitoring, and provisioning".</p>
<b>1.17</b>	<b>Warranty</b>	<p>Hardware and software support from vendor, with available customer portal.</p> <p>Next business day hardware replacement included for min. 3 years.</p>
<b>1.18</b>	<b>Terms and conditions</b>	<p>All requirements are minimum and mandatory.</p> <p>One requirement must not limit another requirement.</p> <p>All components must be current and not advertised as EOS / EOL.</p> <p>The expansion of memory (ram) and storage capacity must not include any hardware or software limitations.</p> <p>Faulty storage drives are not subject of return in order to be compliant with the security requirements.</p>