

Technical Specification
HCI Server Hardware Procurement
(Tender Ref.: PLD-MP2215/26/66)

Background

Given the continued scaling of operations and the rollout of multiple digital transformation initiatives, the backend Hyper-Converged Infrastructure (HCI) requires a corresponding capacity expansion. Additional server hardware will be procured to enhance compute, storage, and network resources, with the dual objective of meeting anticipated business workloads and replacing aging server infrastructure.

This procurement will be conducted through a public tender process to acquire server hardware and associated software licenses from local IT suppliers officially authorized by the solution manufacturer. The present document has been developed to outline the technical specifications of the hardware servers and the associated software license.

CEM Existing HCI Landscape

CEM presently utilizes a Nutanix AHV metro cluster-based Hyper-Converged Infrastructure (HCI) solution to support its IT operations. The current AHV version is 7.5. Under this procurement, additional server hardware will be added to the existing cluster to expand capacity and replace end-of-life equipment. The primary objective of this procurement is to expand the existing HCI landscape to optimize resource utilization.

Procurement Details

- A. 2 * NX-3235-G10 (2U with 2 nodes) for AHV Metro Cluster with total 4 nodes for delivery to CEM. Their technical specification is outlined in the technical specification table of the present document.
- B. The proposed server hardware shall be fully compatible with CEM's existing HCI infrastructure as specified, backed by an official compatibility guarantee from the HCI solution manufacturer.
- C. The proposed server hardware must comply with CEM's green compliance requirements as defined in Appendix A of this document. Any non-compliance must be explicitly disclosed by the tenderer in their proposal.
- D. This hardware procurement shall include basic installation services comprising: unpacking the servers from the shipping package, mounting them in the designated CEM racks, and powering them on for acceptance testing.
- E. Server hardware delivery is expected to take 6 to 8 weeks from the date of the official order. Overall, the entire process, including the final acceptance test, should be completed within a maximum of 12 weeks (3 months).

- F. The required server hardware shall be supplied by the tenderer authorized officially for the district by the HCI solution manufacturer. Documentary evidence of such authorization must be included in the proposal to CEM.

Technical Specification Table:

Item #	Part No.	Item Description	Qty
1	NX-3235-G10	Nutanix Hardware Platform * NX-3235-G10, 2 Nodes Configuration Nutanix Software * Foundation - Hypervisor Agnostic Installer * Controller VM * Prism Management * Starter License Entitlement	2
2	C-CPU-6517P	Intel Xeon 6517P processor (3.2 GHz/ 16-core/ 190W, Granite Rapids SP)	8
3	C-MEM-64GB-6400-A	64GB Memory Module (DDR5-6400 RDIMM)	64
4	C-HDD-NONE	No HDD Included	2
5	C-SSD-7.68TB-AS1A	7.68 TB SSD	24
6	C-HBA-3808-BT-A	12Gb/s Gen4 HBA	4
7	C-LOM-10G2D1BT	LOM Module: Broadcom 10GbE, 2-port, Base-T NIC (BCM 57416)	4
8	C-NIC-25G2D2	SMC 25/10GbE, 2-port, SFP28 NIC (BCM 57414 8MB)	8
9	C-PWR-4FC13C14A	C13/C14, 10A, 4ft Power cord	4
10	C-CBL-NONE	No Cables and No Transceivers	2
11	S-HW-NBS-PR	24x7 Hardware Support with Next Business Day Ship Parts	4
12	Support-Term	Support Term in Months	36
13	C-TPM-2.0-U-C	TPM 2.0 Module Unprovisioned	4
14	U-XCVR-SR-SFP+	Upgrade, SFP+, Short Range, Ethernet, Single Optical Transceiver; up to 10GbE bandwidth per SFP+ specifications	16
15	S-HW-UPGRADE	Hardware support for Upgrade part qualified for NX-core platform	1
16	SW-NCI-ULT-PR	Subscription, Nutanix Cloud Infrastructure (NCI) Ultimate Software License & Production Software Support Service for 1 CPU Core (Term-in-months- 36)	128

Appendix A – Server Green Compliance

Server (source: HKEPD)	Should comply with power saving standards such as Energy Star	Supplier's self declaration OR
		Presentation of certification or a report from an accredited laboratory to show compliance to requirement
	Product components (circuit boards, electrical, electronic and plastic components) should comply with RoHS	Presentation of certification or a report from an accredited laboratory to show compliance to requirement (Proposed tests: 1. Density test for Pb, Cd, Hg, Cr VI, PBB and PBDE: IEC 62321 Ed. 1 2. Density test for Pb: USEPA - Method 3050B/3051/3052 3. Density test for Cd: USEPA: Method 3050B/3051/3052 or EN1122: 2001 Plastics. Determination of cadmium. Wet decomposition method. 4. Density test for Hg: USEPA -Method 3051/3052 5. Density test for PBB: USEPA - Method 3060A and USEPA - Method 3540C/3550B/3550C 6. Density test for PBDE: USEPA - Method 3540C/3550B/3550C)
	Any plastic parts should be manufactured without chloroparaffin flame retardants	Supplier's self declaration OR
		Presentation of certification or a report from an accredited laboratory to show compliance to requirement
	Plastic parts should not contain halogenated substances	Supplier's self declaration OR
		Presentation of certification or a report from an accredited laboratory to show compliance to requirement (proposed test: BS EN 14582:2007 Characterization of waste. Halogen and sulfur content. Oxygen combustion in closed systems and determination methods)