

# TECHNICAL SPECIFICATIONS

## INFRASTRUCTURE EXPANSION

---

### 1. Storage Expansion (HPE Alletra 6050 dHCI)

**Scope:** Expansion of existing dHCI storage clusters (Alletra 6050-8N-184T - 4 Dual 10/25Gb SFP28).

- Capacity Upgrade:
  - 46 TB Raw/Effective expansion kit per site (Total 2 units).
- Connectivity & Integration:
  - Include all proprietary high-speed SAS interconnect cables and power cords required for backplane integration.
  - Compatibility: Must be fully verified for non-disruptive capacity addition to existing Alletra 6050-8N-184T arrays.

### 2. Compute Infrastructure (HPE ProLiant DL360 Gen11)

Quantity: Two (2) High-Density Rack-Mount Servers

Component	Technical Specification
Processor	Dual (2) Intel® Xeon® Gold 6454S (32-Core, 2.7GHz, 150W TDP)
Memory	1.5 TB Total (96 GiB DDR5-4800 MHz Smart Memory)
Storage Controller	HPE NS204i-u Gen11 NVMe Hot Plug Boot Device (Hardware RAID 1) 480 GB Capacity
Networking	2 x <b>Mellanox</b> Dual-Port 10/25Gb SFP28 Adapters (4 ports total per node)
Transceivers	4 x 25Gb SFP28 SR Transceivers per node (HPE-signed/authenticated)
Power Supply	Dual (1+1) Hot-Plug Redundant 1600W Power Supply
Management	HPE iLO 6 Advanced with full perpetual license
Form Factor	1U Rack-mount including Easy Install Rail Kit

### 3. Virtualization Licensing

- Product: VMware vSphere 8 Enterprise Plus.
- Quantity: 2 Licenses (Support for 2 CPUs per server).
- Capacity: Must support 32-core per CPU architecture.
- Support: 3-Year Production Support.

#### **4. Implementation & Engineering Services**

- dHCI Orchestration:
  - Automated discovery and orchestration of new compute nodes into the existing dHCI management plane.

#### **5. Service Level Agreement (SLA)**

- Hardware: 3-Year HPE Tech Care Service (Essential or Critical), 24x7 Onsite Response.
- Software: 3-Year active subscription for firmware updates and VMware technical support.