



**Hewlett Packard
Enterprise**



ANSYS REFERENCE CLUSTER CONFIGURATIONS (INTEL)

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ANSYS FLUENT/CFX: HPE APOLLO 2000 GEN10 STARTER CLUSTER

Server Options:

- Either 1 ProLiant DL360 Gen10 head node (external) or a single XL170r (within the Apollo 2000 chassis)
- 2-4 ProLiant XL170r Gen10 1U compute servers

Apollo 2000 Gen10 chassis

- Processors: 32 cores per compute node using the Intel® Xeon® Gold 6226R 2.9 GHz processors
- Up to 128 cores with four compute nodes using the Intel Xeon Gold 6226R
- Local scratch one 480GB NVME SSD drive

Memory for the Cluster

- Compute nodes: 192GB
- Head node 96/192GB depending on role

Cluster Interconnect:

- Integrated Gigabit, 10Gigabit Ethernet, InfiniBand or Intel Omni-Path (jobs scaling greater than two nodes InfiniBand or Omni-Path recommended)

Operating Environment:

- RedHat Enterprise Linux v7.x
- SUSE Linux Enterprise Linux v12 SP2
- Windows Server 2019 (or 2019 for latest version)

Workloads:

- Suited for Fluent up to ~260M cells
- Suited for CFX up to 74M to 260M nodes

NOTE: All memory channels need to be filled and be filled with equal amounts of RAM. If not, you could see up to a 40% decrease in performance. Please file an ANSYS service request to help refine your configuration workflow before making a purchase.



ANSYS MECHANICAL: HPE APOLLO 2000 GEN10 STARTER CLUSTER

Server Options:

- Either 1 ProLiant DL360 Gen10 head node (external) or a single XL170r (within the Apollo 2000 chassis)
- 2-4 ProLiant XL170r Gen10 1U compute servers

Apollo 2000 Gen10 chassis

- Processors: 32 cores per compute node using the Intel® Xeon® Gold 6226R 2.9 GHz processors
- Up to 128 cores with four compute nodes using the intel Xeon Gold 6226R
- 2 RAID0 1TB NVME write intensive SSD drives for local scratch

Memory for the Cluster

- Compute nodes: 384GB
- Head node 96/192GB depending on role

Cluster Interconnect:

- Integrated Gigabit, 10Gigabit Ethernet, InfiniBand or Intel Omni-Path (jobs scaling greater than two nodes InfiniBand or Omni-Path recommended)

Operating Environment:

- RedHat Enterprise Linux v7.x
- SUSE Linux Enterprise Linux v12 SP2
- Windows Server 2019 (or 2019 for latest version)

Workloads:

- Suited for Mechanical up to 80M to 550M DOF depending on solver used

NOTE: All memory channels need to be filled and be filled with equal amounts of RAM. If not, you could see up to a 40% decrease in performance. Please file an ANSYS service request to help refine your configuration workflow before making a purchase.

