



Hewlett Packard
Enterprise



ANSYS REFERENCE CLUSTER CONFIGURATIONS (AMD)

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ANSYS FLUENT/CFX: HPE APOLLO 2000 GEN10 PLUS STARTER CLUSTER

Server Options:

- Either 1 ProLiant DL325 Gen10 plus head node (external) or a single ProLiant XL225n (within the Apollo 2000 Gen10 Plus chassis)
- 2-4 ProLiant XL225n (1U, half width) Gen10 Plus compute servers

Apollo 2000 Gen10 Plus chassis

- Processors: 64 cores per compute node using the AMD EPYC 7532 2.4 GHz processors
- Up to 256 cores with four compute nodes using the AMD EPYC 7532
- Local scratch one 480GB NVME SSD drive

Memory for the Cluster

- Compute nodes: 384GB
- Head node 128GB

Cluster Interconnect:

- 10Gigabit Ethernet or InfiniBand (jobs scaling greater than two nodes InfiniBand is 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.



Front



Back

ANSYS MECHANICAL: HPE APOLLO 2000 GEN10 PLUS STARTER CLUSTER

Server Options:

- Either 1 ProLiant DL325 Gen10 plus head node (external) or a single ProLiant XL225n (within the Apollo 2000 Gen10 Plus chassis)
- 2-4 ProLiant XL225n (1U, half width) Gen10 Plus compute servers

Apollo 2000 Gen10 chassis

- Processors: 64 cores per compute node using the AMD EPYC 7532 2.4 GHz processors
- Up to 256 cores with four compute nodes using the AMD EPYC 7532
- 2 RAID0 1TB NVME write intensive SSD drives for local scratch

Memory for the Cluster

- Compute nodes: 1,024GB
- Head node 128GB

Cluster Interconnect:

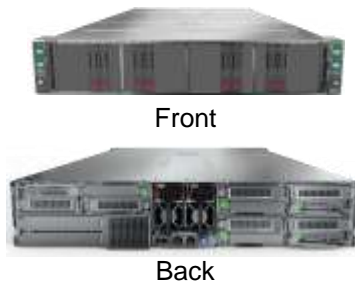
- 10Gigabit Ethernet or InfiniBand (jobs scaling greater than two nodes InfiniBand is recommended)

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.