Winning with HPE Apollo and BlueData EPIC software

Businesses everywhere have realized that their exclusive data is key to competitive success and now want to put that data to work with artificial intelligence (AI). To scale, data science teams need to adopt new tools and techniques that will allow them to get better results and quickly deliver more insights to the business. Hewlett Packard Enterprise takes the guesswork out of deploying large-scale clusters by bringing together the high-density HPE Apollo systems with BlueData EPIC software for an unbeatable Big Data/AI solution. Also, the new GPU-as-a-Service (GPUaaS) from BlueData, recently acquired by HPE, enables on-demand and elastic provisioning of GPUs, allocate right-sized GPU resources for multiple workloads, and deliver significant cost savings.

A bundle built for Big Data and AI

BlueData recommends several reference configurations for Big Data/AI based on the HPE Apollo family of high-density servers. This approach offers key compute building blocks for a high-performance, high-density, Big Data/AI solution. The HPE Apollo 2000 with four nodes and two processors per node provides high-density compute coupled with ample memory and storage. The HPE Apollo 6500 Gen10 system is an ideal HPC and deep learning platform providing unprecedented performance with industry-leading GPUs, fast GPU interconnect, high-bandwidth fabric, and a configurable GPU topology to match your workloads. No solution would be complete without software and services for the best customer experience.

What makes the HPE solution unique?

To take Big Data and AI workloads to new levels of performance, efficiency, and security HPE takes the complexity out of building an ideal configuration no matter the number of users. By applying this unique configuration for Big Data/AI, you benefit from:

- HPE’s industry-leading server technology
- Selecting a complete HPE hardware, software, and services that provide unparalleled price performance
- Worldwide services (Advisory, Professional, and HPE GreenLake consumption model) and support
- 3-year parts, labor, and on-site support warranty
- Simplifying on-premises deployments and increase business agility with turnkey, container-based software from BlueData
- Superior performance per dollar, ease of serviceability, and zoned cooling with GPUs
- Dynamic allocation and provisioning of GPUs with GPUaaS
- Essential firmware is anchored by the HPE iLO 5 chip by HPE Silicon Root of Trust to create an immutable fingerprint that verifies the firmware code is valid so the server won’t boot with compromised firmware
- Second-generation Intel® Xeon® Scalable processors for highest levels of performance and reliability
- A broad choice of tier-one OS supported
- A sophisticated set of metering financial and services components delivered to you at the local level with HPE GreenLake

Validated solution elements for HPE Apollo 2000 with HPE ProLiant XL190r Gen10 server

- Chassis: HPE Apollo r2600 Gen10 Chassis with BlueData EPIC software
- Servers: (2) HPE ProLiant XL190r Gen10 server
- CPU: (4) Intel Xeon Scalable Gold 6242 processors
• Memory: (24) HPE 64GB 4Rx4 PC4-2933Y-L Smart Memory
• Storage: (4) HPE 960GB SATA MU SFF SC DS SSD and (4) HPE 3.2TB SAS MU SFF SC DS SSD
• Smart storage controller: (2) HPE Smart Array E208i-p SR Gen10 Controller
• GPUs: (4) NVIDIA® Tesla V100 with 300 GB/s NVLink (Note: 2 GPUs per tray)
• NICs: (2) HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter and (2) HPE Ethernet 1Gb 2P 368FLR-MMT Adapter
• Service and support: 3/3/3—Server warranty, worldwide HPE Pointnext Services (extensive Advisory, Professional, Operational. HPE GreenLake flexible consumption model)

Validated solution elements for HPE Apollo 6500
• Servers: (2) HPE ProLiant XL270d Gen10 server with BlueData EPIC software
• CPU: (2) Intel Xeon Scalable Gold 6242 processors
• Memory: (12) HPE 64GB 4Rx4 PC4-2933Y-L Smart Memory
• Storage: (2) HPE 960GB SATA MU SFF SC DS SSD and (3) HPE 1.92TB SATA MU SFF SC DS SSD
• Smart storage controller: (2) HPE Smart Array P408i-a Controller
• NICs: (1) HPE Ethernet 10/25Gb 2-port 640FLR-SFP28 Adapter
• GPUs: (8) NVIDIA Tesla V100 with 300 GB/s NVLink
• Service and support: 3/3/3—Server warranty, worldwide HPE Pointnext Services (extensive Advisory, Professional, Operational. HPE GreenLake flexible consumption model)

The right systems based on the right technology
HPE has put together a winning combination of hardware to provide breakthrough performance to accelerate Big Data/AI workloads. Both configurations include ample storage and memory for solid performance. As your needs grow, you can easily scale these solutions with additional flash storage and HPE Apollo server nodes to support your increasing needs.

Software designed to accelerate AI and Big Data deployments
By utilizing BlueData, you get more flexibility, greater agility, and a cost-effective approach to Big Data infrastructure and AI/ML models. GPUaaS delivers on-demand and elastic provisioning for GPU-accelerated applications while sharing and allocating GPU infrastructure resources across multiple applications. HPE enables GPUaaS to increase business agility, optimize GPU utilization, and increase ROI for GPU infrastructure by combining HPE Apollo systems and BlueData software for cloud-like experience on-premises. Enterprise customers can leverage all the benefits of the cloud-operating model (self-service, agility, and elasticity) for AI/ML, Spark, Kafka, and other Big Data workload while keeping their data on-premises or in the public cloud.

A powerful solution supported by global services
HPE Pointnext Services leverages our strength in infrastructure, partner ecosystems, and end-to-end lifecycle experience to accelerate powerful, scalable IT solutions to provide you the assistance for faster time to value. HPE Pointnext Services provides a comprehensive portfolio including Advisory and Transformational, Professional, and Operational Services to help accelerate your digital transformation.

Let’s make it happen together
The HPE Apollo bundles for Big Data/AI make it easy to configure, deploy, and manage. Get started today by sending questions or inquiries to ai_madeeasy@hpe.com or contact your local HPC/AI specialist to take advantage of these bundles at special pricing through January 2020.

Learn more at
HPE Apollo 2000
HPE Apollo 6500

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