

HPE Apollo Systems

Enabling the data-driven organization



Technical specifications: HPE Apollo 2000 System



HPE ProLiant Gen9 servers and options

	HPE ProLiant Apollo XL170r: Gen9 1U node	HPE ProLiant Apollo XL190r: Gen9 2U node
Maximum number	1U half width—Up to four per chassis	2U half width—Up to two per chassis
Processor	Intel® Xeon® E5-2600 v3 and v4 series processor options with choices from 4–22 cores, 1.6 GHz–3.5 GHz CPU speed, 85–145 watts. And Intel Xeon E5-1630 v3, E5-1650 v3 and E5-1680 processor options	Intel Xeon E5-2600 v3 and v4 series processor options with choices from 4–22 cores, 1.6 GHz–3.5 GHz CPU speed, 85–145 watts
Memory	16 x DDR4 up to 2,400 MHz 512 GB maximum	16 x DDR4 up to 2,400 MHz 512 GB maximum
Network module	2 x 1 Gb Ethernet, Serial RJ45 connector, SUV connector (one serial/two USB/one video), optional FlexibleLOM, and Intel® Omni-Path	2 x 1 Gb Ethernet, Serial RJ45 connector, SUV connector (one serial/two USB/one video), optional FlexibleLOM and Intel Omni-Path
PCIe 3.0 slots	Two externally accessible I/O options that allow you to choose how the PCIe lanes are utilized to deliver balanced workload performance	Three externally accessible and one internally accessible I/O options that allow you to choose how the PCIe lanes are utilized to deliver balanced workload performance
Storage	Up to 24 drives per node Dual SATA host based M.2 2242 NGFF SSDs—internal Hot-plug HDD support Internal USB port Hard drive mapping feature on r2800 chassis	Up to 24 drives per node Dual SATA host based M.2 2242 NGFF SSDs—internal Hot-plug HDD support Internal USB port Hard drive mapping feature on r2800 chassis
Storage controller	Integrated Smart Array B140i storage controller Optional PCIe host bus adapters (HBAs) and Smart Array Controllers with advanced array features like HPE SmartCache and RAID 10 Advanced Data Mirroring	Integrated Smart Array B140i storage controller Optional PCIe host bus adapters and Smart Array Controllers with advanced array features like HPE SmartCache and RAID 10 Advanced Data Mirroring
Supported accelerators	N/A	NVIDIA® Tesla K2-RAF, K40, K80, M-60 GPUs or Intel Xeon Phi 5110P coprocessors or AMD S9150
Management interface options	HPE iLO (iLO 4) HPE Apollo Platform Manager HPE Insight Cluster Management Utility (CMU) HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)	HPE iLO (iLO 4) HPE Apollo Platform Manager HPE Insight Cluster Management Utility (CMU) HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)

Apollo 2000 System Chassis options

	HPE Apollo r2200 Chassis	HPE Apollo r2600 Chassis	HPE Apollo r2800 Chassis
Description	Gen9 12 LFF disk or SSD chassis	Gen9 24 SFF disk or SSD chassis	Gen9 24 SFF disk or SSD chassis with drive mapping capability
Storage configuration	12 LFF hot-plug SAS or SATA HDDs or SSDs, allocated equally across server nodes	24 SFF hot-plug SAS or SATA HDDs or SSDs, allocated equally across server nodes	24 SFF hot-plug SAS or SATA HDDs or SSDs; supports flexible drive mapping enabling custom drive allocations to match workloads giving you flexible storage density for various applications
Size	2U: 17.64" wide x 31.21" deep	2U: 17.64" wide x 29.61" deep	2U: 17.64" wide x 29.61" deep
Power supplies	800 W or 1,400 W Platinum Power Supplies, N+1 redundancy option	800 W or 1,400 W Platinum Power Supplies, N+1 redundancy option	800 W or 1,400 W Platinum Power Supplies, N+1 redundancy option

Technical specifications: HPE Apollo 4200 Gen9 Servers





HPE Apollo 4200 Gen9 LFF Server

HPE Apollo 4200 Gen9 SFF Server

	•	•
Form factor	2U rack server	2U rack server
Storage type	Up to 24 LFF hot-plug SAS/SATA/SSD + Optional four LFF or two SFF in rear drive cage	Up to 48 SFF hot-plug SAS/SATA/SSD + Optional two SFF in rear drive cage
Storage capacity	Up to 224 TB (24 + 4 LFF 8 TB HDD) Up to 4.48 PB per 42U rack (20 servers 8 TB HDD)	Up to 100207 TB (48 + 26 SFF 23.84 TB HDD) Up to 2.04 PB per 42U rack (20 servers 23.84 TB HDD)
Storage controller	Flexible Smart Array P840ar and Dynamic Smart Array B140i Plus optional HPE Smart Array or Smart HBA controller	Flexible Smart Array P840ar and Dynamic Smart Array B140i Plus optional HPE Smart Array or Smart HBA controller
Processor family	Intel Xeon E5-2600 v3 or E5-2600 v4 Series	Intel Xeon E5-2600 v3 or E5-2600 v4 Series
Processor number	One or two per server	One or two per server
Processor cores available	4/6/8/10/12/14/16/18/20/22	4/6/8/10/12/14/16/18/20/22
Processor frequency	From 1.6 GHz–3.5 GHz	From 1.6 GHz–3.5 GHz
Memory	HPE SmartMemory 16 DIMM slots Up to 1,024 GB DDR4 memory at up to 2,400 MHz	HPE SmartMemory 16 DIMM slots Up to 1,024 GB DDR4 memory at up to 2,400 MHz
Networking	2 x 1 Gb Ethernet Plus FlexibleLOM and PCle options	2 x 1 Gb Ethernet Plus FlexibleLOM and PCle options
Expansion slots	Up to six PCle slots + FlexibleLOM support With 2 PCle slots in optional rear cage	Up to six PCle slots + FlexibleLOM support With 2 PCle slots in optional rear cage
Management interface options	HPE iLO 4 HPE Insight Cluster Management Utility HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)	HPE iLO 4 HPE Insight Cluster Management Utility HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)
Systems fans features	Up to 10 fans (for redundancy)	Up to 10 fans (for redundancy)
Power supply type Up to two power supplies, 800 W and 1,400 W Flex Slot, hot-plug redundant power Up to two power supplies, 800 W redundant power Up to two power supplies, 800 W redundant power		Up to two power supplies, 800 W and 1,400 W Flex Slot, hot-plug redundant power

Technical specifications: HPE Apollo 4510, 4520, and 4530 Systems







	HPE Apollo 4510 System	HPE Apollo 4520 System	HPE Apollo 4530 System
Form factor	4U shared infrastructure chassis	4U shared infrastructure chassis	4U shared infrastructure chassis
Server	1 server per chassis	2 servers per chassis	3 servers per chassis
Storage type	Up to 60 LFF hot-plug SAS/SATA/SSD + Optional 8 hot-plug LFF in rear drive cage	Up to 46 LFF hot-plug SAS drives	Up to 15 LFF hot-plug SAS/SATA/SSD per server Up to 45 drives per chassis
Storage capacity	Up to 544 TB per server (60–8 LFF 8 TB HDD) Up to 5.4 PB per 42U rack (10 servers 8 TB HDD)	Up to 368 TB per server (23 LFF 8 TB SAS HDD) Up to 3.68 PB per 42U rack (10 servers 8 TB HDD)	Up to 120 TB per server (15 LFF 8 TB HDD) Up to 3.6 PB per 42U rack (30 servers 8 TB HDD)
Storage controller	HPE Dynamic Smart Array B140i Integrated HPE Smart Array P244br/ HPE H244br controllers for boot drives Plus additional Smart Array or Smart HBA controller options	HPE Dynamic Smart Array B140i Integrated HPE Smart Array P244br/ HPE H244br controllers for boot drives H240 Smart HBA controller options	HPE Dynamic Smart Array B140i Integrated HPE Smart Array P244br/ HPE H244br controllers for boot drives Plus additional Smart Array or Smart HBA controller options
Processor family	Intel Xeon E5-2600 v3 and v4 Series	Intel Xeon E5-2600 v4 Series	Intel Xeon E5-2600 v3 and v4 Series
Processor number	One or two per server	One or two per server	One or two per server
Processor cores available	6/8/10/12/14/16/18/20/22	6/8/10/12/14/16/18/20/22	6/8/10/12/14/16/18/20/22
Processor frequency	From 1.6 GHz-2.6 GHz	From 1.6 GHz-2.6 GHz	From 1.6 GHz-2.6 GHz
Memory	HPE SmartMemory 16 DIMM slots Up to 1,024 GB DDR4 memory at up to 2,400 MHz	HPE SmartMemory 16 DIMM slots Up to 1,024 GB DDR4 memory at up to 2,400 MHz	HPE SmartMemory 16 DIMM slots Up to 1,024 GB DDR4 memory at up to 2,400 MHz
Networking	2 x 1 Gb Ethernet Plus FlexibleLOM and PCle Options plus PCle and FlexibleLOM Options	2 x 1 Gb Ethernet Plus FlexibleLOM and PCle Options plus PCle and FlexibleLOM Options	2 x 1 Gb Ethernet Plus FlexibleLOM and PCIe Options plus PCIe and FlexibleLOM Options
Expansion slots	Up to four PCIe Slots + FlexibleLOM support	Up to four PCIe Slots + FlexibleLOM support	Up to four PCIe Slots + FlexibleLOM support
Management interface options	HPE iLO 4 HPE Apollo Platform Manager HPE Insight Cluster Management Utility HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)	HPE iLO 4 HPE Apollo Platform Manager HPE Insight Cluster Management Utility HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)	HPE iLO 4 HPE Apollo Platform Manager HPE Insight Cluster Management Utility HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)
Systems fans features	Five hot-plug fan modules (provide redundancy)	Five hot-plug fan modules (provide redundancy)	Five hot-plug fan modules (provide redundancy)
Power supply type	Up to 4 power supplies, 800 W and 1,400 W Flex Slot, hot-plug redundant power supplies	Up to 4 power supplies, 800 W and 1,400 W Flex Slot, hot-plug redundant power supplies	Up to 4 power supplies, 800 W and 1,400 W Flex Slot, hot-plug redundant power supplies



"The power of the HPE Apollo 6000 System strengthens scientific research for Ghent University and allows our researchers to quickly test new hypotheses and explore areas like bioinformatics, weather prediction, fluid dynamics, nanotechnology, physics, computational chemistry, and linguistics. The ability to swiftly process massive amounts of data enables innovative analysis that opens up new worlds of research and exploration."

– Ewald Pauwels, Scientific Coordinator for High-Performance Computing, Ghent University

HPE Apollo 6000 System

Rack-scale solutions with improved density, performance, power efficiency, and cost of ownership

To address the growing demand for HPC, and the relentless pursuit of efficiency, Hewlett Packard Enterprise has taken the lead on a new approach: thinking beyond just the server and designing a rack-level solution that gives you the right compute at the right economics so you can get the most out of your infrastructure—and your budget.

Rack-scale efficiency

- Enjoy simplified, rack-scale administration efficiencies with:
- -Smart Update
- Integrated management tools
- Networking flexibility
- Pooled power efficiency with cost-effective redundancy
- Apollo Platform Manager

Flexibility to tailor the solutions to the workload to lower total cost of ownership

- Innovation zone allows for choice of NIC,
 FlexibleLOM options to fit workload needs while increasing cost savings
- Flexibility to tailor the infrastructure by workload:
- Simple to scale by chassis or rack with a single modular infrastructure and a selection of compute, storage, and GPU/accelerator trays
- Flexibility at rack level with compute and storage in the rack
- Simple to manage with Apollo Platform Manager

Technical specifications: Apollo 6000 System





Chassis	HPE Apollo a6000 Chassis	HPE Apollo 6000 Power Shelf
Form factor	5U (H) x 44.81 cm (W) x 86.23 cm (D) 1.5U (H) x $5U$ (H) x 17.64 in. (W) x 33.95 in. (D) 1.5U (H) x Supports 10 single-slot trays max Supports si	
System fans	Five hot-plug, double rotor, redundant fans	N/A
Power supply type	N/A	HPE 2,650 W Platinum hot-plug power supply HPE 2,400 W Platinum hot-plug power supply
Max power	N/A	15.9 kW (6 x 2,650 W power supply) 14.4 kW (6 x 2,400 W power supply)
AC input	N/A	Single-phase or three-phase AC input
Redundancy	N/A	N+0, N+1, and N+N

Technical specifications







	HPE ProLiant XL260a Gen9 Server	HPE ProLiant XL230a Gen9 Server	HPE ProLiant XL250a Gen9 Server	
Form factor	5U (H) x 4.33 cm (W) x 70.79 cm (D) 5U (H) x 1.70 in. (W) x 27.87 in. (D)	5U (H) x 1.70 in. (W) x 27.87 in. (D) 5U (H) x 4.33 cm (W) x 70.79 cm (D)	5U (H) x 8.66 cm (W) x 70.79 cm (D)	
Processor family	Intel Xeon Phi x200 series	Intel Xeon E5-2600 v3/v4 series	Intel Xeon E5-2600 v3/v4 series	
Cores	64/68/72	6/8/10/12/14/16/18/20/22	6/8/10/12/14/16/18/20/22	
Chipset	Intel C612 series chipset	Intel C612 series chipset	Intel C612 series chipset	
Number of processors	1	2	2	
Max processor speed	1.3 GHz (Turbo 1.7 GHz)	2.8 GHz	2.8 GHz	
Drive description	4 SFF SATA or M.2	4 SFF SAS/SATA/SSD	6 SFF SAS/SATA/SSD	
Supported drives	Hot-plug 2.5-inch SATA	Hot-plug 2.5-inch SAS/SATA/SSD	Hot-plug 2.5-inch SAS/SATA/SSD	
Memory slots	6 DIMM slots	16 DIMM slots	16 DIMM slots	
Memory max	384 GB (6 x 64 GB)	2048 GB (16 x 128 GB)	2048 GB (16 x 128 GB)	
Memory type, ECC	DDR4; R-DIMM/LR-DIMM 2,400 MHz	DDR4; R-DIMM/LR-DIMM; 2,133/2,400 MHz	DDR4; R-DIMM/LR-DIMM; 2,133/2,400 MHz	
Network options	work options Network module supporting various fabric options: 10GbE, InfiniBand EDR, Intel Omni-Path		Network module supporting various FlexibleLOMs: 1GbE, 10GbE, and/or InfiniBand/Omni-Path	
Storage controller HPE H241 Smart Host Bus Adapter		1 HPE Dynamic Smart Array B140i SATA controller HPE H240 Host Bus Adapter	1 HPE Dynamic Smart Array B140i SATA controller HPE H240 Host Bus Adapter	
Expansion slots N/A		1 internal PCIe: 1 PCIe x16 Gen3, half-height 1 PCIe/FlexLOM I/O module (optional)	1 internal PCle: 1 PCle x16 Gen3, half-height 1 PCle/FlexLOM I/O module (optional)	
Accelerator N/A		N/A	2 accelerator card slots supporting: Intel Xeon Phi 5110P/7120P NVIDIA K40/K80/K1/M60 AMD S9150/S7150x2	
USB ports/SD	SB ports/SD 1 Serial/USB/Video port Internal microSD		1 Serial/USB/Video port Internal microSD	
Management	HPE iLO (Firmware: HPE iLO 4) Option: HPE Advanced Power Manager	HPE iLO (Firmware: HPE iLO 4) Option: HPE Advanced Power Manager	HPE iLO (Firmware: HPE iLO 4) Option: HPE Advanced Power Manager	
OS support Red Hat® Enterprise Linux® SUSE Linux Enterprise Server		Microsoft Windows Server® Red Hat Enterprise Linux SUSE Linux Enterprise Server	Microsoft Windows Server Red Hat Enterprise Linux SUSE Linux Enterprise Server	

Technical specifications: HPE Apollo 6500 System







HPE ProLiant XL270d Accelerator Tray

Rack	Optimized for 1,200 mm deep racks		
Chassis	HPE Apollo d6500 Chassis (4U, 2 server trays, up to 16 GPU/chassis) $6.96 \times 17.638 \times 37$ in.		
Processor	Intel Xeon E5-2600 v4 family		
Power	HPE Apollo 6000 Power Shelf		
Memory	16 2,400 MHz DDR4 DIMMs, 1,024 GB max (16 x 64 GB)		
Network options	Two 1GbE single-port module Two x16 PCI Express low profile slots supporting InfiniBand/OPA/Ethernet (1GbE or 10GbE)		
I/O slots	Support for 8 350 W GPU per tray 1 x8 PCIe mezzanine form factor (Smart Array) 2 x16 PCIe low profile Gen3		
Storage	Up to 8 SFF hot plug SAS/SATA/SSD—front accessible storage		
Accelerator	NVIDIA Tesla: K40, K80, M40, and the AMD FirePro S9150 NVIDIA Pascal GPU, and Intel's future Xeon Phi		
Management interface options	HPE iLO 4 HPE Insight Cluster Management Utility HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)		

"A juice glass full of water has the cooling capacity of a room full of air. And the pump energy needed to move that juice glass of water, to eject the heat from the system, is less than the fan energy needed to move that room full of air—much less."

– Steve Hammond, Director of Computational Sciences, National Renewable Energy Labs

HPE Apollo 8000 System

The possibilities are as limitless as your imagination

Supercomputers provide the massive compute power that allows leading research institutions to run the simulations and analytics that are behind incredible breakthroughs in science and technology.

Time is of the essence when trying to find a cure, predict the next earthquake, or create the next game-changing innovation. But the massive space and energy requirements of traditional supercomputers are threatening to slow the pace of innovation.

Hewlett Packard Enterprise is passionate about driving technology to commercialization in the areas most important to our customers—and society. As a leader in HPC solutions, we invest in a forward-looking, ambitious research agenda to fuel the next generation of HPE products, services, and solutions, delivering breakthroughs that can transform current businesses and create new ones.

That drive for innovation is what inspired Hewlett Packard Enterprise to break through the barriers of traditional supercomputing to enable a high-density, energy-efficient, HPC solution that uses a groundbreaking warm-water liquid cooling system to deliver faster, more energy-efficient, and more sustainable infrastructure for research computing workloads than ever before.

Increase performance, density, efficiency, and sustainability

To begin with, liquid cooling is 1,000X more efficient than air cooling,³ giving the HPE Apollo 8000 System the ability to offer higher performance components. Bringing the heat extraction closer to the processor further enhances computational performance capabilities. That allows extremely dense configurations that deliver hundreds of teraflops of compute power in a very compact space.

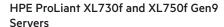
The ingenious design of the HPE Apollo 8000 System allows you to use the transferred facilities heat for a dramatic reduction in costs—and your carbon footprint.



³ Liquid cooling is 1,000X more efficient than air cooling according to NREL







- XL730f Gen9 tray has two 2P servers per tray
- XL750f Gen9 tray has a single 2P server with two accelerators per tray
- Processors: Intel Xeon E5-2600 v3 series, Intel Xeon E5-2600 v4 series
- Accelerators: Two NVIDIA Tesla K40 XL GPUs (XL750f Gen9)
- Memory: Up to 512 GB per server HPE DDR4 SmartMemory 2,400 MT/s
- Storage: One SFF SSD per server
- Networking: One InfiniBand FDR port and 1GbE NIC per server
- 1,200 W input power per tray
- Component-level cooling with dry-disconnect server trays
- Reusable energy providing additional savings to the overall energy bill
- Heat sinks and jackets protect processors and memory, with heat pipes to ensure heat transfer
- Hot-plug, independent server trays
- HPE Server and Support Management

HPE InfiniBand Switch for HPE Apollo 8000 System

- 36-port InfiniBand FDR switch, each tray has 18 QSFP uplinks and 18 downlinks for node connectivity
- 4–8 per rack based on configuration
- Integrated in the rack for simplified cabling and network topology



HPE Technology Services is ready to engage as you consider the HPE Apollo 8000 System. HPE Consulting Services can help you analyze and prioritize needs for power and cooling, as well as more detailed design and data center implementation planning. HPE recommends Factory Express services to oversee the implementation of HPE Apollo 8000 Systems from the HPE factory floor to the data center floor. And our HPE HPC specialists are ready to configure software solutions and any third-party integration needed. Once the new HPE Apollo 8000 System is in place, Hewlett Packard Enterprise gives you easy access to expertise for routine hardware replacements and the ability to get assistance fast if a more complex situation arises.

HPE Datacenter Care is a flexible, comprehensive, relationship-based approach to personalized support and management of heterogeneous data centers. With a structured framework of repeatable, tested, and globally available services, your team can leverage HPE's experience supporting complex environments, global support partnerships, and technical expertise. You get exactly the services you need—when and where you need them—in a single agreement.



Technical specifications: HPE Apollo 8000 System (continued)





HPE ProLiant XL730f Gen9 Server

HPE ProLiant XL750f Gen9 Server

Server	Each HPE ProLiant XL730f Gen9 Server comes standard with two 2P servers Each HPE ProLiant XL740f Gen9 Server and XL750f Gen9 Server comes standard with one 2P server and two accelerators	
СРИ	Intel Xeon E5-2600 series: E5-2699 v3, E5-2698 v3, E5-2697 v3, E5-2695 v3, E5-2690 v3, E5-2683 v3, E5-2680 v3, E5-2670 v3, E5-2667 v3, and E5-2660 v3	
Memory	16 DIMMs per server, max 512 GB HPE DDR4 SmartMemory 2,400 MT/s	
Network	Integrated NIC: Single port 1GbE per server InfiniBand Adaptor Kit: Single ConnectX-3 Pro InfiniBand FDR or ConnectX-4 EDR port per server	
Storage	One small form factor (SFF) SSD per server Supports 120 GB, 240 GB, 480 GB, 960 GB	
Boot	SSD and network (IB or Ethernet)	
Minimum configuration	Two CPUs per server, single InfiniBand FDR or EDR adaptor, two DIMMs per CPU (up to eight DIMMs max)	
Accelerator	The HPE ProLiant XL750f Gen9 Server supports two NVIDIA Tesla K40 XL GPUs	
Power	Max of 1,200 W of high-voltage direct current to 12 V conversion per tray	
Management interface standard options	HPE iLO 4 HPE 8000 System Manager HPE Insight Cluster Management Utility HPE iLO Standard and Advanced HPE OneView (3.0—Discovery and monitoring only)	



HPE InfiniBand Switch for Apollo 8000

Switch type	Mellanox 36-port QDR/FDR10/FDR integrated leaf module	
Ports	Each tray has 18 QSFP uplinks and 18 downlinks for node connectivity	
Speed	Up to 56 Gb/s InfiniBand FDR per port	
Cabling	Front cabled uplinks with rear cabled node connectivity	
Form factor	1U half-width tray	
Power	Maximum 250 W per tray (preliminary estimates)	
Management	Embedded	

Apollo Family comparison chart









	Apollo 8000 System	Apollo 6000 System	Apollo 2000 System	Apollo 4000 Family
Typical workload	Supercomputing	HPC clusters	Data center HPC	Big Data analytics and object storage
Value proposition	Ground-breaking and highly serviceable warm liquid cooling system enables leading performance density with lower energy costs	Optimizing performance at the rack level	Achieve the power of HPC with the space and cost savings of density-optimized infrastructure—without disruption	Harnessing Big Data will unlock the insights that will streamline operations and reduce costs, target products and services more efficiently and effectively to customers who need them, and build the next generation of products and services to satisfy unmet needs ahead of competition
Customer profile	Large research institutions Government Universities Life Sciences	Product design firms using product design and engineering (PD&E) applications Manufacturers leveraging engineering design automation (EDA) Financial Services firms running risk modeling Life Sciences web-hosters wanting to offer HPC capabilities to customers	Enterprise and SMEs looking to benefit from HPC power within the constraints of a traditional data center	HPE Apollo 4200 Gen9 Server Enterprises and SMEs who want to start or grow Big Data solutions or want to deploy smaller Object Storage systems, Hadoop and NoSQL-based Big Data analytics solutions, and smaller, data-analyzing HPC clusters HPE Apollo 4500 System Enterprises that need to enable Big Data solutions at scale

HPE financing for HPE Apollo 6000 and 8000 Systems

Having access to technology on terms that align to your business needs is critical, and HPE Financial Services is uniquely positioned to help accelerate your move to the data center of the future with a broad portfolio of flexible investment and transition solutions. Maximize your current data center environment, and access the latest high-performance computing technology when you need it. HPE Financial Services offer:

- Simple transition from existing technology to HPE Apollo 6000 and 8000 Systems
- Dual usage of existing and new equipment to ease the transition

- Flexible payment plans to quickly access HPE Apollo 6000 and 8000 Systems more economically
- Removal of existing technology and recovery of remaining value to help support the transition to new HPE Apollo 6000 and 8000 Systems
- Technology refresh approach to allow for future scalability and upgrades
- Expert support for secure data removal from legacy equipment
- Flexible terms to meet business needs
- Availability globally where HPE Financial Services conducts business⁴

Financing and service offerings available through Hewlett Packard Enterprise Financial Services Company and its subsidiaries and affiliates (collectively HPE FSC) in certain countries are subject to credit approval and execution of standard HPE FSC documentation. Rates and terms are based on customer's credit rating, offering types, services, and/or equipment type and options. Not all customers may qualify. Not all services or offers are available in all countries. Other restrictions may apply. HPE FSC reserves the right to change or cancel this program at any time without notice.