



HPE ProLiant WS460c Gen9 Graphics Server Blade

Boost productivity with high-octane end-user computing

The HPE ProLiant WS460c Graphics Server Blade is the cutting-edge of high-performance end-user computing. It centralizes workstations in the data center where they can be more securely, easily, and economically managed. The result is improved end-user productivity, reliable operational efficiency and business continuity, and enhanced change management agility allowing for the right GPU performance for the right job.

Meet user demands for high-performance graphics

The consumerization of IT and bring-your-own-device (BYOD) expectations, along with the explosion of video and multimedia has accelerated the demand for performancedriven remote graphics capabilities. Organizations that rely on high-performance graphics acceleration applications—including financial trading, computer aided design (CAD), web design, digital content creation, Education, Public Sector, Oil and Gas, and Healthcare—are asking themselves one question:

"How do we enable graphics-accelerated end-user computing that allows workstation-class application performance and visual fidelity accessible from anywhere, at any time, and on any device while also ensuring the protection of corporate information and minimizing management?"

The HPE ProLiant WS460c Gen9 Graphics Server Blade now delivers even more performance with new Intel® Xeon® Processor E5-2600 v4 processors and 2,400 MT/s DDR4 memory. It is the industry's first bladed technology to support up to six MXM form factor GPUs per blade, lowering the cost per user while enabling remote users to easily complete large model visualizations.

HPE ProLiant WS460c Gen9 Graphics Server Blade

- Delivers the industry's most comprehensive graphics acceleration capabilities for virtual desktop infrastructure (VDI) in a blade form factor
- Reduced annual IT infrastructure cost, up to 56 percent over traditional infrastructures¹
- Achieves up to 3X improvement in user density² for savings in power and space, or up 512 users per 10U of rack space when virtualizing GPU resources
- HPE OneView delivers the Power of One—one infrastructure, one management platform—to transform business economics by accelerating service delivery up to 66X faster while reducing data center costs³

Virtual GPU technology

Hewlett Packard Enterprise has expanded its comprehensive set of graphics offerings with NVIDIA® GRID and AMD FirePro MXM card solutions that, for the first time, support hardware GPU virtualization and multiple GPUs on a single adapter card, providing an excellent end-user experience.

NVIDIA GRID GPU adapters have an optimized multi-GPU design that helps to maximize user density. NVIDIA's newest Tesla M6 boards, with 8 GB of memory, provide the first MXM form factor card with GRID virtualization technology, allowing up to 16 users per card. With the HPE Multi-GPU Carrier, up to four Tesla M6 cars can be installed in a half-height, double-wide blade, providing the industry best GPU user density at 512 user in a 10U enclosure.

Also new, the AMD S7100X GPU adapters deliver performance and flexibility for multiple environments. Since hardware virtualized GPUs are directly accessible by multiple VMs, each workload and user can be assigned in flexible configurations for each card. The AMD MXM card also supports bare-metal environments and with HPE Multi-GPU Carrier, up to four S7100X cards can be installed.

NVIDIA K1 boards, which include four NVIDIA Kepler based GPUs and 16 GB of memory, are designed to host the maximum number of concurrent users on a single standup card. GRID K2 boards, which include two higher-end Kepler GPUs and 8 GB of memory, deliver maximum density for users of workstation-class graphics applications on a standup card.

With NVIDIA GRID and AMD FirePro solutions, users benefit from the best of both software virtualized and pass-through GPU technologies, because the virtual machine (VM) shares the GPU, but has direct access to the dedicated portion of the GPU resources.

Pass-through GPU

The HPE ProLiant WS460c Gen9 Graphics Server Blade delivers the industry's first support for MXM form-factor graphics with up to six GPUs per blade with PCI Express (PCIe) Gen3 x 16 GPU support—all on the proven HPE ProLiant Gen9 architecture.

This solution enables a lower cost per seat through multi-tenancy in a virtualized environment while keeping a dedicated GPU per user for performance, and taking full advantage of NVIDIA drivers. This is beneficial to users who utilize high performance graphics applications in multiple industries.

The HPE ProLiant WS460c Gen9 Graphics Server Blade provides a local workstation for a high performance PC experience to end users over the network using industry standard remote protocols such as Citrix[®] HDX 3D and VMware[®] PCoIP. Initially, the server blade was introduced as a bare-metal 1:1 solution, meaning that a client operating system was loaded on the blade for a single user. The HPE WS460c G6 systems made a giant leap forward with its industry first ability to virtualize the server blade by connecting a GPU directly to a virtual machine (first supported by XenServer 6). This allowed multiple graphics-accelerated VMs to support a range of needs from media rich PCs to high performance 3D workstations. Now with the Gen9 version, the new graphics offering and GPU density has taken another giant leap forward.

High-performance graphics acceleration—from media-rich PCs to 3D accelerated graphics users

Virtualized GPU solutions

HPE provides flexible solutions for graphics acceleration with its key partners, NVIDIA and AMD.

The NVIDIA GRID vGPU, also known as a True Virtual GPU is the NVIDIA/Citrix/VMware implementation of the technology. It offers the benefit of GPU scaling like the software virtualized GPU (application programming interface [API] intercept) and provides the performance of a native NVIDIA graphics driver like the pass-through models (see Figure 1).

¹ "Business Value of Blade Infrastructures," IDC, #28762, 2015.

² Outfits 3X more NVIDIA Quadro K3100M GPUs in the same HPE c-Class enclosure space vs. using WS460c Gen9 without expansion blade.

³ IDC report #246385, January 2014.

This technology is currently implemented by the NVIDIA GRID M6, K1, and K2 products. The GRID GPU is shared between multiple VMs similar to API intercept. However, in this model each VM has direct access to the GPU via dedicated channels managed by the NVIDIA GRID vGPU Manager.

Unlike the software virtualized GPU (API intercept) model, the NVIDIA vGPU Manager within the host hypervisor manages the VM to GPU channels, guaranteeing that each VM has a dedicated amount of Video RAM per user and direct access to the GPU. Administrators will have the ability to assign one to 16 users per physical GPU depending on their particular card and workload needs.

The AMD FirePro S7100X is also the first hardware virtualized GPU solution from AMD for the WS460c Gen9. Similar to the M6, the S7100X also provides GPU scaling without the overhead of an API driver, and is ideal for a number of environments including bare-metal deployments and VDI, where bandwidth can be extended to a large number of VDI users and thereby reducing costs per user.



Figure 1. HPE ProLiant WS460c Gen9 Graphics Server Blade with NVIDIA GRID configurations

Multi-GPU configurations

The HPE ProLiant WS460c Gen9 Graphics Server Blade has two options for the base blade configuration (see Figure 2): the single-width base blade or double-width blade with graphics expansion. The base blade supports up to two MXM style graphics cards installed on the blade mezzanine slots, while the expansion blade allows installation of full size high-end graphics cards.

The HPE ProLiant WS460c Multi-GPU Carrier card allows up to six GPUs (MXM style) to be installed in the blade, creating three times more GPU density in the same 10U enclosure than similar performance-class graphics in single-width blades.

High-performance desk-side graphics experience

The HPE ProLiant WS460c Gen9 Graphics Server Blade delivers an outstanding performance experience across all media rich PC and workstation class users.

- Share advanced media rich workstation or PC graphics remotely, with 2D and 3D multi-display, and full-motion video capabilities
- Drive up to six displays per client device and run multiple computing sessions from each, so professionals have access to the compute and graphics performance they need, on demand
- Meet a full range of graphics users' demands for flexible high-end graphics solutions on client and server OS, both for bare-metal and virtualized environments
- See substantial graphics performance gain—from simple Microsoft® Office documents to full blown solid modeling applications—on HPE Thin Clients with new graphics pass-through capabilities and new hardware-based graphics on HPE blade servers



Figure 2. HPE ProLiant WS460c Gen9 Graphics Server Blade and Expansion Blade with MXM and Multi-GPU Carrier configurations

Remote access for greater productivity and flexibility

HPE ProLiant WS460c Graphics Server Blade customers report that their users love the ability to access their workstation or media rich PC remotely from home or on the road increasing their productivity. The HPE ProLiant WS460c Gen9 Graphics Server Blade paves the way for new business models by removing distance barriers. It accomplishes this with reliable network-enabled access and HPE Integrated Lights-Out (HPE iLO) management.

- Access resources easily from thin clients, workstations, PCs, and almost any mobile device through Citrix and VMware solutions
- Provide segregated graphics and applications access for remote contractors
- Experience faster load and save times for large data sets or media files sitting in the data center and connected to your high bandwidth datastores
- Increase the ability to maintain a single working data set
- Deliver not only flexible, on demand, high-configuration resources (processor, memory, and graphics) for time sensitive tasks, but also significant hardware utilization levels by using the WS460c Graphics Server Blade as a pooled resource in the data center
- Enable high performance levels and resource utilization through the ability of partner (Citrix, Microsoft, and VMware) protocols to take advantage of the graphics processors delivering a robust user experience

Data center security and control

The HPE ProLiant WS460c Gen9 Graphics Server Blade lowers risk by ensuring all data remains in the data center, reducing exposure to your confidential business information.

- Benefit from mission-critical security and low latency data access across the workstation environment
- Reduce the risk of company data exposure from loss or theft of local hard drives, removable media drives, data interfaces such as USB and SD cards or even client systems
- Maintain better control over the IT environment by eliminating unauthorized software loads or data removal
- Enable non-employees/contractors to work on projects without providing access to sensitive data

Business continuity

- Configure redundant N+1 or N+N Power supplies, fans, interconnects, and On Board Administrator management units
- Optimize the use of your existing data center power infrastructure with HPE ProLiant Server Dynamic Power management; measure power utilization and set power caps that enable an overloaded data center to add additional servers without the cost of bringing in additional power
- Dramatically improve business continuity with multi-blade and multi-site capabilities
- Run multiple HPE ProLiant WS460c Gen9 Graphics Server Blade sessions from a single client and connect to any data center to intelligently balance and shift compute resources in the event of a problem
- Be prepared for incidents such as power loss and catastrophic disasters, with data center computing environments that can be accessed more securely from any location

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Common client virtualization platform

Whether your client virtualization strategy is based on VMware, Citrix, or Microsoft, you can resource and manage all your desktop compute needs from a common graphics-enabled virtualization solution—no matter if they are for task workers, productivity users, knowledge workers, power or media rich PC users, or high performance 3D workstation users.

Boost business performance with new storage, application, and I/O enhancements

- The WS460c Gen9 Server Blade includes an HPE Dynamic Smart Array B140i as a standard feature—plus your choice of an HPE Smart Host Bus Adapter (HBA) H244br or HPE Smart Array P244br/1 GB FBWC for performance or additional features. Both offer support for 12 GB SAS speeds for the two internal drives.
- HPE DDR4 SmartMemory technology is available only on ProLiant Gen9 servers, offering unmatched quality, performance, and manageability, when compared to industry-standard memory.
- Enhanced memory performance, up to 64 GB DIMMs along with the benefit of reduced power—16 DIMM slots with 2,400 MT/s DDR4 and eight slots per processor socket.
- Two x 16 PCIe 3.0 I/O expansion slots can support the highest performing mezzanine option cards now, as well as in the future.
- NVMe PCI SSD support as well as standard internal USB 3.0, as well as future support for redundant microSD and optional M.2 support for a variety of system boot alternatives.

Accelerate IT service delivery with agile infrastructure management

By providing a comprehensive set of management offerings, Hewlett Packard Enterprise can meet your management needs at every stage of the server lifecycle with three types of solutions:

- On-premise management
- On-system management
- On-cloud management

On-premise—HPE OneView, our single, software-defined management platform, accelerates IT service delivery through automated configuration, lifecycle management, and faster virtual machine provisioning, and it helps accelerate the transition to Infrastructure-as-a-Service (IaaS) and hybrid cloud.

On-system—On-system management provides embedded tools and scripting tools on all HPE servers that increase server administrator productivity and simplify the server management experience. On-system management portfolio includes Unified Extensible Firmware Interface (UEFI), HPE Intelligent Provisioning, HPE iLO, HPE Smart Update Manager (HPE SUM), Service Pack for ProLiant (SPP), Scripting Tools (Scripting Toolkit for Linux® and Microsoft Windows®, Scripting Tool for Windows PowerShell, and the RESTful Interface Tool).

On-cloud—HPE Insight Online is a cloud-based infrastructure management and support portal providing fast problem resolution and easy access to the information you need to support your IT environment. You can use the Insight Online dashboard to track device health, service events and support cases, view device configurations, create custom reports, and proactively monitor HPE contracts and warranties. You can also use the HPE Insight Online dashboard in the HPE Support Center Mobile App to stay up to date while on the go.

Technical specifications



HPE ProLiant WS460c Gen9 Graphics Server Blade

Compute	Intel Xeon Processor E5-2600 v3 or v4 Series, 4/6/8/10/12/14/16/18/20/22 cores
I/O expansion slots	x 16 PCIe 3.0 Type A (supports Type A mezzanine cards) (expansion slot 1) x 16 PCIe 3.0 Type B (supports Type A and Type B mezzanine cards) (expansion slot 2)
HPE Smart Socket Guide	Yes
Memory	(16) DDR4, up to 2,400 MT/s (1 TB max)
HPE DDR4 SmartMemory	Yes
Graphics cards	NVIDIA Tesla M6, AMD FirePro S7100X, Quadro M3000SE, Quadro K3100M, GRID K2, K1, Quadro M6000, M5000, K6000, HPE Multi-GPU with three NVIDIA Quadro K3100M or 2 Tesla M6 or 2 AMD S7100X; AMD FirePro S4000X
Storage	Standard HPE Dynamic Smart Array B140i with choice of HPE Smart Host Bus Adapter (HBA) H244br, or HPE Smart Array P244br for performance or additional features
HPE SmartDrive	Yes
FBWC	1 GB DDR3-1,866 MHz, 72-bit wide bus at 14.9 GB/s on P244br
Networking	One (1) 20 Gb 2-port FlexFabric FLB, 10 Gb 2-port HPE FlexFabric FLB, or 10 Gb 2-port Ethernet FLB
HPE FlexibleLOM	Yes
On-premise management	HPE OneView and HPE iLO Advanced for BladeSystem
On-cloud management	HPE Insight Online with enhanced mobile app
On-system management	HPE iLO, SPP, HPE SUM, Scripting tools (Scripting toolkit for Linux and Windows, Scripting tools for Windows PowerShell, and RESTful Interface Tool)
Power and cooling	Enclosure based (94 percent Platinum)
3D Sea of Sensors	Yes

Technical specifications (continued)

Processor and memory		
Processor type	Intel Xeon E5-2600 v3 Series, Intel Xeon E5-2600 v4 Series	
HPE processor	Twenty-two-core processors Intel Xeon E5-2699 v4 (2.2 GHz/22-core/55 MB/145 W)	
	Twenty-core processors Intel Xeon E5-2698 v4 (2.2 GHz/20-core/50 MB/135 W)	
	Eighteen-core processors Intel Xeon E5-2697 v4 (2.3 GHz/18-core/45 MB/145 W)	
	Intel Xeon E5-2695 v4 (2.1 GHz/18-core/45 MB/120 W)	
	Intel Xeon E5-2699 v3 (2.3 GHz/18-core/45 MB/145 W)	
	Sixteen-core processors Intel Xeon E5-2683 v4 (2.1 GHz/16-core/40 MB/120 W)	
	Intel Xeon E5-2697A v4 (2.6 GHz/16-core/40 MB/145 W)	
	Intel Xeon E5-2698 v3 (2.3 GHz/16-core/40 MB/135 W)	
	Fourfeen-core processors Intel Xeon E5-2690 v4 (2.6 GHz/14-core/35 MB/135 W) Intel Xeon E5-2680 v4 (2.4 GHz/14-core/35 MB/120 W) Intel Xeon E5-2660 v4 (2.0 GHz/14-core/35 MB/105 W) Intel Xeon E5-2650L v4 (1.7 GHz/14-core/35 MB/105 W) Intel Xeon E5-2697 v3 (2.6 GHz/14-core/35 MB/145 W) Intel Xeon E5-2695 v3 (2.3 GHz/14-core/35 MB/120 W) Intel Xeon E5-2695 v3 (2.3 GHz/14-core/35 MB/120 W) Intel Xeon E5-2683 v3 (2 GHz/14-core/35 MB/120 W)	
	Twelve-core processors	
	Intel Xeon E5-2650 v4 (2.2 GHz/12-core/30 MB/105 W) Intel Xeon E5-2690 v3 (2.6 GHz/12-core/30 MB/135 W) Intel Xeon E5-2680 v3 (2.5 GHz/12-core/30 MB/120 W) Intel Xeon E5-2670 v3 (2.3 GHz/12-core/30 MB/120 W) Intel Xeon E5-26501 v3 (1.8 GHz/12-core/30 MB/65 W)	
	Ten-core processors Intel Xeon E5-2640 v4 (2.4 GHz/10-core/25 MB/90 W) Intel Xeon E5-2630 v4 (2.2 GHz/10-core/20 MB/85 W) Intel Xeon E5-2630L v4 (1.8 GHz/10-core/25 MB/55 W) Intel Xeon E5-2660 v3 (2.6 GHz/10-core/25 MB/105 W) Intel Xeon E5-2650 v3 (2.3 GHz/10-core/25 MB/105 W)	
	Eight-core processors	
	Intel Xeon E5-2620 v4 (2.1 GHz/8-core/20 MB/85 W) Intel Xeon E5-2609 v4 (1.7 GHz/8-core/20 MB/85 W) Intel Xeon E5-2667 v4 (3.2 GHz/8-core/25 MB/135 W) Intel Xeon E5-2667 v3 (3.2 GHz/8-core/20 MB/135 W) Intel Xeon E5-2640 v3 (2.6 GHz/8-core/20 MB/90 W) Intel Xeon E5-2630 v3 (2.4 GHz/8-core/20 MB/85 W) Intel Xeon E5-2630L v3 (1.8 GHz/8-core/20 MB/55 W)	
	Six-core processors Intel Xeon E5-2603 v4 (1.7 GHz/6-core/15 MB/85 W) Intel Xeon E5-2643 v4 (3.4 GHz/6-core/20 MB/135 W) Intel Xeon E5-2643 v3 (3.4 GHz/6-core/20 MB/135 W) Intel Xeon E5-2620 v3 (2.4 GHz/6-core/15 MB/85 W) Intel Xeon E5-2609 v3 (1.9 GHz/6-core/15 MB/85 W) Intel Xeon E5-2603 v3 (1.6 GHz/6-core/15 MB/85 W)	
	Four-core processors	
	Intel Xeon E5-2623 v4 (2.6 GHz/4-core/10 MB/85 W) Intel Xeon E5-2637 v4 (3.5 GHz/4-core/15 MB/135 W) Intel Xeon E5-2637 v3 (3.5 GHz/4-core/15 MB/135 W)	
	IIIIEI AUUI E2-2023 V3 (2 GHZ/4-COTE/IU MB/IU2 W)	

Technical specifications (continued)

Processor core	4, 6, 8, 10, 12, 14, 16, 18, 20, and 22
Maximum processor speed	3.5 GHz
Processors per 42U enclosure	128 (single-width form factor); 64 (double-width form factor)
Cache memory	55 MB (1 x 55 MB) shared L3 cache 50 MB (1 x 50 MB) shared L3 cache 45 MB (1 x 45 MB) shared L3 cache 40 MB (1 x 40 MB) shared L3 cache 35 MB (1 x 35 MB) shared L3 cache 30 MB (1 x 30 MB) shared L3 cache 25 MB (1 x 25 MB) shared L3 cache 15 MB (1 x 15 MB) shared L3 cache 10 MB (1 x 10 MB) shared L3 cache
Memory type	HPE DDR4 SmartMemory Load Reduced DIMMs (LRDIMMs) or Registered DIMMs (RDIMMs)
Memory options	HPE Persistent Memory (NVDIMM) 64 GB DDR4 2,400 MT/s LRDIMMs at 1.2 V 32 GB DDR4 2,400 MT/s R/LRDIMMs at 1.2 V 16 GB DDR4 2,400 MT/s R/LRDIMMs at 1.2 V 8 GB DDR4 2,400 MT/s RDIMMs at 1.2 V 64 GB DDR4 2,133 MT/s LRDIMMs at 1.2 V 32 GB DDR4 2,133 MT/s R/LRDIMMs at 1.2 V 16 GB DDR4 2,133 MT/s R/LRDIMMs at 1.2 V 8 GB DDR4 2,133 MT/s RDIMMs at 1.2 V
Maximum memory	1 TB (16 x 64 GB) up to 2,400 MT/s at 1.2 V RDIMM
Storage	
Maximum internal storage	Hot Plug SFF SAS 4.0 TB (2 x 2.0 TB drives) Hot Plug SFF SATA 4.0 TB (2 x 2.0 TB drives) Hot Plug SFF SAS SSD 7.68 TB (2 x 3.84 TB drives) Hot Plug SFF SATA SSD 7.68 TB (2 x 3.84 TB drives) Hot Plug SFF NVMe SSD 4.0 TB (2 x 2.0 TB drives)
Number of hard drives	Supports up to two (2) HPE Hot Plug SFF SAS/SATA/SSD/NVMe drives

Technical specifications (continued)

Storage controller	HPE H244br HBA or HPE Smart Array P244br, depending on model	
Graphics		
Graphics adapter	Mezzanine cards NVIDIA Tesla M6 with GRID, Quadro M3000SE, Quadro K3100M, AMD FirePro S7100X, S4000X Graphics expansion blades NVIDIA GRID K2, K1, Quadro M6000, M5000, K6000, HPE Multi-GPU with three NVIDIA Quadro K3100M or 2 NVIDIA Tesla M6 or 2 AMD S7100X	
Deployment		
Form factor	Half-height blade (single and double width)	
Rack height	10U: Up to 16 ProLiant WS460c Blades or 8 with expansion module (single width) 6U: Up to 8 ProLiant WS460c Blades or 4 with expansion module (single width)	
Operating systems	Client operating systems Windows 7 Professional/Enterprise (64-bit) Windows 8.1 Professional/Enterprise (64-bit) Red Hat [®] Enterprise Linux 6.5 or later (64-bit only); HPE supported, partner certification pending	
	Server operating systems Citrix XenDesktop [®] 7 or later, XenServer 6.5 or later VMware [®] Horizon [®] View 6 or later, VMware vSphere [®] 5.5 or later Windows Server [®] 2012 R2 (64-bit) Standard, Enterprise, and Data Center editions (for Citrix XenApp)	
Warranty	3-year parts, 3-year labor, 3-year onsite support	
QuickSpecs URL	Specs URL hpe.com/h20195/v2/GetDocument.aspx?docname=c04440131	





Check out the HPE t820—HPE's most powerful thin client solution

- Experience super-fast performance, robust security protection, simple management, and monitor flexibility
- Eliminate efficiency barriers with Intel® Core™ i7-4770S 2.9 GHz quad-core CPU
- Keep your business data safe—lock down sensitive information and meet compliance standards with robust encryption and security options including fiber NIC, Trusted Platform Module (TPM), and Intel vPro technology
- Multitask seamlessly with multiple open applications on up to seven full HD monitors using optional AMD Radeon HD 7650A MXM Graphics Card and HPE Multi-Stream DisplayPort 1.2 Hubs

HPE Thin Clients

The flexible performance and easy ownership of industry leading thin client solutions from Hewlett Packard Enterprise deliver rich user connectivity to client virtualization or cloud computing environments while meeting the most rigorous environmental requirements. Designed with the latest, standards-based operating systems and hardware, leading client virtualization software, and a robust set of manageability tools, HPE Thin Client solutions help simplify IT while providing outstanding connectivity and flexibility.

HPE t820 Series Thin Clients give you a powerful and seamless desktop experience, enhanced security, and premium client virtualization. You can customize your thin client with everything you need using the configuration options and expansion capabilities that best fit your business and help ensure an ideal end-user experience.

Available port options include VGA, Serial, or fiber network interface card (NIC)—and additional legacy serial and parallel ports on the PLUS chassis. Enjoy easy connections to your peripherals with eight USB ports and front and rear audio jacks to support cleaner multimedia installations. Low-power AMD embedded systems-on-chip—which combine the CPU, GPU, and I/O controller onto a single die—help enable small and quiet solutions for a low total cost of ownership in thin-client operations utilizing VDI. AMD's 2D and 3D graphics capabilities provide stunning visual experiences for thin clients and support up to two high-resolution displays from a single highly integrated processor.

And for an even more powerful thin client, see the information in the left sidebar to learn more about the HPE t820 with quad-core Intel[®] processors and the ability to drive up to seven monitors.

Optimize your IT investment strategy with new ways to acquire, pay for and use technology, in lock-step with your business and transformation goals. hpe.com/solutions/ hpefinancialservices

HPE Factory Express provides customization and deployment services along with your storage and server purchases. You can customize hardware to your exact specifications in the factory-helping speed deployment.

hpe.com/info/factoryexpress

Gain the skills you need with training and certification from HPE. With HPE ProLiant training, you will accelerate your technology transition, improve operational performance. and get the best return on your HPE investment. Our training is available when and where you need it, through flexible delivery options and a global training capability.

h10076.www1.hpe.com/us/en/ training/portfolio/proliant.html

HPE Technology Services

When technology works, business works

Hewlett Packard Enterprise offers a very comprehensive suite covering the entire services lifecycle with predefined, fixed price, and custom consulting services.

Recommended HPE Care Pack Services

- Three-year, HPE 24x7, four-hour response, hardware support, onsite service
- Three-year, HPE 24x7, four-hour response HPE Collaborative Support
- HPE ProLiant Server Hardware Installation Service

Related HPE Care Pack Services

Three-year, HPE 24x7, four-hour response Proactive Care or three year, HPE six-hour, onsite, call to repair HPE Collaborative Support and HPE Proactive Select Service.

All support services come with HPE Insight Remote Support, providing 24x7 remote monitoring, proactive notifications, and problem resolution.

Coverage

For HPE ProLiant servers, Care Pack Services provide coverage for HPE branded hardware options qualified for the server, purchased at the same time or afterward, internal to the enclosure, as well as external monitors up to 22 and tower UPS products; these items will be covered at the same service level, and for the same coverage period as the server unless the highest supported lifetime and/or the highest usage limitation has been exceeded. Coverage of UPS battery is not included; standard warranty terms and conditions apply.

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