Bare Metal VDI—Engineering Workstation

Securely delivering the right performance for your engineers and graphic designers
**Filling the technology gap**

To meet the overall objective of delivering innovative solutions to market faster and more cost-efficiently, today’s business must find solutions that resolve an ever-growing set of challenges specific to engineering and development teams:

- Supporting increasingly geographically dispersed teams and ensure proper collaboration
- Enhancing system and application performance and reliability
- Working out of the office, where and when design changes must be implemented immediately
- Ensuring data security and protecting intellectual property

Classic workstations might provide the necessary performance to support traditional workloads, but they fail to meet requirements of today’s demanding engineering teams and are often too expensive. Today’s workstations must deliver a highly secure workspace while also enabling mobility for engineers and designers who are still too often chained to their desks using non-optimal workstations.

To fill the technology gap that exists between available solutions and today’s business and engineering requirements, HPE created a bare-metal VDI solution for engineering workstations. Designed with mobility and performance in mind, this solution allows users to work from anywhere securely, accessing their graphics-intensive CAD applications, supporting up to eight high resolution screens.

**Creating trusted digital workspaces**

Designed to meet the needs of graphics designers, solution architects, and visualizers, the HPE Engineering Workstation leverages the proven capabilities of HPE Edgeline EL4000 Converged Edge System and HPE ProLiant m710x Server Blades to deliver trusted digital workspace that provides exceptional benefits for graphics users:

- Improved cost- and energy-efficiency
- Enhanced system performance
- Proven data protection and security
- Simplified management and administration
- Increased workspace agility
- Greater business continuity
- Ergonomic working environment
- Space savings

**Your workstation, built your way**

At HPE, we understand that different user groups have dramatically different needs. For example:

- Disparate project teams need to move very large computer-aided design (CAD) files through the network quickly and securely.
- Mechanical engineers and architects need to reduce turnaround time and improve the accuracy of change requests from customers.
- Manufacturing and assembly sites want to provide immediate feedback on design issues that cause problems in production.
- Every worker needs fast, easy access to their primary productivity applications, including Microsoft® Office, rich graphic applications, and high-definition video.
- Differing communities of designers/engineers need improved collaborative working (file sharing) capabilities.

To meet all these requirements, HPE offers Bare Metal VDI—Engineering Workstations on two proven platforms—HPE Edgeline EL4000 and HPE Moonshot. The size of your business and your users' requirements, workloads, and locations will dictate which platform you choose.

**Benefits that matter**

HPE is using the industry-proven data center technology, Moonshot 1500 leveraging up to 45 HPE ProLiant m710x Server Blades with integrated Iris Pro GPU that caters for demanding workers like traders or mid- to low-tier engineers.

Using HPE Edgeline EL4000 with up to four ProLiant m710x Server Blades, the bare-metal VDI solution for engineers takes the graphics to the next level by adding additional performance with AMD Radeon Pro WX 4100 GPU. With these advanced systems, your organization benefits in many ways.

- **Optimized end-user experience**—Tested and certified to support major CAD, computer-aided manufacturing (CAM), and 3D applications, these systems offer constant, reliable performance; minimal latency; increased agility; and fast access from any device and location.
- **Breakthrough economics**—These systems are 10–50% less expensive, as compared to other VDI solutions. In addition, there is no hypervisor or external storage to manage or maintain.
**Simplicity**—Bare-metal deployment, with no virtualization and no licensing costs, makes the systems easier to deploy and operate.

**Security**—Proven data protection is built in to every system, coupled with easier management of devices and applications updates and maintenance.

**Scalability**—HPE Bare Metal VDI–Engineering Workstations running in an HPE Moonshot chassis can support up to 45 HPE ProLiant m710x Server Cartridges—with each cartridge offering dedicated resources for each designer, low- to mid-tier engineer, or designer. HPE Bare Metal VDI–Engineering Workstations running in the HPE Edgeline EL4000 chassis with an AMD Radeon Pro WX 4100 GPU offers dedicated performance for four high-end graphics users.

Whether you deploy HPE Bare Metal VDI–Engineering Workstations running in the HPE Edgeline EL4000 chassis with enhanced AMD Radeon Pro WX 4100 graphics in your branch offices, HPE Engineering Workstations running in the HPE Moonshot chassis with the embedded Intel® Iris® Pro GPU in your data center, or a right-fit combination of both, each system will deliver the right performance for your users, leveraging the compute performance of ProLiant m710x server blade.

**Supporting mainstream use cases**

The solution based on HPE Moonshot is optimized for supporting wide range of workloads running in your data center:

- Hosted desktop infrastructure (HDI)
- Virtual desktop and applications
- Stock trading and other financial services operations
- Mainstream CAD

Based on a revolutionary infrastructure design, HPE Moonshot with embedded Intel Iris Pro GPUs delivers breakthrough efficiency and scale by aligning just the right amount of compute, memory, and storage to get the work done. Moonshot replaces general-purpose servers with energy-efficient systems on chips (SoCs) that contain integrated Intel Iris Pro graphics accelerators tailored for graphics-intensive applications.

The HPE Moonshot chassis incorporates all the resources commonly found in a traditional server—power, cooling, management, fabric, switches, and network uplinks—all shared across 45 hot-pluggable server blades in a dense form factor. This architecture enables massive scale-out without a corresponding increase in complexity and management overhead.
Giving high-end users the performance they need

Once restricted to the central data center, high-end graphics are now generated and processed at the edge. The people who create very large and highly complex graphics files at the edge need more performance than standard PCs and workstations can deliver.

Designed specifically for today’s top-tier users, the HPE Bare Metal VDI–Engineering Workstation running in the Edgeline EL4000 chassis leverages the high-performing AMD Radeon Pro WX 4100 GPUs to ensure power users get what they need to succeed—from any location.

The HPE Edgeline EL4000 Converged Edge System delivers simple, smart, dense, and secure desktops or applications from anywhere, to any device. The system is designed to cache and rapidly process rich media and graphics-intensive applications in one converged system.

Performing all these operations at the edge via the Citrix Cloud creates a superior user experience, while also driving down networking and operational costs and reducing IT administration and system maintenance.

Learn more at

hpe.com/info/edgeline
hpe.com/info/moonshot