



# The workplace of the future

HPE Moonshot Mobile Workspace



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### Impressive total cost of ownership (TCO)

- Reduced hardware investment costs
- Flexible capacity financing models guarantee requirements-based allocation as per the **pay-as-you-grow** principle
- Elimination of the hypervisor layer realizes significant savings in license costs and an extensive reduction of complexity
- Reduced space requirements and energy costs

### High level of security and compliance

- Ensuring the highest safety standards
- Enforcing compliance policies
- Optimal risk reduction and protection against data loss

### Energy efficiency for a better CO<sub>2</sub> balance

- The low-power cartridges consume 45 percent less power than traditional rack servers.
- The high user density makes for reduced space requirements in the data center.
- The reduction of heat emissions results in environmental cost savings.

### Simplicity and reliability in operation

- Central, efficient management of desktops and applications
- Highly scalable, flexible expandability, and easy fulfillment of new requirements
- Improved desktop support and guaranteed business continuity

### Productivity at a new level

- Customized handling of different user requirements in a central system, while increasing user acceptance
- Consistently reliable performance and the highest quality for all users
- Adequate support for flexible and mobile working models

## Digital work style—productivity at its best

Today’s world of work is changing rapidly. Globalization, increasing competition, and cost pressures have companies rethinking their business models and adapting their work processes.

Whether online, offline, in the office or on the road, the digital workstyle removes previous limits of space and time. Influenced by the increasing digitization of their personal everyday life, employees today want to access business and personal applications and data at any time and from anywhere, without any difficulties—regardless of whether it is a personal or company-provided device and independent of the platform.

More and more companies are therefore developing new working models intended to promote the productivity of employees and meet their individual needs regarding work location, workplace design, work equipment, and working hours. The productivity of employees depends to a large extent on the accessibility of applications and information from anywhere and at any time. It is equally important to be able to share data, collaborate, and participate in meetings anywhere and at any time.

## Best support of individual work styles

There are different types of users in most businesses today. Not all users need the same functionality and performance. Task workers, such as employees at reception or a call center, usually use one or two simple applications. Productivity users typically use office applications such as email, Word processors, and spreadsheets.

Knowledge workers, currently the largest and growing user groups in companies, require simultaneous access to multiple applications and also increasingly use computation-intensive graphics and multimedia tools. Stable performance and smooth and uninterrupted consumption of a wide range of graphic and multimedia content, even when running parallel applications, are important prerequisites for the successful handling of daily tasks.

Power users and workstation-class users put high demands on performance, graphics, and availability, due to their field of activity and the graphics and design programs used (such as CAD)

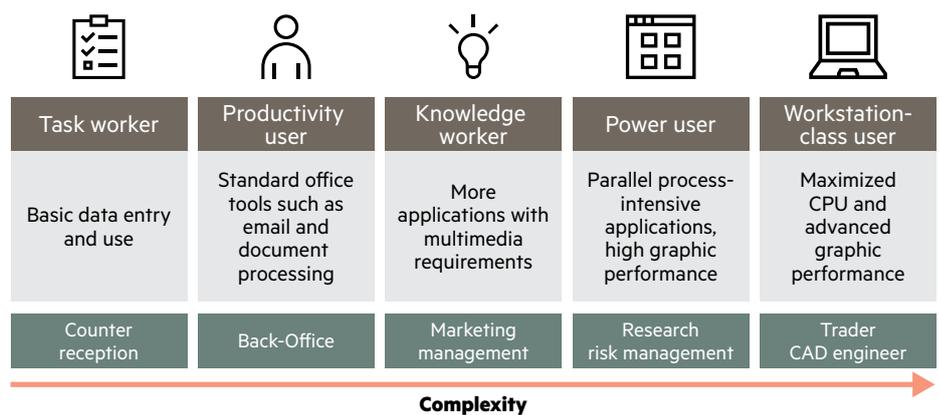


Figure 1. User types in a contemporary business



#### HPE ProLiant m510

Intel® Xeon® D Broadwell-D  
 8 core, 2.0 GHz (2.3 GHz all-core Turbo)  
 16 core, 1.7 GHz (2.1 GHz all-core Turbo)  
 Max. 128 GB DDR4 ECC RDIMM Memory  
 1x SATA-3 m.2—64/120 GB  
 4x Gen3 NVMe m.2, up to 4 TB  
 Integrated NIC: dual port 10GbE  
 HPE Integrated Lights-Out 4 (iLO 4)  
 (Remote Console)  
 HPE Trusted Platform Module



#### HPE ProLiant m710p

Intel Xeon E3-1284L v4, 2.9 GHz  
 (3.8 GHz Turbo)  
 Integrated Intel® Iris Pro 6300  
 graphics card  
 32 GB DDR3 SODIMM memory  
 120, 240, 480 or 960 GB m.2 SSD  
 Integrated network card: dual port 10GbE



#### HPE ProLiant m700: 4x

AMD Opteron X2150 APU, 1.5 GHz  
 Integrated GPU AMD Radeon graphics  
 card in the HD 8000 Series  
 8 GB DDR3 SODIMM memory  
 32 or 64 GB solid-state memory  
 (64 or 120 GB m.2 SSD)  
 Integrated network card: dual port 1GbE

## Caught between flexibility and standardization

In drafting the IT strategy, two very basic requirements must be reconciled: the need for agility and flexibility as part of high technology and quality requirements on the one hand, and the desire for maximum possible standardization due to major cost and operational aspects on the other. Unfortunately, the classic virtualization concepts, such as the virtual desktop infrastructure (VDI), which have been used in the past primarily for the centralization of IT infrastructure, have reached their limits. Changing user communication and media habits gives rise to increased demands on network bandwidth, and computing and graphics performance that cannot be adequately handled with the classic virtual client infrastructures.

## HPE Moonshot Mobile Workspace

With HPE Moonshot Mobile Workspace, companies can get a cost-effective, scalable, and stable foundation for the successful support of diverse user needs within a system that simultaneously meets all environmental and economic criteria of a modern workstation infrastructure. With a new server platform, the revolutionary Moonshot technology, Hewlett Packard Enterprise has laid the foundation for successful, customized support of diverse user needs within a standardized server system. This innovative technology allows for the efficient support of flexible and mobile work models with a cost-effective server infrastructure. Due to the high scalability of the platform, digital workstations with diverse applications, including simple client applications, classic productivity software, communication and collaboration tools, computing-intensive calculation and publishing programs, and video streams can be made available in a resource-optimized form and stable performance quality. A massive increase in productivity and an excellent user experience are guaranteed anywhere and at any time.

### HPE Moonshot for Citrix XenApp (desktop and application virtualization)

Citrix® XenApp environments can be provided by using a server card (HPE ProLiant m510, m710p, and m710x Server Cartridges), which is optimized for desktop and application virtualization. The HPE Moonshot for Citrix XenApp solution provides fast and reliable access to a variety of applications, including simple call center applications, office applications, and computing-intensive financial applications, as well as published desktops, and guarantees high-quality graphics performance. By centralization in a data center, access to corporate data can be secured, the risk of information loss can be reduced, real-time support can be given to user collaborations, desktop and application provision can be consolidated in a single architecture, and the integration of mobile devices can be accelerated. A massive increase in productivity and an excellent user experience are guaranteed anywhere and at any time.

### HPE Moonshot Hosted Desktop Infrastructure for Citrix XenDesktop Dedicated graphics and computing performance without virtualization

The HPE Moonshot Hosted Desktop Infrastructure (HDI) for Citrix XenDesktop takes an entirely new approach to the provision of user desktops from a data center. Whereas users in traditional VDI environments share physical servers and virtual resources and therefore have to put up with losses in performance. This HDI solution, with its system-on-chip concept, provides a dedicated graphics and performance service for each user that is 100 percent comparable with a traditional PC workstation and comes without additional virtualization technology or the associated complexity (no hypervisor layer). Nevertheless, Moonshot HDI for Citrix XenDesktop offers the same advantages as VDI in terms of costs, management, and security.



**HPE ProLiant m710x: 1x**

Intel Xeon E3 v5 4 core, 3.0 GHz  
(3.4 GHz Turbo)  
Integrated Intel HD Graphics P530 GPU  
Max. 64 GB DDR4 ECC SODIMM Memory  
1x SATA-3 m.2—32/64/120 GB  
4x Gen3 NVMe m.2 (2280) up to 4 TB  
Integrated NIC: dual port 10GbE  
HPE iLO 4 (Remote Console)  
HPE Trusted Platform Module

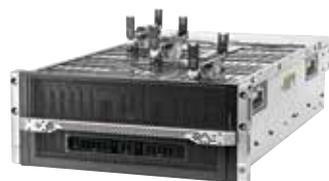
Users benefit from consistent performance and service quality independent of individual workload, for both high-resolution images and all types of multimedia applications. Therefore, Moonshot HDI for Citrix XenDesktop closes the service gap of classic virtualization solutions and seamlessly integrates into existing VDI-based back-end infrastructures. Due to the XenDesktop® foundation, all clients can still be centrally managed regardless of the technology used.

The HPE Moonshot Mobile Workspace solution is currently offered with three cartridges (HPE ProLiant m700/m710p/m710x Server Cartridges) with different specifications, covering the requirements of knowledge workers as well as the workloads of power users. An AMD cartridge (HPE ProLiant m700 Server Cartridge) with four nodes makes it possible to provide four dedicated physical user PCs per cartridge (respectively 180 physical computers per chassis) from the data center. The Intel cartridges (HPE ProLiant m710p and m710x Server Cartridges) can handle high requirements, and thanks to 1:1 allocation of cartridges to users (one node per cartridge), up to 45 workstations can be provided in just one chassis.

**Mix and match**

**Free choice in the design of the architecture**

With HPE Moonshot, you can freely choose the design of your desktop and application architecture. If you decide on an individual configuration, you have the opportunity to assemble a complete HPE Moonshot 1500 Chassis for mapping your workloads with a specific cartridge, in the mix and match mode, or create exactly the quantity of each cartridge type for mapping your user requirements.



**HPE Moonshot Chassis**

Up to 180 PCs  
Up to 45 powerful workstations  
Up to 7560 application users

**HPE Moonshot technology**

Compared to traditional rack server infrastructures, the HPE Moonshot architecture offers significant advantages in operating costs (TCO) since space and power consumption per user can be greatly reduced. The versatile HPE Moonshot 1500 Chassis supports up to 45 cartridges. Thanks to the 4.3U-form factor, 10 chassis fit into one rack. The low-power cartridges share management, power supply, cooling, and network. The combination of cost savings and scalability, paired with the advantages of the high graphics performance of the workload-optimized cartridges from the Mobile Workspace portfolio, efficiently makes a wide range of applications and desktops available to a large number of users.

HPE Moonshot represents a quantum leap in infrastructure design that offers companies the speed, scalability, and specialization needed to redesign their IT.

Learn more at  
[hpe.com/info/moonshot](http://hpe.com/info/moonshot)



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