Imagine having the density and performance you need for virtual desktop infrastructure in your data center. We make this a reality.

The way people work has changed dramatically over the past two years. Intermittent work-at-home orders have many business organizations turning to the cloud for solutions that once seemed temporary. Some offices are opening back up; even so, 75 percent of staff now want to keep working from remotely or in a flexible work environment. This means you need to rethink your virtual desktop and application deployments and costs. For example, can hosting your virtual desktop infrastructure (VDI) on premises help you deliver a responsive and consistent user experience with optimal total cost of ownership (TCO)? Cisco UCS® C245 M6 Rack Server powered by 3rd Gen AMD EPYC™ processors, make this answer a resounding ‘yes’!

Key benefits

- Simplify desktop provisioning, scaling, and management
- Increase in-office and remote employee productivity and collaboration
- Improve security by centralizing sensitive data
- Reduce IT operational and end-user support costs
- Support all desktop and workstation applications
Current and ongoing challenges

Many companies are moving to a desktop-as-a-service (DaaS) infrastructure to support remote work using a combination of on-premises and cloud-hosted infrastructure for staff convenience. These deployments face four primary challenges:

- Difficult and costly deployment and management
- Poor user experience and performance with teleconferencing applications
- Increased desktop session density and limited scalability
- Lack of data security assurances

Meet your challenges

The Cisco UCS C245 M6 Rack Servers can help you adopt a DaaS infrastructure that meets all four challenges.

- **Simplify desktop management, provisioning and scaling**—with our cloud-based Cisco Intersight™ platform
- **Improve employee collaboration**—with powerful 3rd Gen AMD EPYC processors
- **Increased desktop density and scalability**—with support for over 400 knowledge worker users on a single server
- **Improve security**—by keeping sensitive business data off remote desktops, laptops, tablets or mobile phones and enabling AMD Security Guard features, including secure encrypted virtualization (SEV)

- **GPU support**—if your organization runs complex graphical applications now or in the future

Cisco UCS C245 M6

The Cisco UCS C245 M6 has all the value-added capabilities you have come to expect from Cisco UCS servers including both high performance and up to 64 cores per ADM EPYC processor.

VDI users fall into three general use cases that help with sizing and performance calculations:

- **Task users**, such as call center workers
- **Knowledge workers**, such as professional or office workers
- **Power users**, such as architects, engineers, and animators who use very intensive graphical applications that normally require a GPU

We tested the Cisco UCS C245 M6 using the Login VSI knowledge worker profile to simulate virtual desktop users running Microsoft Windows 10 and Citrix Virtual Apps and Desktops. These workloads represent the most commonly used personas and delivery mechanisms for knowledge workers.

We also ran Login VSI in test mode on Microsoft Windows Server 2019 Remote Desktop Session Host (RDSH) with Citrix Virtual Apps and Desktops to determine the maximum supported number of task worker sessions.

The results of both tests demonstrate the power, performance, and value of Cisco UCS servers powered by 3rd Gen AMD EPYC processors.
Excellent virtual desktop performance

400 knowledge workers
Testing shows that the Cisco UCS C245 M6 server powered by one or two 64-core 3rd Gen AMD EPYC processors can easily support more than 400 simultaneous knowledge worker sessions running Microsoft Windows 10 virtual desktops. These tests did not saturate the CPU; available memory was the limiting factor.

1000 RDSH sessions
Testing also shows that the Cisco UCS C245 M6 server powered by one or two 64-core 3rd Gen AMD EPYC processors can support nearly 1000 task workers accessing Microsoft Windows Server 2019 RDSH with Citrix Virtual Apps and Desktops.

Powered by AMD EPYC
3rd Gen EPYC processors are highly recommended for VDI workloads including graphics-intensive workloads that can benefit from additional CPU cores and GPUs.

3rd Gen AMD EPYC processors
These world-record setting 3rd Gen AMD EPYC processors are built on the new “Zen 3” core combined with AMD Infinity Architecture. AMD EPYC processors support up to 64 cores, up to 128 lanes of PCIe Gen 4 I/O, and an integrated security processor on the chip. AMD EPYC 7003 CPUs provide up to 32 MB of L3 cache per core, 4–6–8 memory channel interleaving designed for better economics and performance in multiple DIMM configurations, plus synchronized clocks between fabric and memory to speed access.

Simplify management and reduce costs
You can manage Cisco UCS C245 M6 Rack Servers either as standalone systems or with the Cisco Intersight platform. Intersight is a software as-a-service (SaaS) infrastructure lifecycle management solution that delivers simplified configuration, deployment, visibility, maintenance, and support. The SaaS model means you always use the most up-to-date management software with no need to manage managers or worry about incompatible versions. Cisco Intersight gives you all the benefits of SaaS delivery and the full lifecycle management over Intersight-connected distributed servers and third-party
Learn more

- Cisco Intersight platform
- Cisco UCS C245 M6
- Cisco UCS C245 M6 Characterization for VDI

storage systems across data centers, remote sites, branch offices, and edge environments (Figure 2). This can help move you closer to a DaaS model for efficient desktop services.

The modular Cisco Intersight platform lets you adopt the services that best meet your requirements and significantly simplifies IT operations by bridging applications with infrastructure. The full visibility and ability to manage everything from bare-metal servers and hypervisors to serverless applications reducing both costs and risk. The included open REST API provides a common interface that natively integrates with third-party platforms and tools.

Performance that delivers

Cisco UCS C245 M6 powered by 3rd Gen AMD EPYC processors have all the power you need to run your VDI or RDSH workload with maximum efficiency and compute density—the foundations of a successful on-prem DaaS deployment. Add in Cisco Intersight platform and you are well on your way!

Act now

Contact your Cisco sales representative today to discover how Cisco UCS C245 M6 Servers and the Intersight platform can help you make DaaS a reality.

Figure 2. Cisco Intersight platform delivers complete lifecycle management.