



Amazon WorkSpaces

A cost-effective approach
to desktop deployment



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Introduction

Provisioning and managing desktops in today's dynamic workplace is a bit like wrangling a herd of cats. Employees are working all over the place, from neighborhood coffee shops and branch offices to hotels and airports in far-flung locations. Contract and temp workers are coming and going to meet peak or seasonal demands. And thanks to a proliferation of choices and the advent of BYOD, users may be doing their jobs with a wide range of devices—different form factors, different platforms, and different operating systems.

This new workforce reality, while great for employee satisfaction and productivity, comes at a cost. Providing well-equipped laptops and desktops is pricey. Securing, managing, and maintaining them is time-consuming for IT staff. And organizations may overprovision devices in order to quickly accommodate changes in user numbers and computing requirements. Even virtual desktop infrastructure (VDI) solutions involve procuring, deploying, and managing a costly and complex environment.

Desktop as a Service (DaaS) solutions like Amazon WorkSpaces can help wrangle desktops by providing a cloud-based approach to desktop deployment and management. Amazon WorkSpaces can transform this complex, time-consuming, and costly responsibility into a process that's simple, secure, flexible, and cost-effective.



Chapter 1

Introducing Amazon WorkSpaces



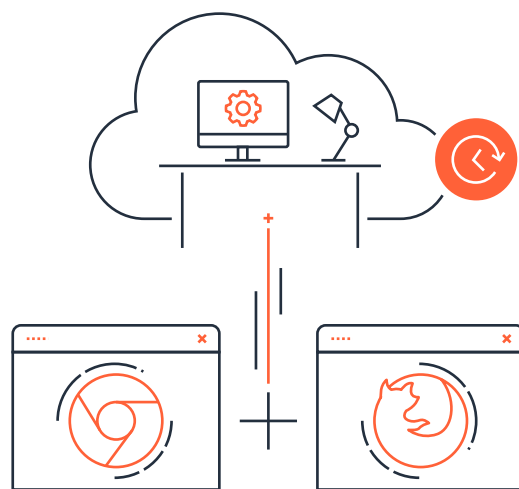
Amazon WorkSpaces is a managed, secure cloud desktop service running on the AWS cloud. With Amazon WorkSpaces, organizations can eliminate the high costs and management burden associated with traditional desktop deployment methods and VDI solutions, including the costs and complexity of managing hardware inventory, OS versions, and patches.

Amazon WorkSpaces replaces traditional desktops, providing users with a fast, responsive desktop experience from anywhere, at any time, from any internet-connected device. Offered as a bundle of compute resources, data storage, and software, Amazon WorkSpaces provides secure access to the data, applications, and resources users need, allowing them to perform day-to-day tasks as if they were using a traditional desktop.

Users can connect to their WorkSpaces using Chrome or Firefox web browsers on any internet-connected device or by running the free Amazon WorkSpaces client application from any supported device. These include Windows and Mac computers, Chromebooks, iPads, Kindle Fire tablets, and Android tablets.

Organizations can use Amazon WorkSpaces to provision either Windows or Linux desktops in just a few minutes and quickly scale to provide thousands of desktops to workers across the globe. They can pay either monthly or hourly, just for the WorkSpaces they launch, which helps save money when compared to traditional desktops and on-premises VDI solutions.

Users can connect to their WorkSpaces using Chrome or Firefox web browsers, or by running the free Amazon WorkSpaces client application.



Chapter 2

Key features of Amazon WorkSpaces



Amazon WorkSpaces provides a cost-effective and feature-rich alternative to managing traditional desktops or an on-premises solution for VDI:



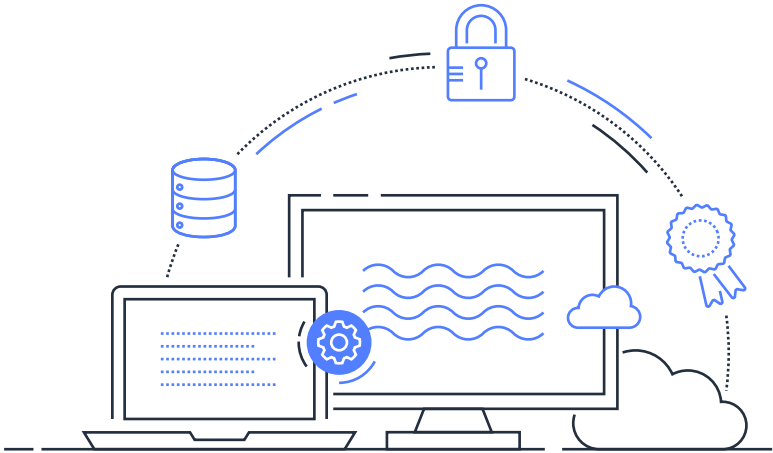
Flexible options

Amazon WorkSpaces offers a choice of service bundles that offer different CPU, GPU, memory, and storage resources based on user requirements. Organizations can switch between bundles as needed and reconfigure them dynamically with no interruption to users.



Bring existing licenses

Enterprises can bring their existing Windows 7 and Windows 10 licenses to Amazon WorkSpaces, allowing them to use WorkSpaces at a discount of up to 16%. To qualify, organizations must run at least 200 Amazon WorkSpaces and meet Microsoft License Mobility requirements.





Security

Amazon WorkSpaces helps meet demanding compliance and security requirements, including HIPAA and PCI. WorkSpaces lets organizations control which client devices can access their WorkSpaces based on IP address, device type, or through the use of digital certificates. Data is not stored on end-user devices, and data in transit is encrypted to help ensure business-critical data and applications are secure.

With Amazon WorkSpaces, organizations can easily integrate their existing Active Directory deployment to manage WorkSpaces and end-user credentials. As a result, they can apply Group Policies, deploy software using existing tools, and use a RADIUS server to enable multi-factor authentication (MFA). The service also integrates with the AWS Key Management Service (KMS) to easily manage encryption keys.



Scalability

With just a few clicks in the AWS Management Console, organizations can easily provision high-quality, cloud-based Windows or Linux desktops for any number of users. They can quickly scale to provide thousands of desktops to workers and add or remove WorkSpaces on demand to meet the needs of a dynamic workforce. Amazon WorkSpaces is available in [AWS Regions](#) across the globe to help deliver desktop access to users everywhere.



Persistent storage

Amazon WorkSpaces provides users with SSD volumes of persistent storage in the AWS cloud based on the bundle selected. These volumes are automatically backed up to Amazon S3 on a regular basis. Users can also store content on Amazon WorkDocs Drive.

Chapter 3

How Amazon's cloud desktops are different



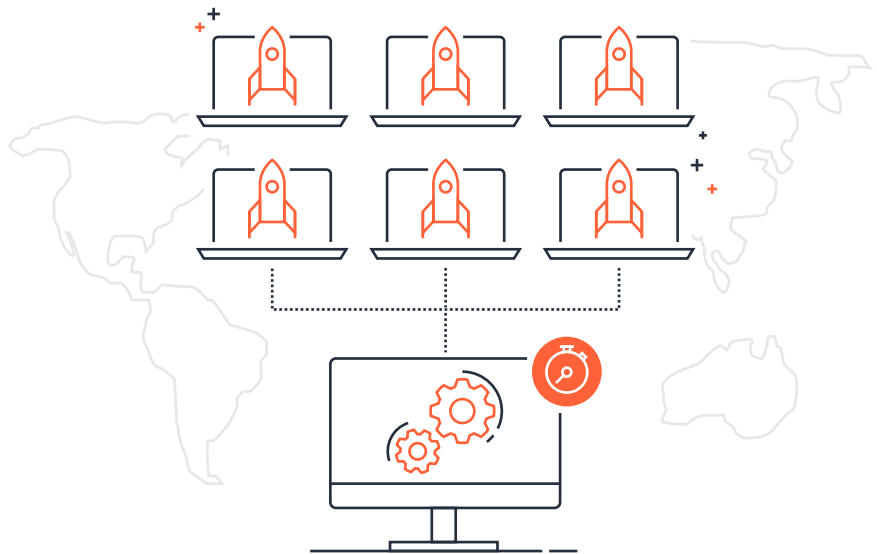
With Amazon WorkSpaces, IT organizations can provide high-quality portable desktops and applications to their users on the devices of their choice. This desktop strategy delivers significant cost savings and many other benefits in the process, including simplifying desktop delivery, eliminating the complexity of hardware inventory management, reducing administrative overhead, and enabling centralized management.

Both traditional desktops and VDI solutions require substantial capital investment and are often difficult to deploy and manage. Amazon WorkSpaces eliminates the need for that up-front investment in expensive on-premises servers, storage, and networking gear to support a VDI deployment, and eliminates the risk of over-buying hardware. It also dramatically simplifies and accelerates desktop delivery, saving yet more time and costs.

As a managed cloud desktop service, Amazon WorkSpaces eliminates many administrative tasks associated with managing the desktop lifecycle, from provisioning devices and applying patches to updating OS versions and recycling decommissioned devices. Organizations can centrally manage a global deployment of thousands of WorkSpaces from the AWS console. By relieving IT staff of the ongoing burden of infrastructure management, organizations can reallocate IT resources to projects that deliver more value to the business.

Amazon WorkSpaces adapts to changing business needs in a way that fixed assets simply can't. For a low, pay-as-you-go fee, Amazon WorkSpaces provides users a better experience and more functionality than physical desktops or VDI.

Organizations can centrally manage a global deployment of thousands of WorkSpaces from the AWS console.



Chapter 4

The ideal use cases



While Amazon WorkSpaces offers benefits to organizations of all sizes and configurations, it offers particular advantages in eight specific scenarios:



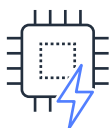
Equipping remote and mobile workers

IT organizations often struggle to provision and support desktops for remote and mobile workers such as sales and support teams. Amazon WorkSpaces gives these workers anywhere access to the applications they need from the device of their choice.



Onboarding and offboarding temp and contract workers

Provisioning desktops for seasonal workers, contractors, and other temporary users can pose its own challenges to IT organizations. With Amazon WorkSpaces, they can quickly provide these workers with secure and fully functional desktops, then terminate the WorkSpaces when they are no longer needed.



Powering graphics applications

Designers, CAD/CAM operators, and other graphics professionals often work on a project basis, leaving their high-performance graphics workstations under-utilized between projects. Amazon WorkSpaces allows organizations to provision high-GPU desktops, giving these users the performance they need for the length of time they need it—as well as providing the flexibility to access those high-performance resources from anywhere.



Enabling BYOD policies

Organizations that support bring-your-own-device policies are tasked with providing fast, easy, and secure access to apps and data across a wide range of devices. Amazon WorkSpaces allows organizations to provision secure desktops across multiple form factors, platforms, and operating systems, whether through the client app on supported devices or through a supported browser.



Facilitating development and testing

Developers and test teams need access to secure, high-performance resources to perform their specialized tasks, which often means maintaining an expensive, overprovisioned inventory of physical hardware. Amazon WorkSpaces allows development organizations to rapidly provision and scale desktops that meet their demanding requirements. And with Amazon WorkSpaces, source code is not stored on developers' devices, helping keep intellectual property safe.



Accommodating mergers and acquisitions

Mergers and acquisitions require fast onboarding and divesting of employees, teams, and entire departments. Amazon WorkSpaces helps IT organizations meet the challenges of these organizational changes without spending time and money going through complex integration cycles.



Replacing legacy VDI systems

Organizations are often surprised at the TCO of their VDI systems once they take into account the server, storage, and network hardware costs; data center space, power, and cooling costs; VDI software costs; and administrative costs. Amazon WorkSpaces can deliver desktops at less than half the cost of running and managing an equivalent VDI solution on an on-premises infrastructure.



Provisioning classrooms and labs

Schools, universities, and other educational institutions often don't have the resources to provision desktops and applications that are unique to each course. With Amazon WorkSpaces, these organizations can quickly provision persistent desktops that meet the specific learning requirements of individual classrooms and labs.

Chapter 5

WorkSpaces in the real world



Organizations across industries and across the globe have achieved significant cost savings, higher IT efficiency, and higher user productivity by deploying desktops through Amazon WorkSpaces.



Autodesk is a software company serving the architecture, engineering, construction, manufacturing, media, and entertainment industries. In the past, Autodesk would rent, configure, and deploy hundreds of physical workstations for the attendees of its many conference events, a process that took nine days and cost \$5,000 per workstation. With Amazon WorkSpaces, Autodesk can configure and deploy 450 workstations in two to three days at a cost of about \$300 each, significantly reducing the cost of their conferences.



Cornell University recently used Amazon WorkSpaces to equip students for a hands-on course on business intelligence systems. The solution gave students the flexibility to use their own devices—outside of a lab environment—while quickly providing all the specialized software tools they needed. Once the desktop image was created, instructor Jeff Christen was able to deploy WorkSpaces to over 40 students in around 20 minutes, delivering a superior and consistent desktop experience to every student.



Endemol Shine Nederland is a global creator, producer, and distributor of multimedia formats and entertainment. Due in part to a project-based business model, the company's workstations would often sit under-utilized during different phases of a project. In addition, traveling crews tended to use their own devices, leaving their bulky company-issued equipment back at the office. Deploying Amazon WorkSpaces addressed both issues, saving the company 70% of its annual PC budget.

Next steps

Ready to see what Amazon WorkSpaces can do for your organization? Click to learn more, or go ahead and get started today.

[Learn more](#)

[Get started](#)

