



# AWS End User Computing

Cost-effective, secure, and reliable virtual desktop and application streaming services

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# Our core tenets



Flexibility



Choice



Customer experience

# “There is no compression algorithm for experience.”

## MOST EXPERIENCE

16

years running Microsoft workloads in the cloud

## GLOBAL REACH

105

Availability Zones in 33 geographic regions

## MOST SECURE

143

security standards and compliance certifications

## PACE OF INNOVATION

90

percent of what AWS builds is driven by customers

## MOST FUNCTIONALITY

200+

fully featured services

## CLOUD LEADER

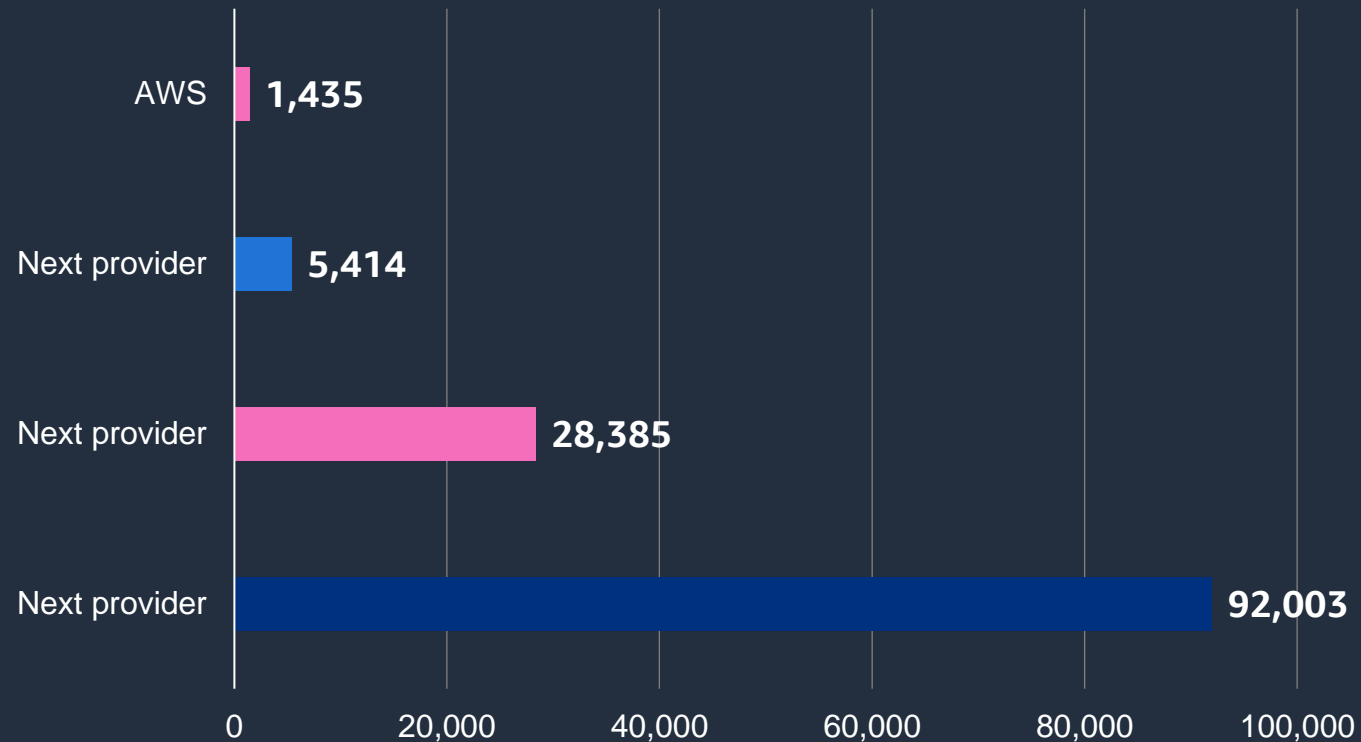
13

consecutive years in Gartner 2023 Magic Quadrant

# Year over year, AWS has less downtime hours across services

**DOWNTIME HOURS = DOWNTIME HOURS PUBLISHED \* REGIONS IMPACTED \* SERVICES IMPACTED**

**# of downtime hours by cloud provider in 2023**



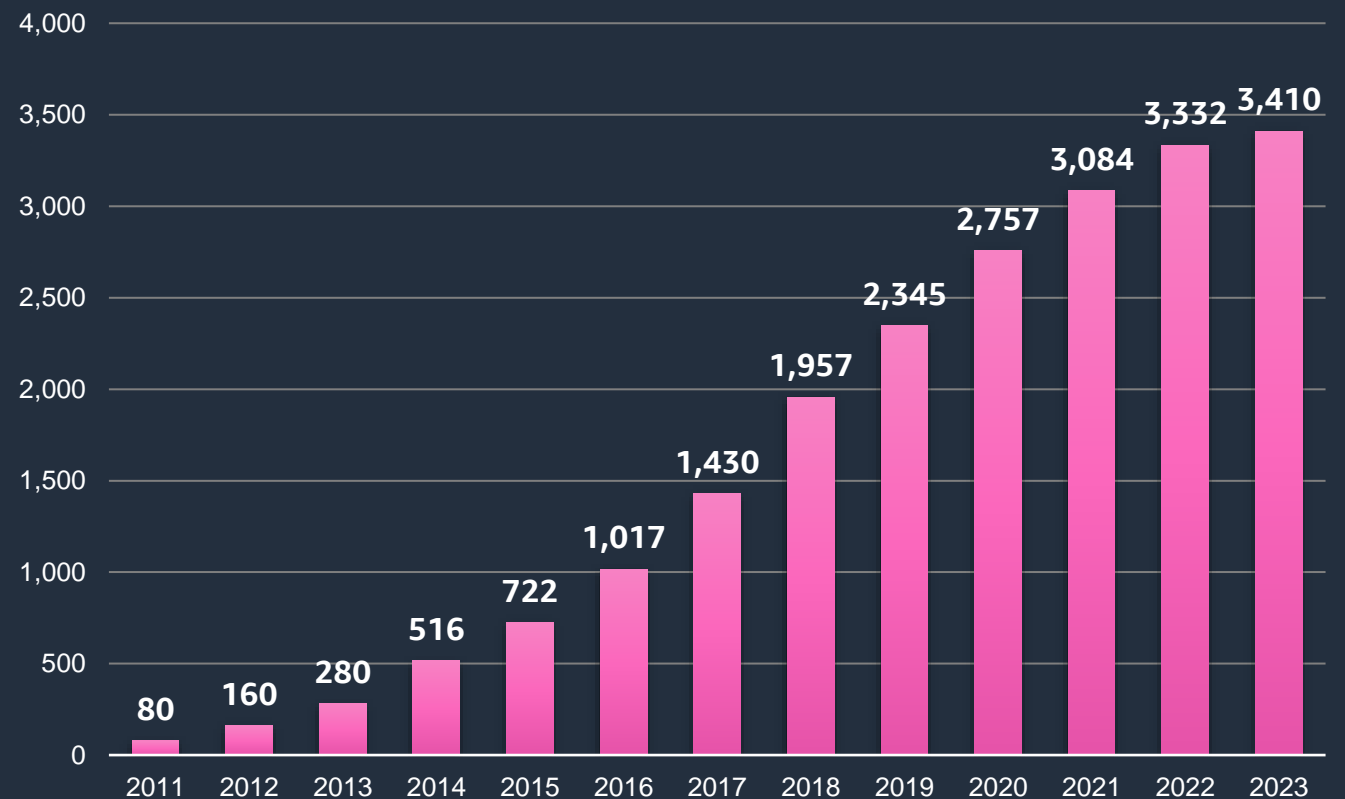
# Customers drive our fast pace of innovation

LEVERAGE THE LATEST TECHNOLOGIES TO EXPERIMENT AND INNOVATE MORE QUICKLY

“At AWS, **90% of what we build is driven by what customers tell us matter to them.** The other 10% comes from things that may not be directly articulated, but where a deep knowledge of customer needs and pain points allows us to invent new features and services that will surprise and delight them.”

*Daniel Slater*  
Worldwide Lead, Culture of Innovation  
AWS

# of AWS services and features released each year



# AWS end-user computing services

## Virtual desktops



### Amazon WorkSpaces Core

Infrastructure for third-party virtual desktop software



### Amazon WorkSpaces

Persistent virtual desktops



### Amazon AppStream 2.0

Non-persistent virtual desktops



### Amazon WorkSpaces Web

Low-cost, secure web browser



### Amazon AppStream 2.0

SaaS conversion, application streaming



### Amazon WorkSpaces Thin Client

Cost-effective, secure, simple access to virtual desktops



# Run third-party VDI software of your choice

WORKSPACES CORE PARTNERS




vmware  
Horizon

GA



citrix

Public Tech Preview\*



Workspot.  
Cloud PC

GA



LEOSTREAM

GA

Rapid deployment  
Simple provisioning

Consistent user experience  
No need to update client

Easy management  
Existing console, no retraining



\*Citrix public tech preview allows customers to leverage new features and capabilities in a non-production or limited-production environment to test and provide feedback based on their experience. See Citrix documentation for more information.



# Global customer base



# Genomics England

- Challenge

- While the company's on-premises VDI solution provided researchers access to the data and tools needed to do their jobs, ongoing management of the solution was resource intensive and often prevented the Genomics England IT team from working on other projects. The company needed to focus limited IT staff on improving service offerings and user experience, rather than managing infrastructure.

- Solution

- Genomics looked to the AWS End User Computing team to provide a fully managed solution to address challenges with its on-premises VDI solution. Not only did WorkSpaces allow the UK-based company to comply with data-residency requirements, it helped optimize end-user experience for researchers leveraging Genomics applications already running at AWS. Genomic sequencing data, security was also an important factor. Moving to a managed service ensured that Genomics England benefited from AWS's shared responsibility model and **offloaded ownership of underlying VDI security administration to AWS.**
- "User feedback collected during beta testing showed **WorkSpaces was easy to use and delivered great performance.** In fact, users who participated in the beta program were quite vocal about not wanting to go back to the old VDI solution."  
– Sarah Egan, IT Manager, Genomics England
- "After migrating to WorkSpaces, we no longer need to manually adjust infrastructure allocation when someone wants to run a resource-intensive workload. **Having a fully managed solution allows us to focus our small IT team on developing new services and improving our applications.**"  
– Graham Binns, Head of IT Strategy and Architecture, Genomics England



# Lucid Motors

- Challenge

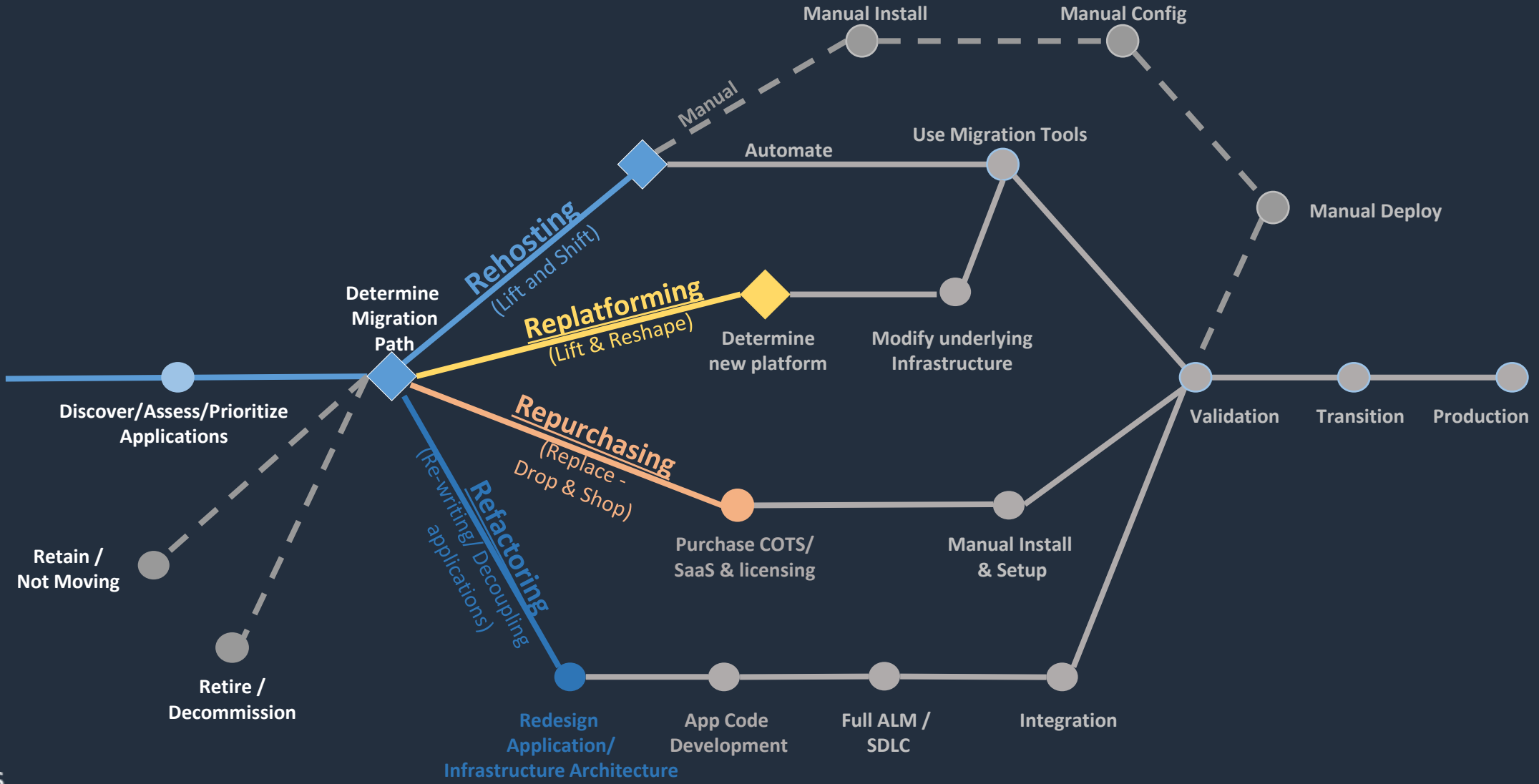
- The need to move their global users to more remote but still controlled environments. Protecting intellectual property and also having minimal upfront costs.

- Solution

- After looking at many solutions they found that Amazon WorkSpaces Core with Horizon 8 provided the best flexibility and the ability to protect some of their existing investments. Licensing, the technical skillset of our staff and the existing on prem. hardware given that this is a hybrid deployment.
- 900 desktops within 30 days, users can request new desktops in minutes vs hours
- Blast protocol helped them reduce the size of the instance needed for their desktops
- Support for Microsoft Office 365



# Journey & Migration Strategy



# Endpoints

•Examples of Purpose-built services from Amazon includes:

•[Amazon WorkSpaces Thin Client](#) - Reduce costs, simplify logistics, and accelerate deployment using virtual desktops

•[AWS Systems Manager](#) - Manage your resources on AWS and in multi cloud and hybrid environments

•[AWS Device Farm](#) - Improve the quality of your web and mobile applications by testing across desktop browsers and real mobile devices hosted in the AWS Cloud

Examples of Partner solutions include:

Solutions that have achieved acceptance into the [Digital Workplace Competency program for Endpoint Management](#)

Okta, SOTI, PrinterLogic

Explore the AWS Marketplace with search examples like [Endpoint Management](#) or [Endpoint Protection](#)



# Applications

## Examples of Purpose-built services from Amazon includes:

[Amazon WorkSpaces Family](#) - Fully managed, secure, reliable virtual desktop solutions for every workload.

- [Workspaces All-inclusive](#) - fully persistent, virtual desktops for all worker types.
- [WorkSpaces Core](#) - Managed virtual desktop infrastructure designed to work with third-party VDI solutions
  - [VMware Horizon 8 powered by Amazon WorkSpaces Core](#) - Unified, hybrid VDI solution simplifies management, enhances security, and reduces costs
  - [Workspot Cloud PCs powered by Amazon WorkSpaces Core](#) - Advanced user-base observability with the security and scalability of the AWS Cloud.
  - [Leostream powered by Amazon WorkSpaces Core](#) - Improve user visibility and cost management, while leveraging the security and scalability of the AWS Cloud
- [WorkSpaces Web](#) - Secure browser access to internal websites and SaaS apps starting at \$7 per month

[Amazon AppStream 2.0](#) - Secure, reliable, and scalable access to applications and non-persistent desktops from any location

[AWS Systems Manager](#) - Manage your resources on AWS and in multicloud and hybrid environments

[AWS Identity Center](#) - [AWS Access Portal](#) - use application assignments to provide single sign-on access to many SAML 2.0 business applications, including Salesforce, Box, and Microsoft 365.

## Examples of Partner solutions include:

Solutions that have achieved acceptance into the [Digital Workplace Competency program for Application Management](#)

CloudSoftwareGroup (Citrix), Horizon\*, OneIdentity, eG innovations, Nutanix, Okta,

Explore the AWS Marketplace with search examples like [VDI \(Virtual Desktop infrastructure\)](#) or [Workforce Identity](#)



# Collaboration

## Examples of Purpose-built services from Amazon includes:

[Amazon WorkDocs](#) - Secure document sharing and content collaboration—connecting teams everywhere

[Amazon Connect](#) - AWS's AI-powered contact center. Accelerate CX innovation at a lower cost Transform your customer experience (CX) at scale.

[Amazon Chime](#) - Meet, chat, and place business phone calls with a single, secure application.

## Examples of Partner solutions include:

Solutions that have achieved acceptance into the [Digital Workplace Competency program for Collaboration](#).

Nasumi, Druva, SmartSheet, Kaltura, Whispr, Bluescape, Monday.com

Explore the AWS Marketplace for categories like [Business Application](#) or [Collaboration & Productivity](#)

# Action

Visit us at our booth and check out these great demos

- Amazon ThinClient
- Amazon WorkSpaces Core and Horizon 8
- Improved observability
- Ubuntu desktops with Amazon WorkSpaces

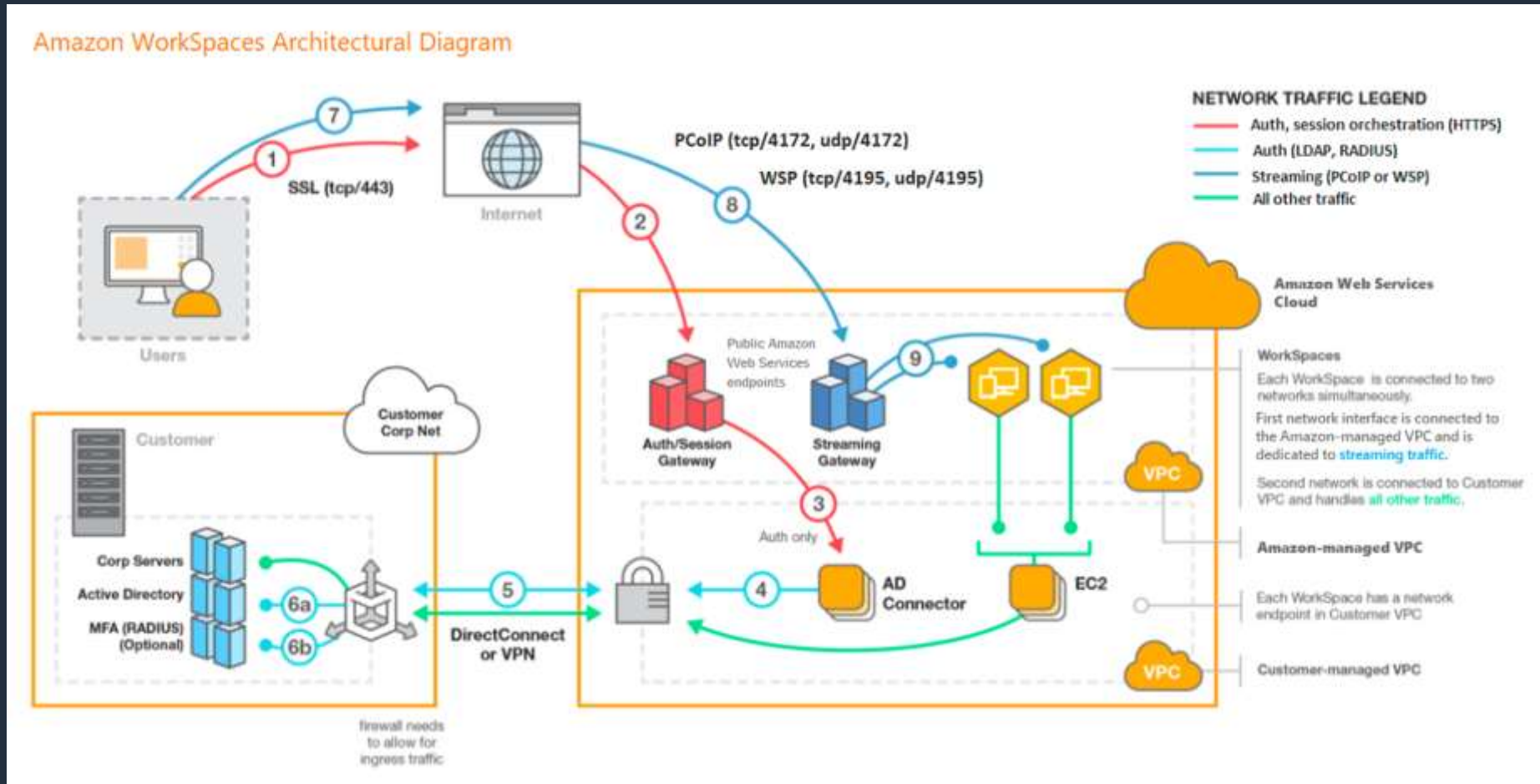
Contact your AWS rep to learn more about Migration Acceleration Programs





# Thank you!

# WorkSpaces architecture and network traffic flow





Freedom to bring previously purchased software to the cloud

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Freedom to run on-premises software on the cloud of your choice

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Freedom from retaliation for cloud choices

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Equal treatment for software licensing fees in the cloud

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Directory software should be interoperable

# Amazon WorkSpaces Thin Client

REDUCE COSTS, SIMPLIFY LOGISTICS, AND ACCELERATE DEPLOYMENT



**Reduce end-user computing cost**

Low-cost device starts at \$195 USD

**Ships directly from Amazon to end users**

Simplifies logistics

**Set up in minutes**

Pre-configured for simple end-user deployment

**Built for AWS virtual desktop services**

Works seamlessly with WorkSpaces, Workspace Web, and AppStream 2.0



# WorkSpaces Thin Client



OCTA-CORE, ARM CPU, 2GB RAM, HDMI 2.1 OUT

HUB: HDMI OUT, 4 USB-A PORTS

DUAL-MONITOR SUPPORT

WIRED OR WIRELESS KEYBOARD AND MOUSE

WIRED WEBCAM AND HEADSET



# WorkSpaces Thin Client

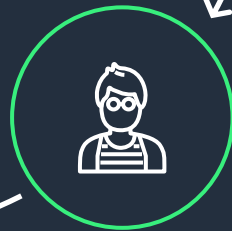
**1.**  
Purchase WorkSpaces  
Thin Client through  
Amazon Business



**2.**  
Amazon ships  
directly to the  
employee or office



**3.**  
End user connects  
peripherals and logs  
into virtual desktop



**4.**  
Admin manages the  
registered thin clients  
through AWS Console



# Example use cases

## Contact centers

- Simplified hoteling in corporate offices
- Secure remote work
- Empower customer service agents with low-cost workstations

## Administration / back office

- Enable HR, payroll, accounting, and finance employees
- Protect sensitive corporate, employee, and customer data

## Front desk / kiosk

- Simple front-desk infrastructure
- Hospitality customer check-in
- Corporate office badge-in

