Moving Your Desktop to the Cloud with Amazon WorkSpaces

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End-User Computing in AWS

**WorkSpaces**
Virtual desktops
- Secure access from anywhere
- Monthly pricing
- March 2014

**WorkSpaces Application Manager**
Virtual applications
- Centralized application deployment
- Monthly subscription options
- April 2015

**WorkDocs**
Secure enterprise document collaboration
- Central sync, document feedback
- Secure access from anywhere
- September 2014

**WorkMail**
Secure email and calendaring
- Strong security controls
- Existing desktop, mobile support
- January 2015

**Directory Service**
Managed directories
- Simple AD, AD Connector, Managed AD
- October 2014
What is WorkSpaces?
Managed Cloud Desktops

- Secure
- Pay-as-you-go
- Simple to deploy and manage
- Scale & consistent performance

Highly interactive and secure desktops your users will love
Desktop as a Service

Microsoft Windows desktops on AWS
- realizing the “virtual desktop dream”

The cloud replacement for traditional VDI
- no-hassle infrastructure, capacity, perf
- anywhere-access, industry-standard security

Decentralization meets consumerization
- “Corporate IT embraces Consumer IT”
- device and location independence
Why WorkSpaces?
Why Desktops as a Service?

Admins want to
• Secure resources
• Lower cost structure
• Deliver high quality user experience
• Simplify administration
• Scale on-demand

Users want to
• Get instant access to apps and data
• Go between devices
• Get work done from anywhere
Popular Use Cases

- BYOD
- Mergers and acquisitions
- Mobile workers
- Temporary workers
- Securing data
- Dev/Test
- Compliance requirements
- Call centers
- Training and labs
- Demos
Simplify Desktop Deployments

Amazon WorkSpaces simplifies physical and virtual desktop deployments
Feels Familiar

Launch the number of WorkSpaces needed

Heavy lifting taken care of by AWS

On-demand, pay-as-you-go
Standard Windows Management

- Treat like any other Microsoft Windows desktop environment
  - **Auth and Policy**: Active Directory, GPOs
  - **Patching**: WSUS, SCCM, 3rd-party
  - **Distribution**: SCCM, App Layering, App Virt
  - **Profile Management**: 3rd-party
  - **Automation**: Powershell, .NET, and more

Use the technologies you know.
Simple to Provision

- custom-image the way you want
  - install-all or inject
- map to desired hardware configuration
  - 1 vCPU, 2GB RAM
  - 2 vCPU, 4GB RAM
  - 2 vCPU, 8GB RAM
  - NEW! 8vCPU, 16GB RAM, nVIDIA K520 GPU

Zero to desktop in ~30 minutes.
Keep Data Highly Secure

- Enforce MFA with RADIUS-based solutions
  - Gemalto, Entrust, RSA, Duo Security … just to name a few

  - no data stored locally on end-user device
  - utilizes Teradici PCoIP for streaming protocol
  - supports storage volume encryption with customer-owned keys
Supports Multiple Devices

- **Desktop, Laptop**: PC, Mac
- **Tablets**: iOS, Android, Kindle, Surface
- **Zero Clients**
- **Thin Clients**
- **Chrome OS**

Reuse your existing devices, or acquire to fit your needs.
Monitoring Support

- Consume custom metrics and events
- Take action on key conditions as they occur
- Become more proactive, not reactive

Tie in with other AWS services to …
- open trouble tickets if something happens
- archive data for reporting and analysis
- process large file sets in the cloud
General Availability

7 Regions

- Americas
  - Oregon
  - Northern Virginia
- EMEA
  - Ireland
  - Frankfurt
- APAC
  - Tokyo
  - Singapore
  - Sydney

(as of November 2016)
Why are Multiple Regions Important?

Keep your desktops close to your users ...

or ...

Keep your desktops close to your apps.

You decide.
Graphics WorkSpaces
Just Announced!

AWS Blog

New – GPU-Powered Amazon Graphics WorkSpaces

by Jeff Bar | on 14 Nov 2016 | in Amazon WorkSpaces, Launch | Permalink | Comments

As you can probably tell from my I Love My Amazon WorkSpace post I am kind of a fan-boy.

Since writing that post I have found out that I am not alone, and that there are many other WorkSpaces fan-boys and fan-girls out there. Many AWS customers are enjoying their fully managed, secure desktop computing environments almost as much as I am. From their perspective as users, they like to be able to access their WorkSpace from a multitude of supported devices including Windows and Mac computers, PCoIP Zero Clients, Chromebooks, iPads, Fire tablets, and Android tablets. As administrators, they appreciate the ability to deploy high-quality cloud desktops for any number of users. And, finally, as business leaders they like the ability to pay hourly or monthly for the WorkSpaces that they launch.

New Graphics Bundle

These fans already have access to several different hardware choices: the Value, Standard, and Performance bundles. With 1 or 2 vCPUs (virtual CPUs) and 2 to 7.5 GB of memory, these bundles are a good fit for many office productivity use cases.

Today we are expanding the WorkSpaces family by adding a new GPU-powered Graphics bundle. This bundle offers a high-end virtual desktop that is a great fit for 3D application developers, 3D modelers, and engineers that use CAD, CAM, or CAE tools at the office. Here are the specs:

- **Display** – NVIDIA GPU with 1,536 CUDA cores and 4 GB of graphics memory.
- **Processing** – 2 vCPUs.
- **Memory** – 15 GB.
- **System volume** – 100 GB.
- **User volume** – 100 GB.

This new bundle is available in all regions where WorkSpaces currently operates, and can be used with any of the devices that I mentioned above. You can run the MS-licensed operating system (Windows Server 2008 with Windows 7 Desktop Experience), or you can bring your own licenses for Windows 7 or 10. Applications that make use of OpenGL, OpenGL ES, CUDA, OpenCL, and the...
Quick Stats

• ~500 Graphics WorkSpaces for user desktop
• centralized file servers for lab datasets (~150GB data)
  • 16 NVIDIA K80 GPUs, 64 vCPUs, 732 GiB, 20Gbps network I/O
• zero clients for true stateless conditions
  • HP t310, Dell Wyse 5030
Demo
How did I do?

- Your class feedback is critical. Fill out a class survey now.

- Use the AU mobile app or fill out a class survey online.

- Give feedback after each session.

- AU speakers will get feedback in real-time.

- Your feedback results in better classes and a better AU experience.