

TRG Talk:



Work without workstations with Amazon AppStream 2.0

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Current Challenges - Engineering Workloads



Expensive
Hardware



Massive
Data Movement



IP & Data
Security



Evolving
Workforce & Customers



Mobility



Time To Market



Software & Hardware
Upgrades

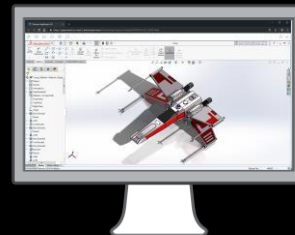


Dynamic
Organizations

amazon AppStream 2.0



Co-located Compute, Graphics,
Apps, Data



Client



Demo - Try It Now

AppStream 2.0 benefits



Work without workstations



Accelerate engineering workflows



Centralize and secure apps and data



Collaborate globally



No hardware or software to manage



Consistent performance and global scale

Popular apps customers run on AppStream



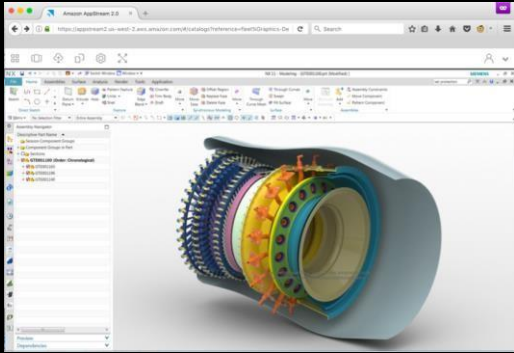
Use case #1: Business apps and DevOps



- **Data** - no data resides on local device
- **Security** - apps are centrally patched
- **Performance** - apps and data co-located
- **Agility** - no device constraints, scale on demand, with global reach
- **Example** - SAP client, BI tools, helpdesk tools

Users want fast, secure, and instant access to app workflows

Use case #2: Design and engineering



- **Speed** - faster, better design through simulations and quick iterations in the cloud
- **Performance** - apps and data co-located
- **Agility** - no device constraints
- **Collaboration** - global, follow-the-sun workflows
- **Example** - Design workflows for AutoCAD

Designers want cloud enabled 3D workflows

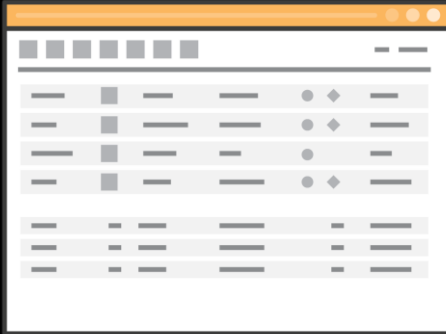
Use case #3: ISVs - Online Trials & Training



- **Trials, Pre-sales** - software trials on demand, with no installs, or special hardware required
- **Training** - educate new and existing users on the latest software version and features

ISVs want to quickly trial their software to customers with limited IT overhead.

Use case #4: ISVs - Software-As-A-Service



- **Enable cloud platforms** - run apps anywhere
- **SaaS** - convert desktop apps to web subscriptions

ISVs want to SaaSify their apps with no code rewrite.

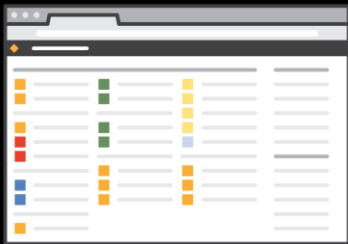
Use case #5: Education



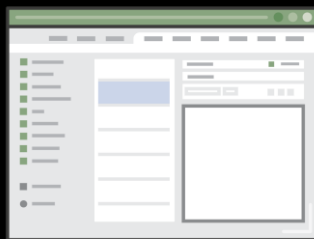
- **Virtual labs** - convert physical labs to classrooms
- **Any device** - use popular design, engineering, and, gaming apps on Chromebooks and Macs
- **Online classrooms** - deliver coursework and labs online, including apps

Democratize the use of industry leading software by students

Simple User Experience



Simple browser interface



Use multiple apps
at the same time



Identity integration
(SAML, User Pools, Custom)



File upload / download



Persistent file store



Personalize
(Roaming profiles)

User experience: Consistent performance



Each user gets a full virtual machine

1 user ↔ 1 VM

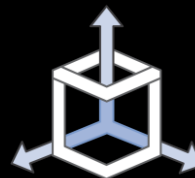
Streaming Protocol (NICE DCV)



HTTPS secureaccess



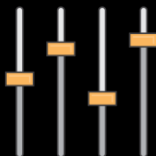
Encrypted pixelstream



3D and business apps



Adaptive quality of service



Adaptive multi-codec



Optimized image quality

Security: Secure streams, users, apps, and instances



**Secure access via
streaming gateways**

Firewall friendly
HTTPS/443
AES-256 Encrypted

**Non-persistent
instances**

Instances terminated after
every user session

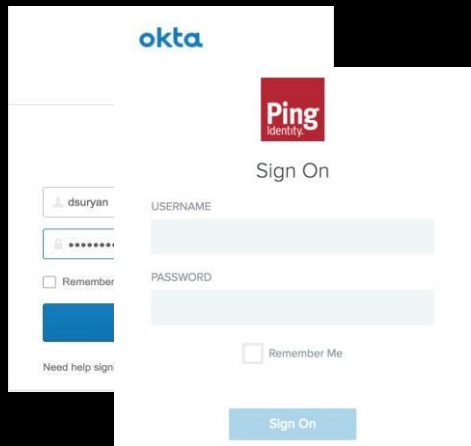
**Launch in your
Amazon VPC**

Control network access
for users/apps

**Data movement
controls**

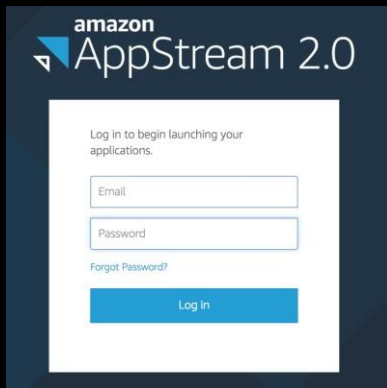
Control file transfer,
clipboard, and printing

Identity: Bring your own or built-in



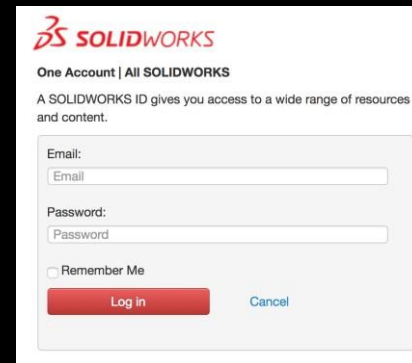
The screenshot shows the Okta Sign On interface. At the top left is the 'okta' logo. In the center is the 'Ping Identity' logo. Below the logo is the text 'Sign On'. There are two input fields: 'USERNAME' and 'PASSWORD'. The 'USERNAME' field contains the text 'dsuryan'. Below the 'PASSWORD' field is a 'Remember Me' checkbox. At the bottom left is a 'Need help sign' link. At the bottom center is a blue 'Sign On' button.

SAML 2.0



The screenshot shows the Amazon AppStream 2.0 Log In page. At the top left is the 'amazon AppStream 2.0' logo. Below the logo is the text 'Log in to begin launching your applications.' There are two input fields: 'Email' and 'Password'. Below the 'Password' field is a 'Forgot Password?' link. At the bottom center is a blue 'Log in' button.

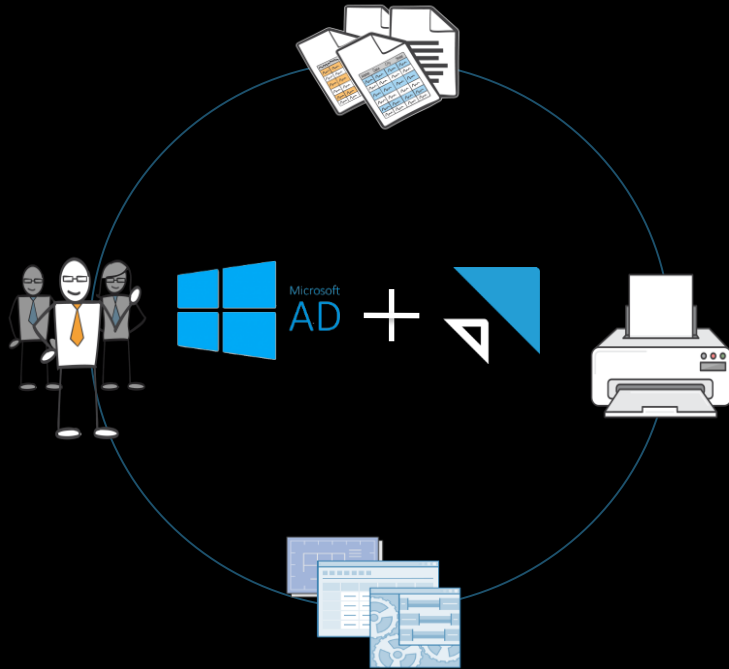
Built-in User Pool



The screenshot shows the SolidWorks One Account | All SOLIDWORKS page. At the top left is the 'SOLIDWORKS' logo. Below the logo is the text 'One Account | All SOLIDWORKS'. Below that is the text 'A SOLIDWORKS ID gives you access to a wide range of resources and content.' There are two input fields: 'Email' and 'Password'. Below the 'Password' field is a 'Remember Me' checkbox. At the bottom left is a red 'Log in' button. At the bottom right is a blue 'Cancel' button.

Custom Identity

Identity: Connect to your domain



- Join AppStream to your domain (optional)
- SSO access to intranet sites
- Access network file shares
- Print to network printers

Data: Connect to your storage



Home Folders
(Amazon S3)



Microsoft OneDrive
for Business



Google Drive (GSuite)



Network fileshares



File upload/download
from local device



AWS Storage Gateway

Instance performance matching users / apps

Standard

2 - 4 vCPU cores
4 - 8 GiB memory
Starts at \$.10/hr



Compute

2 - 32 vCPU cores
4 - 60 GiB memory
Starts at \$.25/hr



Memory

2 - 32 vCPU cores
15 - 244 GiB memory
Starts at \$.25/hr



Graphics Design

AMD FirePro virtualized GPU
2 - 16 vCPU cores
7.5 - 61 GiB memory
1 - 8 GiB GPU
Starts at \$.25/hr



Graphics Pro

NVIDIA Tesla M60 GPU
16 - 64 vCPU cores
122 - 488 GiB memory
8 - 32 GiB GPU
Starts at \$2/hr



Admins: Managed environment



SDK



Console

- Integrates with your IT environment
- Manage through AWS SDK or console
- No hardware or software to deploy, patch, or manage
- Automatically scale to meet demand
- Monitoring support
- Use nearest region to reach global audience

Q&A

Upcoming TRG Virtual Talks

8/5 - Content Marketing for Beginners (10am)

11/5 - Blog Posts that Drive Traffic (10am)

11/5 - Creative Problem Solving during COVID-19 (3pm)

13/5 - TEBIS: what it is and how to use

THANK YOU