



AWS  
re:Invent

**EUC334**

# Give students access to applications for class through any computer

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Sr. Tech. Product Manager  
Amazon AppStream 2.0  
Amazon Web Services

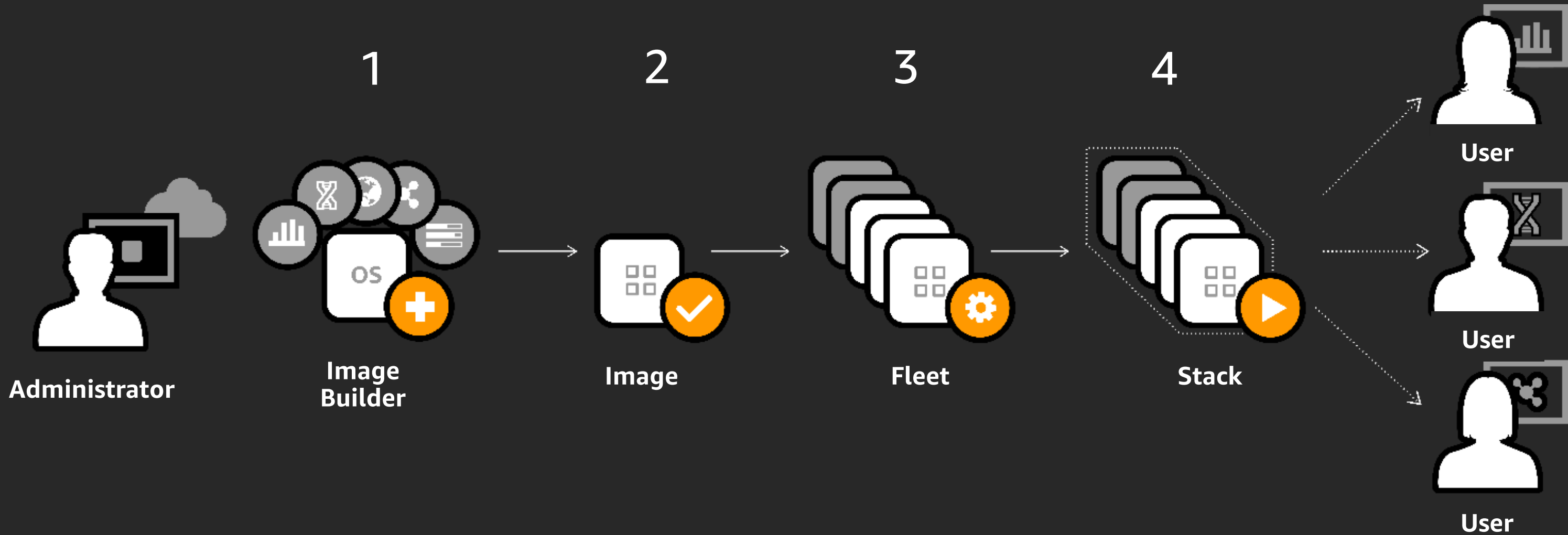
## **Marty Sullivan**

Cloud Systems Architect  
Cornell University

amazon  
 AppStream 2.0

Fully managed application streaming

# How does Amazon AppStream 2.0 work?



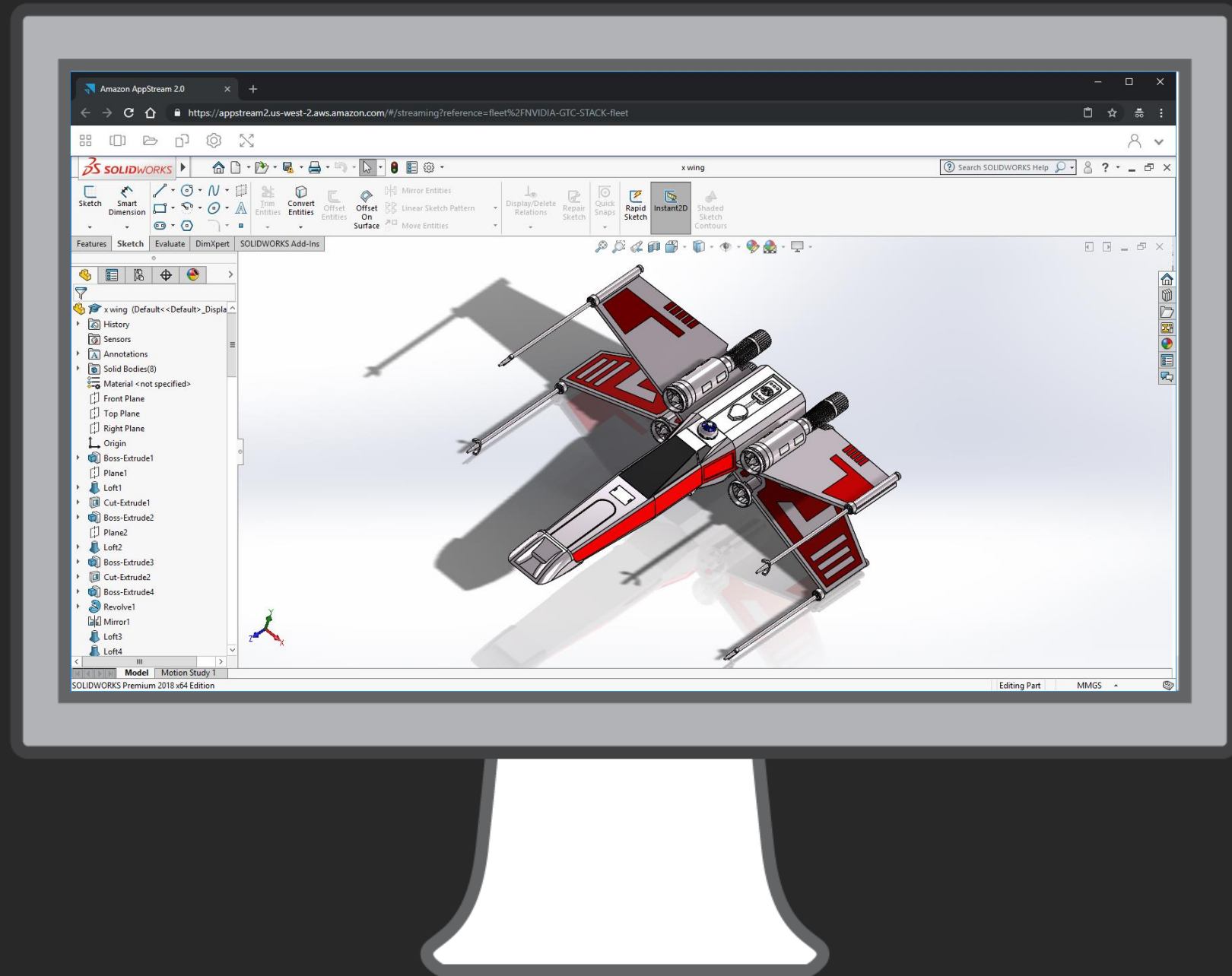
# How do users access AppStream 2.0?

Applications are streamed to users' devices as encrypted pixels.

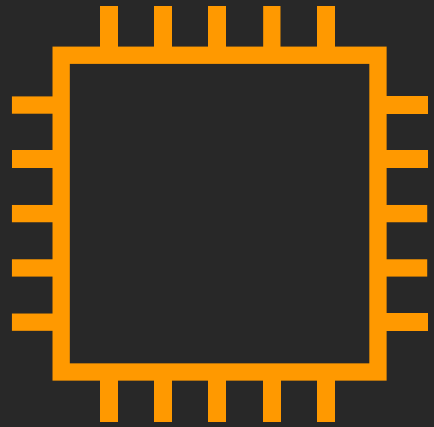
Applications run entirely on AppStream 2.0 instances (virtual machines).

Two ways for users to access AppStream 2.0:

1. An HTML 5-compatible browser
2. The AppStream 2.0 Client  
(Windows)



# How do customers pay for AppStream 2.0?



## Streaming Instance

Hourly fee for a running AppStream 2.0 instance

Starting from \$0.10/hour



## Stopped Instance

Hourly fee for a stopped AppStream 2.0 instance

Starting from \$0.025/hour



## User

Monthly fee per unique user who streams apps

\$0.44/user for EDU  
\$4.19/user for commercial

# How can schools and universities use AppStream 2.0?



- **Online Courseware:** Provide course-specific desktop applications to students
- **Virtual Labs:** Convert physical labs to AppStream 2.0 environments and reclaim your space for classrooms
- **Testing:** Administer exams and standardized tests with no local installation required
- **Any Device:** Access popular design, engineering, and gaming applications on Chromebooks and Macs

*Democratize the use of industry-leading software by students*

# Cornell University

Marty Sullivan  
Cloud Systems Architect

Visit <https://aws.amazon.com/appstream2/>

## Resources

- [Try AppStream's](#) demo experience
- [Follow the simple getting started guide](#)
- [Integrate AppStream with your web portal](#) using the ISV workshops
- [Learn about best practices and new features](#) – Follow our blog!

## Engage an APN Partner



# 2019 Features

- **Session scripts** – Create and execute scripts at session start to prepare the session, or at session end to clean the session up
- **Long running sessions** – Increase the maximum time a user can use a streaming session to up to 100 hours
- **Multi-touch support** – Use multitouch gestures on your desktop applications from your tablet or PC
- **Auto app launch for SAML** – Automatically launch an application at the start of a SAML-initiated streaming session
- **Idle Timeout** – A configurable timeout to disconnect users that are idle
- **Usage Reports** – User session details (date, session length, applications, stack, username) are available in S3 for reporting
- **Windows Server 2016/2019** – Use Windows Server 2016 and Windows Server 2019 as the host operating system
- **Programmatic image creation** – On-image builder CLI operations to programmatically manage/create an image
- **File system redirection** – Users can access their local drives and folders within remote session with the Windows native client
- **Private streaming endpoints** – Route the streaming traffic through private VPC endpoints enabling DirectConnect or VPN
- **IAM Role Assertion** – Apply an IAM Role to streaming instances to enable calling AWS services without managing credentials
- **FIPS Endpoints** – FIPS-enabled endpoints for the commercial and government US Regions
- **4 monitors/4K monitors** – Use 4-2K monitors or 2-4K monitors with the Windows native client
- **Embeddable AppStream 2.0** – Embed your desktop application in your web portal using a JavaScript object
- **Z1D Instances** – Launch Z1D instances for running compute and memory intensive workloads such as HPC simulations or batch processing
- **Target tracking scaling** – Create scaling policy that scale fleet capacity to meet a utilization target

**Workshops:** ISV (Integrate AS2 with your web portal for free trials, workshops, and SaaS/BYOL enablement), ENT (Build a self-service onboarding portal for your app owners)

**Compliance:** HIPAA eligible, PCI, SOC1, SOC2, SOC3 compliant

**Regions:** Seoul (AP-NORTHEAST-2), GovCloud West (US-GOV-WEST-1)

# Related sessions

## **Wednesday, December 4<sup>th</sup>**

EUC341: Why GE Renewable Energy and Multiview stream their desktop applications

9:15 am – 10:15 am | Bellagio, Monet 3

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## **Wednesday, December 4<sup>th</sup>**

EUC331: Moving to SaaS? Deliver desktop apps as web apps with no rewrite

10:00 am – 11:00 am | Mirage, St. Thomas A

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## **Wednesday, December 4<sup>th</sup>**

ENT314: How GE Power empowered its departments to manage & stream their desktop apps

1:45 pm – 2:45 pm | Bellagio, Grand Ballroom 1

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## **Wednesday, December 4<sup>th</sup>**

EUC338: Why Carnival Cruise Line moved from on-premises VDI to Amazon WorkSpaces

4:00 pm – 5:00 pm | MGM, Level 3, Chairman's Ballroom 366

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## **Wednesday, December 4<sup>th</sup>**

EUC404: How Facebook deployed Amazon WorkSpaces globally

5:30 pm – 6:30 pm | MGM, Level 1, Grand Ballroom 119

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## **Wednesday, December 4<sup>th</sup>**

EUC405: Amazon WorkSpaces Streaming Protocol: Enable a consistent user experience

6:15 pm – 7:15 pm | Aria, Level 3 West, Ironwood 8

# Customer Reception

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**Wednesday, December 4<sup>th</sup>**

**[eucappsreception.splashthat.com](http://eucappsreception.splashthat.com)**

6:00 pm – 8:00 pm | Canaletto Ristorante Veneto at the Venetian

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# Thank you!



Please complete the session  
survey in the mobile app.