



# THE FUTURE OF SHOTGUN PLATFORM

LEE HOLLINGWORTH / GUILLAUME BROSSARD



# SHOTGUN SIGGRAPH 2019



- 9:00 - 9:50AM Introduction to Shotgun
- 10:00 - 11:20AM Accelerating Creative Teams with Shotgun Create
- 11:30 - 12:50PM The Future of Shotgun Platform
- 1:00 - 2:20PM Developing for Shotgun - An Introduction
- 2:30 - 3:50PM Developing for Shotgun - Advanced Topics
- 4:00 - 4:50PM Shotgun Technical Roundtable



[github.com/shotgunsoftware/sg-siggraph-2019](https://github.com/shotgunsoftware/sg-siggraph-2019)



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## Where to get these materials



<https://github.com/shotgunsoftware/sg-siggraph-2019>



## Lee Hollingworth

Director of Engineering, Shotgun, Autodesk

Lee has held numerous roles in his fifteen years at Autodesk across a variety of products and industries. He has been part of the Shotgun team since September 2017 primarily focused on the evolution of the Shotgun cloud platform used by many of the most influential studios in Media and Entertainment.



## Guillaume Brossard

Software Developer Manager / Product Owner, Shotgun, Autodesk

Guillaume has been leading the Shotgun DevOps team, architects and maintainers of Shotgun Hosted and on-premise offering, for the last 5 years. Among other things, he has been leading the initiatives that brought Shotgun Hosted Service to four nines uptime and is now focusing on making sure our clients can leverage the full power of the cloud. Since 2005, he has been working as a developer in various industries gravitating around cloud services, graphics, rendering and AI.

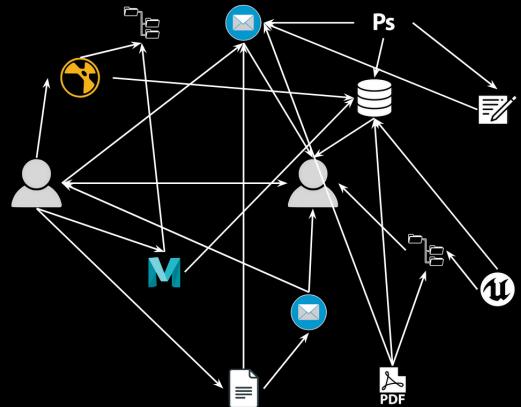
# THE PROBLEM

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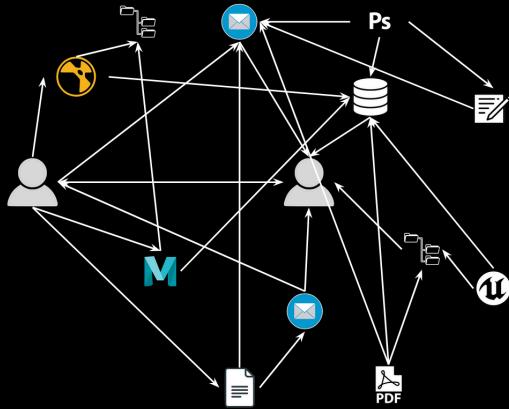
## Studio Complexity

Managing a production is complex

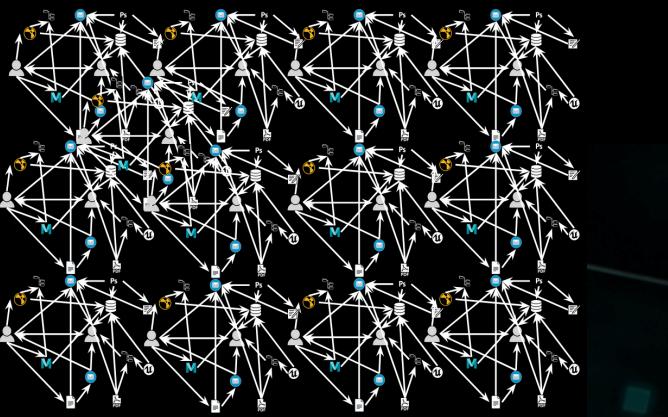


## Studio Complexity

Managing a production is complex

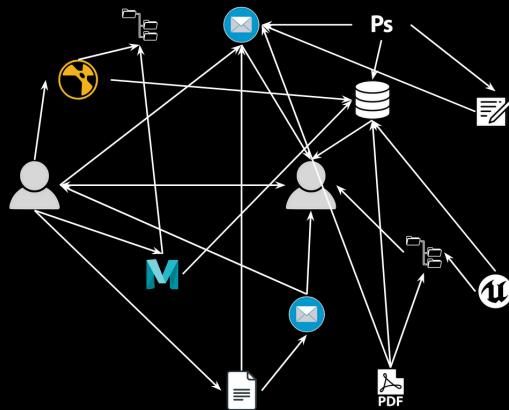


It only gets worse as you scale...

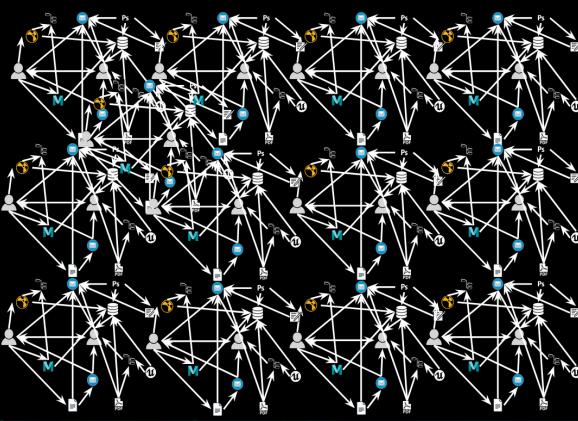


## Studio Complexity

Managing a production is complex



It only gets worst as you scale...



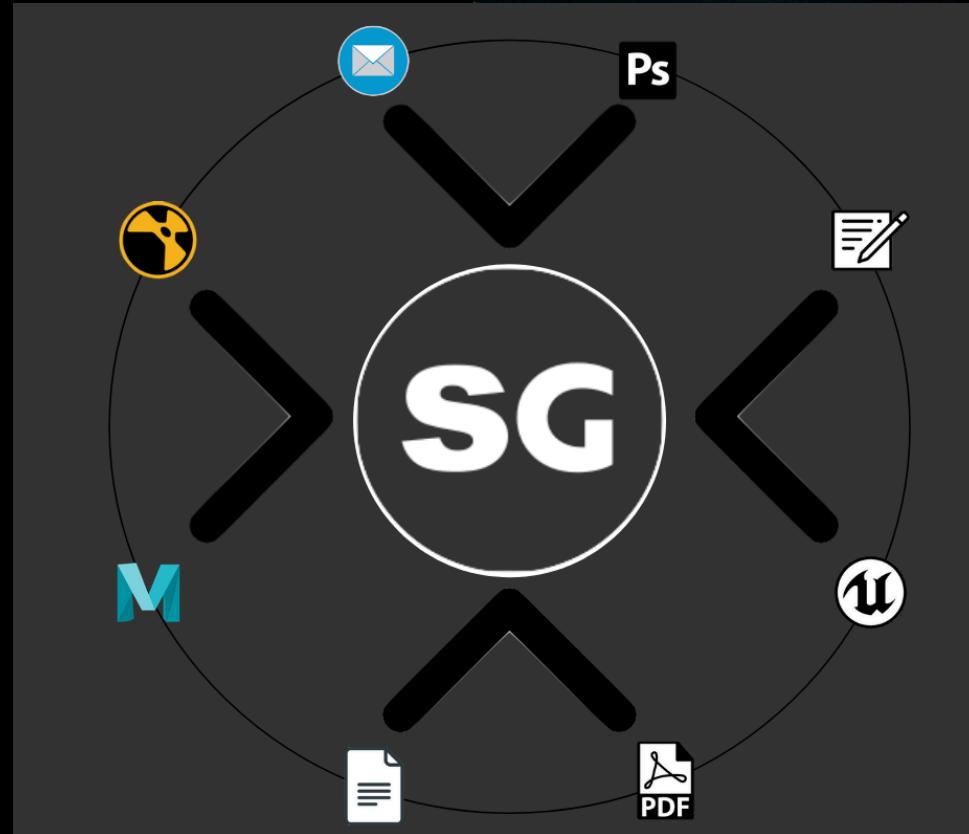
... across the globe!



## Knowledge Consolidation

 Single source of truth

 Always up to date



# Connecting Studios



THE FUTURE OF SHOTGUN PLATFORM



TRUSTED PARTNER  
NETWORK

A JOINT VENTURE OF



UNDER THE GUIDANCE OF

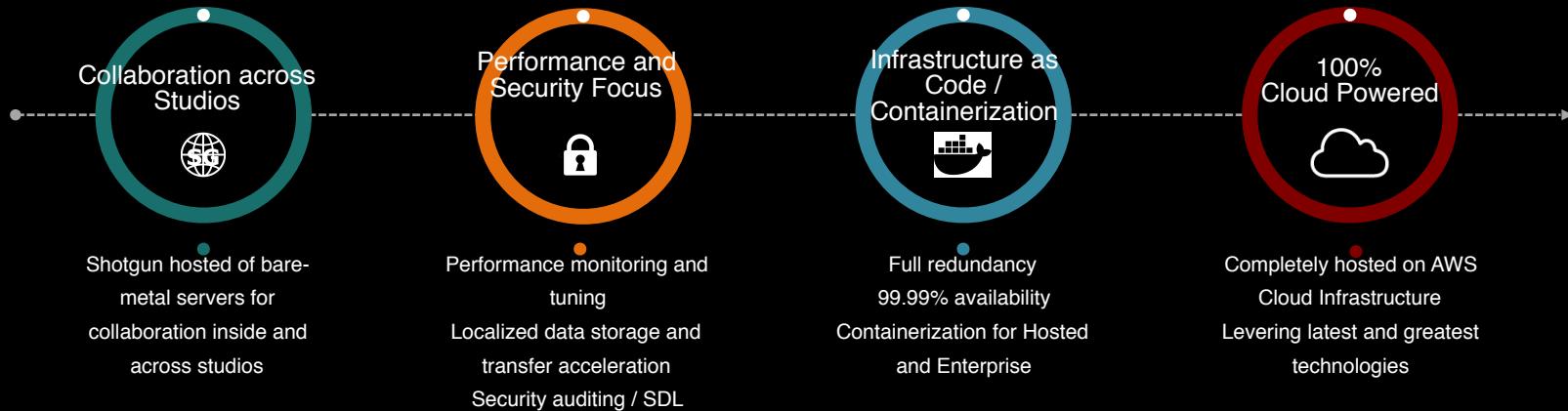


# SHOTGUN CLOUD

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## Shotgun Infrastructure Evolution



## Two Tiers



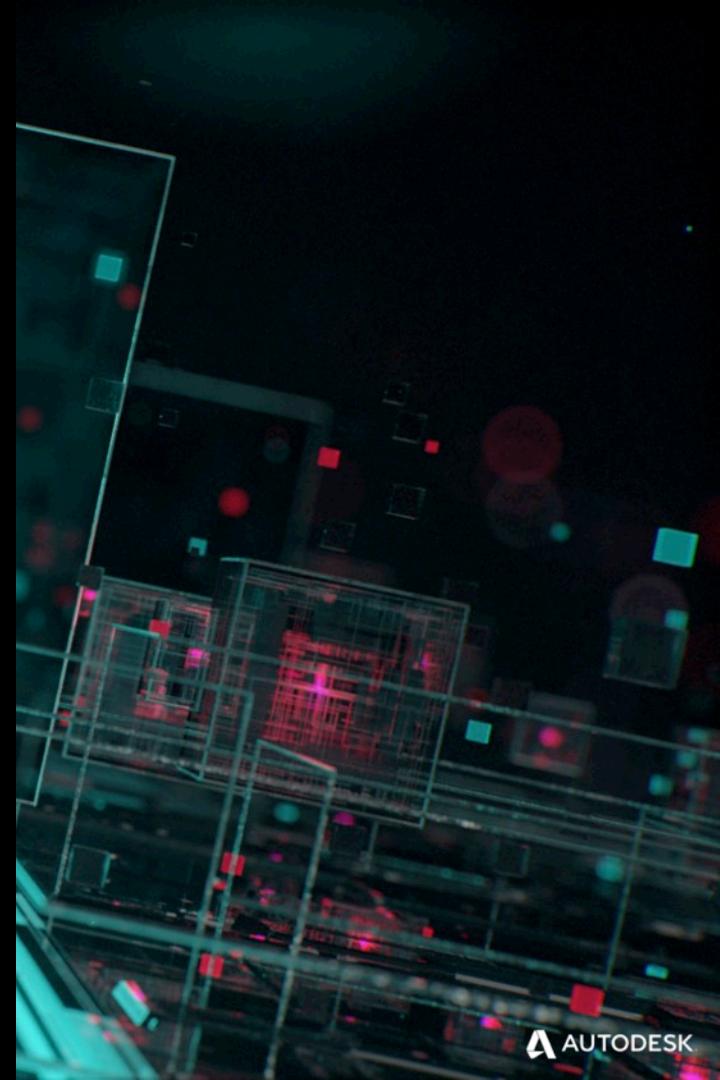
Tier 2

- Fully managed service
- Resilient, redundant, scalable



Tier 1

- All of Tier 2
- Media Isolation
- Private Networking



## Tier 2



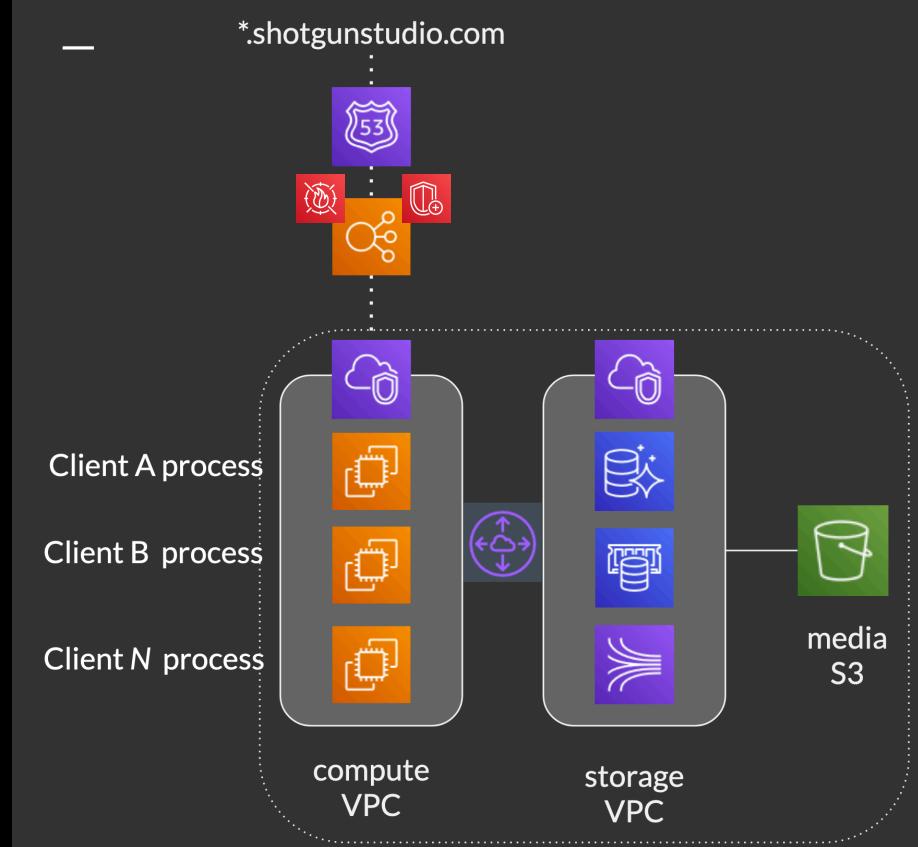
### Shared Compute VPC

- Ephemeral computing
- Secured behind WAF and Shield Advanced

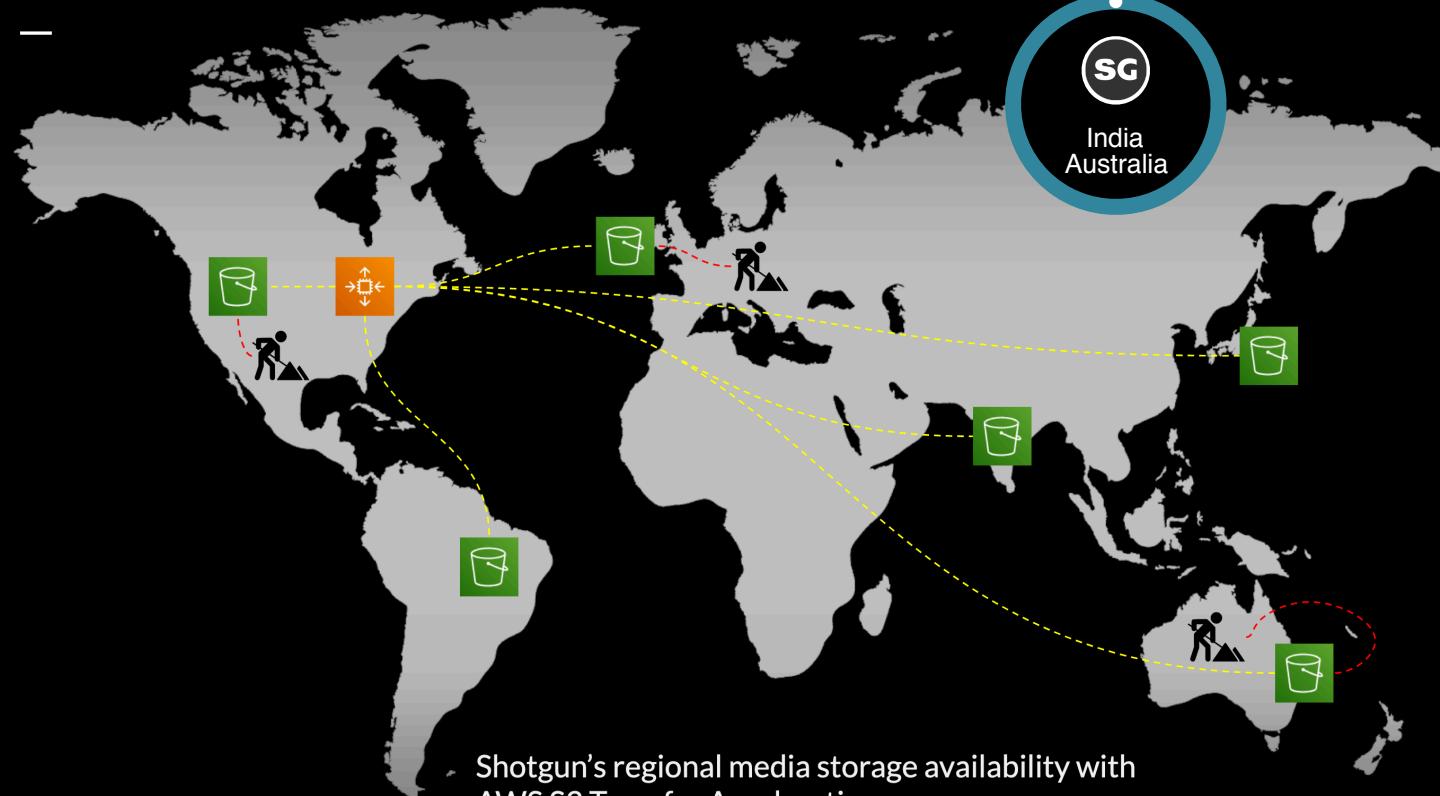


### Shared storage VPC and S3

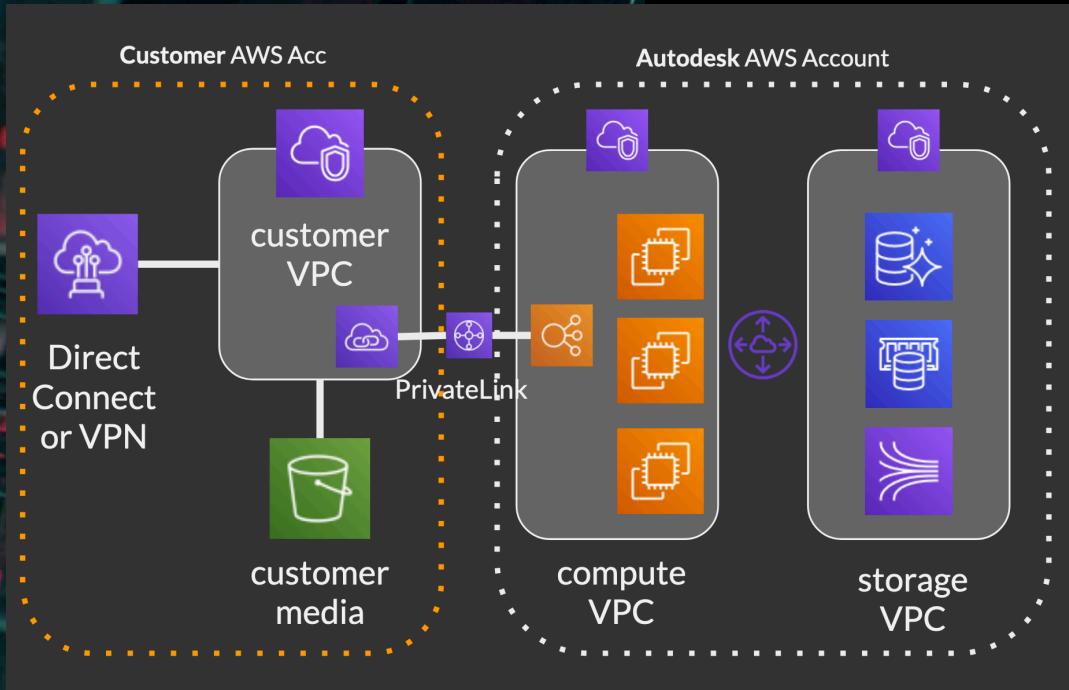
- Unique DB per tenant



## Customizable media storage location



Shotgun's regional media storage availability with  
AWS S3 Transfer Acceleration



## Tier 1 with Private Connectivity

### Private Connectivity

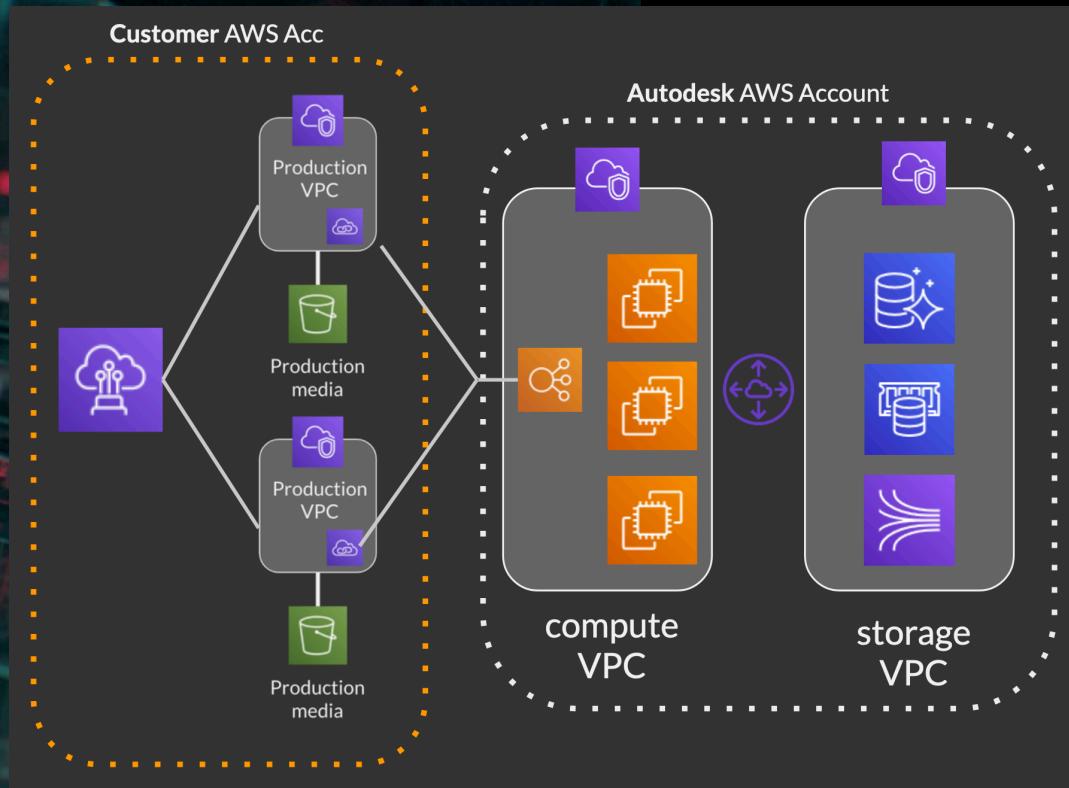
- Autodesk Compute/Storage VPCs
- AWS Closed Network
- No public traffic



### Private S3 Bucket

- Customer owned bucket
- Customer managed VPC





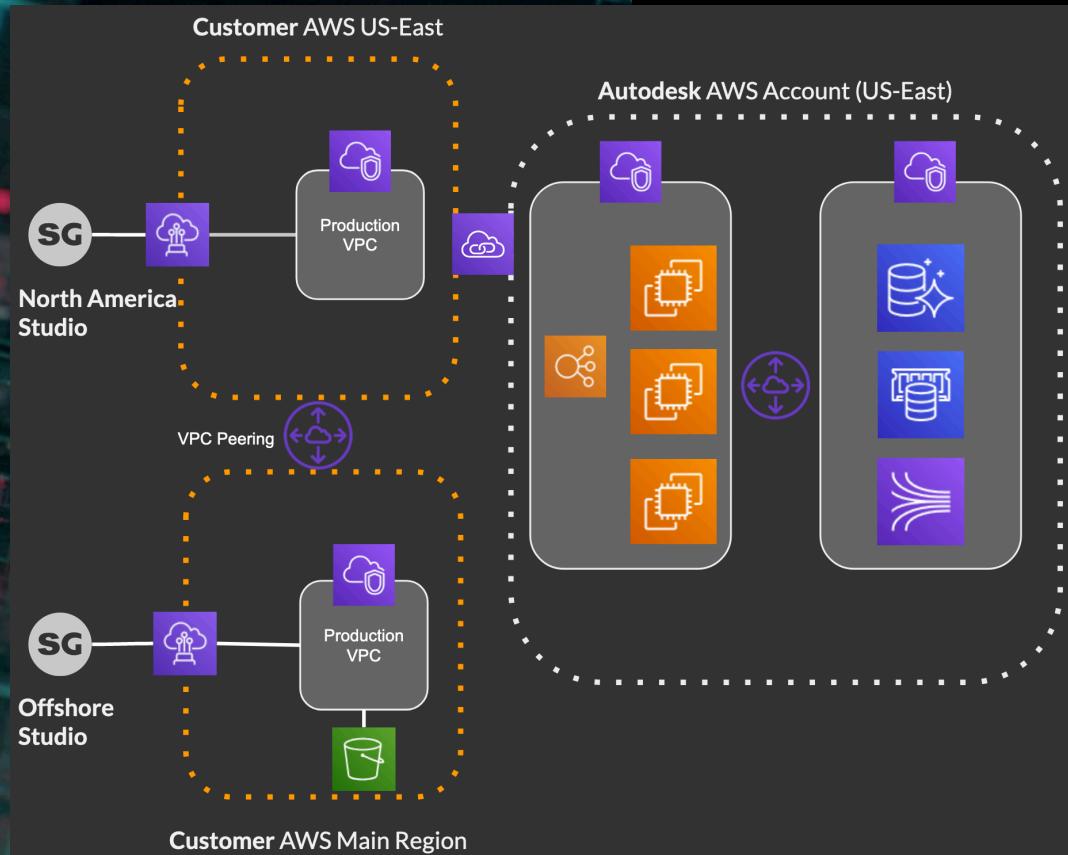
## Tier 1 with Isolated Productions

Separated VPCs per production



Flexibility to customer needs





## Tier 1 with Multi-Region Studios

AWS Closed Network across locations



S3 Bucket Region to customer choice

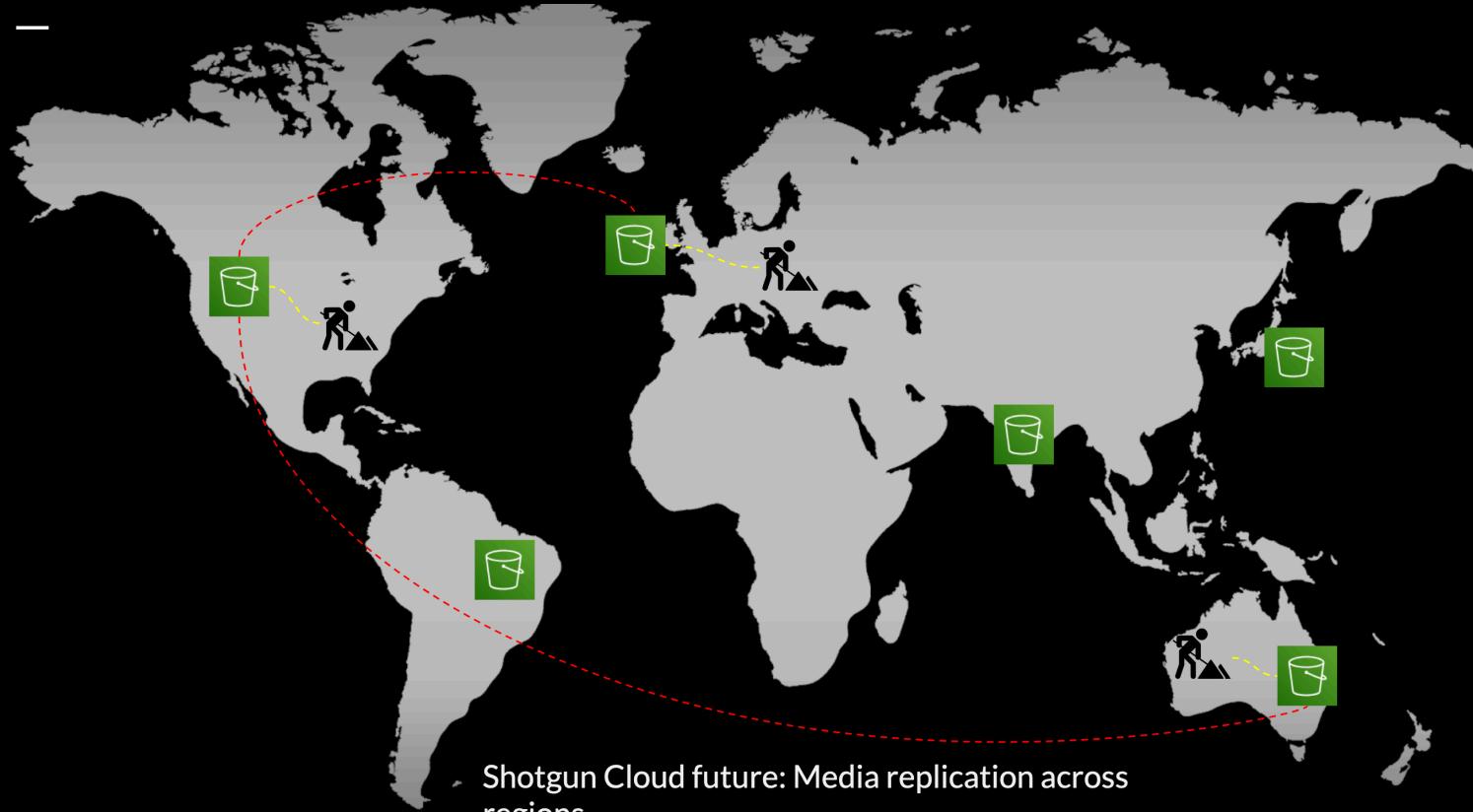


# SHOTGUN FUTURE

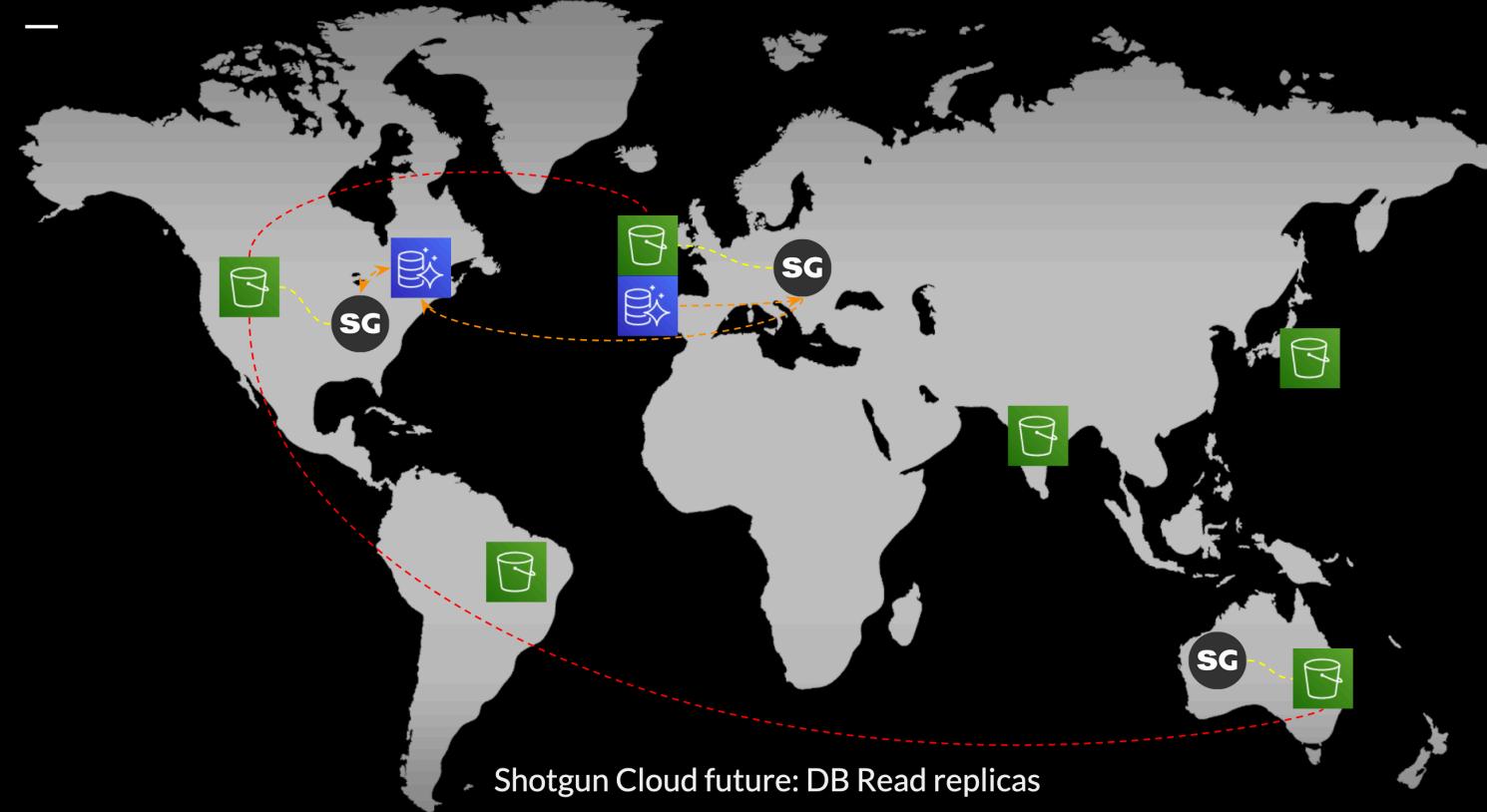
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## Media replication

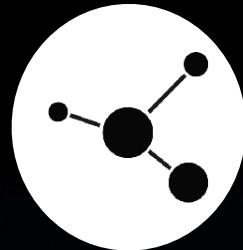


# Read Replicas

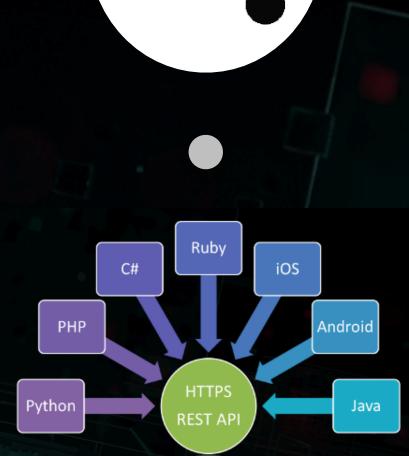


## Extending Shotgun

REST API



Web Hooks



**Webhooks**

SO SIMPLE YOU'LL THINK IT'S STUPID



## Beyond TPN

### AWS Well-Architected

- ✓ No outstanding improvements pending
- ✓ Operational Excellence
- ✓ Security
- ✓ Reliability
- ✓ Performance Efficiency



### SOC2

Working toward SOC2 Certification



### TPN

Working closely with TPN to get certified as soon as service certifications are available

### ISO 27001

Working toward ISO 27001

# ROADMAP

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# Major Milestones

• **February**

- Tier 2 Stack for Trials
- Customer migration starts

• **Later in 2019**

- Tier 1 Stack available

CY19.Q1

CY19.Q2-4

• **Beta**

- Tier 1 beta in Q2/3

# Q & A

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Tier 1



Tier 2



Data Replication



Security



Other



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#C543





# Q & A - Overseeing Clients Questions

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Q. What is the future of Enterprise / Local Install?

A. We will continue to support Shotgun Enterprise Docker. Shotgun Enterprise Classic deprecation will be announced soon.

Q. How much will Tier 1 cost?

A. For now, there is no additional cost for Tier 1, at least as far Shotgun licensing is concerned. Tier 1 is increasing client flexibility in term of network segregation and isolation, at the cost of added infrastructure upkeep and AWS Costs for the client. In Tier 1, client assume S3 Storage/Bandwidth costs, as well as part of the Bandwidth costs to Shotgun Shared Compute storage.

Q. How is media transferred to the Shotgun Transcoding Service

A. Thru HTTPS. It is not guaranteed that the media won't leave AWS Backbone when transferred across sessions. There are different ways to go around this limitation:

- \* IP Whitelisting using S3 Policies
- \* Transcoding in same region
- \* Client hosted transcoding