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ACE PRO IT

"The show must go on" ABEX 2022 - Post-NAB

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M&E data challenges

- Higher resolution content 4K, 8K, 16K and HDR continues to rapidly expand to petabyte levels

- Secure, accessible, high capacity file storage

- Enhance collaboration and productivity for remote editorial workflows

- Remote work environment must function like the studio environment

- Deliver new content more frequently with unmovable production timelines

- Quick access to transcode, package, and distribute media

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Qumulo's file data platform

All-NVMe

COMPUTE

4 Node Cluster
18+ GB/s
~1.2M+ IOPS
52 TB Usable

50 Node Cluster
230+ GB/s
2.8+ Million IOPS
7.2 PB Usable

Mixed-use Hybrid

BALANCED

4 Node Cluster
6+ GB/s
167 TB Usable

50 Node Cluster
100+ GB/s
10.4 PB Usable

Active Archive

LONG-TERM RETENTION

4 Node Cluster
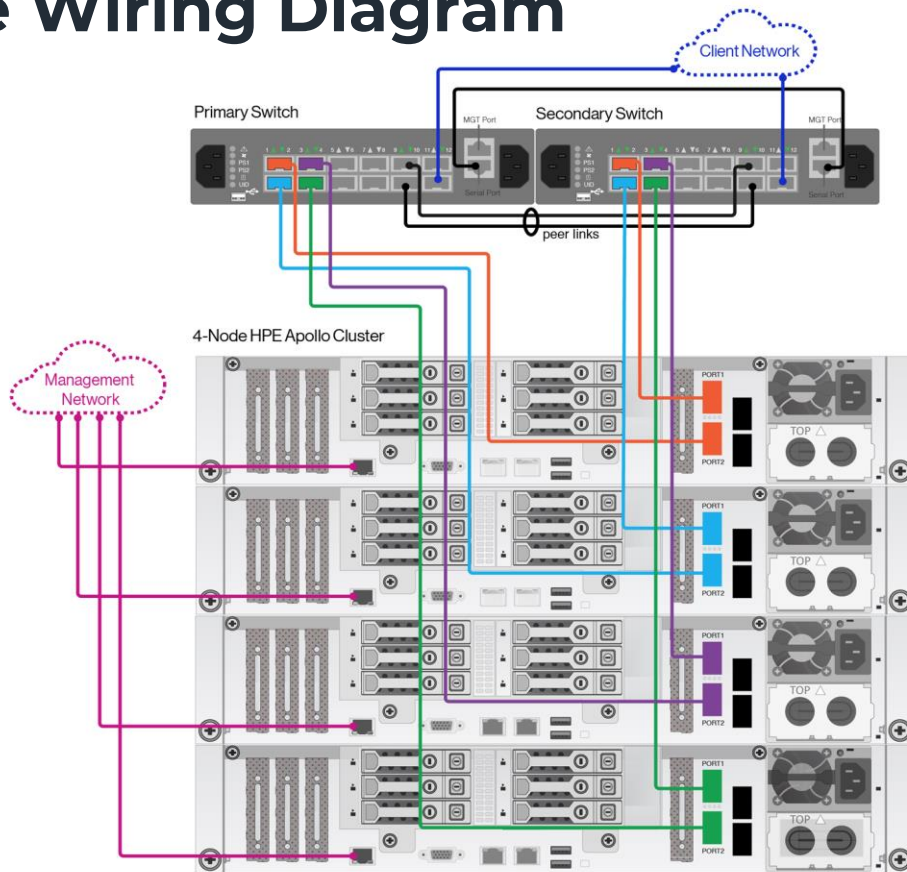320TB Usable

50 Node Cluster
11.5 PB Usable

Multi Cloud

FLEXIBILITY

aws

Google Cloud

Qumulo

Example Wiring Diagram

Client Network

Primary Switch

MGT Port

Secondary Switch

MGT Port

Serial Port

Serial Port

peer links

4-Node HPE Apollo Cluster

Management Network

PORT1

PORT2

PORT1

PORT2

PORT1

PORT2

PORT1

PORT2

TOP

TOP

TOP

TOP

Enterprise Hybrid Cloud File System

Data Access & Authentication	SMB	NFS	FTP	AD	LDAP
Management & Programmability	REST API		CLI		Web-based GUI

Single Namespace

Data Services	Continuous replication, snapshots, quotas, audit, SHIFT to Amazon S3				
File System	Real-time queries and aggregation of metadata (no tree walks) Multi-protocol permissions / identity				
	Massively scalable file counts and high-performance file operations				
Scalable Block Store (SBS)	Protected Virtual Blocks	Global Transactions	Erasure Coding	Flash First Write, Predictive Read, Cache	Encryption
Operating Environments	Bare Metal Appliances / OEM HCL	AWS	AWS GovCloud	AWS Outposts	Google Cloud / VMware ESX / Hyper-V

Shared Nothing Architecture; Seamlessly Scale Compute and Storage

10/25/40/100 Gb Ethernet

Enterprise Proven in the most secure and complex use cases on the globe

Scale Across on-prem, and the cloud

Real-time Analytics eliminate data blindness

Take Control and automate common tasks

Customer Delight from buying, to installation to day-to-day use. Qumulo has redefined the customer experience.

Radical Simplicity

The new way to manage content at scale, anywhere.

Store securely across on-prem and in the cloud with dynamic scaling in a single namespace.

Manage easily with real-time visibility and predictive caching to speed productivity.

**Build** automated workflows and empower creative teams to work anywhere in the world.

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Qumulo benefits for M&E

Capture, collaborate, edit and distribute file data globally

- Efficiently stores BOTH large and small files
- Large 4K, 8K and 16K video files
- Small files, for gaming or metadata
- Simple scalability to grow to petabyte-scale capacities
- Built-in enterprise-level data security and protection for valuable assets
- Simplify resource management and reduce costs with real-time analytics
- Cloud-native file data platform delivers multiple cloud options
- Enhance collaboration
- Burst rendering to the cloud
- Award winning Qumulo Customer Success support you can count on

Manage full content lifecycle with Qumulo
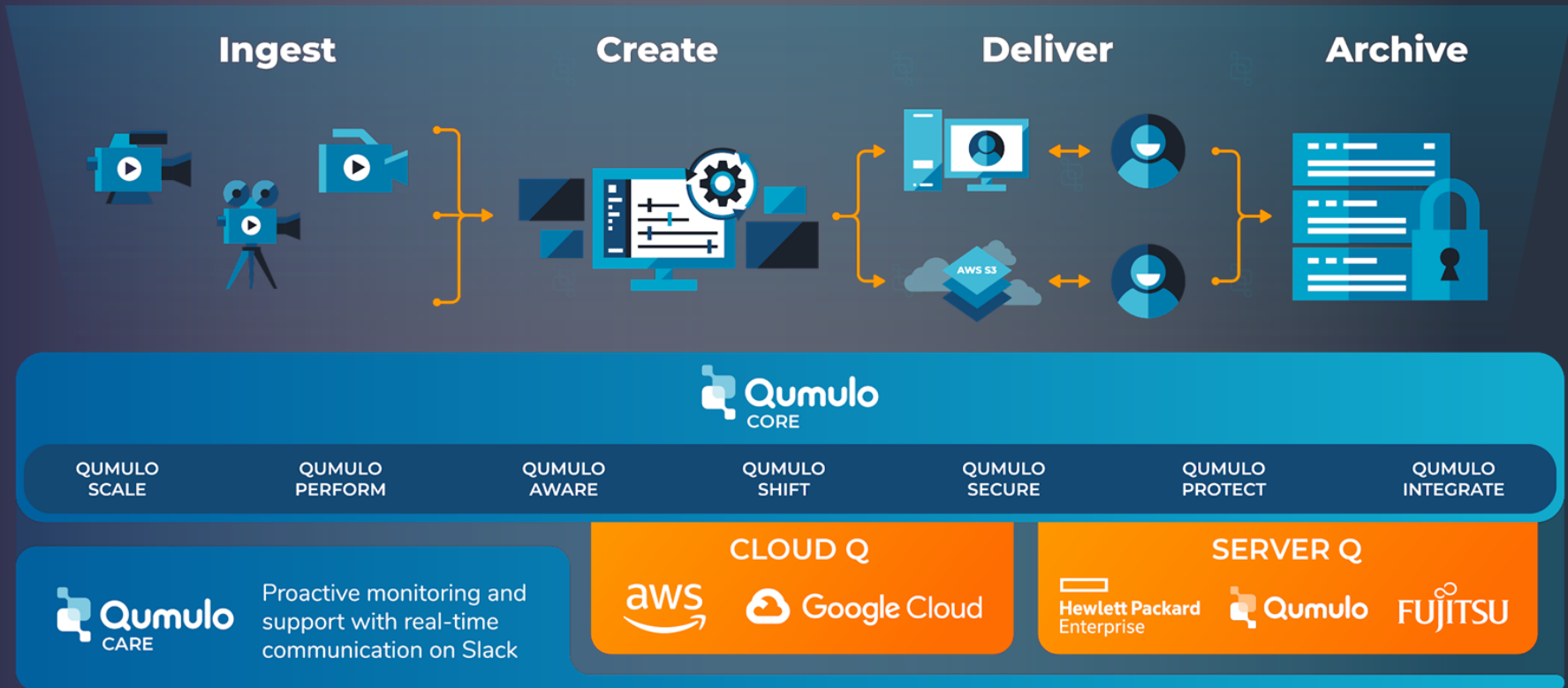
How can you use Qumulo's file data platform?

Qumulo On-prem

Editorial / Post Production

Animation and VFX

Game Development

Corporate video production

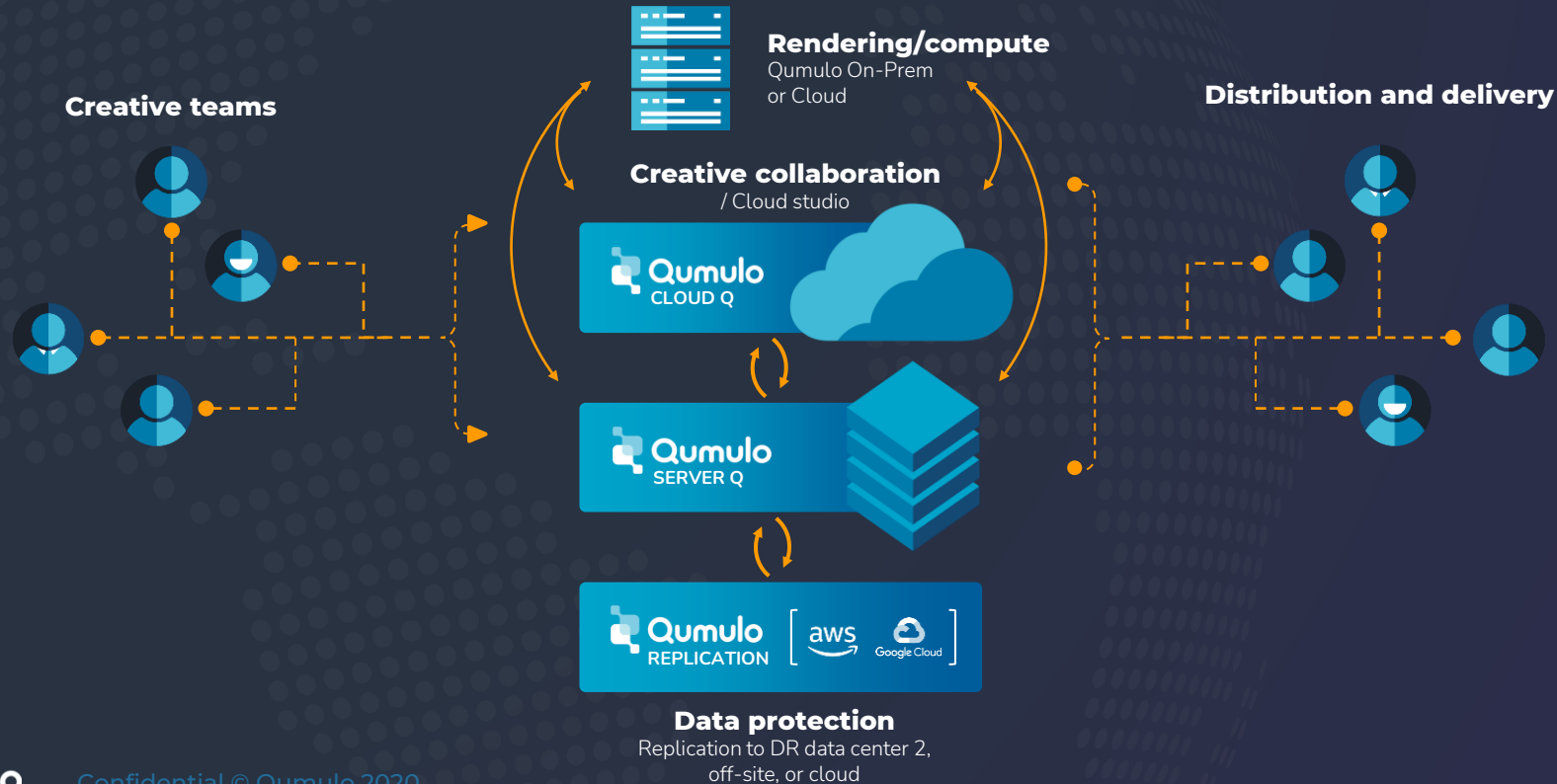Active Archive

Qumulo Cloud options

Collaboration

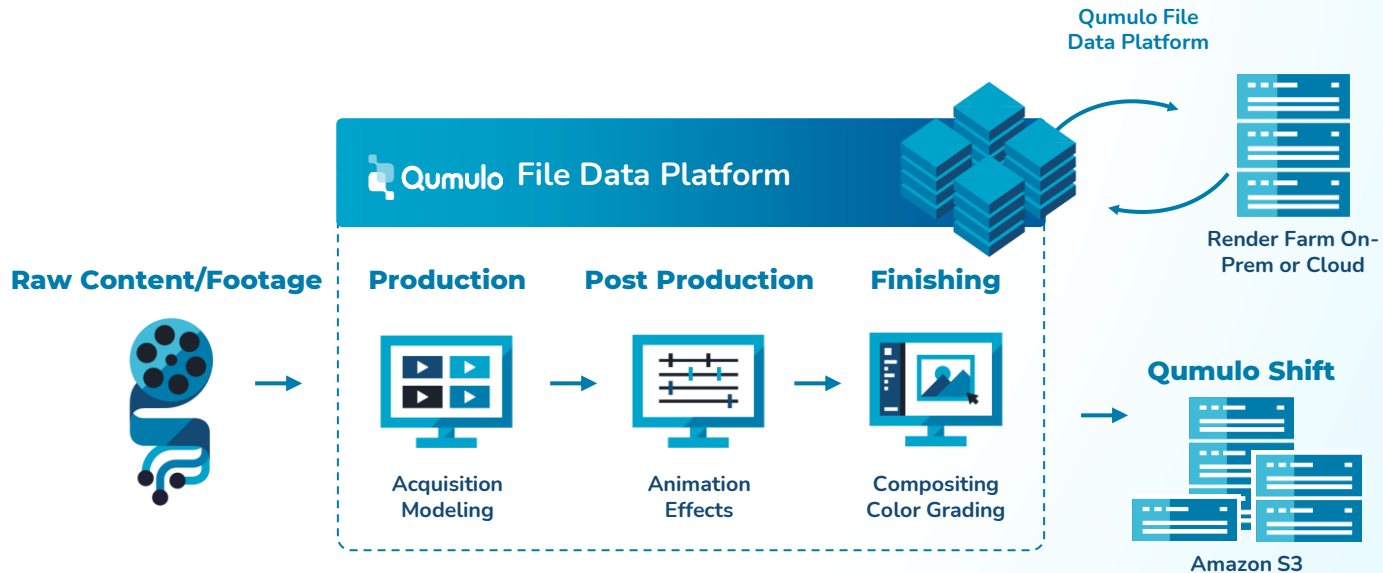Rendering / Compute

Editorial / Post Production (Cloud studio)

Broadcast

VFX Workflow

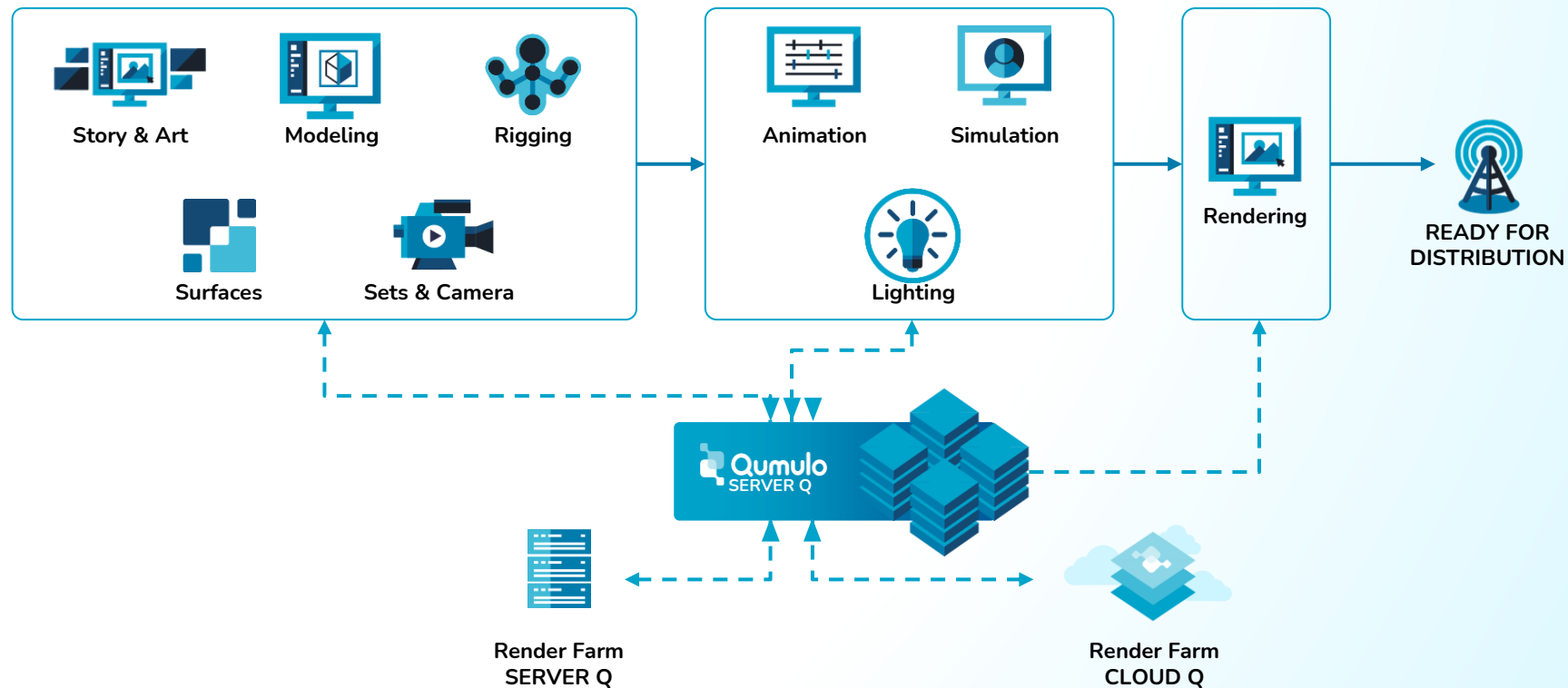Qumulo File Data Platform

Qumulo File Data Platform

Render Farm On-Prem or Cloud

Raw Content/Footage

Production

Acquisition
Modeling

Post Production

Animation
Effects

Finishing

Compositing
Color Grading

Qumulo Shift

Amazon S3

Animation Workflows

Story & Art · **Modeling** · **Rigging** · **Surfaces** · **Sets & Camera** · **Animation** · **Simulation** · **Lighting** · **Rendering** · **READY FOR DISTRIBUTION**

Qumulo SERVER Q

Render Farm SERVER Q · **Render Farm CLOUD Q**

Editorial workflow
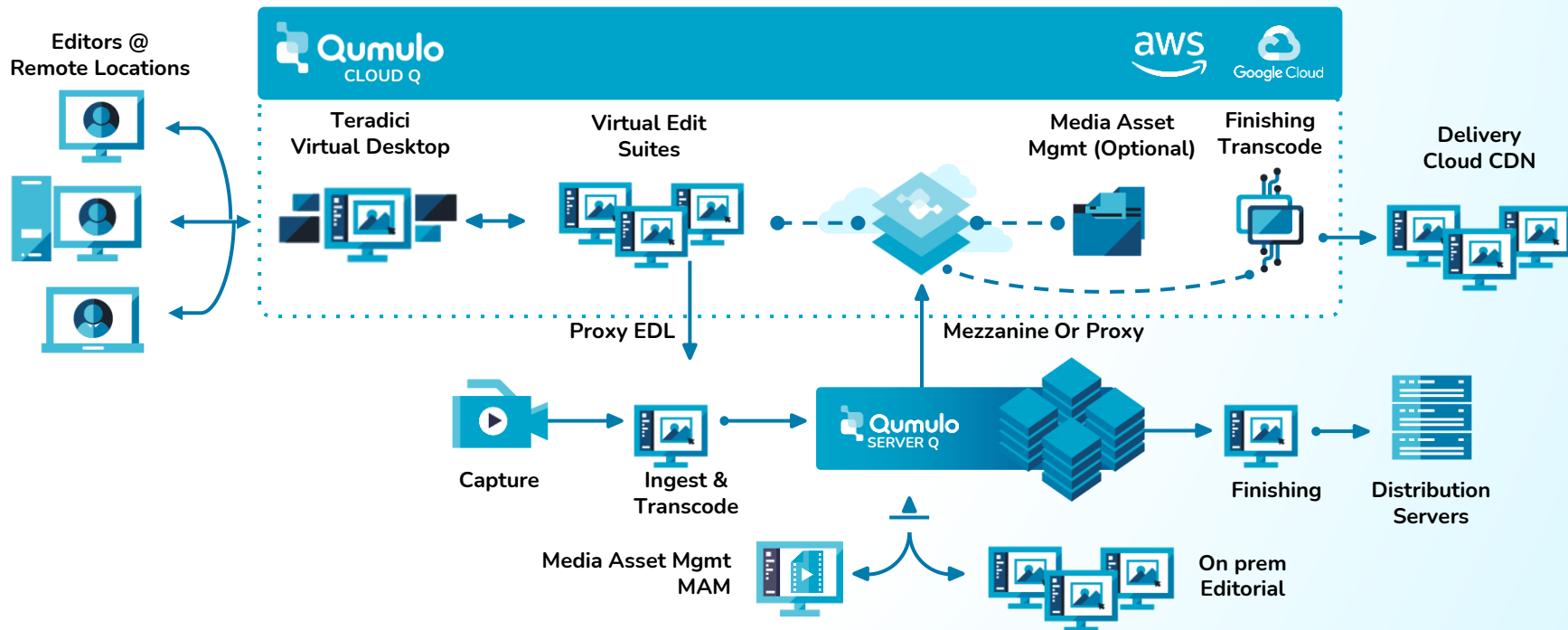
Corporate Video workflow

Data Creation ——————— **Processing** ——————— **Qumulo's File Data Platform** ———————

Production Cameras

VFX

Post Production

MAM

Qumulo
ON PREM

Qumulo
ON CLOUD

Multiple Cloud Options
- Replication and snapshots
- Build a cloud studio
- Burst compute for rendering
- Enhance editorial collaboration
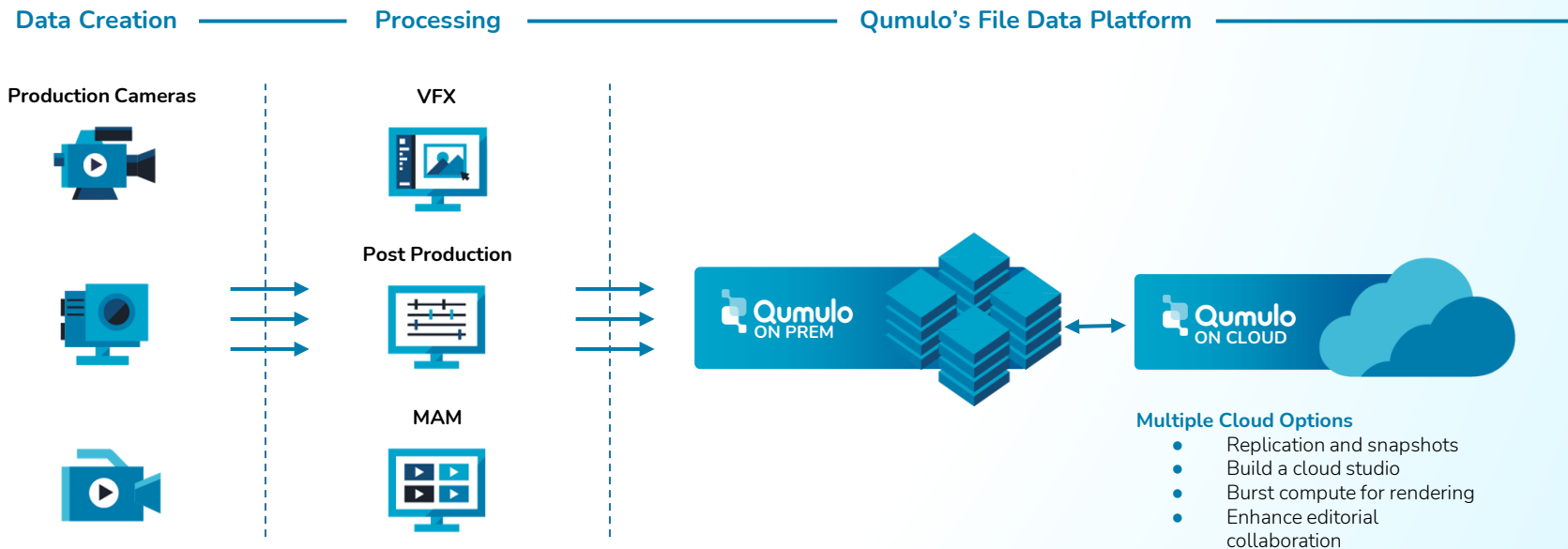
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Qumulo with PAM

Qumulo's Flexible File Data Platform Meets Changing Production Requirements

Instead of dedicated direct attached storage, Strawberry allows the use of shared Qumulo file storage. This unlocks collaboration between Avid™, FCP, Premiere editors,and other production workflows without having to constantly copy data back and forth between dedicated and shared storage. Save time and increase artist productivity. Share projects and assets easily among different users and applications seamlessly

KEY BENEFITS

Manage and share projects and assets in Avid(™) Media Composer, Premiere, Final Cut and more in a shared file system.
● Scale-out to billions of files and petabytes of storage capacity in a single shared file system instead of silos of storage, organized by Strawberry
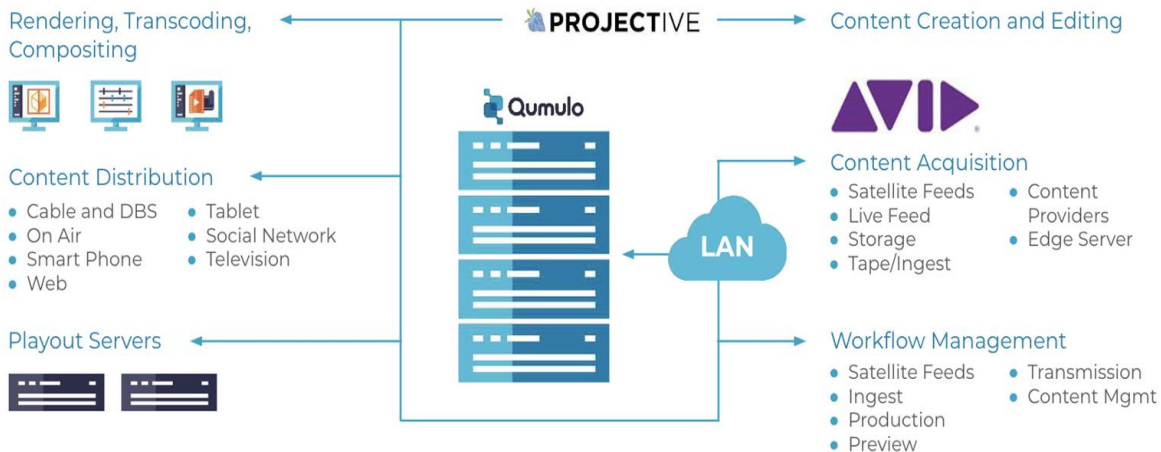
● Simplify storage management, reduce duplication, and save time lost searching for content

● Provide real-time visibility into data and storage solving data management Problems

● Avid(™) project bin locking

● Project analytics and visualization

Qumulo and Projective Strawberry PAM Workflow

PROJECTIVE

Rendering, Transcoding, Compositing

Content Creation and Editing

AVID

Content Distribution
- Cable and DBS
- On Air
- Smart Phone
- Web
- Tablet
- Social Network
- Television

Content Acquisition
- Satellite Feeds
- Live Feed
- Storage
- Tape/Ingest
- Content Providers
- Edge Server

LAN

Playout Servers

Workflow Management
- Satellite Feeds
- Ingest
- Production
- Preview
- Transmission
- Content Mgmt

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M&E customer examples

Thank you!

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