

## Overland SnapScale and NEO with Adobe Anywhere for Video

## Adobe Anywhere

The Overland Storage SnapScale NAS and NEO Series Tape Library is an excellent storage solution for the rich media Adobe Anywhere for video infrastructure.

Overland Storage has partnered with Adobe and Empress to extend the Adobe Anywhere software to even better enable content creators to access and process from virtually any location there is network connectivity.

Overland Storage's SnapScale<sup>TM</sup> is an Ethernet-based Clustered NAS X2 and X4 solution that is optimized for digital media data. It provides the ideal bandwidth performance and storage capacity required to support Adobe Anywhere in its use as a premier video collaborative workflow platform. The primary benefit using the SnapScale NAS with Adobe Anywhere is its performance and high availability. Each SnapScale node adds processing power, network bandwidth and disk storage to increase aggregate throughput. High availability not only protects end user data from multiple drive failure. Even failure of entire SnapScale nodes results in no downtime, offline rebuilding or system slow down. It is truly optimized for content delivery performance at predictable throughput and assured protection of video assets.

The NEO Tape Library can be easily integrated and used for video archival in conjunction with Media Assets Managers (MAM) such as Empress eMAM. NEO tape library supports LTO-5 and LTO-6 tape drives with 8Gb Fibre Channel or 6Gb SAS interfaces. Video assets are protected on tape to meet legal and corporate policy requirements as well as for long-term storage so it can be easily retrieved when needed. MAM's have software API's that enable easy integration into new or existing backup archival software that are supported by the MAM's. Such is the case for Empress eMAM, which supports both Archiware P5 Archive and XenData Digital Archives.

The Adobe Anywhere platform consists of two components: the Collaboration Hub and Mercury Streaming Engine. Adobe recommends a minimum of one Collaboration Hub and three Mercury Streaming Engines with a 10GbE network communication to the SnapScale NAS.

The Mercury Streaming Engine, a technology that dramatically minimizes the usual speed-quality tradeoff associated with distributed video workflows. With the Mercury Streaming Engine, users can work directly with high-quality media without latency. Clips are accessed remotely via a dynamic streaming technology to provide full resolution and very high quality over standard networks. It provides real-time, dynamic viewing

streams of Adobe Premiere Pro CC. Media is streamed from its native file formats on the SnapScale to the users in a proxy workflow.

The Collaboration Hub is the core component in the Adobe Anywhere cluster. It contains the database of project information and metadata, manages user access, coordinates the other nodes in the cluster, and provides API for integration into other Adobe Anywhere clusters. It utilizes standard protocols and specifications such as Apache ActiveMQ<sup>TM</sup> open-source message broker and Java OSGi framework.

Hubs negotiate communication between distributed Anywhere Node Controllers and clients, and manage tasks such as media ingest, export and conversion. In addition to supporting Mercury Streaming Engines, SnapScale can connect directly to editing clients located inside the broadcast center. This high performance, mixed deployment simplifies implementation and saves users from needing to build and support separate storage systems.

By adding more Mercury Streaming Engines to the environment, users scale-up capacity to support bigger workgroups. Adobe Anywhere is designed to be located in the data center, alongside the SnapScale storage system and a media asset management (MAM) in Empress eMAM.

Empress eMAM is a powerful media asset management platform designed to organize, tag, search, collaborate, approve, distribute and archive digital content. Empress eMAM environment is used as part of the growing Adobe Anywhere ecosystem to manage, which is all designed to enable total content lifecycle management, from tracking source assets through production all the way to archive. Adobe Anywhere directly and simply integrates with eMAM to create custom workflows via the Anywhere API to allow users to easily manage all of their digital assets from any global location. It supports any type of digital assets; video, audio, image and documents. It powers search, browse and other media asset management tools by sharing proxy copies. It can also manage storage and processing across multiple locations. eMAM provides an intuitive web interface to quickly collaborate and share content using proxy copies.



**Figure 1** depicts the Empress eMAM user interface.

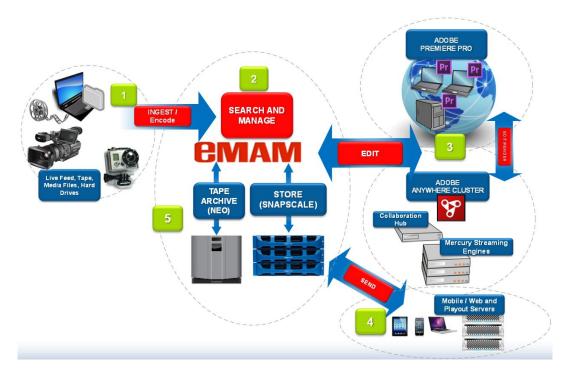
As a complementary solution to Adobe Creative Cloud, Adobe Anywhere enables deep collaboration for enterprise level video production workflows. Its capabilities are embedded directly in the latest versions of an editing tool called Adobe Premiere Pro CC.

Adobe Premiere Pro workspace is simple to understand and customize, allowing users to save workspace layouts appropriate to their current needs. Virtually all video formats can be imported without transcoding, and edited natively. It links to industry-standard file-based media, such as P2 cards, XDCAM, RED, and ARRIRAW. It works directly with Apple ProRes and MOV files captured by DSLR cameras with full metadata support -no transcoding or rewrapping required.

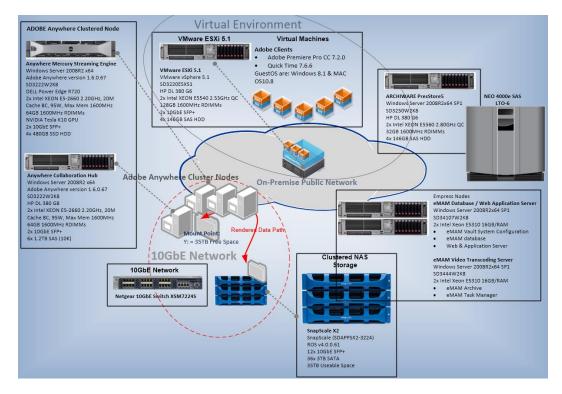
Connections between Adobe Anywhere nodes and SnapScale are performed using standard TCP/IP. The recommended connectivity is 10GbE SFP+ or CAT6 interfaces, which are supported by the SnapScale NAS.

The Adobe Mercury Streaming Engines host local instances of Premiere Pro and provide access to mounted SnapScale shares. Clients can access their Anywhere projects over any workstation connected to the Internet—there is no need for each creative workstation to have its own dedicated Ethernet or fibre channel connection.

Figure 2 depicts the data flow from raw data ingest to projects and final production.



**Figure 3** depicts the SnapScale NAS and NEO products with Empress eMAM and Adobe Anywhere environment.



## Conclusion

An Adobe Anywhere and Empress eMAM solution featuring Overland Storage Snap-Scale NAS offers significant flexibility, scalability and protection. It provides low latency and throughput to enable Adobe Anywhere clients to achieve maximum video playback performance. The SnapScale, NEO, Empress eMAM and Adobe Anywhere for video simplifies administration and management tasks in the rich media market.