## Whitepaper:

## **Combining Media Management with Distributed Editing**

axle Gear for Adobe Anywhere By Sam Bogoch, axle Video

With Adobe® Anywhere for video, a modern collaborative workflow platform that empowers users of Adobe professional video solutions such as Adobe Premiere® Pro CC, Prelude® CC, and After Effects® CC to work together using centralized media and assets across standard networks, Adobe has given the broadcast and postproduction industries a powerful new option for collaborative workflows. This whitepaper outlines a powerful new collaborative system that combines Adobe Anywhere for Video, with axle Gear – a new type of affordable, browser based media management system that can be deployed in hours, not weeks or months. axle Gear works closely with Adobe Anywhere to make sophisticated, collaborative workflows available to distributed teams.

The combined solution creates a private cloud environment and uses centralized storage and computing resources that reside within your physical facility, so you can create a secure, efficient workflow customized to your needs. Adobe Anywhere and axle Gear are set up on your local area network, and remote team members can access the same cloud environment across the Internet via VPN.

Adobe Anywhere software is installed on a cluster of servers (hardware that you purchase separately). The cluster contains two types of nodes: a single Adobe Anywhere Collaboration Hub node and three or more Adobe Mercury Streaming Engine nodes, each installed on a separate server. The core component in the Adobe Anywhere cluster is the Collaboration Hub. It contains the database of project information and metadata, manages user access, coordinates the other nodes in the cluster, and provides an API for integration into other Adobe Anywhere clusters. The Adobe Mercury Streaming Engine nodes provide real-time, dynamic viewing streams of Adobe Premiere Pro and Prelude sequences with GPU-accelerated effects to your team members on their individual computers. The media is streamed from its native file formats on the storage server out to the users in a proxy-free workflow.

For anyone using Adobe Premiere Pro CC or Adobe Prelude CC, working with the remote media via Adobe Anywhere should feel just like using media files stored locally. Playback is frame accurate, and scrubbing is instantaneous and smooth. There is virtually no change to the workflow within the Premiere Pro and Prelude applications, and no compromises are required in the editing experience.

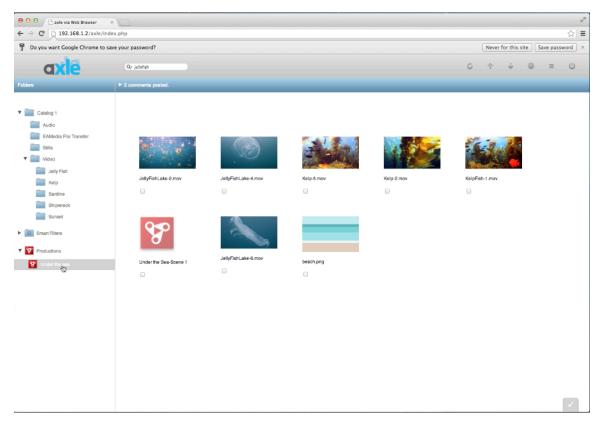
Adobe Anywhere doesn't require dedicated network cabling between individual editing workstations and the Anywhere cluster. This can greatly lower the costs associated with your network infrastructure and make it possible to create flexible workspaces for your creative team. Because the Adobe Anywhere system provides high-performance media handling and rendering, it's possible to smoothly edit media on hardware with lower specifications than those required for editing large local files, thus reducing the

cost of the computers used by your individual team members. Since the source files reside on the shared server, individual team members need dramatically less local storage.

Adobe Anywhere is designed to augment other enterprise media storage and asset management infrastructure. Adobe Anywhere doesn't provide global search or media management capabilities across the wider storage pool. These functions are reserved for your media asset management system. Larger broadcasters typically already own enterprise asset management systems and have the resources to implement complex custom integrations. For prospective Anywhere customers who may already have shared storage but do not currently use media asset management databases, another option is needed.

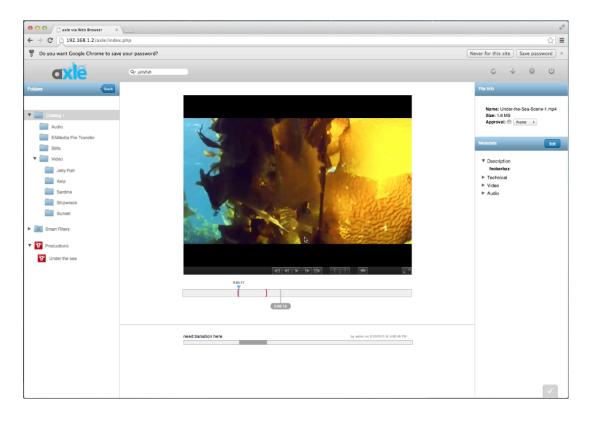
axle Video's radically simple media management system, first launched in 2012, is ideally suited for this use. axle's Gear media management appliance provides not only MAM capability, but also robust search throughput for small and midsize workgroups as well as utility transcoding for generating H.264 proxies and other formats. axle has introduced a special version, axle Gear for Adobe Anywhere, which can be deployed quickly and affordably in an Adobe Anywhere for Video environment. The system is priced at \$11,995 for five users (outright purchase), including hardware, software and one year's support. Additional license blocks of five users are priced at \$3,995. It is delivered as a complete turnkey system with a 1U rackmount appliance, and axle's Gear for Adobe Anywhere preinstalled. Two simple Gigabit Ethernet connections plug it into the same infrastructure as the Anywhere server cluster; FibreChannel SAN connections are also supported at additional cost.

In this way, axle Gear for Adobe Anywhere can access the same shared storage as Anywhere. Each Anywhere user receives a login to axle Gear, which gives them access to a browser interface with intuitive search, annotation and shot selection functionality.



axle Gear browser-based interface showing the contents of an Adobe Anywhere Production

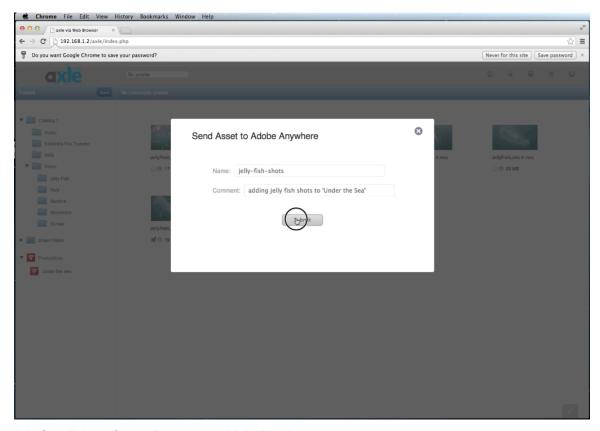
From within the axle Gear browser front end, producers, loggers and editors can navigate through all the media available to them using standard web browsers, and play proxies of these files through axle's HTML5 H.264 player. These users are not required to have Adobe's Creative Cloud applications installed on their systems to view this content; in fact, axle Gear is equally compatible with OSX, Windows and iPad browsers.



## Axle Gear web-based player, showing frame-accurate playback and annotation

This opens the media management, selection and collaboration phases of the workflow to the widest possible team – it can include loggers, interns, assistant editors and producers, at local or remote locations. They don't need to have any software installed on their laptops, and can even participate using iPads instead. Unlike the situation in a traditional editing facility where individual rooms and connections have to be available to ensure productivity, all of these participants can now participate on equal footing and play a key role in selecting and managing the media which a team of craft editors can work together to complete. Back-and forth collaboration and review and approval workflows are supported throughout the process.

As part of the axle Gear for Adobe Anywhere solution, axle has integrated this user interface with Adobe Anywhere, so that assets can be exported to Productions in Anywhere using a straightforward drag-and-drop metaphor in the browser UI. The combined system represents an ideal, low-cost solution for media management for searching across multiple directories of shared media and placing selected media into the Adobe Anywhere collaborative editing environment for craft editing work. Anywhere organizes this work on the basis of Productions, private areas where all of the assets required for a given media project are stored.



Axle Gear dialogue for sending assets to Adobe Anywhere

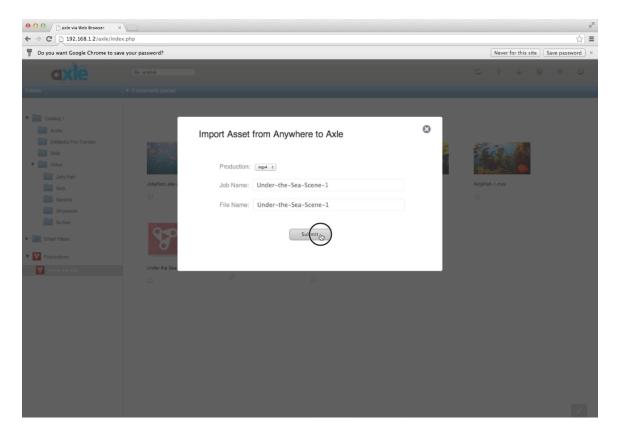
Once the desired media have been placed in an Anywhere Production, they can be directly accessed and placed on the timeline of an Adobe Creative Cloud video editing tool (Premiere Pro CC or Prelude CC) running in Anywhere mode. In the screenshot below, a Premiere Pro user works on the timeline using material that is located remotely from their workstation. The dynamics of the user interface, and even the video playback are almost exactly the same as if the media were on their local hard drive.



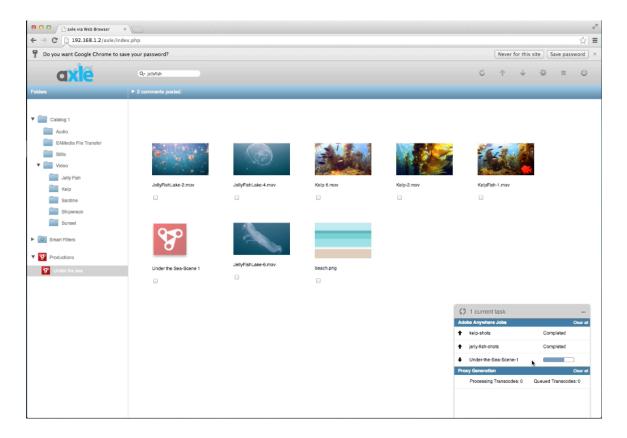
Premiere Pro CC in Anywhere mode with assets brought in from axle Gear

This represents a big win in productivity, as full-fledged editing sessions can now occur in locations that are remote from the media being worked on. For instance, freelancers can be brought into a project quickly, despite being thousands of miles away. Distributed, collaborative teams can now be nearly as effective as their counterparts in a central postproduction facility, but can work much more flexibly.

Finally, axle's integration with Adobe Anywhere allows the results of media editing sessions to be exported as new assets to be cataloged in axle Gear. This creates flexible opportunities to create and deliver media in multiple formats, from a distributed editing team. Unlike other media management systems, axle Gear works on the principle of watching, rather than controlling your file systems and folders. As a result, the integration with Adobe Anywhere leverages the same file paths used by Anywhere's processing subsystems. A simple pop-up dialog in the browser interface allows the new media to be created and saved to shared storage, where it is automatically cataloged and made available to future searching, browsing, logging and collaboration by any of the system's users.



axle web browser interface with dialogue to request render of a new high-resolution asset



axle web browser interface with pop-up status display showing progress of the high-res export

axle Gear for Adobe Anywhere allows organizations without an existing enterprise-level media asset management system to harness the power of the Adobe Anywhere collaboration platform. In this way, they can collaborate much more effectively and at lower cost, bringing new efficiencies to their video production work. A video demonstrating the full workflow described here is available online. Please contact us at <a href="mailto:info@axlevideo.com">info@axlevideo.com</a> if you think there could be a fit for your needs, or would like to arrange an interactive demo for your team.