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**WHITE PAPER**

# EVALUATING ADOBE PRODUCTIONS USING A STORNEXT SHARED STORAGE ENVIRONMENT

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The concept of shared storage has been around for years. During the evolution of shared storage concepts, Quantum has been a pivotal key player in the transformation, from dedicated storage to shared architecture. Over time, data requirements in the Media & Entertainment industry have exploded with higher resolutions, higher bandwidth, and larger capacity requirements. The sheer amount of digital imagery requires data to stay in place and not be replicated around a facility or around the globe as companies expand their presence. Collaboration, therefore, becomes an essential tool for companies, editors, colorists, visual effects operators, and others. Here at Quantum, we work closely with our partners in the Media & Entertainment industry to continue to improve collaboration using our StorNext® file system and our partner's ever-evolving software. Adobe Productions is one of those features of evolving technologies.

We tested Productions in our lab with Adobe's beta version of Premiere Pro. During this period, we observed a seamless, collaborative workflow with Adobe Productions and our StorNext file system. Our goal during this evaluation exercise is to evaluate the implementation of Adobe Productions, while running the production in a facility with a StorNext file system, fully implemented. Using various connectivity options to either NAS or SAN share, we hope to prove the workflow is applicable in a truly shared production environment.

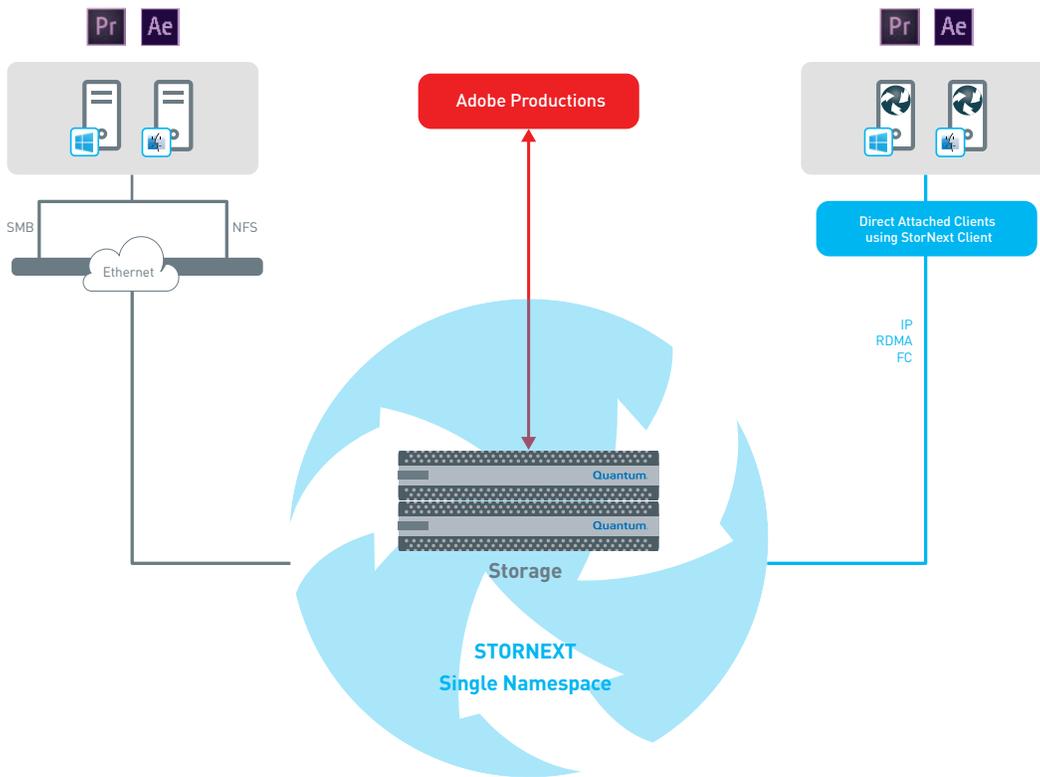


Figure 1 – Shared production environment for our lab test.

## WHAT IS ADOBE PRODUCTIONS?

So, what is Adobe Productions in Premiere Pro? Essentially, it's a completion of how Adobe works with shared project workflows. You have a Single Project, the traditional way of working, a Production, or a Teams Project.

Single Project	Standalone, resides on local system
Teams Project	Cloud collaboration, resides in Creative Cloud
Productions	Actions within a folder reflected on file system and clients, lives locally on shared storage

A Production is a collection of Premiere Pro project files inside a folder where editors can now store and organize all their projects and associated assets. This concept can be viewed as an evolution in shared projects, where clips, sequences, or assets can be cross referenced between all projects, simplifying media management and increasing performance and efficiency.

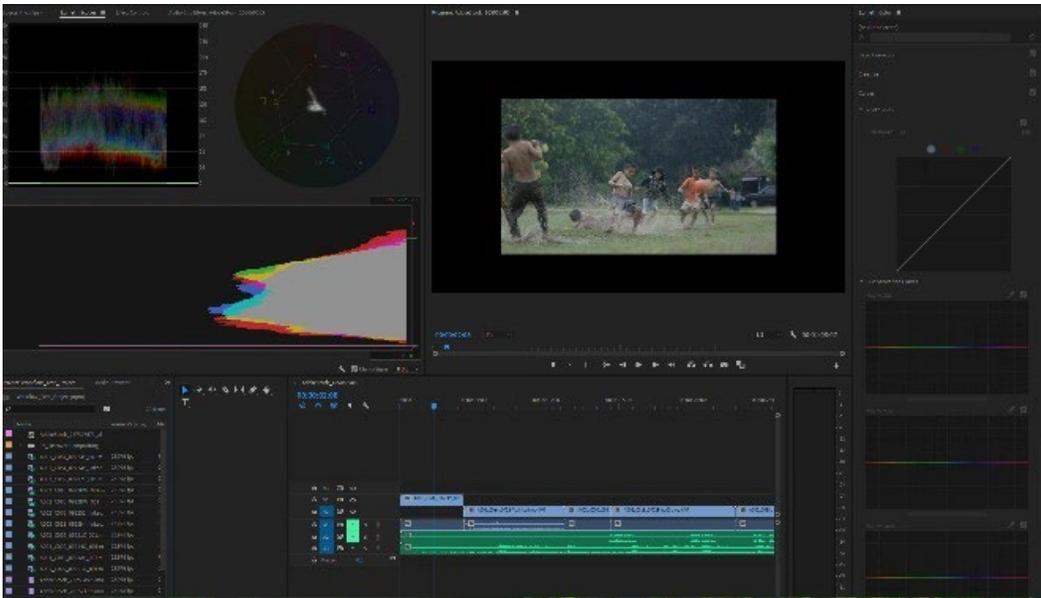


Figure 2 – Productions project interface.

With the idea of Project sharing, you not only have media, but also project metadata along with other assets associated with these projects living on some shared storage devices.

When a user opens a project, Premiere creates a .prlock file, locking the project and alerting other editors that the project is read-only for all, except the owner, and also notes who locks it. In Figure 3, the owner gets a read-write indication in the interface as well.

This condition stays in effect until the owner saves and releases write access, or closes the project, releasing that project back to whoever wants the read-write privilege. One further point to add here is that Productions is flexible, but often deployed in a facility, whether small or large. This contrasts with Team Projects that allow cloud collaboration for Premiere and After Effects, no matter the location in the world. The benefits from using Productions in a workflow include breaking up large projects for speed and organization, avoiding the need to duplicate clips, easy reuse of projects or parts of projects, and finally, collaboration.

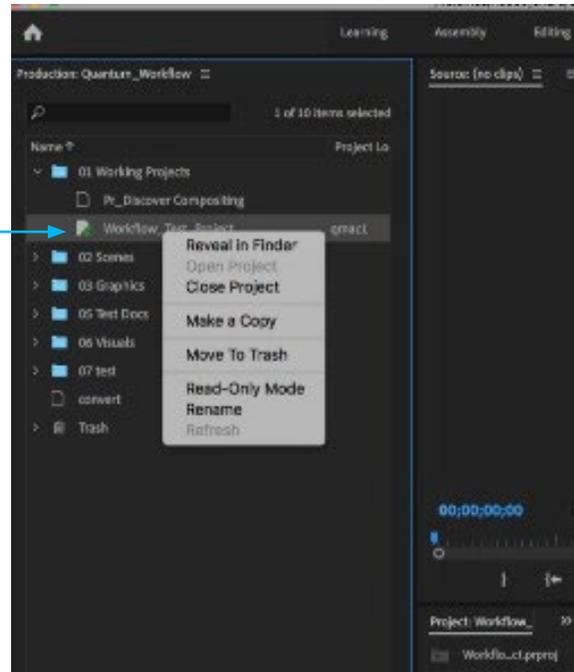


Figure 3 – Managing Productions project permissions.

## SMB/NFS AND SAN ACCESS TO STORNEXT FILE SYSTEM

In our lab testing, we have demonstrated not only operating system interoperability, but also the various file system access available to our StorNext clients. These methods include SMB and NFS for NAS, and additional options with Quantum shared storage are SAN direct via Fibre Channel or Ethernet, and finally our proprietary LAN proxy client, aka DLC.

To begin, we configured two systems, one PC running Windows 10 and the other an iMac Pro running Mac OS X (10.15.3). Our first attempt at setting up the Production was to use a network share from our NAS stack running off our lab Xcellis® shared storage system. Both systems accessed the network share via SMB. We then created a Production on our shared volume called Quantum Workflow, and then created a new project from within the production folder. From here, you can see folders such as Working Projects, Graphics, Scenes, etc. Subsequently, any projects created in or brought into Productions will inherit all the same settings and access to all parts in the Production. This seamless flow over shared SMB volumes from StorNext NAS worked flawlessly.

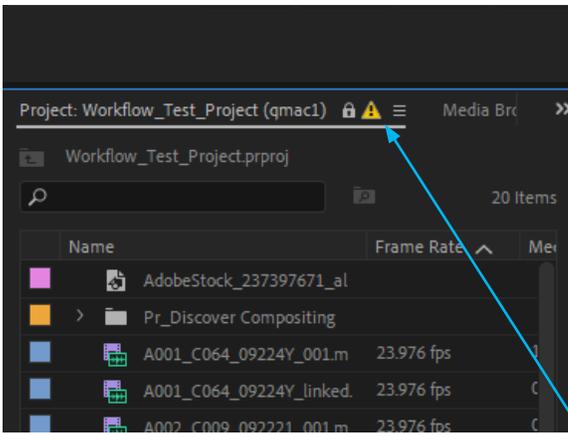


Figure 4 – Testing the notification process.

We then decided to test the notification process with the same SMB share on the OS X system and a direct StorNext LAN proxy client, to the Windows 10 system.

Again, we made some changes to the existing project while in read-write mode from the MAC, and immediately editors that have the project open in read-only get a notification that a change has been made.

The other editors in the production or, in our case, our single Windows client should refresh the project to see the latest changes to the project.

As a final test, we connected our iMac Pro via the StorNext proxy client and our Windows via direct SAN client. So, no NAS connectivity was involved in this final test. Project notifications were again sent out to read-only editors and the read/read-write locking was respected, showing a thorough collaborative workflow with Adobe Productions and Quantum's StorNext file system.

In conclusion, what's significant about our findings is that customers can utilize our NAS connectivity options with Productions and/or have a mixture of Quantum direct-attached clients with high-speed performance connectivity when demands dictate, such as when 4K or 8K material is used. It is vital that content does move around during a project with the ability for numerous clients to connect over a simple NAS interface in addition to high-performance client transfers via direct-attached clients. These complementary capabilities allow Adobe Productions and Quantum's StorNext file system to reduce the overall workflow cycle for production professionals, shortening the time from production to screen.

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Quantum technology and services help customers capture, create and share digital content – and preserve and protect it for decades at the lowest cost. Quantum’s platforms provide the fastest performance for high-resolution video, images, and industrial IoT, with solutions built for every stage of the data lifecycle, from high-performance ingest to real-time collaboration and analysis and low-cost archiving. Every day the world’s leading entertainment companies, sports franchises, research scientists, government agencies, enterprises, and cloud providers are making the world happier, safer, and smarter on Quantum. See how at [www.quantum.com](http://www.quantum.com).

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