ACCELERATING 4K FULL RESOLUTION WORKFLOWS

Pixspan and Dell EMC Isilon: Taking control of the ever-increasing data footprint of full-resolution media

ESSENTIALS

- Reduce storage costs and increase transmission speeds of full-resolution media
- Uncompressed 4K compositing over standard 10 Gbit Network infrastructure
- Lowers Bandwidth by ~60%
- Reduces Storage Costs up to 80%
- Maintains Bit Exact Quality
- Covers all bit depths and resolutions of EXR, DPX, TIFF, Cineon, and ARRIRaw

THE EXPLOSION OF BITS

Hollywood is in the process of transitioning from 2K to 4K (a quadrupling of size), while camera manufacturers are beginning to release even higher resolution cameras. High Frame Rate (HFR) and High Dynamic Range (HDR) formats are additional multipliers on the footprint of a project, leading to significant cost increases and challenges in data handling and transmission times.

The entire digital workflow is impacted by the increasing size of media, from set to post, to “follow-the-sun” development sharing, to delivery of masters to the studio. While throwing hardware at the problem might work (e.g., upgrading an organization’s LAN infrastructure to 40GbE), it can get prohibitively expensive.

What’s needed is a method of reducing the footprint of high-resolution media (both in terms of storage and network bandwidth requirements), with no loss in resolution, and without breaking the bank.

MOVING AND STORING FULL RESOLUTION FASTER WITHOUT LOSING FIDELITY

Pixspan focuses on the largest image formats in the Media and Entertainment vertical: High resolution Digital Intermediates and Full resolution Camera Raw formats.

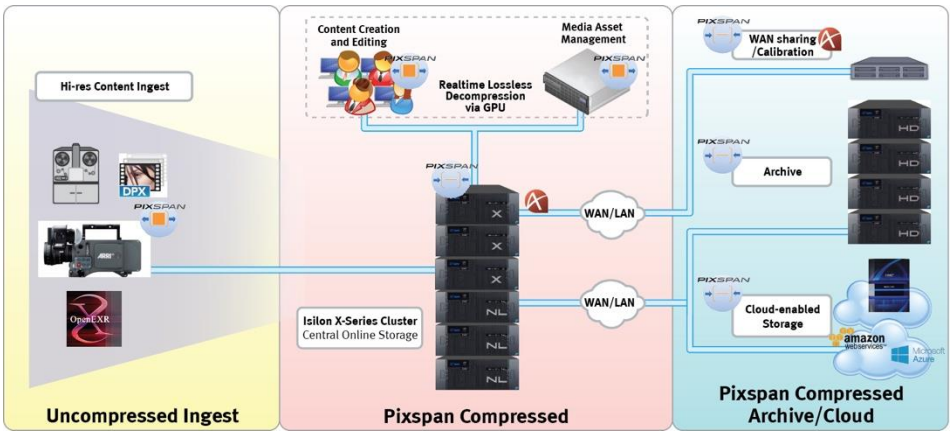
Digital Intermediates are at the heart of today’s full-resolution workflows. They are large in size, from 12 Megabytes per frame for 2K to 90 Megabytes per frame for 6K in DPX or EXR. Whether generated on-set or in post-production, Digital Intermediates can consume hundreds of terabytes to more than a petabyte of storage. Pixspan technology lets you move and store these large data files without losing fidelity.

When applied to the on-set workflow of a 4K or 6K camera raw format, Pixspan can substantially reduce the time and cost of storage and digital transmission. Whether moving media to off-site disaster recover site or distributing a full-resolution production to theatres, transfers of full definition video can be twice as fast using half the space.

OPTIMIZING THE WORKFLOW

Dell EMC Isilon storage combined with the Pixspan solution considerably streamlines and accelerates high definition workflows. Media transfer speed to/from consolidated storage is accelerated, reducing the amount of hardware required to support workflow throughput requirements. In addition, more data streams can be simultaneously supported from Isilon storage, giving effects specialists and editors the capability of presenting more and varied media sequences to their producer.

An artist can play 4K media in real-time, add layers, work on color correction, and perform every other step in the VFX workflow natively—but with greatly reduced infrastructure requirements. The high-definition workflow takes place over standard 10GbE networking and is supported by standard Dell EMC Isilon scale-out storage. There is no need for IT administrators to change their procedures, nor do they need to support exotic, dedicated hardware generally regarded as necessary for storage and transfer of high-definition media.



HOW IT WORKS: BIT EXACT COMPRESSION

Pixspan's solution is based on their new Bit Exact Compression Solution technology. Bit Exact Compression means that an image is compressed into a smaller representation of the original image, while retaining absolutely all the information from the original image. That means that the representation can subsequently be decompressed back to an image, and the rehydrated image is a bit-for-bit exact replica of the original image. Bit-exact compression allows multiple compress/decompress cycles without loss of resolution. Pixspan compression is intra-frame, meaning that each image is compressed without knowledge of other surrounding frames.

ABOUT PIXSPAN

Pixspan offers unique software products that reduce storage costs and increase transmission speeds of full-resolution media, medical, and surveillance imaging. Its software covers all bit depths and resolutions of EXR, DPX, TIFF, Cineon, and ARRIRaw, while remaining bit exact. Currently, Pixspan is the only company providing a solution that enables full-resolution workflows, beginning from camera RAW to image processing, and through to final assets. For more information, visit www.pixspan.com.

ABOUT DELL EMC

Dell EMC is a trusted leader in media and entertainment storage for content creators, broadcasters, and content delivery providers. Dell EMC storage forms the foundation of a simple and future-proof infrastructure, giving you the agility to transform business operations, and the flexibility to adapt to new media workflows. Through innovative products and services, Dell EMC accelerates creation and monetization of media, helping media professionals store, manage, protect, and analyze their most valuable digital media assets.

CONTACT US

To learn more, contact your local representative or authorized reseller.