

Your Journey to 4K...

The casino game of Pontoon is a simple concept: do you gamble and take the next card or stay with the hand you already have?

On the high street, decisions that used to be a gamble are no longer difficult to make. Now consumers don't think twice about sticking, when they can twist so easily and cheaply? A 50" UltraHD with smart services and HDR video support for under \$1000? Twist. 50Mb/s broadband at tenth the cost of 5 years ago? Twist.

These decisions are not so easy to make in the world of professional media production. The transition to higher resolution formats will stress each part of the workflow, from lenses and cables to test tools and encoders. It's a process that involves planning, training, project management and new rounds of purchasing.

Storage as the Sticking Point

The move to a new video resolution has a massive impact on storage networks. Technicians face demands for ever greater bandwidth, increased data sharing, larger capacities, accelerated processing and new format handling. The sad truth is that the majority of SAN systems simply cannot cope with sharing 4K data. So central storage is seen as the part of the production chain that is most costly to upgrade, often requiring a complete overhaul.

The Painful Shift to UHD Workgroups

For those media organizations that rely on last generation storage, UltraHD editors will feel compelled to re-learn the skill of the proxy edit and full version conform. It's an effective workaround and helps with online storage systems that can't serve full resolution video streams. But clearly it's no long term solution.

Others resort to the prehistoric concept of editing a project from local or direct attached storage, with no ability to share files or quickly secure content. Please don't do this!

Make your move

We at GB Labs think that we have a better solution to a slow, painful transition to UltraHD. Or rather two solutions. The first and most obvious is to upgrade central storage to a network attached SSD RAID. Incredibly fast, it's got the power to take workgroups to a time beyond 8K. But it's expensive.

The second option is the acclaimed HyperSpace. In simple terms, we take our proven Space HDD storage and accelerate it. Dramatically.

A single HyperSpace adds blistering multi-stream 4K performance to HDD tier 1 configurations. That's a phenomenal boost in speed at an incredibly attractive price. And capacity is not an issue: Space can be scaled up-to 2 Petabytes.

Expensive? No, it's the most affordable way to get the benefits of SSD technology, without an all-SSD array.

What is HyperSpace?

HyperSpace is an SSD-based accelerator bolt on unit. It works intelligently with Space tier 1 RAID storage units to deliver extreme performance – suitable for even DPX streams - with no loss of capacity in the host array. The accelerator elegantly addresses the I/O performance gap between HDD systems and the ultimate performance of the Space SSD range. By intelligently lowering latency and increasing IOPS performance, the user experience is up to 400% faster.

If you need to use it, it's there in HyperSpace ready for action. The newest and most requested data, no matter how demanding, will be delivered from the fastest SSD technology available. Thanks to GB Labs' proprietary IDA2 technology, the whole experience is transparent with no user intervention required. Your full capacity is always available and the predictive and intelligent nature of HyperSpace gives normal hard disks seemingly impossible performance capabilities.

Expansion

HyperSpace is a low-profile 1U SSD-based rack unit that simply attaches to Space. Installation is fast and straight forward. One or more Hyperspace units can be added to a Space unit ensuring that as storage grows, so does the amount of accelerators. A HyperSpace-enabled Space system can also be expanded dynamically in the same way as the Space capacity can be increased using cost-effective EX units. This allows storage to be increased over time to meet a facility's growing needs – and buying cycles.

Single Secure Volume

As with all mission critical storage devices, data integrity is all important. Security is ensured by immediately committing all data to Space's Raid 6 HDD array. Furthermore advanced SSD management keeps the write overhead to within the data center specification of high endurance SSDs. Even the smallest 1.6TB HyperSpace is designed to process (in or out) 16TB of new unique data every day without exceeding the predicted endurance cycle of 5 years.

Further expansion and security is available by replicating or duplicating to a Space Echo nearline storage unit using the built in software. HyperSpace allows a near instant mirror of all data to be sent to an Echo up to 10 Kilometers away making for a very robust disaster recovery policy that offers more protection than a typical cluster solution that all resides in one server room. Space systems are also cloud-ready facilitating full remote file back-up and restore.

Avid Environments and Third Party Support

By default, Space, accelerated by HyperSpace supports mixed OS environments and has support for many leading third party solutions. These include Marquis Project Parking and Workspace Parking, Tools on Air Broadcast Suite and CatDV Server, as well as non linear editing software from Apple, Adobe, Grass Valley and Sony.

While the platform supports simple Avid bin sharing, the HyperSpace and Space can go much further. The platform has been developed to integrate tightly with an Avid Isis RAID array, from its entry level ISIS 1000 to the enterprise ready 7500. With the interplay between the two platforms, Avid workgroups can manage project files on a low-capacity Isis yet store video clips and other media assets on HyperSpace/Space. This gives them a greatly accelerated 2K/4K editing experience at a significantly lower cost, plus access to massive capacities. At the same time, thanks to Isis, users benefit from the familiar Avid project sharing environment, defined workspaces and support for Adobe Premiere Pro, Apple Final Cut Pro X, Autodesk Smoke and Blackmagic Design DaVinci Resolve.