Case Study: Post Production



NBC Universal & LX.TV

Solution Summary

At A Glance

- LX.TV is a division of NBC Universal, one of the largest television networks in the USA
- NBC needed to upgrade their storage to be ready and flexible for 4K or Ultra HD acquisition and post production
- The new storage solution had to be reliable, provide higher capacity and higher bandwidth
- The server room is not very large so the new solution needed to optimize the rack space used

The PROMISE Solution

 NBC deployed three VTrak J930s, two VTrak E830 units, multiple SANLink bridges and Pegasus Thunderbolt™ drives

Benefits

- Upgrade to 912TB of raw disk space
 new SAN solution provides 672TB
 of usable shared storage
- Proven reliability enables NBC to not worry about losing data
- Clear speed increase in drives and performance, vital as they move into 4K
- Excellent price point
- PROMISE offers most versatile options whether it is for mobile, desktop, or enterprise editing

NBC Universal is 4K Ready with VTrak



NBC turned to VTrak for higher capacity & bandwidth as it transitions to a 4K workflow

NBC Universal and LX.TV

NBC Universal, headquartered in New York, is one of the world's leading media and entertainment companies in the development, production, and marketing of entertainment, news, and information to a global audience. Mike Fernandes, Post Production Manager for LX.TV, a division of NBC Universal which produces lifestyle and entertainment programming including the Emmy Award-winning home improvement show George to the Rescue, relied on PROMISE VTrak x10 storage for six years but he needed to upgrade his hardware to be ready and flexible for 4K or Ultra HD acquisition and post production.

NBC's existing VTrak deployment provided 42TB of storage, but to be 4K ready they would need significantly more capacity, higher bandwidth, and reliability was vitally important as they simply cannot have any failures. After reviewing the options in the market and speaking with several storage solution providers, Fernandes and NBC trusted PROMISE more than any other company as their existing VTrak deployment proved to be very reliable. Plus, Fernandes was looking for flexibility and PROMISE offers the most versatile options throughout its product lines whether it is for mobile, desktop, or enterprise editing.



The PROMISE SANLink Thunderbolt to Fibre Channel bridge connect NBC's Mac minis to the VTrak J930s



Learn More About:

LX.TV - Lifestyle Television

- Started in 2006 as a broadband video network and was acquired by NBC Universal in 2008
- Based out of New York with satellite offices in Chicago and Los Angeles
- Original content includes Emmy Award-winning *George to the Rescue*, hosted by George Oliphant
- In addition to Network, US, and International syndication, LX.TV's content can be seen in New York City taxis, on WNBC's 24-hour network, and Cozi TV

Learn more: www.lxtv.com

NBC increased its raw disk space by more than 1700%, for a total of 912TB. The new VTrak SAN solution provides 672TB of usable shared storage in one rack, a great advantage since NBC's server room is not very large.

The PROMISE Solution at NBC

NBC boosted raw storage capacity to a total of 912TB with three ultra-dense VTrak J930s, two VTrak E830 RAID subsystems, multiple SANLink Thunderbolt to Fibre Channel bridges and multiple Pegasus Thunderbolt enclosures which are also deployed at its satellite offices in Los Angeles and Chicago that do not have SAN solutions. The existing VTrak x10 units are deployed in the SAN as "Tier 2" storage. During the upgrade, Fernandes and his team completely shut down for a week as the editors copied everything they needed for that week onto local or FireWire storage and they migrated data over the weekend.

LXTV's 24 editing stations are connected to the VTrak storage. Mac minis are used as metadata controllers which are connected to the J930s through the SANLink Thunderbolt to Fibre Channel bridge. The SANLinks, two VTrak E830 units and a Quantum i500 LTO-6, which is used for archiving, are connected to QLogic switches.

NBC added a Media Asset Management system from LevelsBeyond to interact with Final Cut Pro X. LevelsBeyond helps manage storage as the application tracks the location of everything and generates mezzanine files. This is very helpful to Fernandes and his group because policing 42TB was already hard to manage, and now with more than 600TB the challenge is exponentially greater. This also allows Fernandes to check in and check out projects so they don't have multiple copies and after it's finished it can archive out of Final Cut Pro X to their LTO- 6 tape drives – which is still accessible to other users. Additionally, Signiant is used to deliver remote files directly to the SAN facility in New York.

4K Ready with VTrak

For the next season, Fernandes plans to work with the new Blackmagic 4K cameras as they roll out into 4K and the PROMISE VTrak, SANLink and Pegasus solution is vital to his vision of the future. His plan is to work with Pegasus enclosures to load and back up media while out in the field and have SANLinks on every desk so all Mac minis and MacBooks can be connected directly to the SAN.



Ultra-Dense Expansion Capability VTrak J930s



Learn More About:

VTrak J930s

- 4U/60-Bay Ultra-Dense Enclosure
- High Performance 6G SAS
 Architecture
- Dual active/active SAS I/O modules
- Up to 90% power efficiency
- Eight 6G mini SAS (4x) ports
- Redundant, Hot-Swap Field Replaceable Units (FRUs)
- SES-3 compliant in-band enclosure management
- >> Download VTrak J930s Datasheet

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The upcoming move to 4K means that the storage has to deliver higher bandwidth and PROMISE delivered with a clear speed increase in drives and performance.

NBC has already experienced numerous benefits since upgrading their storage. NBC increased its raw disk space by more than 1700%, for a total of 912TB. The new VTrak SAN solution provides 672TB of usable shared storage in one rack, a great advantage since LXTV's server room is not very large. This was a key piece of the upgrade because it had to be done in the smallest footprint possible. Fernandes has seen other groups use different SAN solutions and they have to use three times the space to achieve what he has, but he can squeeze his entire SAN into one rack and he believes that is truly fantastic! This is largely achieved through the ultra-dense J930s, which delivers up to 240TB of raw capacity from a single unit.

"The J930s are so well designed! I think the form factor is spectacular and it's so easy to slide drives and pull them out," said Fernandes. "Performance was perfect for us especially since an SSD solution at this point would not be cost effective."

Since NBC work with a lot of moving parts, reliability is very important because they do not want to worry about losing data. From the VTrak x10 Series deployed 6 years ago to the upgraded VTrak, SANLink and Pegasus solution, PROMISE has proven to be the most reliable.

Additionally, the upcoming move to 4K means that the storage has to deliver higher bandwidth and PROMISE delivered with a clear speed increase in drives and performance. Best of all, the PROMISE solution does all of this at an excellent price point.

"We want to be set up to be 4K ready and future proof our workflows, especially with the upcoming Blackmagic 4K cameras, and looked to the VTrak J930s high density solution for higher bandwidth in less than half the rack space, Final Cut Pro X for 4K video editing and leveraging LevelsBeyond for a digital asset management," said Fernandes.

To learn more about LX.TV and its original content, please visit <u>www.lxtv.com</u>.