



Protecting Video Assets for Online Learning at UCSC Silicon Valley

How UC Scout workflow streamlines video production with B2 for backup and archive

While teams of creative professionals were busy creating educational videos for high school students at UCSC Silicon Valley, digital asset manager Sara Brylowski was keeping her eye on their disk usage. After creating thousands of videos for 65 online courses, Sara realized that their media server was quickly filling to its 128 TB capacity. Sara knew they needed to archive data from completed projects to make room for new ones, sooner rather than later. And she wanted to maximize value of their on-premises storage. Her mission was to build a creative workflow and manage assets, not manage hardware. Their archive needed to be in the cloud.

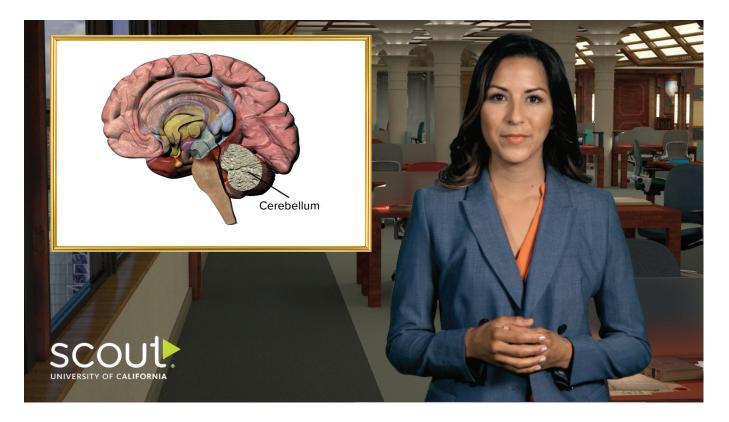


UC Scout delivers A-G approved online classes and curriculum to middle and high school students around the globe, with the intent to bridge the achievement gap. UC Scout is designed to ensure that a higher proportion of California's young people, including those who are first-generation, socioeconomically disadvantaged, and English-language learners, are prepared for postsecondary education and success in the workplace. Our course materials are designed to inspire lifelong curiosity and prepare pupils of all backgrounds and education levels for an increasingly technological world where training and job skills are mobile, asynchronous, and self-directed.



Built from the Ground Up for a Streamlined Workflow

UCSC Silicon Valley had tasked Sara to build a greenfield video production workflow to support UC Scout, the University of California's online learning program that gives high school students access to the advanced courses they need to be eligible and competitive for college. This offered Sara a unique opportunity to architect a modern content creation workflow without the assumptions and requirements of a legacy production system.



The video production teams couldn't wait until all the pieces were in place before they started, so they worked off a NAS and cloud backup from the university IT department's preferred supplier. Sara could see that neither solution worked well.



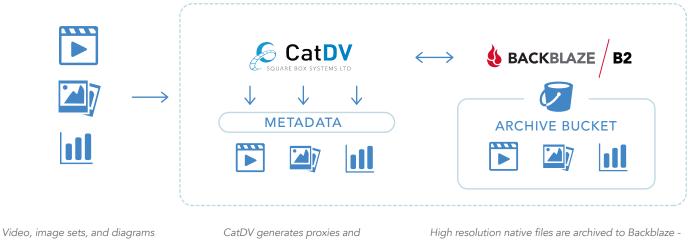
- Sara Brylowski, Digital Asset Manager

To help her design a more efficient workflow, Sara turned to Cutting Edge, one of the country's top media systems integrators with a speciality in storage and asset management solutions. Cutting Edge recommended replacing UCSC's existing storage with a Facilis TerraBlock 128TB media storage solution. Built specifically for editing high-definition video, the Facilis media server allows the three teams of editors, producers, graphic designers and animation artists — a total of 22 creative professionals — to share files and collaborate effectively.



Integrated Cloud Archiving for Quick, Direct Access

Once the media server was in place, Sara's focus turned next to finding the right Media Asset Management (MAM) solution for organizing their diverse and growing library of assets: video shot in studio, B-roll, licensed images, and audio from multiple sources. "We specifically wanted something that would handle more kinds of media than a traditional DAM," she explained. "Most of them are built for marketing and not video production." CatDV was a clear choice. "It had the features we needed at the best price point. Other MAMs have more bells and whistles, but they cost 3-4 times more."



needed for courses are all checked into asset management

CatDV generates proxies and metadata to make assembling courses faster and more efficient

High resolution native files are archived to Backblaze when needed for video production they are retrieved directly from the CatDV interface

One of those key features CatDV offered was integration with cloud storage for archiving. "We had no interest in using LTO tape for backup. **Tape would ultimately require more work and the media would degrade**. We wanted something more hands off and reliable," Sara related. The cloud choice was narrowed to Backblaze B2 or Amazon S3. Both were proven cloud solutions that were fully integrated with CatDV, as well as a broad range of other software. Backblaze was chosen because its \$5 per terabyte per month pricing was a fraction of the cost of Amazon S3.

Sara set up three Backblaze buckets: a backup bucket for protecting active files, an archive for storing infrequently used assets, and a library for the masters of completed course videos, then worked with Cutting Edge CTO Sig Knapstad to connect the buckets to CatDV. The Backblaze rollout was incredibly simple. The configuration from Cutting Edge plugged into the API and it worked right away,.

- Sara Brylowski, Digital Asset Manager

When a new course goes live, its build files are cataloged in CatDV and then moved to the Backblaze archive bucket. Proxies or thumbnails for archived assets still appear alongside the online assets in the CatDV interface, and retrieval is surprisingly fast. "Until they use it, the editors worry it will take hours to pull assets from the archive. But it only takes a minute," explained Sara. "They'll say, 'Ugh, it's offline!' and I'll say, 'Just wait a second.' After a quick refresh, the archived assets are back. That's been a big relief for them, they trust the system a lot more."



Protecting Content from Ingest to Archive in the Cloud

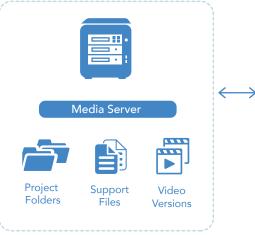
Moving to Backblaze B2 also resolved their problems with backup. The university's standard cloud backup was designed for traditional file servers, so it backed up everything, even the iterative files generated by video production tools like Adobe Premiere, After Effects, Maya 3D and Cinema 3D that don't need to be backed up.







Video editors and illustrations save files to project folders on the media server



Project folders, work in process, multiple versions of and support files on the media server are mirrored to Backblaze



Critical files on the media server are mirrored with a synchronization tool to protect against local file loss or deletion on the media server.

"We wanted to be more strategic and only back up what we need. We pushed to not use the university's backup provider not only because it was expensive, but because it was saving all of this 'noise' in perpetuity."

- Sara Brylowski, Digital Asset Manager

With B2, Sara can specify to back up only volumes currently under production. Right before post-production begins, she sets up a sync in SyncBackPro, which mirrors the project's folder structure and work-in-process files in the B2 cloud bucket. The mirrored folder structure on **B2 simplifies restoring files that are inadvertently deleted on the media server.** "We can drill into the exact project in our B2 backup bucket, find what we need, and pull it back down quickly. Backblaze's integration with Cyberduck makes it intuitive and easy."



An Efficient, Easy to Manage Workflow

With the CatDV and B2 solution now in place, Sara is actively freeing up storage on the media server by cataloging and archiving content for previously completed courses. "Right now our Facilis is down to 100 TB, and we have about the same volume stored in Backblaze. That will shift significantly as we catalog more of the completed courses and move their build files to archive in B2." By managing storage more efficiently, the department won't have to increase the capacity on their media server as video production increases. And unlike their media server, their B2 archive can grow indefinitely



Cutting Edge CEO Brian Botel explained further, "We recognized that UCSC needed a sophisticated and reliable asset management workflow with cloud archive at a competitive price point. CatDV enabled us to orchestrate file movement throughout the full content creation lifecycle, from the Facilis media server to a B2 cloud archive that can limitlessly scale on demand."

But the benefits of Backblaze goes further than optimizing their storage and protecting their data from ingest through archive. It's allowed the University to free the video team's data from the standard backup solution the rest of the organization employs, delivering a significant savings in the cost of their off-site storage. In addition to the cost savings, the integrations from CatDV and Facilis with Backblaze has allowed the internal IT staff to be largely hands off with the video data. "Previously we were using a blanket solution to backup our data, but our current trio of solutions allows us go go in with a scalpel and only retain the objects that we want to save" Sara explained. **"We're able to manage it all within our team and not burden our IT staff with managing a different workflow for just our department."** Efficiency has become only more critical as the department has expanded operations from UC Scout courses to now producing 3-4 university-level Extension courses per quarter. In less than two years, they've created over 4500 videos, each running 7-18 minutes long, often with custom animations created in-house. Having a more efficient workflow in place has also opened up the possibility of creating online courses for groups outside the UC system. Sara explained, "We have our process really well defined and we're an effective team. It only makes sense to offer our services to other organizations."

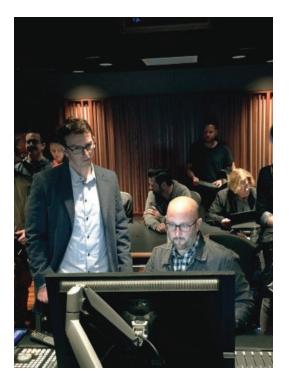
But the biggest value of the new workflow is what they don't have to do — worry about whether their content is protected and readily available. "With this workflow we can manage our content within its life cycle and at same time **have reliable backup storage for the items we know we're going to want in the future**," Sara related. "That's allowed us to concentrate on creating videos, not managing storage."

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About Cutting Edge

Cutting Edge is a Media Systems Integrator providing technology solutions, professional services, and support to content creators nationwide. With offices in Los Angeles and San Francisco, our clients include some of the most recognizable brands in media and entertainment, Fortune 500 corporations, higher education, and world-class sports organizations.

For more information, visit ceag.com.





About Backblaze B2 Cloud Storage

Backblaze B2 Cloud Storage has become the cloud storage of choice for content creators by offering extreme levels of content protection and instant availability at **one-fourth the cost of the largest cloud storage solution**. At only \$5 per terabyte per month of content stored, creatives can finally get all of their content into a truly active archive, streamline their production workflows, and phase out expensive, hard-to-manage tape and disk archive systems.

For more information, visit backblaze.com.