UCSC-SILICON VALLEY

University Learns to Streamline Online Course Video Production

All images provided by UCSC-Silicon Valley.

4,587
Videos
(and Growing)

500K+
Files Stored

22
Creatives
Unleashed

"

Sara Brylowski, Digital Asset Manager, UCSC Silicon Valley

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Situation

Sara Brylowski, the Digital Asset Manager at UCSC-Silicon Valley, needed to find an archive solution for UC-Scout, an online learning platform. Their media server was near capacity and the 22-person video production team was resorting to a NAS and cloud backup solution from the IT department's preferred supplier that fell short of its specific needs.

Solution

With counsel from Cutting Edge, a media systems integrator, Brylowski adopted a Facilis media storage system for easier file sharing and collaboration. Next, she added CatDV media asset management software for content organization that could integrate with 3rd party cloud storage. After comparing Backblaze B2 Cloud Storage and Amazon S3, Brylowski chose Backblaze B2 because it allowed her team to store more within budget.

Result

The solution delivered results quickly. Production team members could fully focus on creating content without concern for storage challenges. Retrievals and restores, as needed, became a breeze. Meanwhile, UCSC IT staff were freed from wrestling gnarly video data. And the whole set-up helped Brylowski bring UC-Scout's off-premise storage costs under control as she plans for significant content growth ahead.

The University of California Santa Cruz-Silicon Valley (UCSC) is a multi-disciplinary teaching and research hub including master's degree programs, online learning, and an incubator-accelerator program. Its UC-Scout program 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 by preparing more young people for postsecondary education.

University Learns to Streamline Online Course Video Production

While teams of UCSC creative professionals were busy developing educational videos for high school students, Digital Asset Manager Sara Brylowski was keeping her eye on their disk usage. After creating thousands of videos for 65 online courses, Brylowski realized that their media server was quickly filling to its 128 TB capacity. Brylowski knew they needed to archive data from completed projects to make room for new ones, sooner rather than later. And she wanted to maximize the 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.

el mosquito
El mosquito es un insecto que muerde.
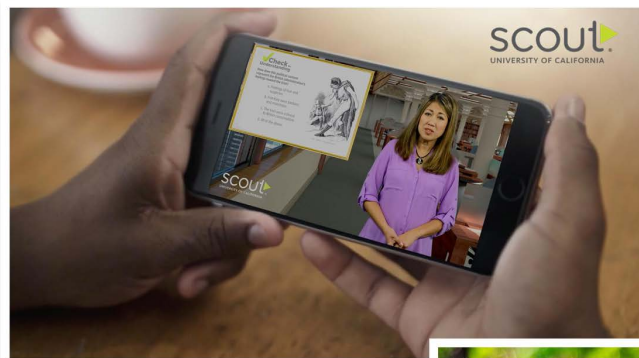
"We had all these editors working off a traditional file server. It was unreliable and inefficient."

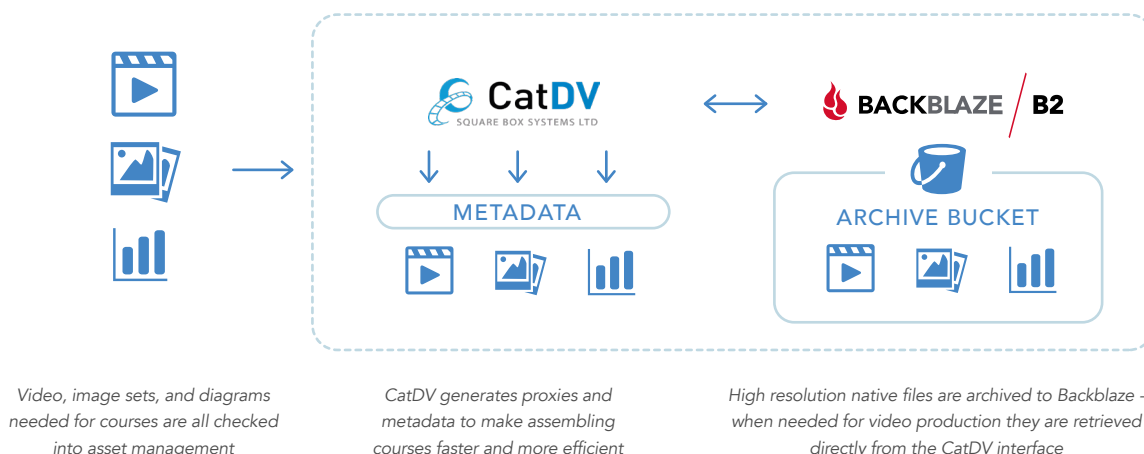Sara Brylowski, *Digital Asset Manager*
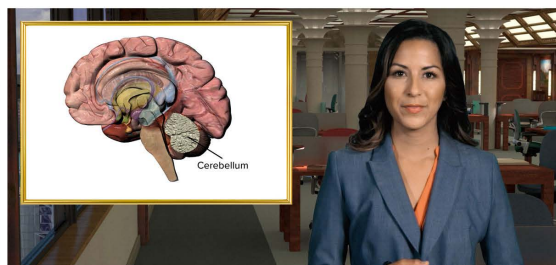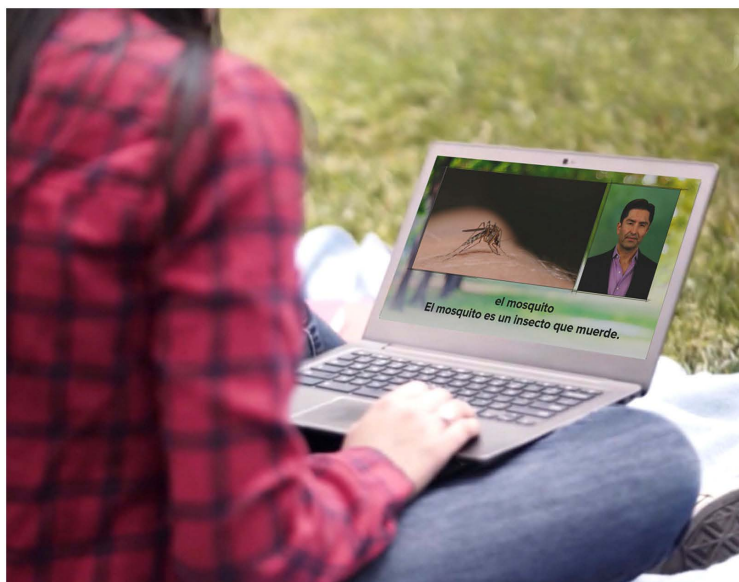
Built from the Ground Up for a Streamlined Workflow

UCSC had tasked Brylowski 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 Brylowski 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. Brylowski could see that neither solution worked well.

To help design a more efficient workflow, Brylowski 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 128 TB media storage solution. Built specifically for editing high-definition video, the Facilis media server would enable the three teams of editors, producers, graphic designers, and animation artists—then a total of 22 creative professionals—to share files and collaborate effectively.

Video, image sets, and diagrams 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

Integrated Cloud Archiving for Quick, Direct Access

Once the media server was in place, Brylowski's focus turned 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."

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," Brylowski related. The cloud choice was narrowed to Backblaze B2 or Amazon S3. Both were proven cloud solutions fully integrated with CatDV and a broad range of

other software. Backblaze B2 was chosen because its $5/TB of object storage per month pricing was a fraction of the cost of Amazon S3.

Brylowski set up three Backblaze B2 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.

What this meant was that, after a new course was taken live, its build files were cataloged in CatDV and then moved to the Backblaze archive bucket. Proxies or thumbnails for archived assets would still appear alongside the online assets in the CatDV interface, and retrieval was 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 Brylowski. "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."

"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."
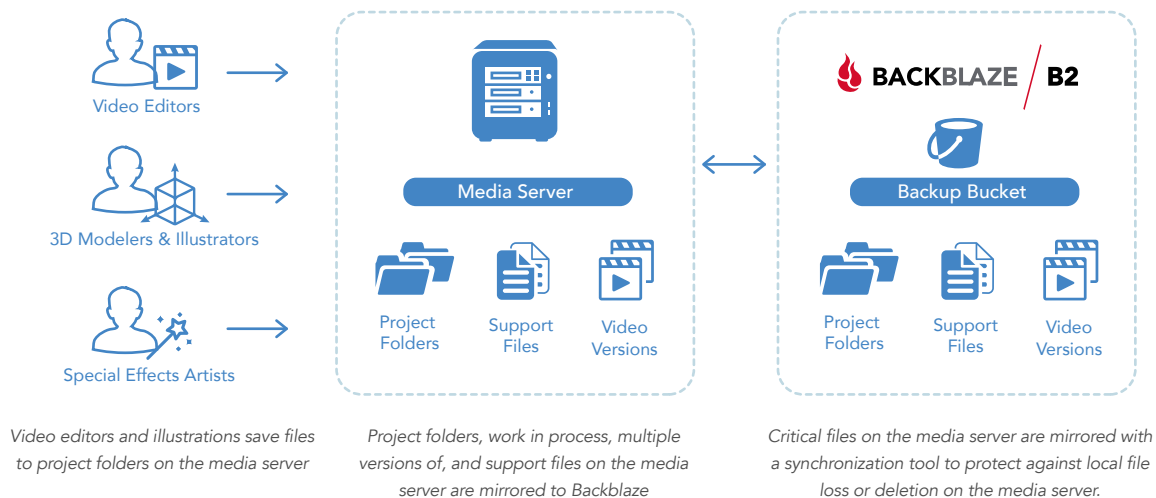
Sara Brylowski, Digital Asset Manager

Protecting Content from Ingest to Archive in the Cloud

Moving to Backblaze B2 also resolved their problems with backup. UCSC'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, Autodesk Maya and Cinema 4D that didn't need to be backed up.

With Backblaze B2, Brylowski could specify to back up only volumes currently under

production. Right before post-production would begin, she could now set up a sync in SyncBackPro, to mirror the project's folder structure and work-in-process files in the Backblaze B2 bucket. The mirrored folder structure simplified restoring any files inadvertently deleted on the media server.

"We can drill into the exact project in our Backup B2 backup bucket, find what we need, and pull it back down quickly," she said.

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.

An Efficient, Easy to Manage Workflow

With the CatDV and Backblaze B2 solution now in place, Brylowski 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 Backblaze 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 Backblaze 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 Backblaze 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 has allowed UCSC 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 to go in with a scalpel and only retain the objects that we want to save," Brylowski 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 only to now also producing select online courses each quarter for other parts of UCSC. In less than two years, they created over 4,587 videos, each running 7-18

"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

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. Brylowski 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," Brylowski related. "That's allowed us to concentrate on creating videos, not managing storage."

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About Backblaze

Backblaze B2 Cloud Storage is purpose-built for ease, instant access to files and data, and infinite scalability. It seamlessly supports workflows via hundreds of third-party software integrations, or through direct APIs and CLIs. At only $5/TB of object storage per month (a fraction of the cost of the largest solutions), Backblaze B2 is priced so users don't have to choose between what matters and what doesn't when it comes to backup, archive, data organization, workflow streamlining, and more.

www.backblaze.com

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