BACKBLAZE

USE CASES: **Archive** / **Distribution** / **LTO Replacement**

KEYWORDS: **Content Syndication** / **Cost Containment** / **Nonprofit**

AMERICAN PUBLIC TELEVISION

Public TV Syndicator Uses Cloud to Distribute Programs

All images provided by American Public Television.

350
TV Stations Served

300
New Titles Per Year

~75%
Savings vs. Others

Gerry Field, VP of Technology & Distribution Services, American Public Television

"The affordability and performance of Backblaze B2 is what allowed us to make the cloud part of the APT data storage and distribution strategy into the future."

Situation

Nonprofit American Public Television (APT) found itself on the frontline of an industry transition from tape to digital files. They leaned in on the change, only to watch their growing digital library exceed their on-premises storage capacity—especially as they expanded programming formats—and their 350+ subscriber stations struggle to keep up with data growth, too.

Solution

Determined to implement a sustainable approach that would avoid large capital investments, APT's VP of Technology & Distribution Services turned to the cloud. Yet he found most solutions at odds with his nonprofit budget. Backblaze B2 Cloud Storage stood out for its scalable, reliable, and notably affordable service, which could help address APT's storage and distribution needs.

Result

APT enjoyed immediate benefit in Backblaze B2's pay-as-you-go storage, which eased, rather than worsened, their local station's infrastructure issues. What's more, it realized a range of new possibilities to explore, including the ability to more easily ingest new programming for future distribution, more efficiently make programs available for stations to download, and enable new e-commerce possibilities like selling episodes to businesses.

Boston-based American Public Television is the largest syndicator of programming for public television stations in the United States. Founded in 1961, the nonprofit organization nationally distributes more than 300 new program titles per year including documentaries, talk shows, music performance content, dramatic and comedic series, how-to programs, children's series, and classic movies. It also distributes select programs around the world.

Public TV Syndicator Uses Cloud to Distribute Programs

In the time since Gerry Field joined American Public Television (APT) in 2007, his industry was in digital overdrive: pushing to acquire and distribute more high-quality, groundbreaking public television programming to their technologically diverse subscribers—local public TV stations.

Two key challenges emerged for Field, who as VP of Technology & Distribution Services is responsible for delivering their extensive program catalog to 350+ public television stations nationwide. First, new technology and format proliferation had driven dramatic increases in digital storage requirements for their servers. Second, many of APT's subscribers struggled to keep up with the rapidly changing industry. A case in point: while some subscribers had adopted state-of-the-art satellite systems to receive programming, others still waited for the Postal Service to deliver programs recorded on tape weeks earlier.

With an expectation that there would be no slowdown of innovation on the horizon—and more likely than not, an acceleration ahead—Field knew that his storage and distribution systems would reach a crossroads in no time at all.

Of course, he was determined to make sure the shows would go on, as subscriber stations had fostered loyal local followings for their many shows. On Field's watch, technology would not become the barrier to viewers enjoying their favorite cooking programs, riveting drama series, and award-winning documentaries.

Living the Tape Paradigm

Difficult as it can be to imagine now, the digital media industry is not far removed from its film, and subsequent videotape, roots. Until fairly recently, for practicality and cost reasons, tape was the industry's input and output of choice. As a consequence, the tools and workflows used by people in the industry were largely built and designed to work with tape.

Eventually, the "file" started to replace the tape as the object to be captured, edited, stored, and distributed. The trouble was that many of the legacy systems and more importantly, workflows, were still based on processing tape. And with change being hard, the way of doing things proved hard to modernize.

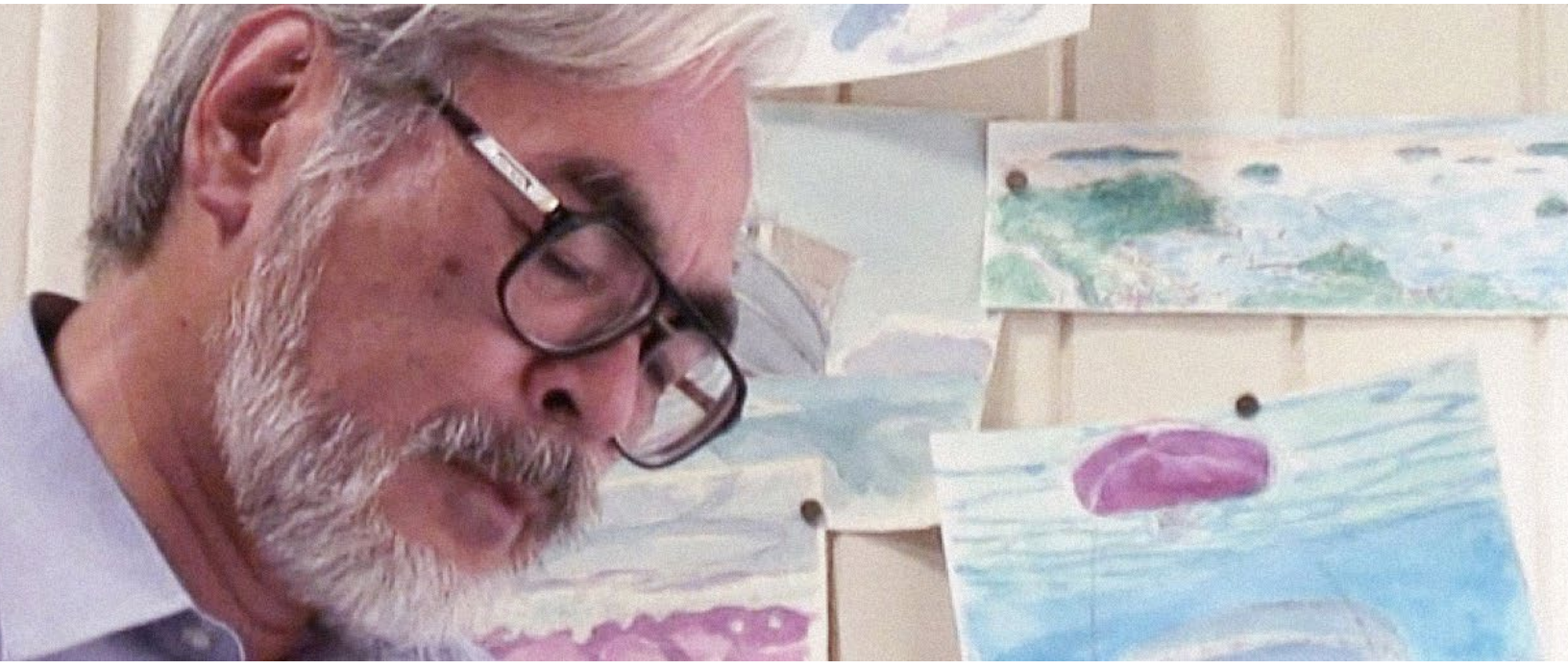
At APT, Field realized the limits of tape-based distribution and began looking for technologies and solutions that enabled workflows based on file- and object-based storage and distribution.

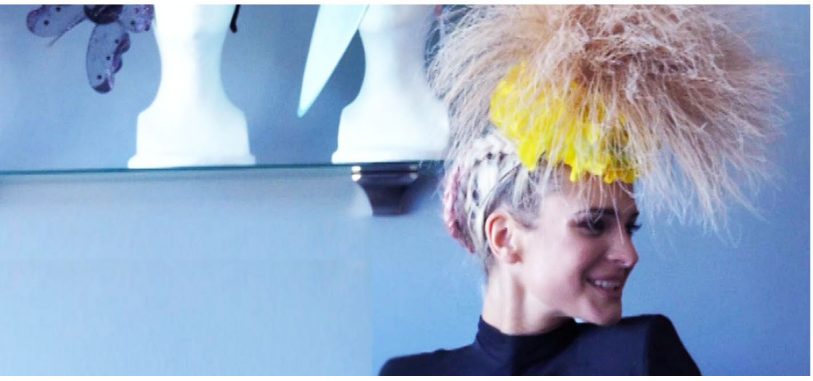
Thinking File-Based Storage and Distribution

APT, like everyone else, started to address the shift to digital media by installing onsite storage servers. And as the amount of digital data grew, they simply added more storage.

But the growth in programming formats and data was neither slow nor linear. APT at this time was expanding its distribution footprint by creating or partnering with incremental distribution channels including Create (focused on how-to content) and World (focused on global human interest stories behind the headlines). As a consequence, updating, maintaining, and managing the APT storage systems had become a major challenge. It had also become a major resource hog.

Knowing that his in-house storage system was only going to cost more time and money, Field decided it was time to look at cloud storage.





Dark Clouds in Cloud Costs

While most people considered cloud storage to be just a different place to back up and archive files, Field envisioned how the ubiquity of the cloud could *also* help solve his distribution challenges. The trouble was that the price of cloud storage from vendors like Amazon S3 and Microsoft Azure was a non-starter, especially for a nonprofit organization like APT.

Then Field discovered Backblaze B2 Cloud Storage, which met all of his performance requirements and, at $0.005/GB/month for storage and $0.01/GB for downloads, would save him roughly 75% in service cost compared to the other cloud storage options he had explored.

Backblaze B2 would also give him the foundation necessary to receive and distribute program content over the internet. Field saw this as especially useful for local subscriber organizations that couldn't conveniently access satellite distribution systems. In addition, downloading from the cloud was clearly much faster than sending a tape through the mail.

Adding B2 Cloud Storage to their infrastructure helped APT address two key challenges. First, it set them up with "unlimited" scalable storage without having to add any on-premises hardware. And they would only have to pay for the Backblaze B2 storage used, free from obligation to estimate and commit upfront to the maximum amount of storage that they might need.

> Field did the math and found he could economically incorporate B2 Cloud Storage into his IT portfolio, using it for both program submission and for storing and archiving APT programs.

Second, by using Backblaze B2 as a distribution source for their programming, they could deliver content to subscribers—especially the smaller and remote public TV stations—faster and more reliably without anyone having to perform costly infrastructure upgrades.

To be sure, Backblaze B2 was not the only solution that Field deployed. APT advanced multiple technologies to effectively enable their file-based infrastructure. Yet Field felt that deploying an affordable, trustworthy cloud storage service in B2 Cloud Storage was one of the critical building blocks that helped everything work together.

The Road Ahead

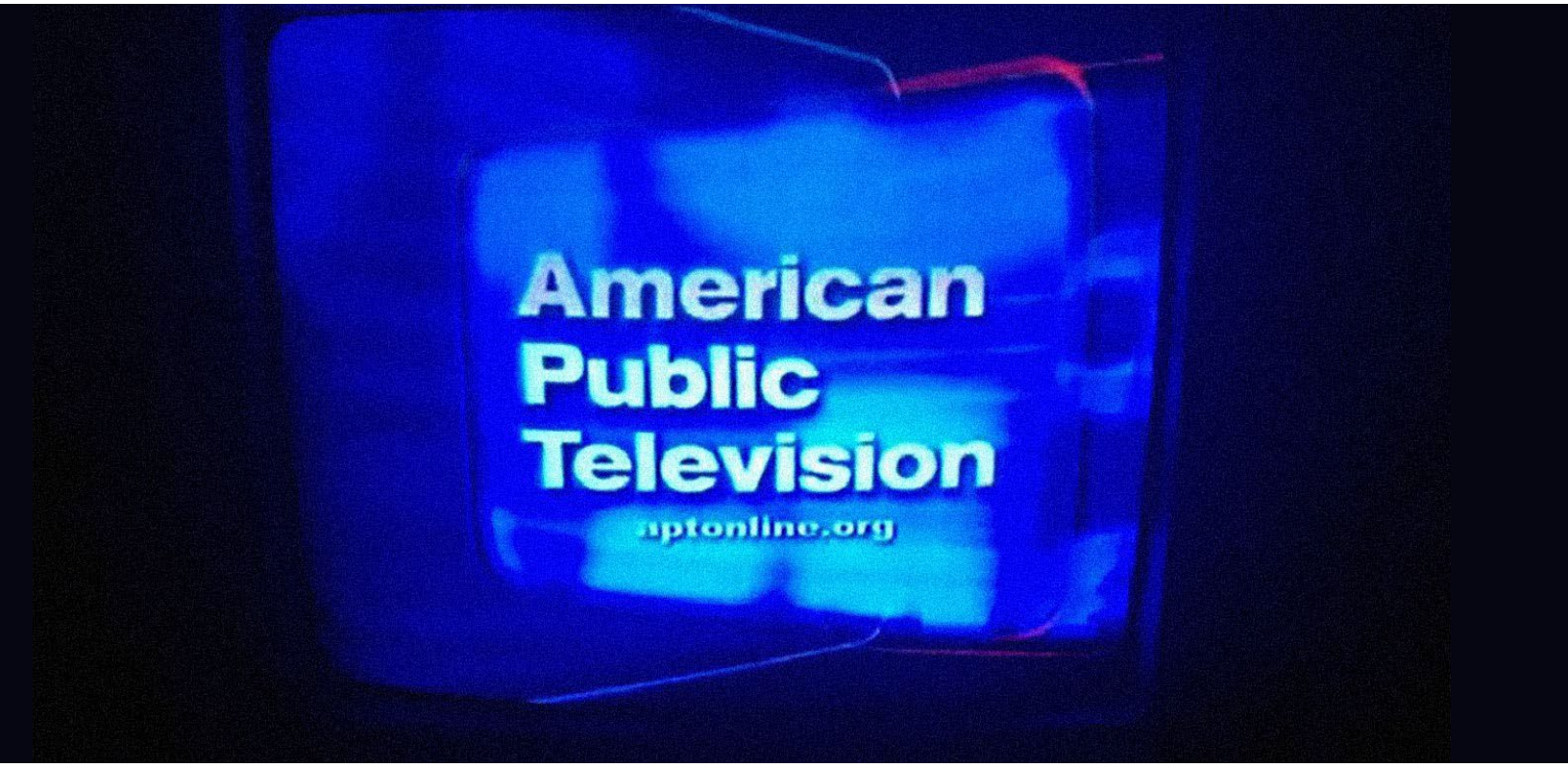
With new fundamentals in place, APT was then positioned to explore several new cost saving and income generating possibilities. Among the future possibilities enabled:

Program Submissions. New content can now be easily uploaded from anywhere using a web browser, an internet connection, and a login. For example, a producer in Cambodia can upload their documentary to Backblaze B2, seamlessly. From there, the program is downloaded to an in-house APT system, where it is processed and transcoded. The finished film is added to the APT catalog and added to B2 Cloud Storage, after which it is instantly available for subscribers to order and download.

Easier Previews. At any time, work in process or finished programs can be made available for download from the Backblaze B2 cloud. One instance in which this can be useful is when a subscriber needs to review a program to comply with local policies and practices before airing. In the old system, each “one-off” was a time-consuming, manual process.

Instant Subscriptions. There are many organizations, such as schools and businesses, that want to use just one episode of a desired show. With an e-commerce based website, current or even archived programming stored to Backblaze B2 can be available to download or stream for a minimal charge.

With new fundamentals in place, APT was then positioned to explore several new cost saving and income generating possibilities.



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

 500 Ben Franklin Ct. San Mateo, CA 94401 USA

BACKBLAZE