



DTC

MSP Cleans Up Data Infrastructure for Time Savings, Market Growth



Use Cases

Backup

Keywords

HIPAA | MSP

CloudBerry-MSP360

\$68K

**Cost Savings
Per Year**

Situation

DTC, formerly known as Dental Technology Center, needed reliable object storage to keep backups for 450+ clients safe and protected. When one provider lost critical data, they transitioned to MSP360 software to manage backups, but cycled through several object storage providers—frustrated with complex interfaces, increasing costs, and backup failures.

500+

**Servers
Backed up**

Solution

When DTC implemented a new solution only to find that it failed at scale, they turned to Backblaze B2 Cloud Storage based on its reputation of reliability and transparency. After conducting due diligence, B2 Cloud Storage proved its superior value in every category. DTC seamlessly migrated nearly 500TB from Amazon S3 over four weeks using Backblaze's data transfer service.

Result

Pairing MSP360 and Backblaze B2, DTC can verify backups without pulling data on-premises, eliminating time-sensitive manual verification and ensuring reliability. For DTC, the move increases margins, made them more competitive in their vertical, and prepared them to expand into other markets, like providing infrastructure as a service to their clients—a long time ambition they can now pursue.

55%

**Faster
Implementation**



DTC is a Baltimore, MD-based managed service provider (MSP) offering centralized IT services to dental and doctors' offices throughout the mid-Atlantic region. They help clients with all aspects of dental office technology—everything from system planning to training to installation. They also offer technical support ranging from fully-managed services to preventative maintenance; remote solutions; and support for hardware, software, and network integration needs.



Dental Services MSP Takes a Bite Out of the Market

"We lost your data." It's a phrase that haunts managed IT service providers, and one Nate Smith had to say to a client shortly after starting at DTC in 2016. "The application we were using said they had it backed up, but we couldn't pull it down. We went through the whole fiasco of working with the backup provider's support team. In the end, it wasn't there, and that file was definitely important," he admitted.

Smith never wanted to hear, let alone speak, those words again. As a technical project manager for DTC, he is responsible for backing up 6,000+ endpoints on 500+ servers at more than 450 dental and doctors' offices in the mid-Atlantic region, and he considers it a serious responsibility. "We're taking care of peoples' livelihoods," he attested. "Reliability is extremely important."

Knowing they could no longer trust their legacy application, DTC implemented MSP360—backup

and recovery software for MSPs—to manage backups moving forward. Reliability necessitated the change, but the cost and ease of the managed backup software sealed the deal. Smith explained, "The more licenses you buy with them, the lower the price per license. Plus, it was one of the only ones out there that I knew of that backed up directly to object storage."

At the time, DTC chose Amazon S3 to handle that object storage. Over the intervening years, they onboarded more than 200 new clients and lengthened retention policies based on evolving HIPAA requirements. The early savings realized from switching to MSP360 offset the cost of Amazon S3 for a while, but as the amount of data being backed up swelled in line with new business and new retention policies, the Amazon bills started to add up at a troubling rate.

“ It’s not like Amazon S3, where you have to use CloudWatch to figure out how many objects you have and how much data is there. Backblaze just tells you. Simplicity is a time saver, and time is money.

Nate Smith, Chief Technical Officer, DTC

DTC Checks Up on Storage Options

“The kicker hit this year,” Smith said of the decision to drop Amazon S3 in 2020. A different project he was working on involved moving DTC infrastructure from self-hosted to a data center, and that came at a price. So, Smith looked for other budget lines to offset that investment, turning his gaze to backup storage.

He tried Amazon Glacier, but found it cost DTC even more money than Amazon S3 due to the sheer number of objects most dentists need to restore—like hundreds of thousands of x-rays. “If you need something and you need it fast, Glacier will hit you hard,” he said, referring to the service’s warming fees and retrieval costs.

Smith looked around again, this time finding a service that integrated both compute and object storage. At \$0.01/GB, it was more expensive than simple object storage, but the anticipated time savings of managing resources with a single vendor was worth the extra cost for Smith—until it wasn’t. He spent more than 75 hours trying to reconfigure DTC’s entire platform to meet the provider’s needs. He eventually got the solution up and running and

was resolved to make it work, but he still needed to smoke test it at scale.

“The transition to the integrated provider was a failure,” Smith lamented. DTC successfully tested the service with a small number of endpoints, but the trouble started when they attempted migrating more than 75 endpoints. Then, the failures began rolling in every night—backups would time out: jobs would retry and fail. There were time sync issues, foreign key errors, remote socket errors, and not enough spindles—in short, a whole host of problems. “They did not have the infrastructure to handle the volume, which surprised me,” he acknowledged.

So Smith reverted the backup data to Amazon S3, worked with the integrated provider’s support team, and then gave their solution one more go. “Seventy-Eight endpoints in, the failures started happening again,” he said. Smith realized they would have to go in a different direction. “This is peoples’ data we’re talking about,” he emphasized. The stakes were too high. So he moved everything back to S3 one last time, then reached out to Backblaze as well as Wasabi, a cloud storage provider founded in 2017.



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**If you need something
and you need it fast,
Glacier will hit you hard.**

Nate Smith, Chief Technical Officer, DTC

Nate Smith Recommends: Do the Math (and Floss)

At first glance, Wasabi looked more economical based on the pricing they highlight, but Smith drew a different conclusion after his due diligence. He estimated that Wasabi's 90-day minimum storage retention policy potentially added up to \$0.015/GB given DTC's 30-day retention policy. Since Backblaze is a pay-as-you-go cloud storage service with no deletion fees and a one-hour minimum retention period, Smith didn't have to worry about unexpected fees breaking his budget forecasts.

Egress wasn't the only scenario Smith tested. He also ran total loss scenarios for 10 clients comparing AWS, Backblaze B2 Cloud Storage, and Wasabi. "We even doubled our biggest average data set size to 4TB just to overestimate. Backblaze B2 won out every single time," he said. Fully loaded costs from AWS totalled nearly \$100,000 per year. With Backblaze B2, their yearly spend looks more like \$32,000. "I highly recommend anyone choosing a provider get detailed in the math," he advised—sage words from someone who's seen it all when it comes to finding reliable object storage.





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Nate Smith, Chief Technical Officer, DTC

Implementing Backblaze B2, No Novocaine Needed

Smith’s math proved out—Backblaze B2 was the best choice, but not only from a total cost of service perspective. With Backblaze’s ease of use, Smith didn’t have to spend hours reconfiguring DTC’s platforms like he did with the previous object storage provider. Of the process, he noted, “We didn’t have to re-seed backups. The data pulled over at an average 6GB per second. Once it was there, we just did another incremental from the client side—and done. It was amazing.”

Smith also appreciated Backblaze B2’s simple interface. He can easily see statistics on his data. “It’s not like Amazon S3, where you have to use CloudWatch to figure out how many

objects you have and how much data is there,” he explained. “Backblaze just tells you. Simplicity is a time saver, and time is money.”

Backblaze’s transparency furthermore appealed to Smith as a technologist and engineer. “Backblaze has an open-source mindset that I absolutely love, down to the point that they show you how to build their own Storage Pods,” he said. “That’s pretty impressive, and it makes me feel confident in their reliability.”

DTC migrated all its 450 clients—nearly 575TB of data—over the course of four weeks using Backblaze’s high speed data transfer solution. “That sped up the project tenfold,” Smith said.

Reliable Storage and Competitive Margins Make for Sparkling Smiles

With MSP360 and Backblaze B2, Smith doesn't just trust in Backblaze's reliability, he can test it without pulling the backups on-premises and doing manual verifications of the data after it's been migrated. "If MSP360 finds an inconsistency, it will just back up those files again and call it a day. If we didn't have that functionality, verifying the data would be next to impossible," he reflected. "MSP360 along with Backblaze have been a perfect match together. If anyone is using MSP360, there's no reason not to use Backblaze."

The transition to Backblaze B2 means Smith is no longer scared to get an unforeseen bill or worried about purging data to lower costs. "The price is predictable, economical, and fair. I'm not going to bed at night thinking about all those terabytes we need to clean up. That stress relief is great," Smith said.

With Backblaze B2, DTC also finally realized the margins they'd been seeking to achieve. The extra funds in their budget allowed them to move their infrastructure to a data center and set them up for growth in their vertical, in new markets, and, one day, as a cloud service provider themselves—a long-time ambition. "We know the market is going to the cloud, and eventually we want to be an infrastructure as a service provider as well," he added. "There's plenty of room to grow," Smith concluded, happy to have the tools he needs to take additional steps toward reaching DTC's full potential.

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.

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