



Perpetual Case Study

2022

When product design and software development company [Perpetual](#) began working with a new sports startup client, Perpetual quickly realized that it needed a solution for an image management tool that was both flexible and cost effective. The startup client, which partners with tennis clubs, coaches, and players, used proprietary images for its coaching portal and needed to quickly and inexpensively optimize how its images were processed.

Perpetual reached out to Amazon Web Services (AWS), seeking a solution for an image handler at the edge that could process and deliver large numbers of images in a quick and cost-effective manner. Looking to the [AWS Solutions Library](#), which offers a collection of cloud-based solutions for dozens of technical and business problems, Perpetual found the optimal fit for its challenge: [Serverless Image Handler](#). This AWS Solution, which provides dynamic image handling, deploys a serverless architecture and facilitates cost-effective image processing at the edge. Within 2 days, Perpetual had the solution in place, making it possible for the company to offer its client an affordable and scalable solution.



“When it comes to having a global presence, we feel confident that this solution will scale well and that it will provide availability and image asset management. Serverless Image Handler is a complete solution for image manipulation and delivery.”

Vishal Gandhi
Head of Technology, Perpetual

Using AWS Solutions to Meet New Client Needs

Founded in 2012, Perpetual is a cross-functional user experience, product design, and software development company. The company has a wide-ranging portfolio of clients—including media corporations, financial services, universities, nonprofits, and startups—and has been an AWS customer for the past 8 years. Perpetual values the flexibility and ease of use of these solutions, as well as the robust documentation and support available for the implementation of different services.

When faced with its sports startup client's image management challenge, Perpetual researched several tools. The client's main hurdle was working with proprietary images for its coaching portal. Some of these images needed to be edited due to irrelevant information or branding issues, but because they were proprietary, the client could not host them externally. As a result, the client found itself in a laborious cycle: downloading images, performing manual updates like cropping and resizing, storing the same image in multiple formats and sizes, and then uploading them. The client needed a dynamic image manipulation tool to streamline this process so that the images could be made available for use in its portal with minimal effort.

Simplifying Setup and Campaign Launches for Its Client

A lower-cost option than externally hosted tools, Serverless Image Handler has the added benefit of helping the client achieve its compliance goals for proprietary images. For a startup like Perpetual's client, using AWS Solutions made the most sense; Serverless Image Handler offered an affordable pricing structure, with the flexibility to grow with the client as it expanded its launch campaigns into new markets. The architecture of Serverless Image Handler combines AWS services with sharp's open-source image processing software and provides image handling that maintains high-quality images on web and mobile. “Serverless Image Handler offered security and scalability,” says Josh Cooter, software engineer at Perpetual. Additionally, Serverless Image Handler was quick for Perpetual to implement. “This was a faster turnaround that essentially cut the client's image management lead time by 50 percent,” says Cooter.

The setup, supported by robust and straightforward Guidance for Serverless Image Handler, was seamless for Perpetual's client, which was able to begin testing within days. The efficiency and ease of use provided by Serverless Image Handler were key requirements for the client, as its complex campaigns featured at least 50 images each. “Without this solution, it would have taken the client at least 3 months to launch six campaigns. But because of the automation and the ease of image editing gained by using Serverless Image Handler, the launch of six campaigns was accomplished in 6 weeks,” says Vishal Gandhi, head of technology at Perpetual. For the fast-growing sports startup client, quickly implementing multiple campaigns was central to growth. Perpetual's implementation of Serverless Image Handler helped the client meet its goal of launching all six campaigns during its first year as it expanded into new states.

Another benefit gained from the client's use of Serverless Image Handler was that the client no longer needed to externally host data in different systems. The client had started out using another system to set up the portal, but after discussions with Perpetual, the client realized that using the AWS tool kit offered the most flexibility. In conjunction with the Serverless Image Handler, the client used two other AWS services to support the portal. [Amazon CloudFront](#)—a content delivery network service built for high performance, security, and developer convenience—was ideal for the distribution of the images. And for storage buckets, the client chose [Amazon Simple Storage Service](#) (Amazon S3), an object storage service offering industry-leading scalability, data availability, security, and performance.

Using Knowledge of AWS Solutions to Explore Future Benefits

Perpetual envisions long-term benefits from implementing Serverless Image Handler. “We've gained familiarity with Serverless Image Handler,” says Cooter. “Now, we have the ability to implement a similar solution for future clients and projects where it makes sense. Anytime that we can do that, it's valuable for us, because we're able to work more quickly and more efficiently to implement those solutions for clients.” And Perpetual's clients benefit from these additional solutions. “It's a much more cohesive solution that's been vetted by our team,” Gandhi says. “It increases confidence and also helps us accelerate our implementation and architecture planning.”

As Perpetual continues to expand and develop its client base, the company is happy to add to its AWS resources. “When it comes to having a global presence, we feel confident that this solution will scale well and that it will provide availability and image asset management,” says Gandhi. “Serverless Image Handler is a complete solution for image manipulation and delivery.”

About Perpetual

Perpetual is a cross-functional user experience, product design, and software development company founded in 2012, with clients ranging from media corporations and financial services to universities, nonprofits, and startups.

Benefits of AWS

- Reduced costs for image management
- Facilitated security compliance for proprietary images
- Reduced image management lead time by 50%
- Facilitated fast and simple implementation

AWS Services Used

Serverless Image Handler

Deploy a solution that combines highly available, trusted AWS services and the open source image processing software Sharp for cost-effective image manipulation in the AWS Cloud.

[Learn more »](#)

Amazon CloudFront

Amazon CloudFront is a fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency, high transfer speeds, all within a developer-friendly environment.

[Learn more »](#)

Amazon Simple Storage Service (Amazon S3)

Amazon Simple Storage Service (Amazon S3) is an object storage service offering industry-leading scalability, data availability, security, and performance.

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