

Successful Case



At **Nubilink** we work to help our clients just to understand and adopt those cloud technologies that allow them to improve and secure their applications and processes.

When a client arrives at **Nubilink**, we are attentive to the needs that they present to us. We propose agile solutions that solve problems because we know that we live in dizzying times. We make firm decisions thanks to our experience, working from automating processes that avoid errors.

This is the case of “**Voy al cine**”. Our client, **Andrés Lapuente** de [e-wave group](#), came at **Nubilink** to ask for our cloud solution services. Here is his testimony, and then the description of this successful case.

Testimony

“ Some time ago, in our company we needed to host an e-commerce website with high availability. After trying with local providers, we migrated to Amazon Web Services. Over time, we came to the conclusion that it was a very good service, but with costs in dollars, which gave us a bit of uncertainty. Searching the internet, we came to Nubilink, as an option to bill the AWS service in Argentine pesos. Immediately, in less than 24 hours we were under the orbit of **Nubilink**. We really learned the excellent decision we had made. They quickly analyzed our poorly implemented infrastructure and in a few meetings, they gave us a proposal to improve the infrastructure and reduce costs. At all times I had and still have **Nubilink** support through different channels just to clear up doubts and solve problems.

The planning and communication of any task to be carried out is always precise and timely.

Recently, we had to migrate to a different AWS zone. It had to be done during non-business hours because of high demand. I constantly had the support and accompaniment of company personnel.

Llegamos casi de casualidad a Nubilink buscando evitar problemas con los pagos al exterior, y nos encontramos con un excelente Partner de nuestro negocio que nos da mucha tranquilidad en nuestro trabajo.”

Andrés Lapuente | e-wave group

Challenge

In this case, the client comes to **Nubilink** with three well-defined objectives of what they need:

- Improve the infrastructure of Voy al Cine to adjust to current security standards
- Accelerate app content delivery
- Improve the total costs of the implementation

This application, "voy al cine", is a virtual billboard with high quality images. It has the peculiarity of showing the posters of all the films available in each of the movie theaters for which this online ticket sales service provides. Here, when loading the page, every millisecond counts.

Initially, this content was delivered from external servers physically located in Argentina, with the aim of reducing latency and aiming for optimal page load. But this was not enough to respond to the needs raised above.

Choosing CloudFront

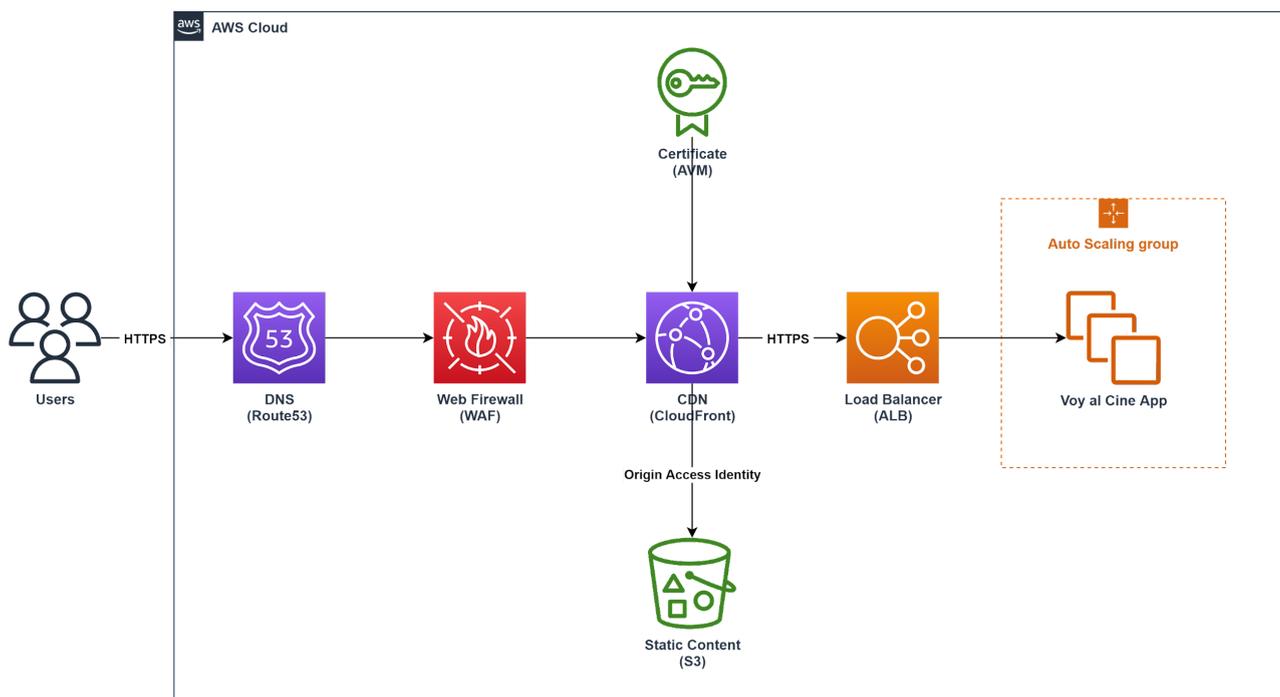
After reviewing the specific needs of the case, it was decided to use the global infrastructure of AWS and specifically the [Amazon CloudFront](#) service to achieve this desired improvement. This decision also allows the expansion of the platform to other regions without the limitation of hosting the content locally.

[Amazon Simple Storage Service \(Amazon S3\)](#) object storage service was used for content persistence. It's a self-scaling service, fully managed by AWS, with a very good cost per

stored GB ratio. In addition, Amazon S3 is a service that integrates perfectly with **Amazon CloudFront**.

“Voy al Cine” Infrastructure

The following architecture diagram conceptually shows how **CloudFront** and Amazon S3 were used to deliver this static content.



Infrastructure for Voy al Cine application (conceptual diagram).

Amazon CloudFront was not only implemented to speed up the delivery of static content. It was also used to improve the content delivery of the app itself.

The Web Application Firewall implementation was an important point to protect the infrastructure against the most common attacks. We define a set of rules, both those from administered services and other personalized rules just to increase the security of the infrastructure.

Content security

All our infrastructures would not be completed without paying special attention to security. Every implementation that we carry out at **Nubilink** is set on the fundamental AWS pillar of security.

Any information in transit is encrypted using SSL/TLS through the [AWS Certificate Manager](#) service, which makes it easy to provision, manage, and deploy these

certificates at the transport layer. The use of HTTPS is forced through specific settings in **Amazon CloudFront**. This configuration is done using Terraform code.

The S3 bucket that stores the static content is protected from public access and all content is stored in encrypted form. Considering that access to the S3 bucket is private:

¿How does CloudFront access this S3 from all edge locations of the global AWS infrastructure??

This is solved using [Origin Access Identity](#) (OAI). OAI is a special **CloudFront** user that is associated with the distribution. Using Terraform code we create an Origin Access Identity.

Once this is done, the permissions of the S3 bucket are configured to enable CloudFront to access it through OAI and deliver the content to users. This keeps the contents of the bucket private, preventing an external user from accessing it outside of **CloudFront**. An access policy is defined by OAI.

Conclusions

AWS has changed the way applications work in the cloud, improving availability while simplifying resource provisioning and management, so our customers can focus on new features and applications without the heavy lifting of managing the infrastructure they need. All this in turn improves the security of these implementations and maintains a very good cost / benefit balance.

In this specific case, a significant improvement was achieved in all these aspects that will allow the expansion of the **“Voy al Cine”** application throughout the Region, maintaining the user experience standard.

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