



# transparent edge

Transparent Edge's  
Varnish-based CDN  
delivers flexible content  
caching for diverse  
caching needs

Case Study:

# Transparent Edge

---

# Transparent Edge builds flexible CDN from the ground up

---

## Background

Transparent Edge is a European edge cybersecurity company that helps internet companies improve their security and positioning through a state-of-the-art content delivery platform..

Their differentiator: being the only Spanish-based commercial content delivery network (CDN), and the only real alternative to American CDNs in Europe.

For more than a decade, Transparent Edge has delivered content and continues to develop a European identity for internet security and speed.

## The challenge

### Managing traffic spikes while maintaining flexible content caching

“In the dynamic landscape of content delivery, we often experience sudden surges in demand, such as during major events or big breaking news,” explains Diego Suárez, Chief Technology Officer, Transparent Edge.

“One of the primary challenges we aimed to address was efficiently handling traffic spikes while maintaining flexibility in content caching.”

In addition to balancing traffic spikes with flexible content delivery, some content delivery requirements can vary significantly from one client to another. Some clients may need dynamic content updates in real-time, while others may require longer caching periods.

## Transparent Edge at a glance

### Company

- Transparent Edge is a European edge computing company and the only Spanish-based commercial CDN provider.

### Challenge

- Building CDN services from the ground up to manage and customize diverse content caching needs for multiple clients

### Varnish Enterprise for Transparent Edge

- Varnish CDN caching engine
- Flexible and powerful Varnish Configuration Language (VCL)
- Support from professional Varnish core engineers



## The solution

### Varnish Enterprise delivers flexible CDN from the ground up

Varnish Enterprise had already demonstrated its effectiveness in content caching and played a critical role in Transparent Edge's content delivery strategy. When they wanted to build a CDN from the ground up, it made sense to explore what Varnish Enterprise could offer, realizing it could provide substantial improvements.

Diego shares, "The enhanced features, support, and customization options available in Varnish Enterprise align perfectly with our goals to optimize content delivery, address traffic spikes, and offer a more flexible caching approach. This, coupled with our positive history with Varnish Enterprise, made it clear that was the ideal choice for our needs."

The team "never considered" other solutions because previous positive experience coupled with Varnish Software's proven track record in content caching addressed their specific needs for flexibility, scalability and the ability to build the CDN around Varnish.

"In our case, the setup and configuration process was not typical, as we developed our product using Varnish Enterprise software from the ground up. We did not integrate Varnish Enterprise into an existing system; rather, we built our entire product around it," says Diego. "As a result, we had the flexibility to tailor the setup and configuration to our specific needs and requirements, making the process highly efficient and tailored to our project. Since our setup was part of the initial development process, it was a seamless and integral part of our content delivery network's creation."

#### Optimizing diverse cache management needs

With many different clients, diverse caching needs arise. Using Varnish as the backbone of the CDN, Transparent Edge could accommodate these needs flexibly and scalably, "Varnish Enterprise has allowed us to address these diverse caching challenges effectively, providing us with the tools to optimize cache management and accommodate various caching scenarios," Diego continues.

The Transparent Edge next-generation CDN relies heavily on Varnish Enterprise to enhance their CDN's capabilities beyond what the open source

Varnish Cache offers. The entire CDN infrastructure is built on the Varnish Configuration Language (VCL).

"Varnish as a caching software allows us to optimize content delivery, efficiently cache and serve content to our users, resulting in improved performance, reduced server load, and a more responsive user experience. Varnish Enterprise plays a pivotal role in our strategy to provide seamless and efficient content delivery services."

In the dynamic landscape of content delivery, we often experience sudden surges in demand, such as during major events or big breaking news. One of the primary challenges we aimed to address was efficiently handling traffic spikes while maintaining flexibility in content caching

- *Diego Suárez, Chief Technology Officer,*  
*Transparent Edge*

The enhanced features, support, and customization options available in Varnish Enterprise align perfectly with our goals to optimize content delivery, address traffic spikes, and offer a more flexible caching approach. This, coupled with our positive history with Varnish Enterprise, made it clear that was the ideal choice for our needs

- *Diego Suárez, Chief Technology Officer,*  
*Transparent Edge*

# Customization

## A key differentiator

Because Transparent Edge's implementation involved building a commercial CDN based entirely on Varnish solutions, they undertook, by Diego's account, "hundreds of thousands of customizations and changes to our Varnish Enterprise implementation to tailor it to our unique needs". With Varnish, this wasn't a problem, and Transparent Edge seamlessly built their CDN architecture around Varnish Enterprise. "The uniqueness of our implementation lies in our ability to harness the full potential of Varnish's capabilities to create a tailored and high-performance content delivery network that aligns perfectly with our business goals," Diego states.

The range of customizations adopted have allowed Transparent Edge to adapt Varnish to compartmentalize different clients, serving content to multiple clients and ensure that their highly specialized content delivery solutions are met. Diego continues, "The ease of making customizations has been a testament to the flexibility and adaptability of Varnish Enterprise. It has made the process of fine-tuning caching rules, addressing specific client needs, and handling dynamic content updates relatively straightforward. The results of these customizations have been highly satisfying, with our clients experiencing improved performance, faster content delivery, and a more responsive user experience. These developments have significantly contributed to our success in the content delivery industry."

## Transparent Edge and Varnish

### The future

For Transparent Edge, Varnish Enterprise is woven into the DNA of its CDN. Future developments will likely be equally as integral as their CDN continues to blaze content delivery trails.

Varnish as a caching software allows us to optimize content delivery, efficiently cache and serve content to our users, resulting in improved performance, reduced server load, and a more responsive user experience. Varnish Enterprise plays a pivotal role in our strategy to provide seamless and efficient content delivery services

*- Diego Suárez, Chief Technology Officer,  
Transparent Edge*

Los Angeles - Paris - London  
Stockholm - Singapore - Karlstad  
Dusseldorf - Oslo - Tokyo



# transparent edge

 **VARNISH**  
SOFTWARE  
[www.varnish-software.com](http://www.varnish-software.com)