



Yeni Şafak

How did Yeni Şafak **improve performance** and **become more secure against attacks** with Medianova Aksela?

Yeni Şafak ranks among the top ten newspapers in Turkey and stands out with its increasing mobile app and website user traffic. Along with Turkey, it also appeals to the readers in the Middle East and Europe with its English and Arabic language options.



Challenges

Security at the edge

The security of web applications is no longer an option but a necessity in the face of cyber attacks, the number and impact of which are increasing every year. One of the key advantages of the CDN and Anycast DNS architecture is that attacks are blocked at edge servers around the world before they ever reach your origin. This being said, it was important for Yeni Şafak to increase the security of its servers that faced DDoS attack threats, with high-tech solutions provided at edge servers.

Constant High Performance

In a world where slow websites reduce user satisfaction and there is a lot of competition; assuring website performance was a necessity for Yeni Şafak as it aims to stay up-to-date in the field of technology in order to provide a superior experience to end-users.

Effective Mobile Applications

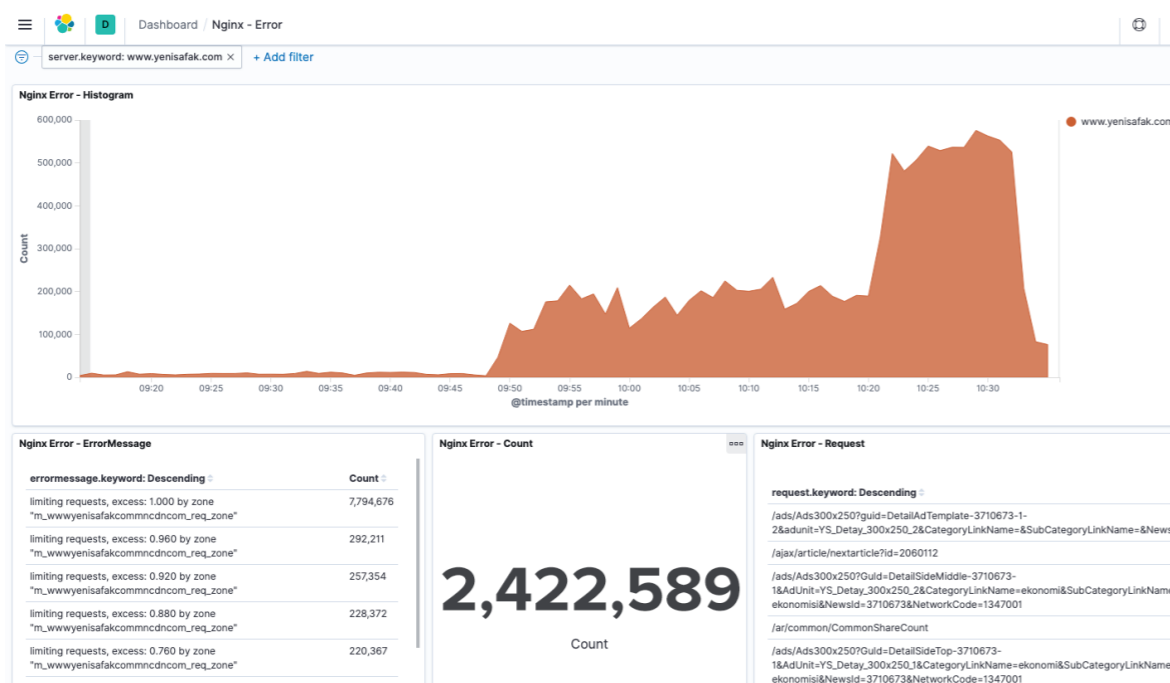
It is an undeniable fact that mobile apps have dominated websites and even reached out to more users than websites in areas such as social media. In light of this, Yeni Şafak wanted to assure the speed, quality, and security of its mobile application with the assistance of a professional partner.



Solution and Results

Secure Architecture with DDoS Mitigation

Aksela cached the dynamic contents of Yeni Şafak on Medianova's PoPs in Turkey and around the world and delivered them to the website and mobile app users fastly and securely. This system hides the origin address and protects it by providing an additional layer of security against the attack. Thus it prevented DDoS attacks from reaching the servers directly.



On the other hand, the rate-limiting feature of Aksela, protected Yeni Şafak from DDoS attacks by configuring thresholds for requests. This helped the app servers to be responsive in the case of receiving too many requests at the same time.

The DDoS attacks were mitigated without any downtime or loss of performance on the origin servers, ensuring that Yeni Şafak users received uninterrupted service.

As seen, in a very short period of time, 2.422,589 malicious requests were blocked.



Solution and Results

High Performance and Speed

Aksela improves the performance of websites by caching dynamic content in a distributed structure and by delivering it to end-users from the closest PoPs. It accelerated all of Yeni Şafak's content including HTML, CSS and Javascript by **microcaching** them.

For the mobile application, **API Caching** helped boost the performance.

Chart Summary									
Breakdown 1	Avg DNS (ms)	Avg Connect (ms)	Avg Time To First Byte (ms)	Avg Load (ms)	Avg Response (ms)	Avg Downloaded Bytes	Avg Throughput	% Availability	# Runs
Yeni Şafak Html - Medianova	44.95	3.56	355.85	10.88	366.73	52,311.26	337.55	100.000	180
Yeni Şafak Html - Current	121.01	43.77	1,388.62	115.82	1,504.44	76,460.39	64.61	100.000	180

* The following metric name prefix SD, Avg, GM and Mdn stand for Standard Deviation, Average, Geometric Mean and Median respectively.

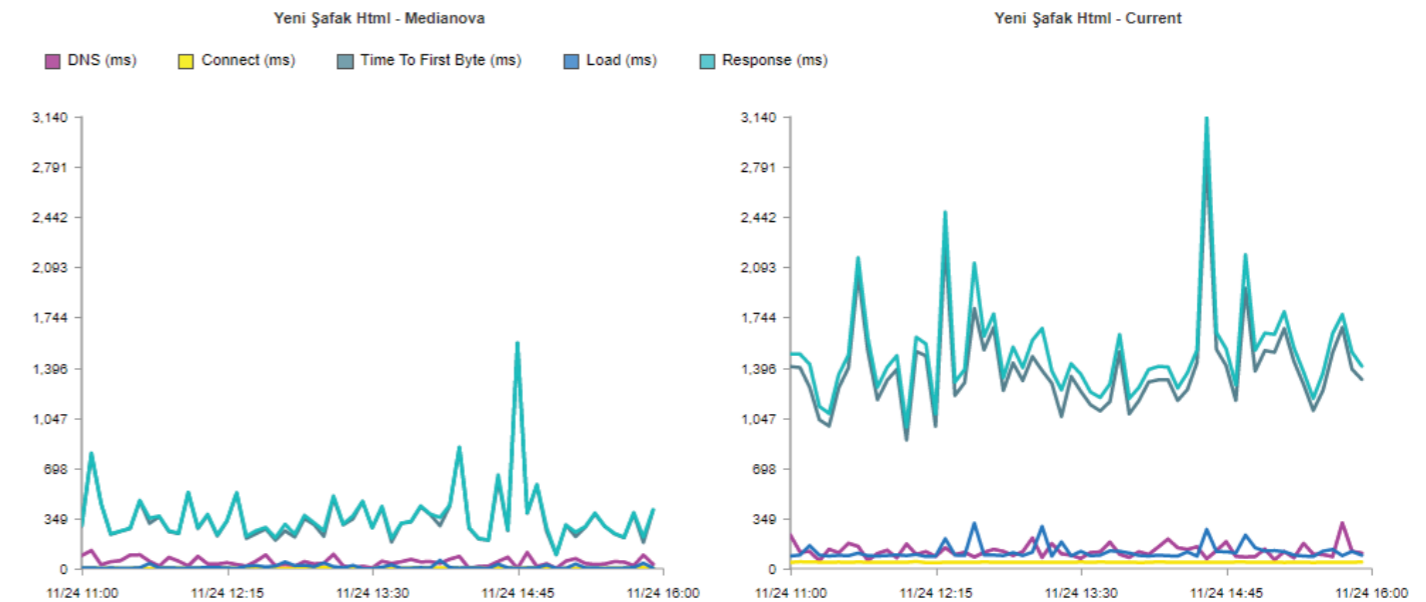


Solution and Results

The performance of Yeni Şafak's website before and after using Aksela was tested with Catchpoint, an independent third-party Real User Monitoring service that can monitor over many nodes around the world.

Results indicated at least 276% faster average page load times.

Average **time to first byte** was reduced from 1,388.62 ms to 355.85 ms; average **load** was reduced from 115.82 ms to 10.88 ms; average **response** was reduced from 1,504.44 ms to 366.73 ms



* Yenisafak.com homepage was tested on existing infrastructure and Aksela account at 5-minute intervals by requesting it from different Catchpoint nodes in Turkey.

* Tests were run on 24.11.2021 for 5 hours.



Adem Çınar

Software Development Manager

What we needed was more than a CDN: we also needed a way to **accelerate dynamic content** and **a way to improve security**. Our website and mobile app are protected against cyber attacks while getting faster as well thanks to Aksela. We are able to deliver faster user experiences without compromising performance for security. Knowing that our traffic is in safe hands thanks to **24/7 support** provided by Medianova is very comforting for us operationally.

