

# FOX Sports Improved Streaming Performance, Lowered Infrastructure Costs

## Project Summary

FOX Sports experienced streaming performance issues and higher infrastructure costs during high-traffic events like the Super Bowl. With X-Team's help, FOX Sports significantly improved the amount of traffic their streaming services could handle while reducing cloud infrastructure costs.

## Client

FOX Sports, also referred to as FOX Sports Media Group, is the sports programming division of the FOX Broadcasting Company, owned by the Fox Corporation, that is responsible for sports broadcasts on the FOX network and its dedicated national sports cable channels.

## Challenge

When the Super Bowl broke streaming records, FOX faced significant streaming performance issues, including server crashes and high infrastructure costs. FOX Sports needed a solution to optimize both performance and cost efficiency, enabling the platform to handle higher traffic volumes while keeping infrastructure costs manageable.

## Services

X-Team focused on improving scalability, reducing costs, and enhancing the user experience by migrating key services from Node.js to Go. X-Team developers also created a specialized toolkit to streamline development, with integrations for NewRelic, Splunk, and InfluxDB, as well as default middleware and configuration management tools. X-Team developed a disaster recovery service to reroute users from overloaded channels, a decisioning service to direct new viewers to the best streaming path, a content delivery network (CDN) based on users' IP address, and a distributed configuration management (ConfigTool) service to run A/B tests to optimize performance.

## Results

### Improved Performance and Scalability

Initially, FOX Sports' Node.js services struggled under 30,000 requests per second, with server CPUs crashing and restarting due to the load. However, after migrating to Go, the new services consistently maintained just 12% CPU usage and consumed only 20MB of RAM, even under the same high request load, allowing FOX Sports to handle far higher traffic volumes without disruption. The switch to Go not only enhanced performance but also reduced cloud infrastructure costs.

**Company** Fox Sports

**Industry** Sports

**Headquarters** Los Angeles

**Project Start** 2008

## Seamless User Experience

X-Team's disaster recovery and decisioning services helped ensure a smooth streaming experience. The disaster recovery service rerouted users away from overloaded channels, while the decisioning service directed viewers to the best CDN based on their location, ensuring balanced traffic distribution and minimizing service disruptions.

## Optimized Traffic Management

Using the ConfigTool Service, FOX Sports was able to run A/B tests to fine-tune their CDN traffic distribution, improving load balance and reducing strain on individual providers. This ensured that FOX Sports could efficiently manage traffic and avoid CDN failures during these major events.