One of Europe's most popular football clubs achieves a 97% cache hit rate and no downtime with Varnish Managed Services

Case Study:

Ajax FC
**Varnish Managed Service** allows Ajax FC to achieve a 97% cache hit rate with no downtime

**Background**

The largest football club in the Netherlands, Ajax football club, which started in 1890, is a popular brand around the world. With global fans wanting to interact with the club, website uptime and performance is key.

**The challenge**

**The downside to popularity**

Evidence of Ajax FC’s popularity appears each time the club releases new merchandise in their online store. When the club released a new kit for the team and made it available for fan purchase, it became so popular that it took down their website. Leading up to their next, much-anticipated release, a Bob Marley-inspired kit as a tribute to the fan anthem “Three Little Birds”, Ajax FC’s sysadmin teams knew they needed to quickly spring into action to avoid a similar outage.

If you have a million requests in one second then there is no time to scale. We needed a solution capable of delivering such a load at scale, and Varnish is it.

- Max Reckers, Technology Lead, AFC Ajax

**Ajax FC at a glance**

**Organization**

- Amsterdamsche Football Club Ajax, or AFC Ajax is a Dutch professional football club based in Amsterdam, the Netherlands.

**Challenge**

- Handle both expected and unexpected traffic spikes from cache, ensuring high performance, availability and protection for the backend
- Continue operating/serving content even in outage conditions
- Improve user experience with improved uptime

**Varnish Managed Services**

- Dedicated Varnish-managed caching infrastructure

- Demand is so high, and you face real problems if your website breaks down. It means you cannot communicate with your fans.

- Max Reckers, Technology Lead, AFC Ajax
The solution

Scaling up with no downtime
Wanting to be ready for the high traffic they knew they would experience, Ajax called Varnish Software. With the next kit release just around the corner, time was of the essence. An initial meeting between Ajax and Varnish took place late on a Monday; Ajax was onboarded Tuesday, and by Wednesday, Varnish was fully in production in the lead up to the release of the new kit on the same day.

Results
Opting for Varnish Managed Services to be able to scale up faster and get the benefit of a dedicated Varnish team running the service, Ajax instantly saw positive benefits:

- **Resilience, redundancy and ability to handle traffic spikes**
  Content is protected with Varnish as a reverse proxy, and the Ajax site is able to scale up without downtime.

- **More performance with fewer resources**
  The improved cache-hit rate has helped improve the load the infrastructure can manage, improving performance and handling traffic spikes at scale.

- **Improved user experience**
  Customers will never have to experience the frustration of downtime that used to happen before implementing Varnish.

When things at the football club kick off, it has to go really quickly. And that applies to technology as well. We took contact with Varnish on a Monday, and within 48 hours, Varnish was already in production.

- Max Reckers,
  Technology Lead, AFC Ajax

We are very confident that even if the backends go down, we are still able to deliver static content to our customers. In practice our website will never be down.

- Max Reckers,
  Technology Lead, AFC Ajax
Always online with Varnish

Varnish Managed Services has delivered the peace of mind AFC Ajax needs when they launch new releases on their website. No matter the scale, Varnish will handle the load.

When we have traffic amount to a million people all at once, sometimes we can plan for it, but when you can’t, you want to be sure the website will stay available. That is the assurance Varnish Managed Services has given us.

-Max Reckers, Technology Lead, AFC Ajax

You need to get the most from the cache… we went from 90% to 97% cache-hit rate with Varnish, and this is the reason our backends can manage this load.

-Max Reckers, Technology Lead, AFC Ajax