SK techx

Tyk

Using Tyk to increase Transactions per Second by more than 100%
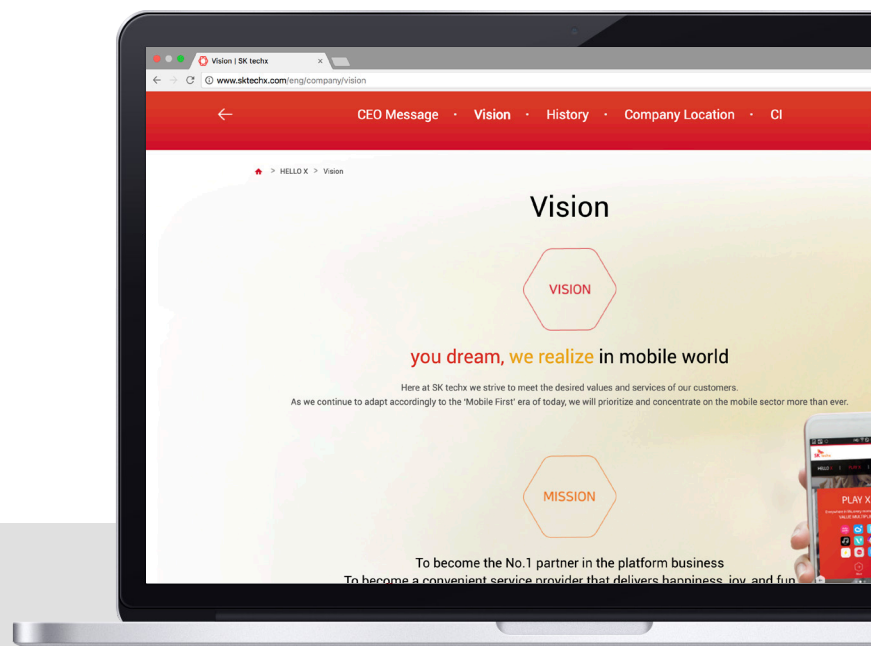
SK TECHX & TYK

Who are SK techx?

SK techx is a leading South Korean company specialising in mobile platform technology and applications.

Part of the SK Family, SK techx develops and maintains an innovative range of mobile applications that add value and convenience to their millions of consumers. These range from mobile messaging between businesses and consumers, to checking the latest weather updates.

Though SK techx deals with a number of APIs as part of its day-to-day business, the weather API is central to the company's B2B and B2C applications, including Weather Pong, and a number of external applications paying to use the service.

What API challenges did SK techx face?

The biggest initial problem that SK techx had with their APIs was performance. The original system had problems achieving the desired Transactions per Second (TPS) of 10,000, resulting in slow data transfer and a poor user experience for end-users of the API or related applications.

Another ongoing issue with SK techx's API performance was the stability of their APIs, owing to the version being developed in Node.js. Other languages were required integrations with other solutions and custom builds.

Though the SK techx team considered building their own solution to ensure improved API and application performance, they had other demands on their time and resources that meant an external solution would be more efficient and effective.

Feeling the strain on internal resources, and with tight deadlines, SK techx started to look for a third-party API management solution.

Why did SK techx turn to Tyk?

Though the original SK techx API Gateway was developed and used in-house, the team were finding they lacked the time to continually improve and refine the solution. When it became time to create a new one entirely, the team began to consider a third-party solution.

SK techx set to work comparing several API Gateway and Management solutions - both proprietary and open source, and building a proof of concept with each.

Tyk stood out of the thorough evaluation for three big reasons: its stability, strong performance in benchmark tests, and ability to be seamlessly integrated with a token-based authentication system, appkey, out of the box.

The icing on the cake was Tyk's open source code base; a key consideration for the SK techx team was using an open source provider so that they could modify the source directly, if required.

How easy is it to implement and use Tyk?

Out of the box, the team found Tyk On Premises (Unlimited nodes) fast and easy to set up. However, SK techx's requirements included additional bespoke customisation to ensure that all their needs could be addressed. This added some initial set-up time before Tyk could begin to manage SK techx's APIs in production.

Day-to-day, the team's use of Tyk focuses on the API Gateway and authentication, rate settling, quota limits and analytics features.

In completing both their custom work on Tyk, and their day-to-day use, SK techx have benefitted from clear and improved operation and installation guides, Tyk documentation, and responsive help and support from the Tyk team.

What was the impact of Tyk on SK techx's API Management?

After switching to Tyk for their API Management needs, SK techx saw huge performance improvements, and found Tyk better at handling their API traffic compared to the previous, internal solution. The API now handles almost 35 million Transactions per Day (TPD), and at peak times can handle 20,000 Transactions per Second (TPS); double the team's previous target.

Tyk's ability to be endlessly customised, and integrated with other systems, also allows SK techx the ability to easily add their own additional services to the Gateway. This saves them much-needed time and resources, as well as increasing Gateway and Platform flexibility.

Plans for the future of SK techx's APIs include further customisations and integrations, and implementation of the Tyk Developer Portal to share the weather API with developers globally.

Vital Statistics

50

APIs

1,000,000,000

API TRANSACTIONS
PER MONTH

20,000

PEAK API TRANSACTIONS
PER SECOND

**AUTO-SCALING
UNLIMITED**

TYK GATEWAY
NODES