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Microservice Architecture

Twitch’s Engineering & Microservices

From a viewers point of view, you may have heard of Twitch by now. Holding as one of the largest gaming and streaming platforms, Twitch hosts millions of viewers daily with hundreds of thousands who stream for those viewers. The website and its services over the years has seen an overhaul of extensions and usages for all forms of users. The sheer scaling equates to many moving pieces for the website to function on a daily basis.

Before talking about the idea of microservices for Twitch, we must look into the past to talk about the history of the platform. In June of 2011, the company known as TwitchTV launched with only a few thousand users and a small engineering team that two hands could count. The team over the next several years began to grow rapidly as traction quickly spewed. Of course the rise of gaming grew as well. Within this time stamp, twitch has been able to develop one of the largest live-video distributions in the world, a real-time chat system, web services that provide functioning data, data storage systems, client applications on the web (pc, console, and mobile), data science infrastructure, internal tooling systems, and a powerful network infrastructure.

Now diving into some of Twitch’s microservices they must focus on in order to keep their parts moving smoothly. Back in 2014, Amazon and its services acquired Twitch for a $970 million cash-only deal that included AWS usages in their infrastructure. Now operations rely on two large components that go into microservices they spoke heavily on it, “At the physical level, we currently run an actually fairly large number of “bare metal” POP (points of presence) all over the world — this allows us to deliver higher quality video due to the unusual requirements of video delivery (lots of bandwidth!).

We also have been moving an increasing amount of our services to Amazon Web Services — this helps to reduce the amount of operational overhead, as well as to take advantage of the convenience and scalability of many of their services.” (Twitch, 2015).