



Extra point: Inside Uber's move to the Cloud

Summary

Uber has been one of the companies resisting the popular concept of Cloud, instead they have been operating their own data centers. From 2016 to 2020, they used some services from AWS and GCP and has increased since.

On February 13th of the current year, a long-term contract was confirmed by Google Cloud CEO for Uber to move to the Cloud. For them to take such decision, they must have faced multiple challenges and complications managing their own data center.

For companies who operate their own data center, it is really common that hardware becomes a big challenge and Uber was no different. Main issues are hard drives. An option that many companies take because of the need of high volumes of hardware to store their data, is the use of cheaper solid-state drives (SSDs).

- They didn't last long, they wore out within a year.
- They had low drive writes per day and in high-writes situations didn't perform as necessary.

They needed to find a cheap option but without compromising the quality.

One key area when a company wants to operate their own data center is the automation of hardware operations and its maintenance. This to make it more reliable, efficient and with more and long term value.

Before making the decision to move to the Cloud, Uber had lots of unused excess capacity and bills still needed to be paid, including the maintenance work and replace the hardware that continued to wear out. Which maybe could've been something to avoid having already a Cloud provider.

The article also talks about some basic concepts regarding the Cloud. The author defines that a data center is a physical location that houses a group of networked computer servers. They also define some internal concepts like location, availability zone, between others, since their application and definition could mean different things depending on the Cloud provider.

Opinion

From my point of view, this article gives more clarification on why the Cloud has had such impact in our area and why companies decide to migrate to this implementation instead of managing their own data centers. Regarding the situation with Uber, it was surprising to know that they only had two data centers, considering how big the company is world wide. I think it was smart to prepare for the worst case scenario, but from what I've seen and hear I think there is always a more hurtful possible scenario that what you initially thought, in this case that both servers would've failed.

Also some personal takeaways were some new concepts that I didn't know about, such as ODM (Original Equipment Manufacturer), which basically means that when companies require hardware, they directly obtain it from suppliers. But this approach can be quite costly for companies that require large amounts, which is why i think it's not really a good approach, but depends on the companies necessities. In this case Uber didn't have the right amount of staff and the staffing they had wasn't qualified and prepared to implement it.