

Part 4

Suppose we have a microservice architecture with many different services. We also have an app that gets data from these different services. The app runs on both Android and IOS. The problem we face is that when we start this app, the first page on the app needs to show data that comes from 15 different microservices. The time to retrieve all this data from all 15 microservices takes 10 seconds, which is too slow and not acceptable. The app should get all the required data as fast as possible. It should not take more than 2.5 seconds to retrieve all necessary data. How can we solve this problem?

Answer:

CQRS pattern is the solution. Command and Query separated components within distributed micro services helps to overcome this problem. All queries for reading from the data we can separate from Command components (CRUD) into different components with its own NoSQL db indexed based on queries from the application first pages.