Success story: We replicate the main retail company database to improve access to data

Rootstack helped a retail company in Panama to replicate its database in all its stores to reduce data access errors.

Project challenge

A well-known retail company with numerous stores in Panama was having problems with its database systems and the interconnection with the different dependent stores. Due to internet failures or connectivity problems with the database, stores were sometimes unable to access the inventory or billing system, creating chaos in the workflow.

This company came to **Rootstack** requesting a solution that would guarantee all its stores permanent access to the database, regardless of internet or connectivity failures.

Our solution

At Rootstack we have an expert database team and precisely they found the right solution for the client's problem. We apply the **SymmetricDS** tool, a replication software that certainly allows that, to **replicate a company's database.**

This open-source software allowed us to replicate the master database where all the company's systems were, creating hundreds of several secondary databases, which would be available in each of the company's branches.

What do we achieve with this? That each of the companies can operate without interruptions in the event of an Internet or connectivity problem, since they will have a local database, without having the vital need to connect to the master database for any operation.
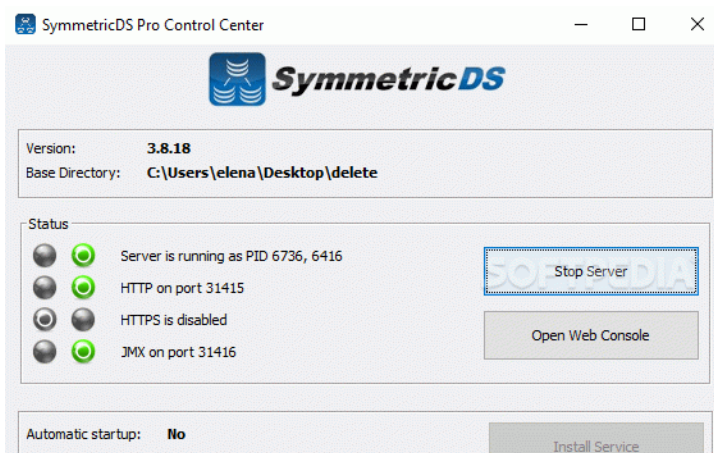
If the connection is lost, when it is reestablished, this local database is synchronized with the main database to which it is connected, so there is always a guarantee that the data will be up-to-date in the master database.

We also had to make a series of adjustments in the same structure of the database so that it could be replicated correctly and there were no problems with the data when synchronizing the replicated databases with the master database.

Technology

SymmetricDS is a feature-focused tool and cross-platform compatibility, so it was the most appropriate technology to use with this client as it ensured database replication with the lowest error rate possible.

It is capable of replicating data on different platforms, being compatible with many databases. It can be synchronized from any database to any database in a heterogeneous environment.

Another of the main characteristics of this technology is that it is optimized for performance and scalability: it is capable of replicating thousands of databases asynchronously in near real-time.

At Rootstack, we have more than 10 years of experience working with databases and managing the best technologies in the area. Do you want to start the digital transformation of your company? Let's talk!