

SecretSkyDB

Goals

Next generation private database.

Description

SecretSkyDB (Secret Sky) is based on the random distribution of each piece of information on each of the participating storages, while still defining exactly the information when accessing the participating storages. Thus, one may store personal photos, letters, and passwords on Google, Amazon, Microsoft, and IBM clouds without revealing any useful information to any of them. Prof. Shlomi Dolev and post-docs on his team have designed innovative schemes to search, in parallel, the distributed storages (each of which was holding useless information) and return the required data item. In fact, they were able to execute programs on distributed data without even revealing the program.

Key value database was implemented as part of the Kamin grant that started prior to the activity on Secret Double Octopus, and together with patents on the technology, were used to establish SecretSkyDB.

Researchers

Prof. Shlomi Dolev shlomidolev@gmail.com

Dr. Ximing Li liximing.cn@gmail.com

Dr. Yin Li yunfeiyangli@gmail.com

Results

A multi-cloud database product is being developed as a startup company in collaboration with JVP Cyber Labs.

Patent assigned to SecretSkyDB.