

Distributed Storage (NYP ID: 0351)

Technology

Adaptive tailored erasure codes-based distributed storage to maximize the system capacity and enhance the reliability

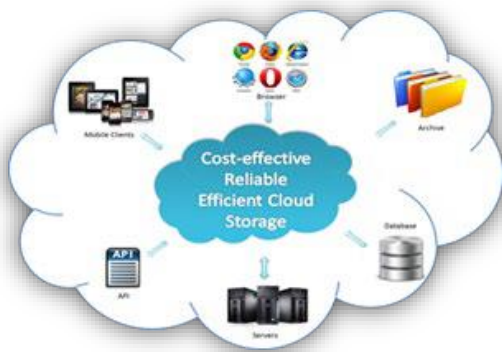
Type of IP and status

Patent. Singapore Patent No. 2012092011.

Overview

Redundancy has to be added into any cloud storage to ensure certain level of reliability. The invention is about a novel way to add redundancy to achieve the best trade-off between data reliability, space efficiency and system capacity. It utilizes erasure codes-based method with adaptive parameters dynamically changed based on the real-time status of the system resource utilization.

The framework is designed for cloud service providers to manage cost while enhancing the storage reliability with higher spatial and time domains' efficiency.



Potential Applications

- Web hosting, managing services or cloud services
- Storage service providers and data centre operators

Advantages

- Efficient approach to adding redundancy yet maintaining high reliability with space saving benefits
- Dynamic configuration to maximise system capacity
- Optimised use of system resources including bandwidth, disk space and processing power

Technology & Licensing Enquiries

Ms Diana Sutanto

Tel: +65 6550 0344

Email: diana_sutanto@nyp.edu.sg

Mr Joel Tan

Tel: +65 6550 0146

Email: joel_tan@nyp.edu.sg

Mr Johnathan Lim

Tel: +65 6550 1972

Email: johnathan_lim@nyp.edu.sg