

**Research Awards:**  
**Gold Medal, Diploma De Merit, The Best Excellence, Grand Prix Archimedes Moskova; in 16th International Salon Of Inventions & Innovation Technologies (ARCHIMEDES) 2013, Moscow, Russia. Gold Medal in Malaysian Technology Expo' 2013 (MTE), PWTC. Project Title: Effective Persistence Layer Synchronous Replication Heterogonous Database**  
**Researchers: Assoc Prof Dr.Noraziah Ahmad, Assoc Prof Dr Ahmed Abdella, Abul Hashem Beg, Ainul Azila Che Fauzi, Mohd Amer**



**BACKGROUND**

- Database System is a collection of information. It moves from centralization towards decentralization.
- Distributed Database System (DDS) is a collection of multiple independent databases.
- Data replication in DDS technology involves copying data between data stores and guarantees data across multiple sites in a distributed environment
- Usually replication process depends on the main server. Introducing the up-gradation of the replication process usually pause the system for a routine of time. Fail or crashes of the main server, usually make the entire system stop working (for database driven system)

**PERSISTENCE LAYER SYNCHRONOUS REPLICATION (PLSR)**

- PLSR Tool & software for replication process in distributed database
- Backup data for heterogeneous system, replication cost effective and faster
- Automatic support handling failure/crash
- Deploys multithreading technique

