## **Core Concepts**

Replication is the process of copying a database to another server, and then keeping the two copies in sync, so that they behave as near as possible.

Replicating data from Source Apps means that as data is updated on the Source Apps platform, the data is replicated within an on-premise database or staging area during specific increments in time.

For example, customer data is added, updated, or deleted in Source Apps and the changes are already replicated or synchronized with an on-premise database. Functionally the synchronization from Source Apps to database is same as how the synchronization works with outlook and your phone.

Replication applications such as DBSync Cloud Replication helps medium and large enterprises to maintain a local copy of the core-business data either On-Premise or in a staging area. Such access lets enterprises report the data as required based on a specific requirement or as per regulations.

It also helps in mirroring your Source Apps or maintain copies of the data for Historical data maintenance and general good disaster recovery operations

## **Key Functions**

Key functions of DBSync Cloud Replication are explained in the table below with descriptions of each functions.

Note: Source Apps are Salesforce and Microsoft CRM

Run Process	Actions Performed
Update Database Schema for Source Apps	Creates Source Apps schema into Database for the selected Source Apps objects. The application will evaluate the schema difference between a particular Source Apps instance schema and generate "ALTER TABLE" command to add the columns. One table is created with a Prefix of SF and MS CRM to Salesforce and Microsoft CRM objects in the database. The system will not remove any existing columns for a given table to maintain historical data.
Source Apps to Database (Clean Copy)	Inserts a clean copy of selected Source Apps object records into respective Database Tables & Columns. Once the command is executed, the system do a dump of all of the Source Apps data for the selected Source Apps Objects with their data and structures intact into a target or staging On-Premise database.
Source Apps to Database (Incremental)	Performs an incremental sync from Source Apps to Database based on the changes / edits made in Source Apps. Once initiated, the application will query all tables / objects in Source Apps (.com) which have been created or modified since the last synch query and will perform an update or insert in Database tables based on the association between Source Apps to Database table last synch Timestamp.
Database to Source Apps (By Control Flag)	Identifies changes in the Database and updates Source Apps records based on the database column do_syn c_flagattributes. The value of do_sync_flag can be Y, S or D.  'Y' specifies that the record has been synchronized between Source Apps and Database.  'S' is used to as a request from an external system to indicate that the record needs to be synchronized from Database to Source Apps (Salesforce and Microsoft CRM)  'D' indicates that the record was deleted in Source Apps (.com)  This functionality (Database ? Source Apps) is not supported with Cassandra Database.