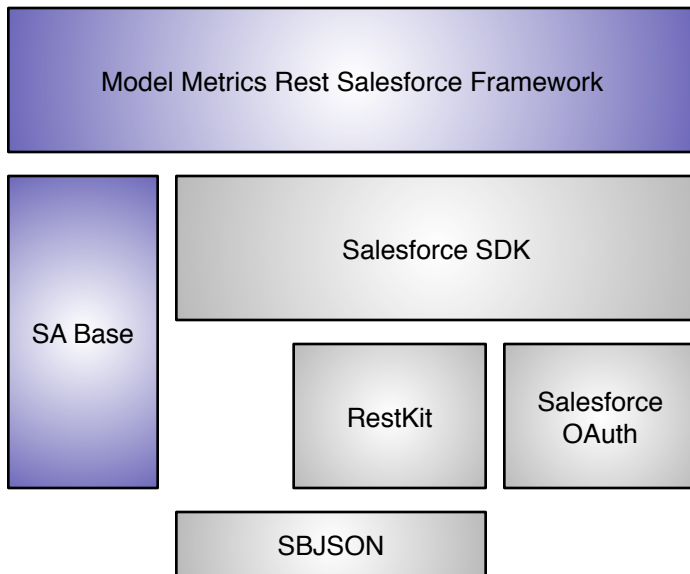


# MM:RSF

## Offline Salesforce data access and editing



The Model Metrics Rest Salesforce Framework (MM:RSF) is based on top of the existing open source Salesforce SDK.

The library uses the REST calls in the Salesforce SDK to bring down (and send up) data from Salesforce; this data is persisted in a dynamically created Core Data store (built using SQLite).

After pulling down the objects from Salesforce, Core Data relationships are established between various entities, creating a robust object graph of the pertinent data.

When editing or creating new objects, snapshots are taken, and only modified data is pushed back up to the server.

The entire framework is thread-aware and multithreaded, to ensure that communications and parsing operations don't block the UI.

The framework supports many common Salesforce patterns, such as:

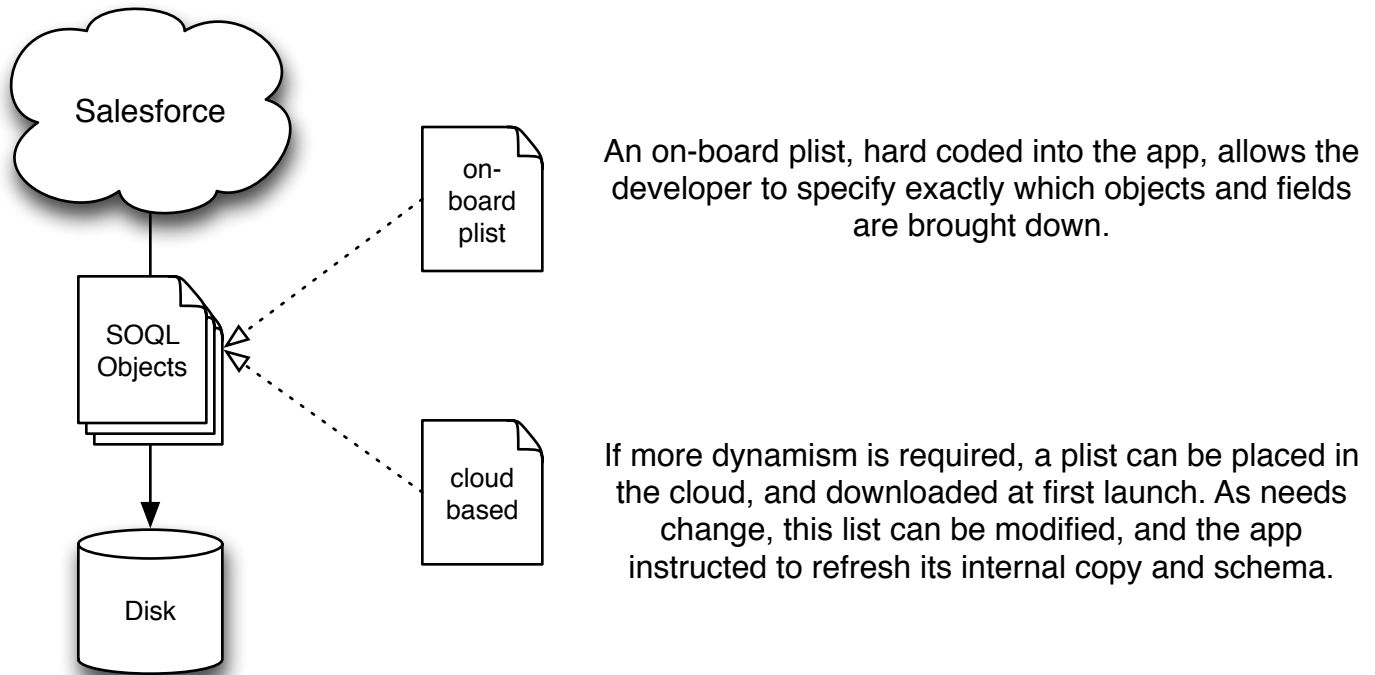
- one-to-one and one-to-many relationships
- data-dependent and record type-dependent pick lists
- delta updates based on modification date
- dynamic record contents based off of describeObject meta data
- support for dynamic and flexible layouts using describeLayout meta data

Indicates proprietary code

Indicates open source code

At first launch, an MM:RSF based application will create a local Core Data store based off of a provided plist (property list, an XML format used widely within iOS). This plist contains a listing of objects to be synced, and queries to specify which fields on which pertinent objects should be brought down.

This plist can be either included with the application at build-time, or brought down from the cloud when needed (or a combination of these two).



After the initial synchronization, the plist filters will be used for all subsequent sync operations, with the addition of an additional clause to restrict the queried objects to only those that have been modified since the last sync.