

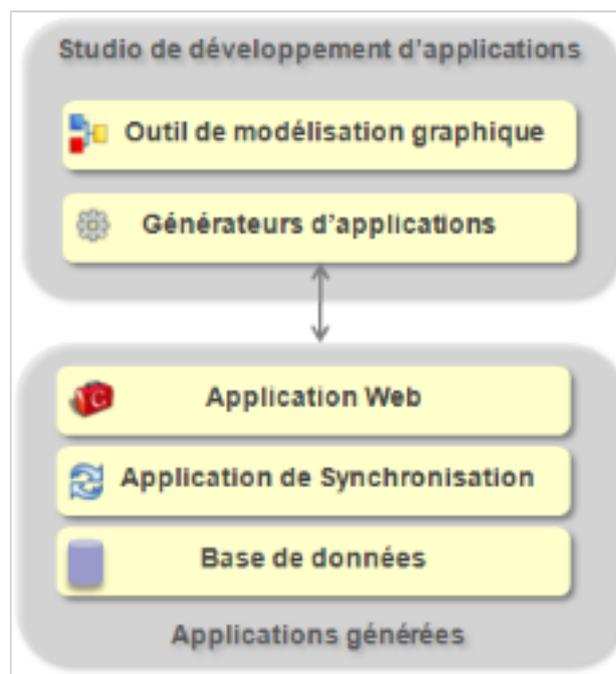
A data collection application: IMOGENE



IMOGENE is a development platform for data collection applications based on Model Driven Architecture (MDA).

It enables data collection applications to be developed rapidly.

It is based on the following principle:



A graphic editing tool enables the user to model the desired application by defining the forms and fields (name, type, etc.) they will contain. This considerably simplifies the modelling process.

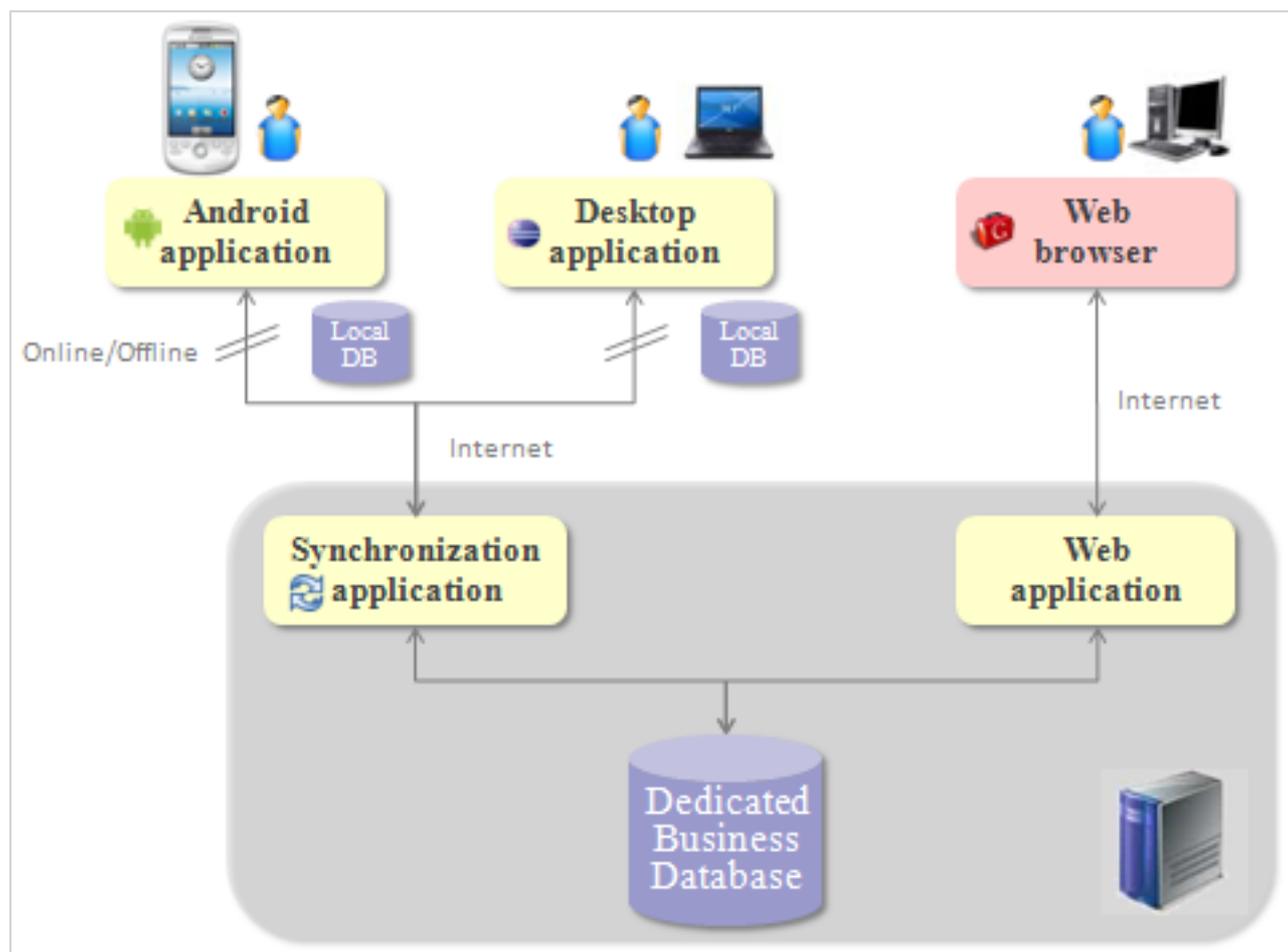
Once the forms have been constructed, the editing suite automatically generates a set of data collection applications which together form the information system:

- * a Web application,
- * a mobile application running on smartphones using the Android operating system,
- * an application for synchronising data.

The platform can also create a Desktop application that can become part of the information system.

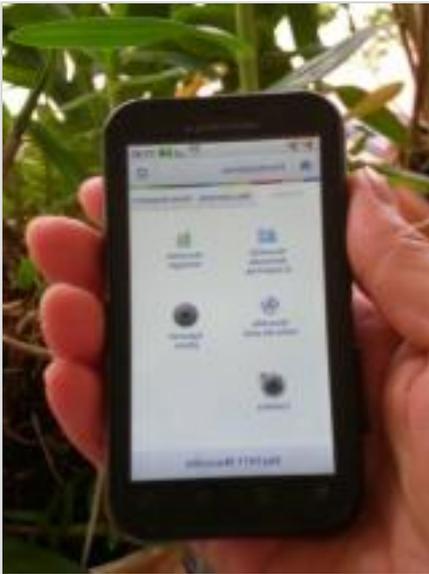
The information system can also include web services enabling other information systems to access its data.

The architecture of the information system generated is illustrated in the following diagram:



The data collected by these different tools are stored in a centralised database.

The mobile application and the “Desktop” application function in either online or offline mode. They store the data locally and the data can be synchronised with the centralised database manually or automatically as soon as the terminal can connect to the network. Synchronisation is 2-way. The applications can thus transmit their data to the central server and also receive updates.



This architecture enables the information system generated to collect data in a wide range of situations (mobile/fixed, online/offline).

The information system also has the following features:

- * The applications can collect binary data such as photos, videos or any other type of document.
- * Acquisition of geographical coordinates, and geo-referenced data can be displayed on a map.
- * User interfaces can be displayed in different languages.
- * The mobile applications include a remote upgrade feature capable of automatically detecting when a new version is available.
- * Applications generated by IMOGENE are based on open-source components (Web Applications: Spring, GWT, Hibernate; Mobile Applications: Android). They comply with Java Enterprise Edition (JEE) standards for industrial development.

The IMOGENE platform itself is published in open source under an LGPL licence:

<http://code.google.com/p/imogene/>

A demonstration video is available at the following address:

<http://code.google.com/p/imogene/wiki/ImogenePresentationVideo>

Expand-TB Cameroon

localhost:8080/TBLabCam/

Expand-TB Cameroon French Utilisateur actuel: admin Déconnexion

Demande ATB: 12-1338C XXX XXX Enregistrer Annuler

Identifiant unique: DISTREQ_13942ab
 Créé le 18/09/2012 par admin
 Dernière modification le 18/09/2012 par admin

Identification du malade

No. Registre TB actuel: 12-1338C No. précédent Registre TB: 12-1338C
 Nom du malade: XXX XXX Age (année): 1965 Sexe: Masculin
 Adresse: Yaounde Tél#1: 94539069 Tél#2:
 Statut VIH: Négatif Hospitalisé: Oui Non NSP Pavillon/Lit: 12

Type de TB et antécédents de la maladie

Site: Pulmonaire
 Antécédents: Rechute
 Traitement antérieur: (2RHZ/4RH)

Provenance de la demande

Région: Adjamé
 District de santé: Bankim
 Hôpital: HD Bankim

Microscopies

Résultat frottis	Technique de microscopie utilisée
1+	Ziehl-Neelsen






10:11

New Sampling 

Sampling Location

User Required

Select

Start

17 Apr 2013

End

Select






10:12

New Sampling 

Sampling Location group 1

Location name Required

Sampling address

Sampling coordinates

Select 

