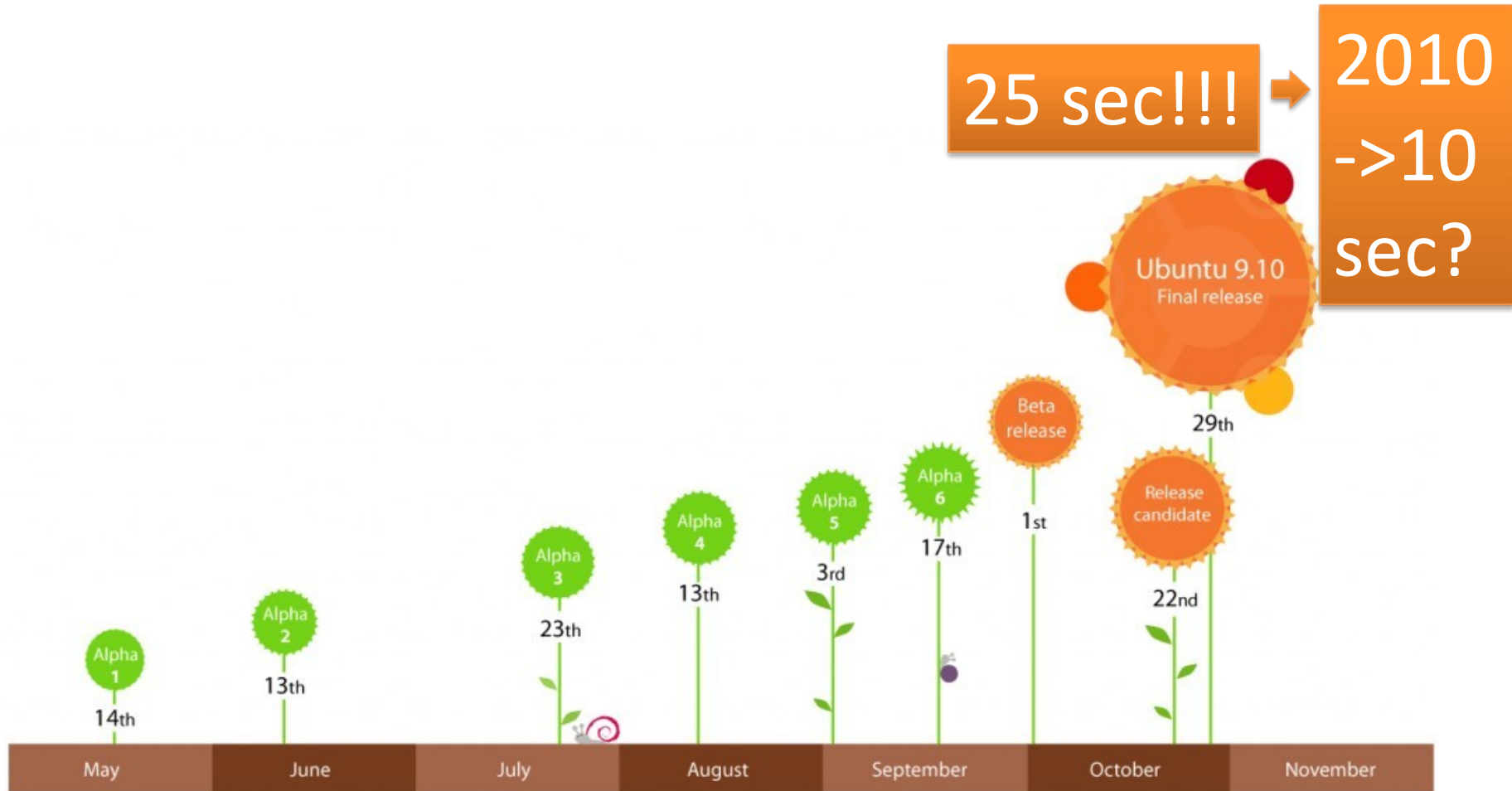


Ubuntu 9.10 released just 2 days ago!



Source: <http://blog.taragana.com/wp-content/uploads/2009/04/koala-timeline-1024x478-1>.

8th Medical Open Source Software Symposium

openEHRApp

An implementation of openEHR specification

By Kruiy Vanna

2009.10.31



Graduate School of Global Information and Telecommunication Studies, Waseda University

openEHRApp

It is our first prototype to help realize the power of openEHR in general. However, it can be used on a LAN and the GUI for template is auto-generated in tree structure.

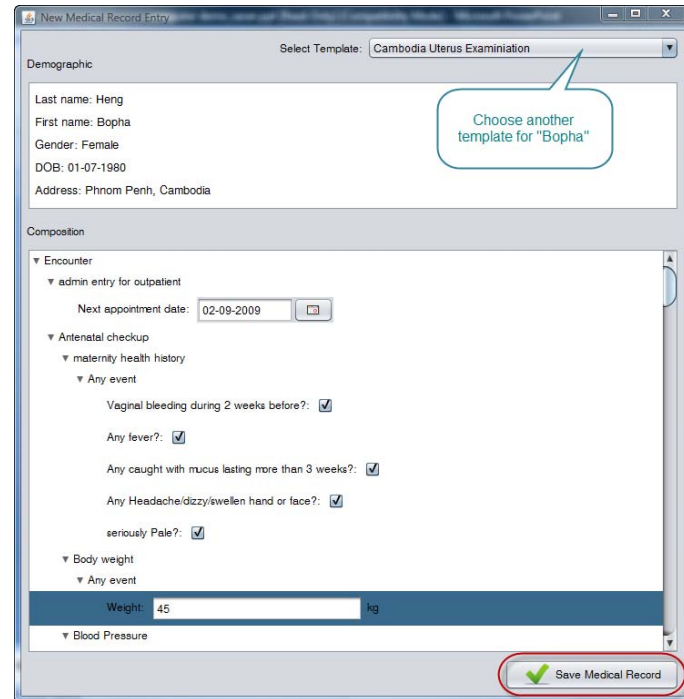
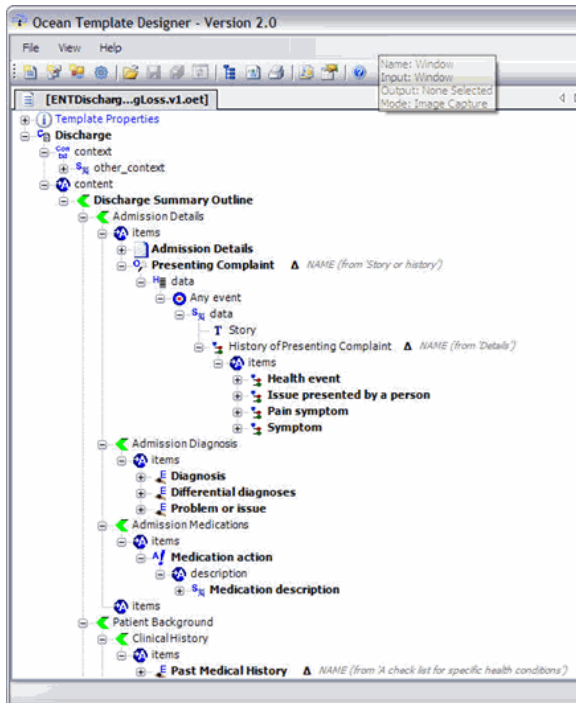
Background:

- Derived from the Opereffa(OpenEHRRefImpExtensions) project by openEHR community, the Tool has moved to a different direction with intention to create RIM(Reference Information Model) data object.
- The RIM data object will be conveniently shared between various platforms that employ openEHR system.

Continued to next page

(See the separate presentation on the Tool)

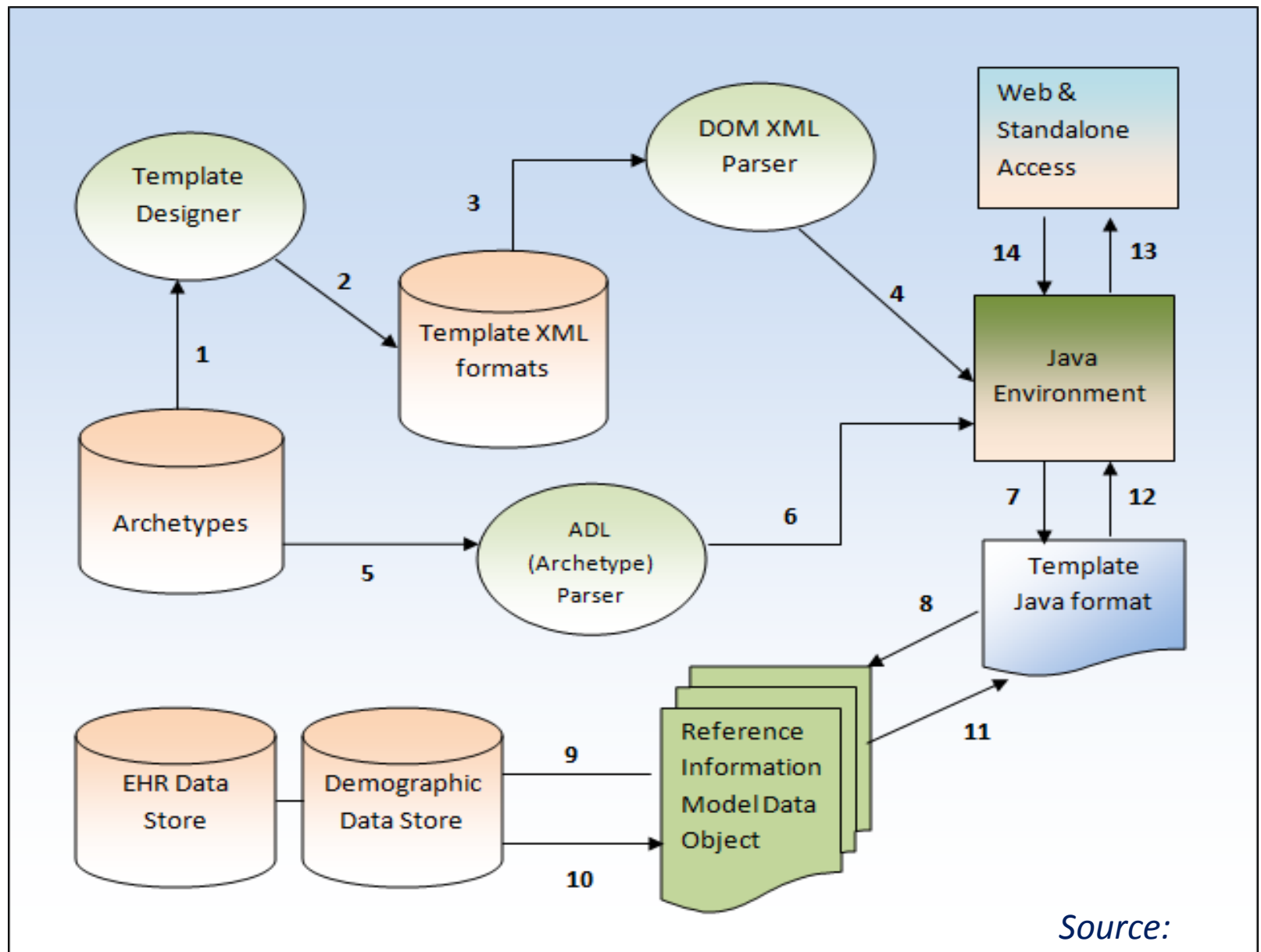
What we want



[*]

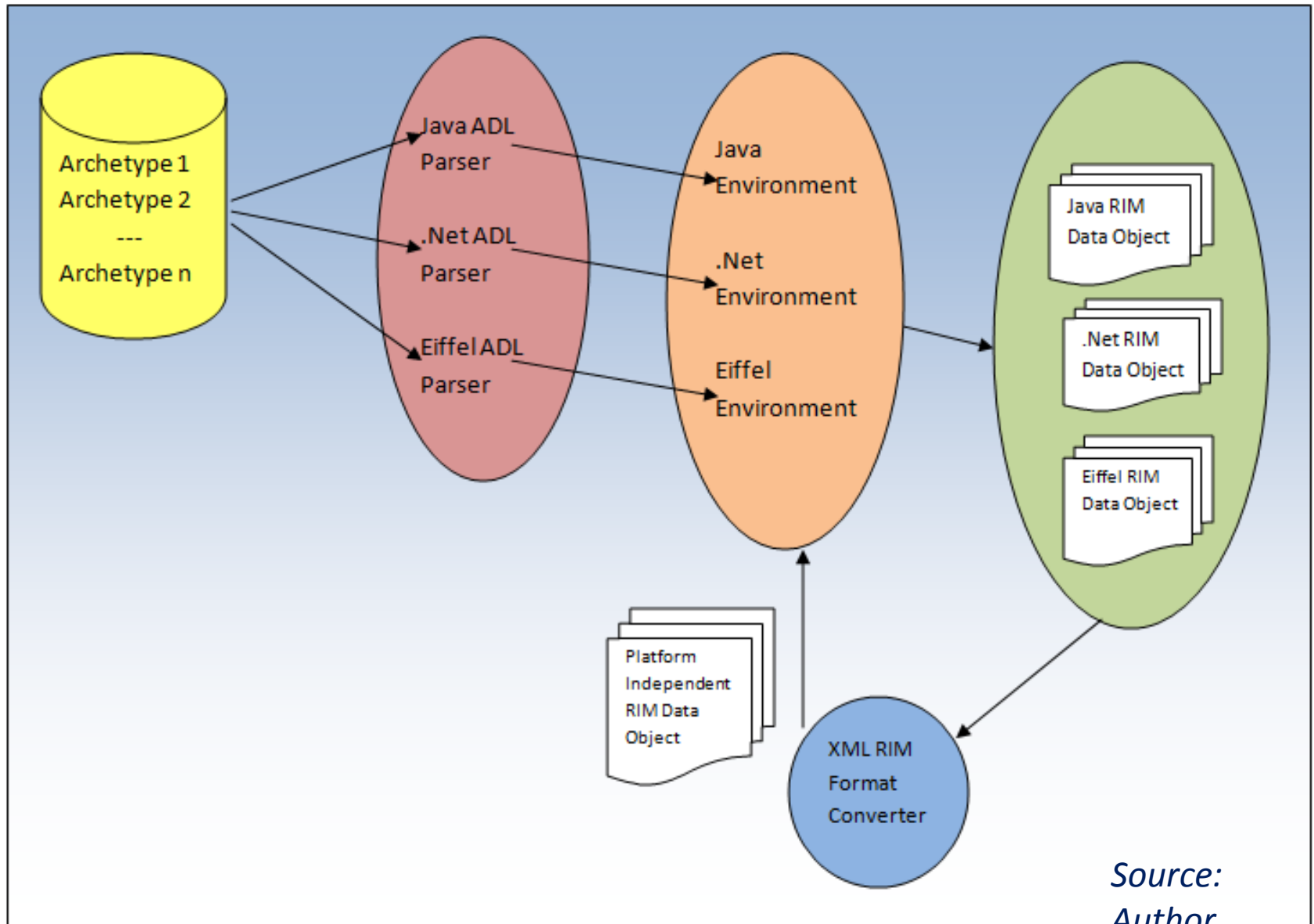


----> How ?



Source:
Author :

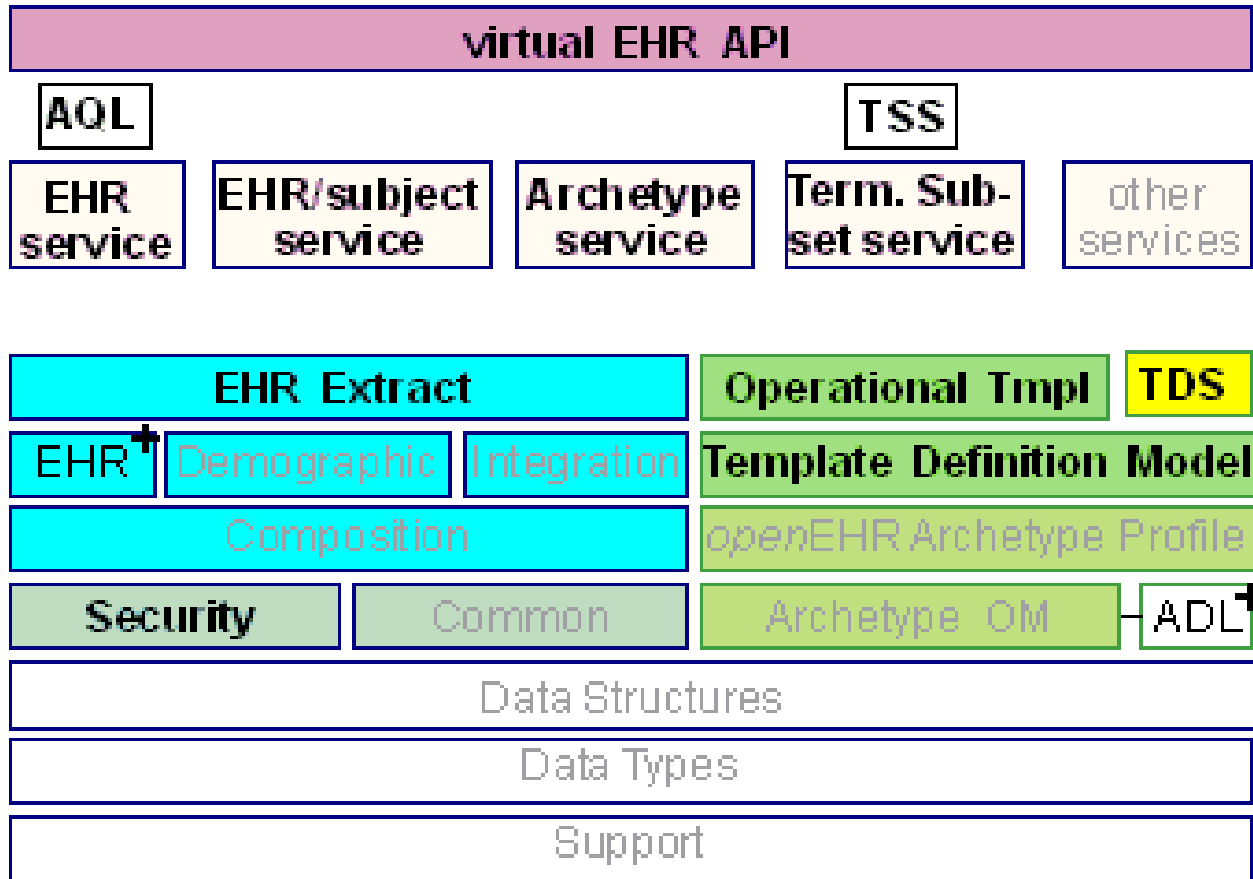
Setting up process of the openEHR based tool



Source:
Author

openEHR based tool to help realize Interoperability

openEHR Specifications Roadmap 2008



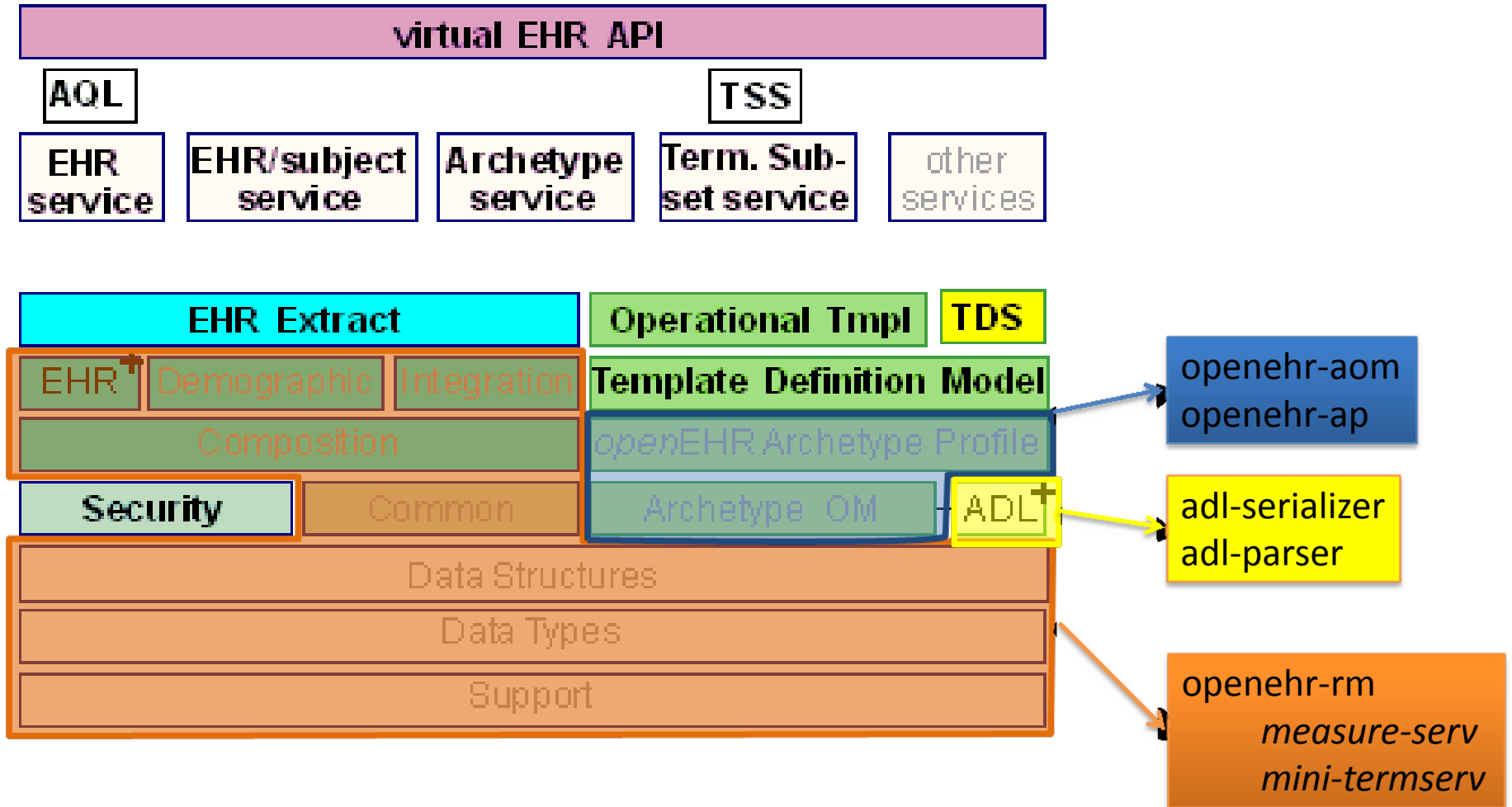
Legend

 Grey: created.
 Bold: will be created new.
 '+' symbol: will be enhanced.

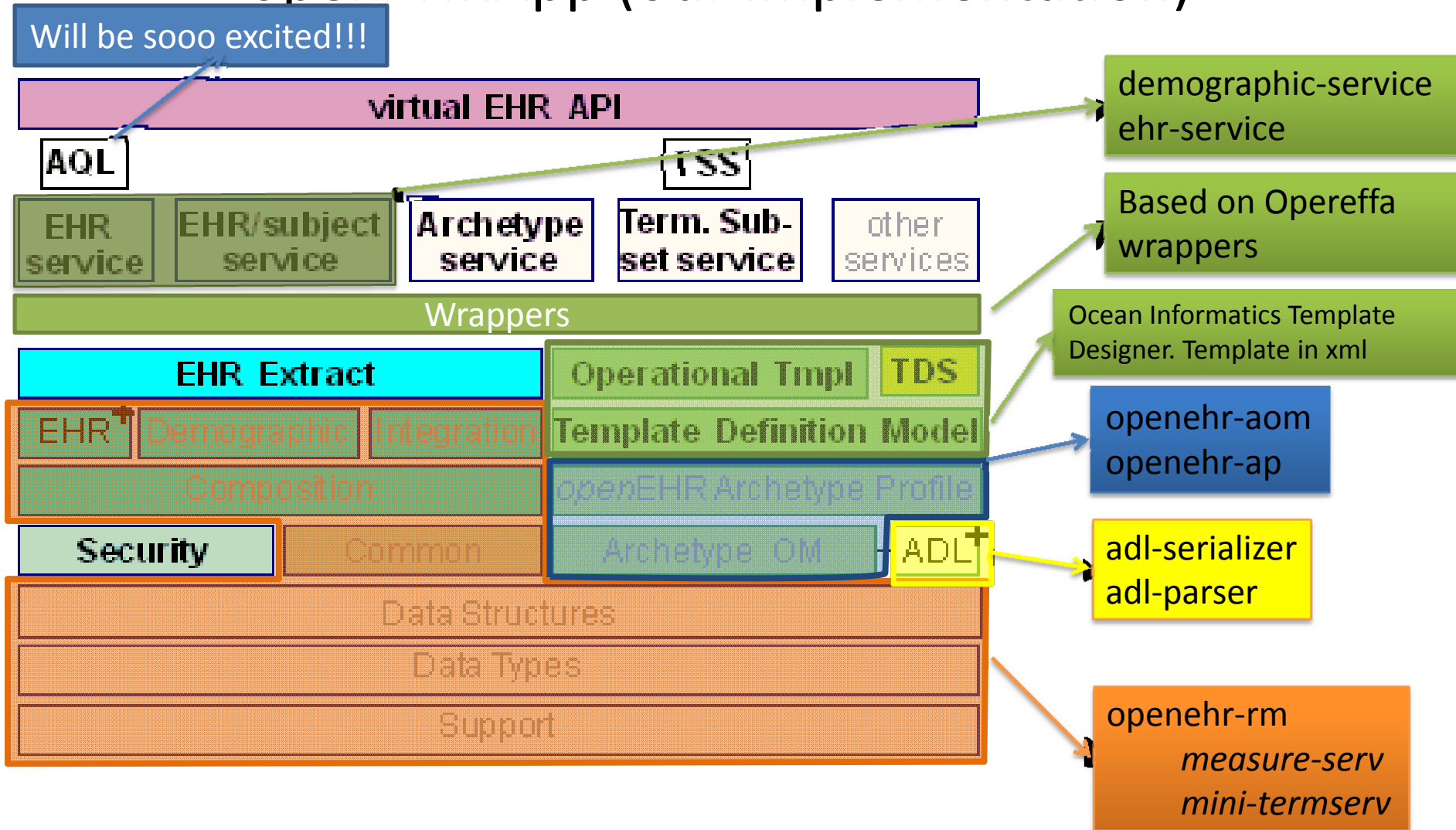
Acronym

 AQL = Archetype Query Language
 TSS = Terminology Subset Syntax
 TDS = Template Data Schema
 ADL= Archetype Definition Language

openEHR Java Reference Implementation Project



openEHRApp (our implementation)



The current accomplished features are:

- Archetype/template-based (Building block)
- Versioning (Time-varying recording)
- Medical/Technical separation (Expertise focus)
- Content /Software separation (Flexibility)
- Content/Owner separation (Generic security)
- Integrated medical history for a patient, besides Tuberculosis
- Medical records can be shared on a LAN (Prior to web-based ones)
- Multi-lingual support (English/Khmer)

Continued to next page

More to do:

– Better constrain on a template regarding a medical parameter

- Setting default value
- Limiting the number of value choice or range

Currently we can choose an archetype to fill in the appropriate slots and decide which parameters are needed or discarded

– More data type implementation (e.g: DvMultimedia, DvInterval, DvURL, etc.). Currently, 11 out of 21 data types have been implemented

– Reports (mostly aggregated ones)

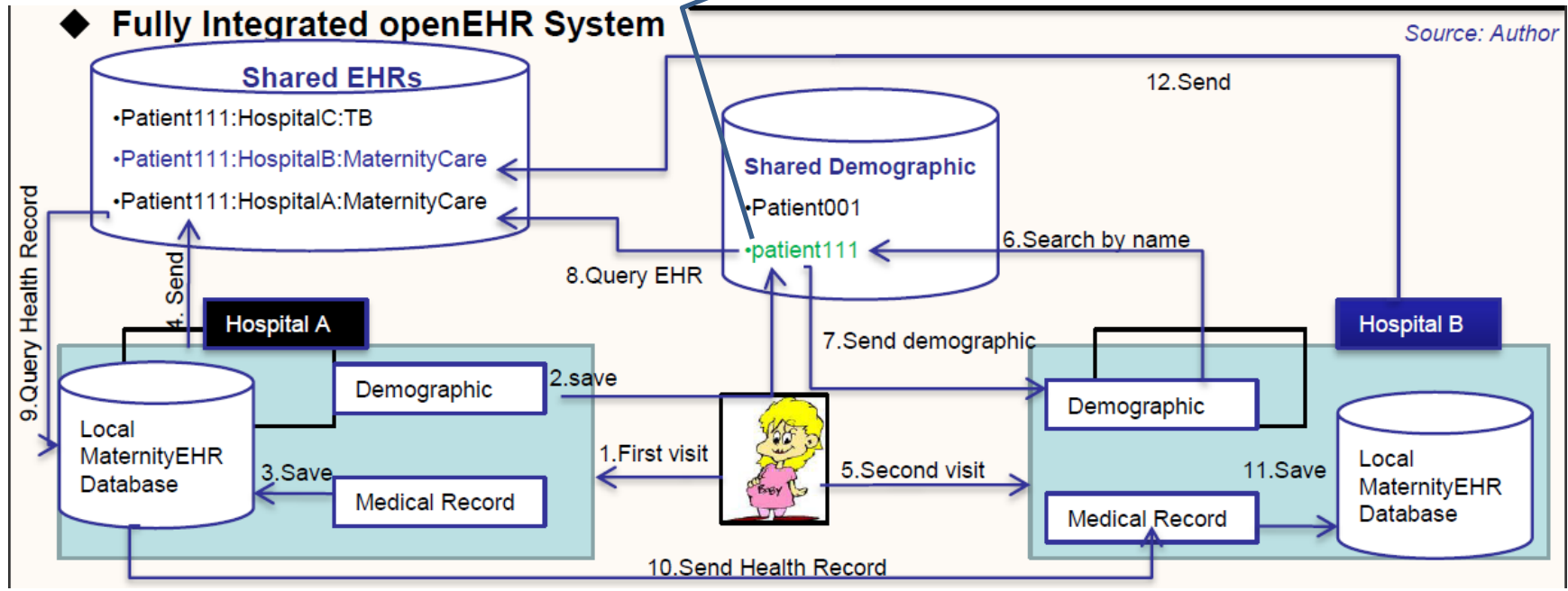
– Security based on roles

– Web-based and Shared online

- Archetypes
- Templates
- EHR (Electronic Health Record)
- Demographics

Methodology: Decentralized Algorithm

Patient identification: All patients should be uniquely identified. → YES , automatically created



Reasons :

- Separating Databases: EHRs. Database and Demographic: Maintain **Privacy** and confidentiality of patients
- Having separated Maternity EHR as local Database for each hospital: **Faster** because usually a patient goes to the same health facility, according to an ob-gyn in Calmette Hospital.

Note: Patient identification number is different from hospital number

Conclusion

Our achievement at Kano Lab is the eye-witness of the real power of *openEHR* approach that can bring about the prospect of “Integrated Health Care Information”.

This makes clear the following important assertions about *openEHR*:

- Shareable medical information based on Archetypes and Templates
- The independent content provided by medical domain, which is not hard-coded.
- The flexibility and robustness of the software that does not outdate due to hard-coded content. The designed content can be put to work on the fly.
- The longitudinal medical history of patients regardless of types of diseases is confirmed. Evident-based medicine is achieved.
- Low cost software (open source) and maintenance due to the software robustness.
- And more...

Thank you!