

CIMI Modeling Tools

Overview

Purpose

Tools to support CIMI model development, validation, translation, transformation, and use in CDS

Design Tools - Magic Draw

- Reference model defined using AML (UML + Reference Model Profile)
- Library to automatically convert from AML to BMM
 - XMI Parser (XMI Version 2.5)
 - ADL2/BMM OpenEHR Library
 - UML-to-BMM Converter
- XMI File → Simplified UML Java Model → BMM Java Model → BMM File

Design Tools - ADL Workbench

Primarily used to

- Visualize archetype hierarchies and archetype details
- Validate archetypes

Archetype development still manually done using sublime.

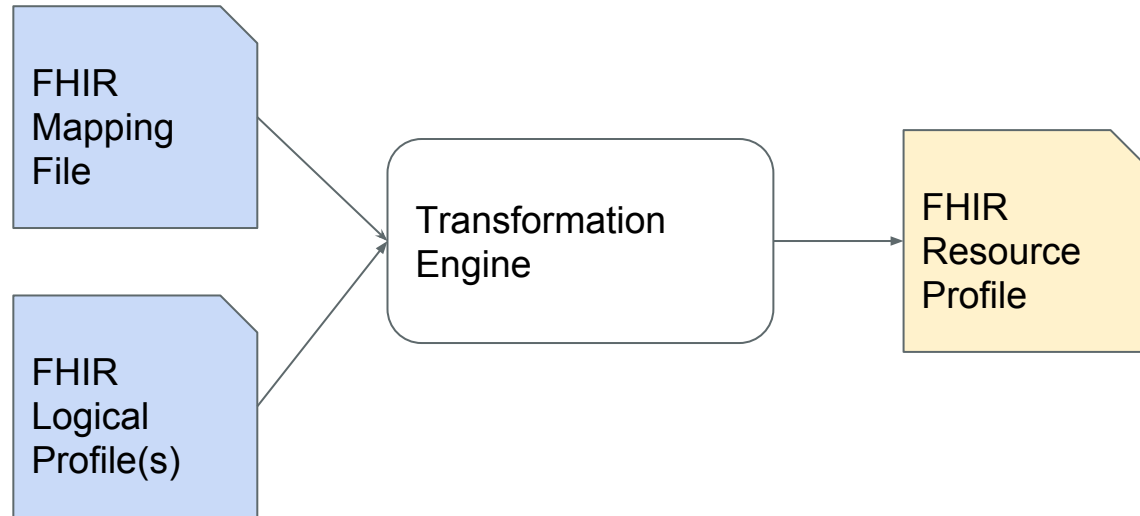
Short Term Goal: Define archetypes using AML and auto-generate top-level archetypes

CIMI-to-FHIR-Logical-Profiles

- Convert archetypes to FHIR logical profiles
- Not implemented at this time

FHIR-Logical-To-Resource-Profiles

- Convert CIMI FHIR-Logical Profiles to FHIR Resource Profiles
- In progress
- Code based on Grahame's implementation
- Code to be donated to HAPI FHIR



CIMI Java Code Generator

- Generation of CIMI Java object model from CIMI archetypes
- Allows use of CIMI in CDS execution engines
- In progress

CIMI-to-Model-Info-File Generator

- Converts CIMI Reference Model to CQL Model Info file to support use of CIMI with CQL expression in knowledge artifacts
- Discussions on approach with Bryn Rhodes
- Not yet implemented

Deserialization of CIMI FHIR Instances

- Pilot to explore the transformation of FHIR instances compliant with CIMI profiles into a CIMI object for manipulations by a CDS engine

