

Archie

Open Source OpenEHR Library



neddap

Nedap Healthcare

- EHR software for the Dutch care market
- Home healthcare, residential care
- Mental Health care
- Disability care

Archie

Open Source OpenEHR Library

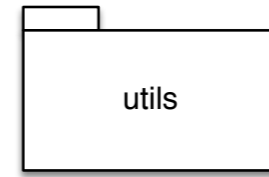
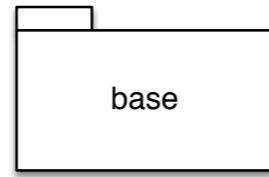
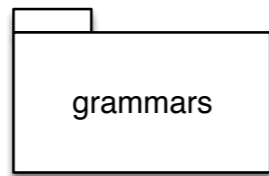
- Overview of library
- Demonstration
- Code examples
- Discussion

Why?

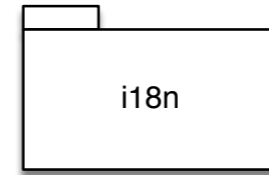
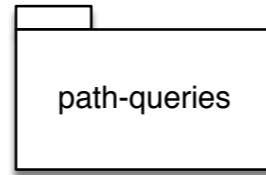
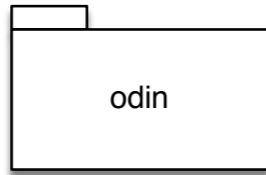
- We wanted to use ADL 2/AOM 2, but there was no suitable library
- Open source to promote ADL 2/AOM 2

Archie

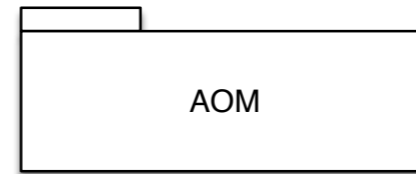
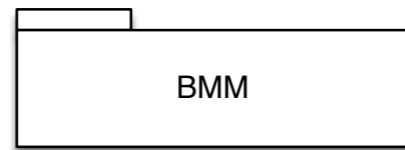
- Java OpenEHR library
- For modelling and EHR
 - BMM, ODIN, ADL, AOM, RM and more



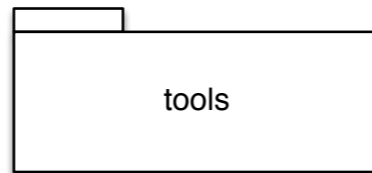
Base tools



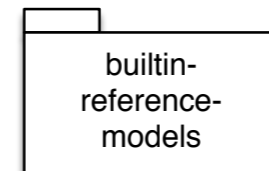
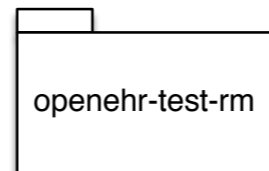
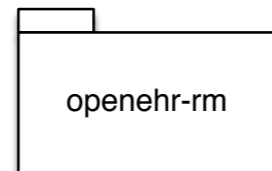
Models

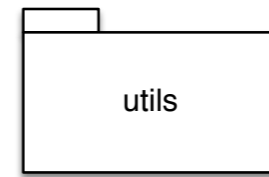
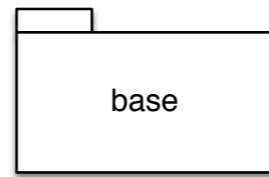
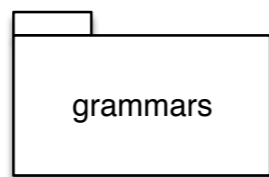


Tools

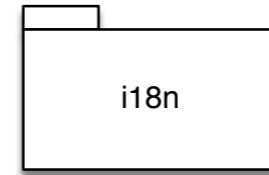
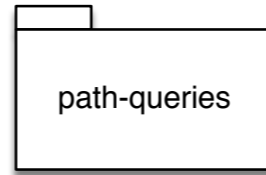
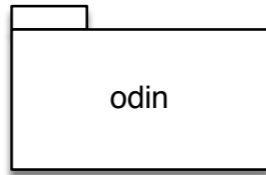


RM implementations

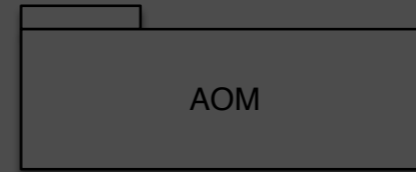
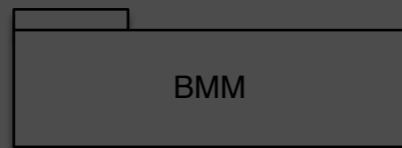




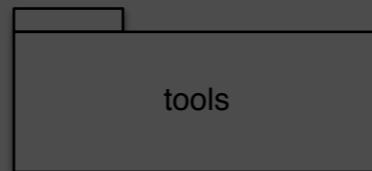
Base tools



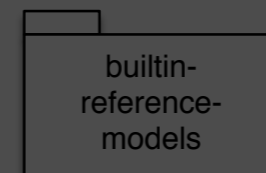
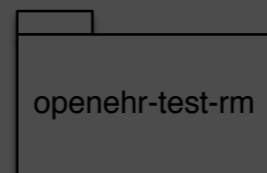
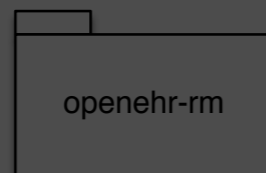
Models



Tools



RM implementations



Basics

- ADL grammar (Adapted from grammar by Thomas Beale)
- Odin parser + serialisers
- Path queries

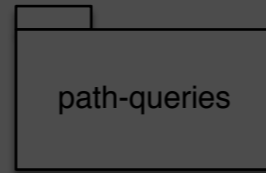
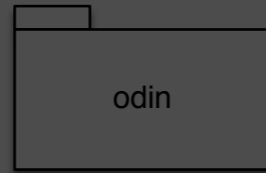
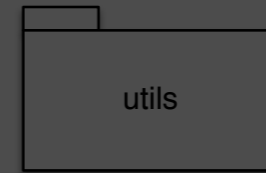
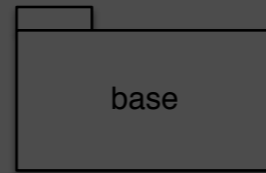
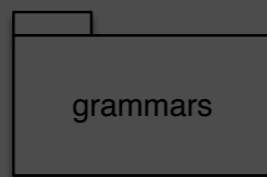
ODIN

- ODIN to JSON converter to parse
- Custom serializer
- ODIN object model

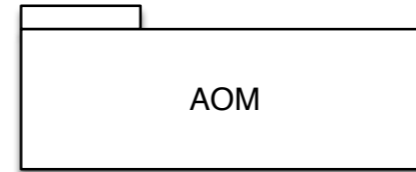
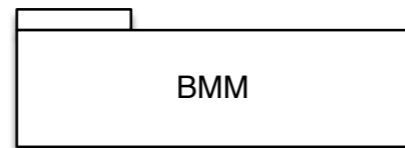
ADL/AOM

- ADL ANTLR parser
- Serializer
- Jackson bindings for JSON
- JAXB bindings for XML

Base tools



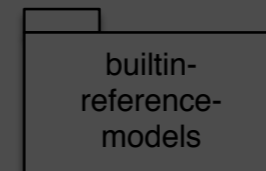
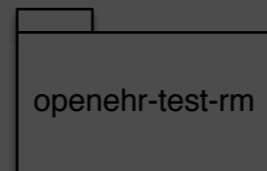
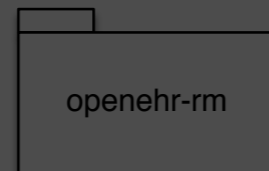
Models



Tools

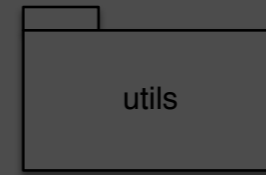
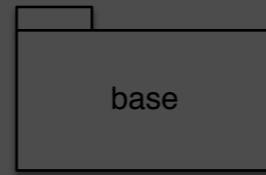
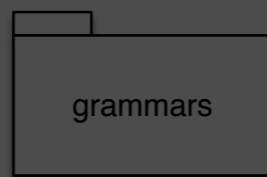


RM implementations

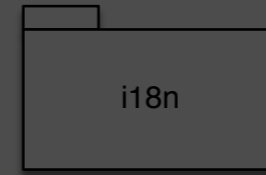
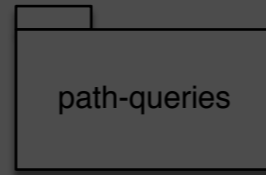
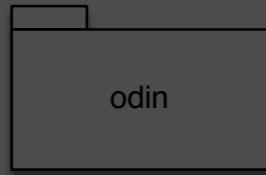


Models

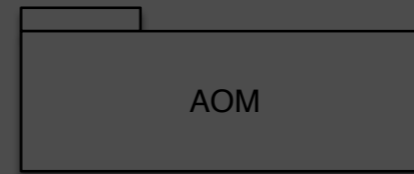
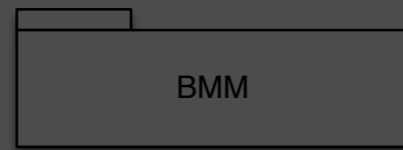
- AOM
 - Includes JSON, XML and ADL parsers and serialisers
 - ADL serialiser, contributed by Marand
- BMM
 - Contributed by Claude Nanjo, Joey Coyle and Kurt Allen



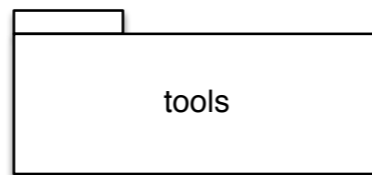
Base tools



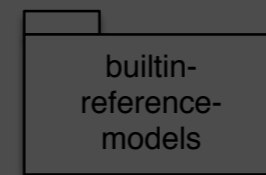
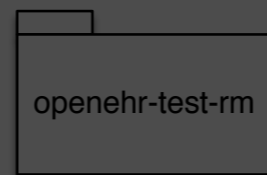
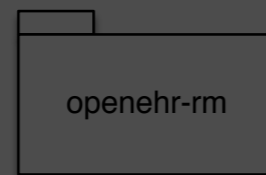
Models



Tools



RM implementations



Archetype tools 1/2

- Path queries
- Archetype validation
- Flattening
- Diff

Archetype tools 2/2

- Operational template creation
- In memory repository
- Node id generation

BMM-based

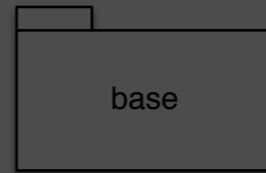
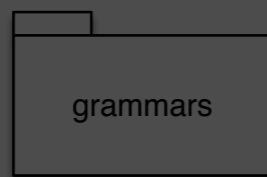
Tools work with any reference model

RM Tools

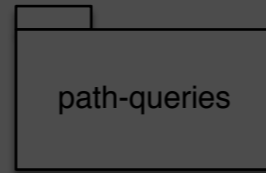
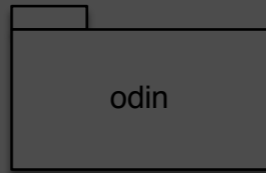
- Object creation + updates
- Validation against Archetypes
- Experimental:
 - rule evaluation

RM Tools

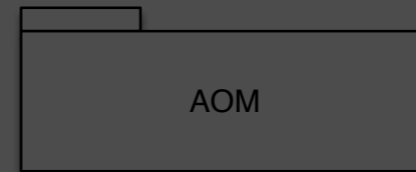
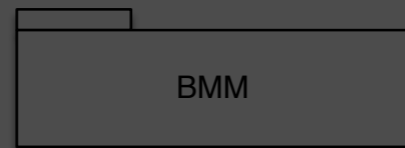
- Independent from RM implementations



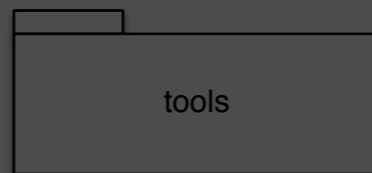
Base tools



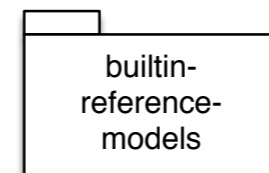
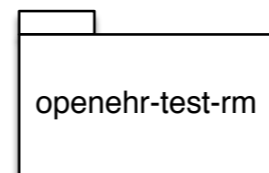
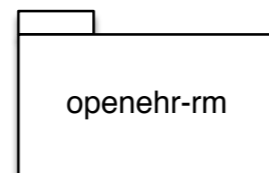
Models



Tools



RM implementations



RM Implementations

- RM 1.0.4 implementation
- OpenEHR Test RM for testing
- Tools to access builtin RM metadata (BMM + access to implementation)

RM implementation

- Jackson bindings for JSON
- JAXB bindings for XML

Apache 2 license

Automated tests

**Performance
optimised**

Status

- Grammar, parser, serializer, AOM complete
- Flattener, OPT and Diff complete
- Archetype validations 95%
- BMM 80% implemented, previous version

Demo application:

Archetype editor