openEHR

Conformance Framework

(a path for openEHR product certification)

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CaboLabs

Hallo!

- I'm Pablo
- My openEHR age is 17
- I help companies with openEHR
  - implementation
  - repositories
  - testing
  - integration
  - and conformance verification :)
- Working from CaboLabs.com

Agenda

- openEHR Conformance Verification
  - Why?
  - Principles & Goals
  - Components
- Conclusion

Why?

It's all about **trust**

Providers need to back openEHR conformance claims

Consumers need to verify openEHR conformance claims

openEHR Conformance verification is a basic market requirement

Principles

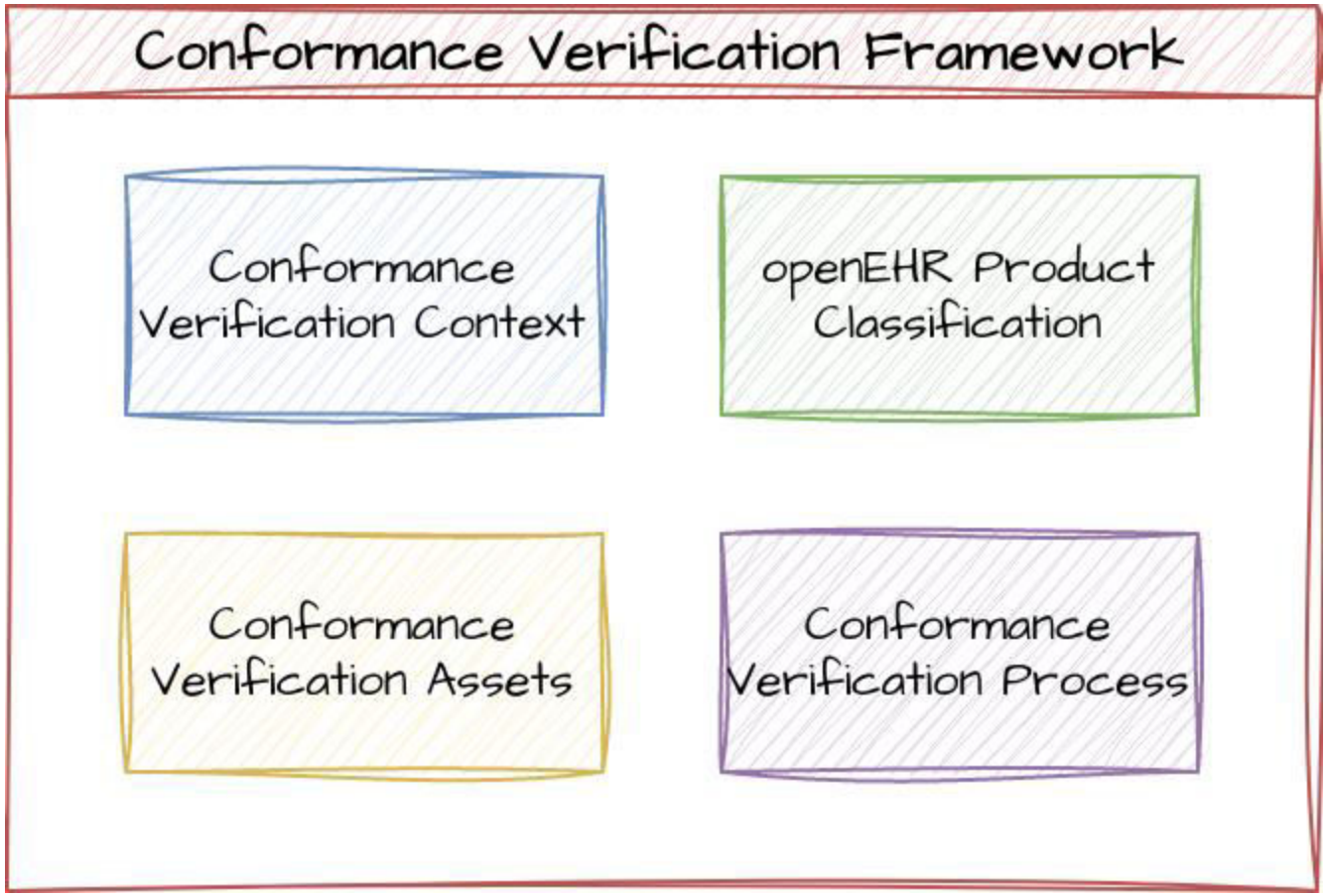
- The openEHR Conformance Verification Process should be:
  - Transparent
  - Fair
  - Unbiased
  - Formal

Goals

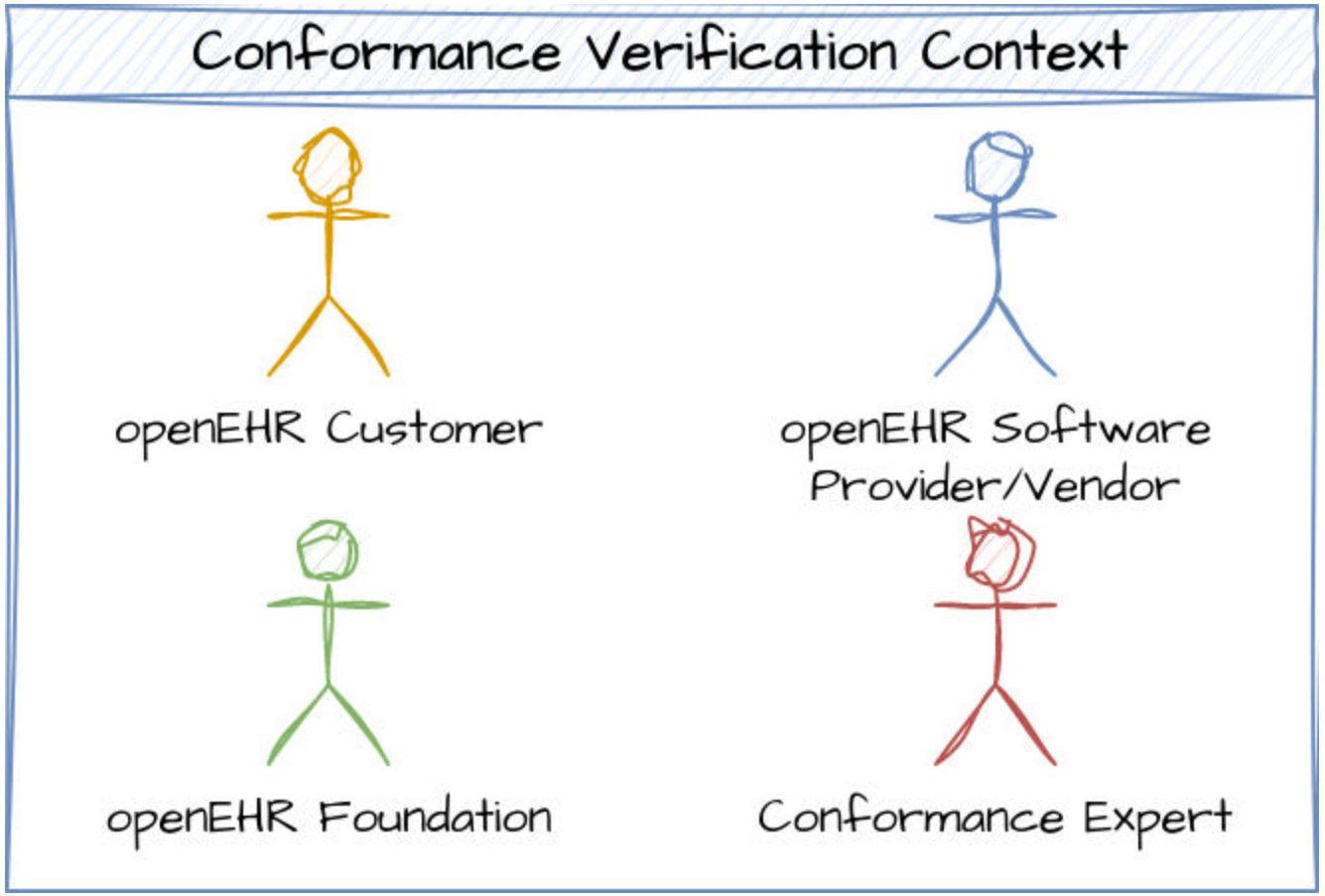
- Get comparable results
  - between products of the same type of different providers
  - between different versions of the same product
- Help providers to verify their products and deliver proposals
- Help consumers with RFP & evaluating proposals
- Lay the foundation for openEHR product certification

Components

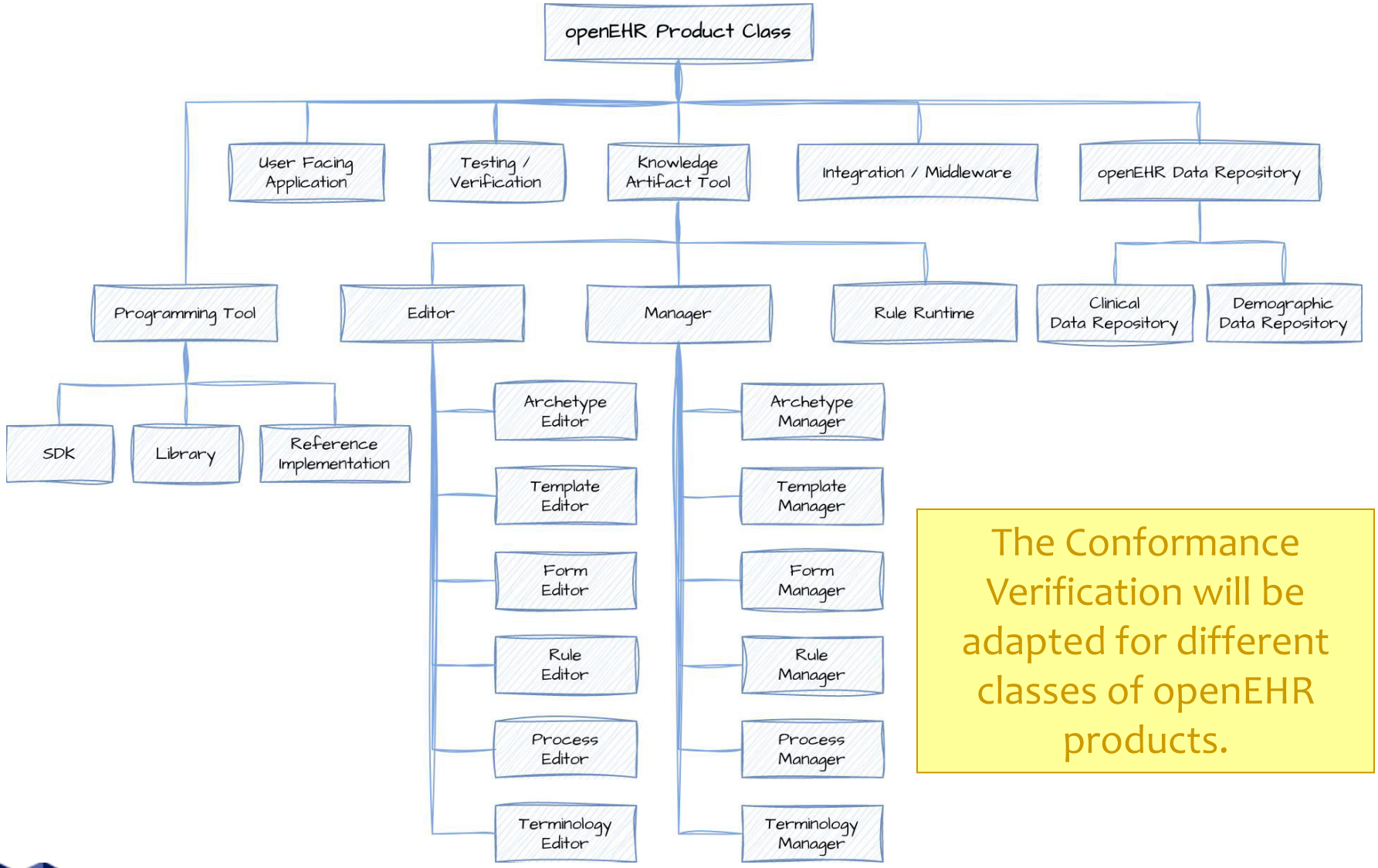
Components


Conformance Verification Framework
Conformance Verification Context
openEHR Product Classification
Conformance Verification Assets
Conformance Verification Process

Context

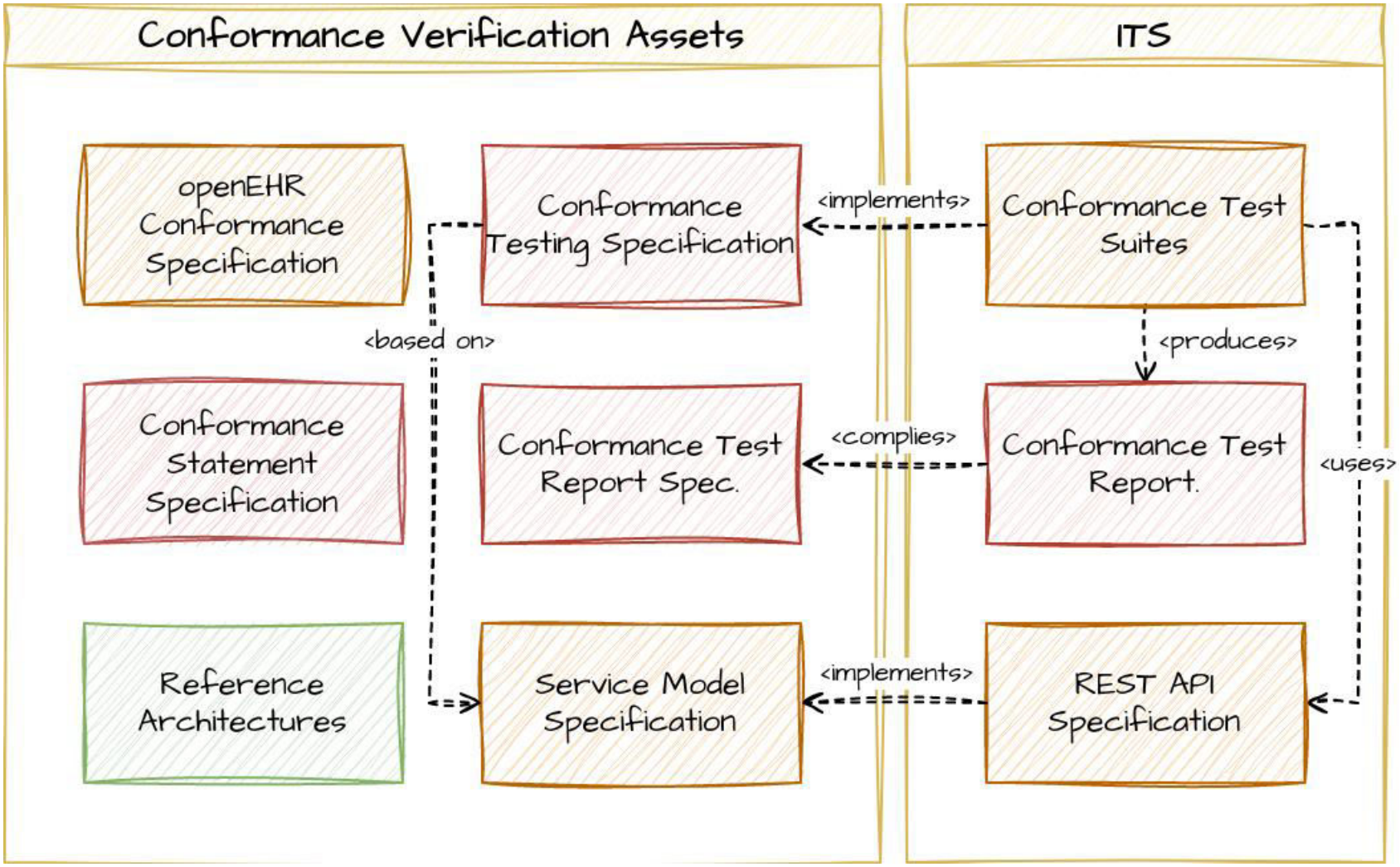

Conformance Verification Context
openEHR Customer
openEHR Software Provider/Vendor
openEHR Foundation
Conformance Expert

Product Classification

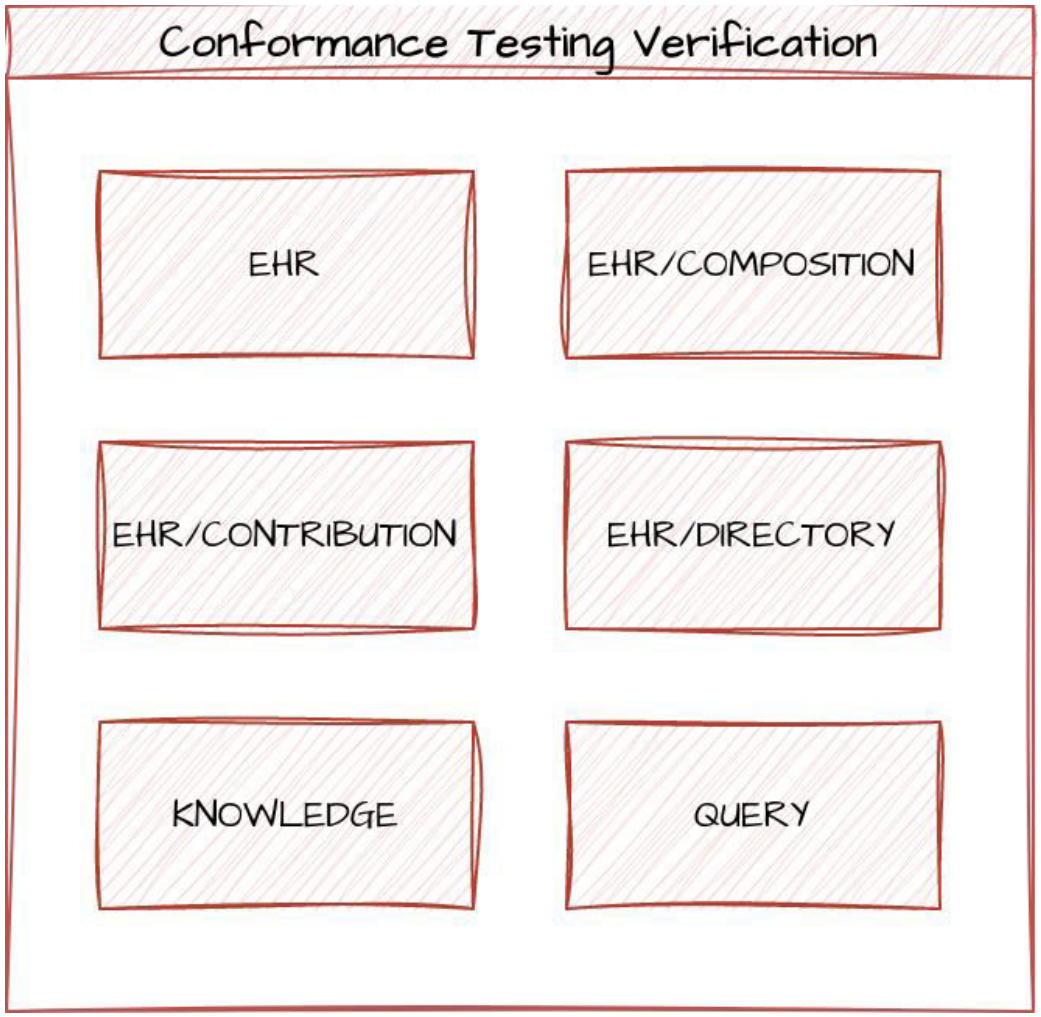


The Conformance Verification will be adapted for different classes of openEHR products.

Assets


Conformance Verification Assets
ITS
openEHR Conformance Specification
Conformance Testing Specification
<implements>
Conformance Test Suites
<based on>
<produces>
Conformance Statement Specification
Conformance Test Report Spec.
<complies>
Conformance Test Report.
<uses>
Reference Architectures
Service Model Specification
<implements>
REST API Specification

Conformance Testing Specification



Test suite (component)

Test case name

Preconditions
Postconditions
Flow
- step 1
- step 2
- ...

....

Conformance Statement Spec

- Identification of product and version
- Which versions of the openEHR specs are implemented
  - RM, AOM, REST API
- Which query formalism(s) are implemented
- Detailed RM components and classes implemented
- Data versioning scheme
- High level architecture
- Processable structure (JSON)
  - Retrievable via the conformance REST API (OPTIONS /)

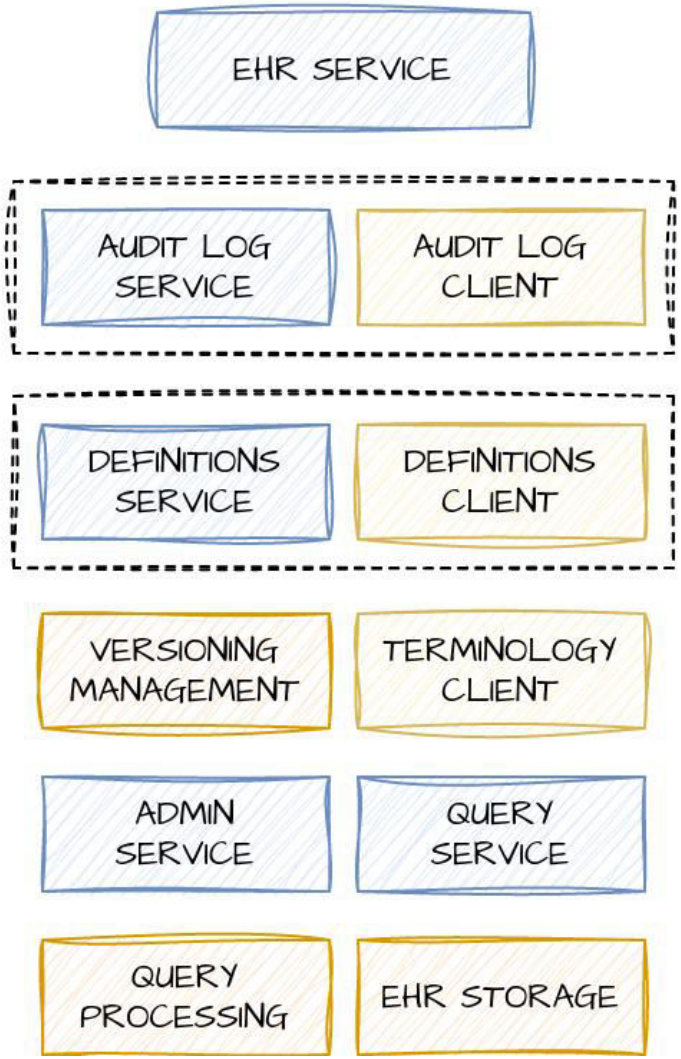
Conformance Test Report Spec

- Product identification and version
- Conformance Testing and Test Suites versions
- Contacts (software provider, conformance expert/s)
- Detailed results
  - Test suite identification
  - Test case identification
  - Test data set identification
  - Expected vs. Actual (condition evaluation)
  - Result: ACCEPTED / REJECTED
- Summary (total executed, total rejected, ...)
- Processable structure (JSON)

Reference Architectures

- High level architectures for each product class
- Each architecture has 3 types of components
  - Provider: provides services that can be consumed
  - Consumer: consumes a service from another system
  - Internal: internal component that support other components
- Each component has a name and definition
  - Different product classes might (re)use the same set of components
- Note: conformance tests will run against provider components

CDR Reference Architecture Sample



Conformance Verification Process

- Request by customer or vendor
- Delivery of Conformance Statement document
- Adaptation of Conformance Test Suites
- Running Tests
- Verify Test Report
- Create Conformance Report
- Certification
  - Submit Conformance Report to openEHR Certification Program
  - Review process
  - Final result

Conclusions

Conclusions

- Conformance Verification is not just running tests
  - we need to prepare the tests based on some criteria (Conf. Statement)
  - requires a set of processes and rules that considers different types of systems, different levels of conformance and design decisions made by vendors
- We need more reviewers to finish the Conf. Framework to update the Conformance Specification
- We hope to work closely with the openEHR Foundation to move towards a Certification Program and a Certification Process

Thank you!

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