

IHE[®] | EXPERIENCE
EUROPE | DAYS

BRUSSELS 2026
25-26 MARCH 



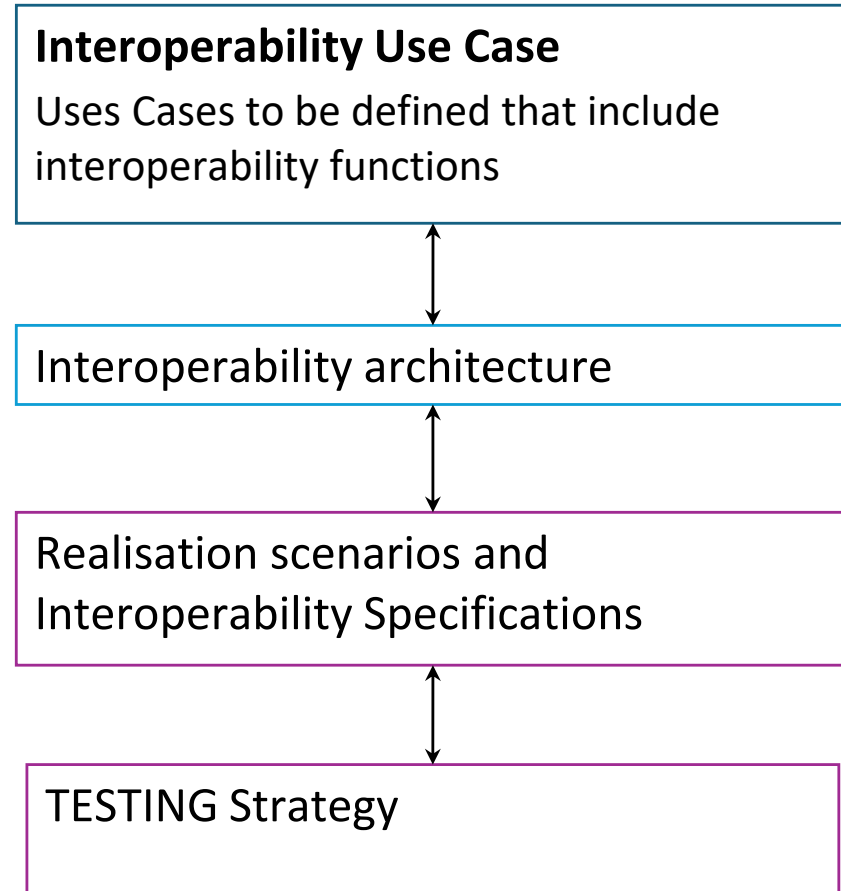
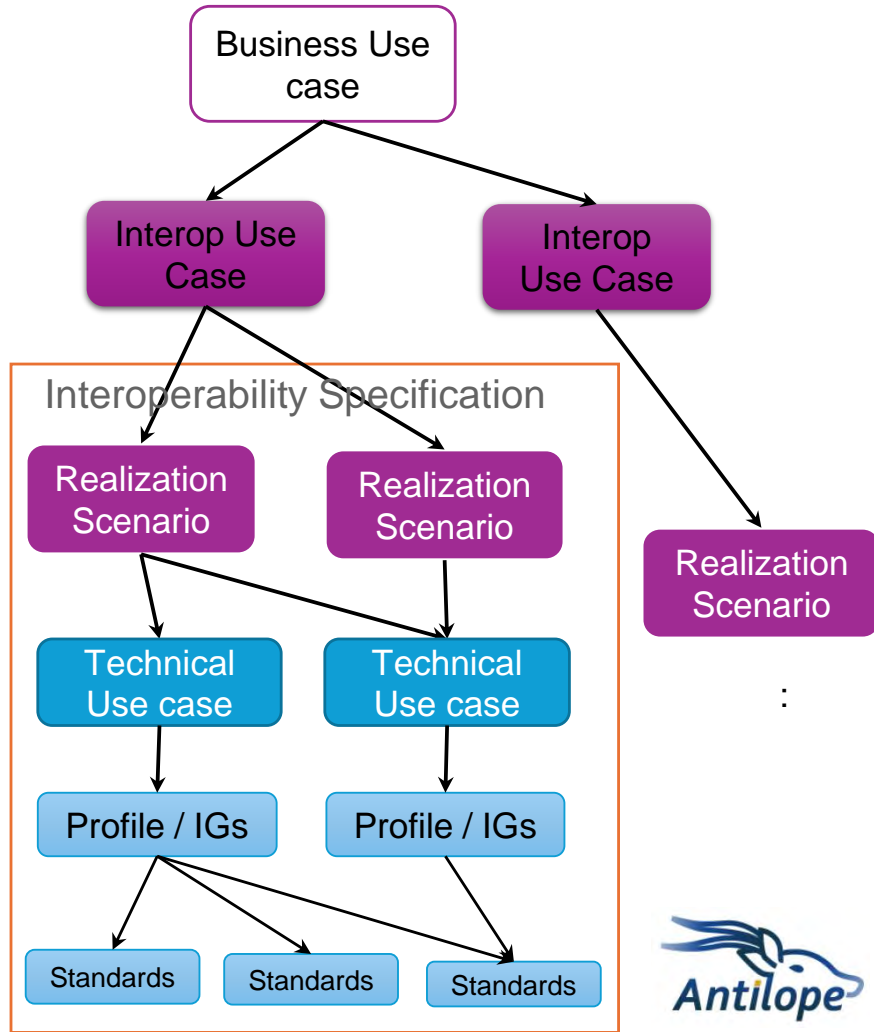
IHE's support for EHDS implementation

IHE testing environment and events



Alexander Berler
Strategic Business Development Director at
IHE Catalyst

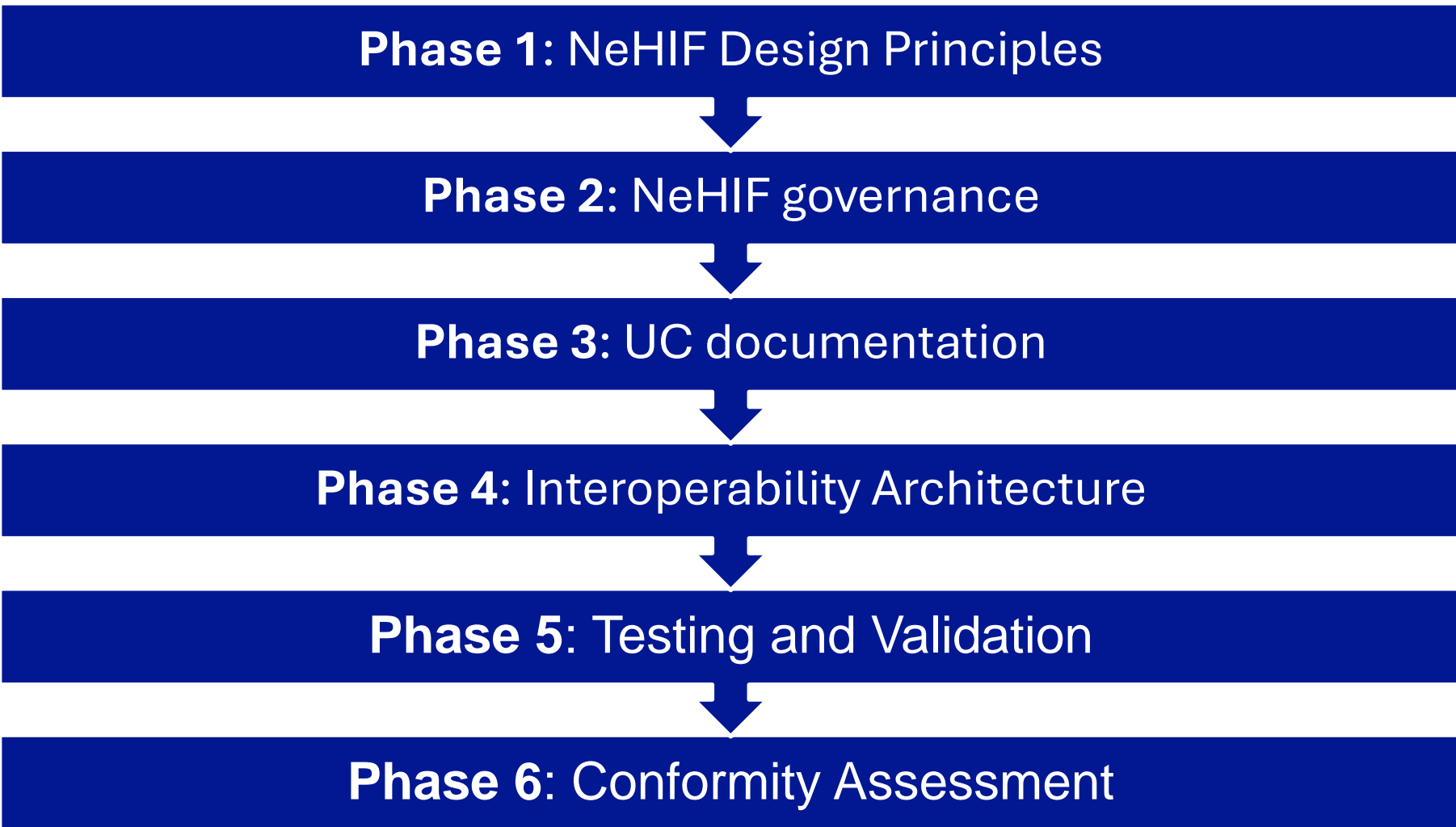
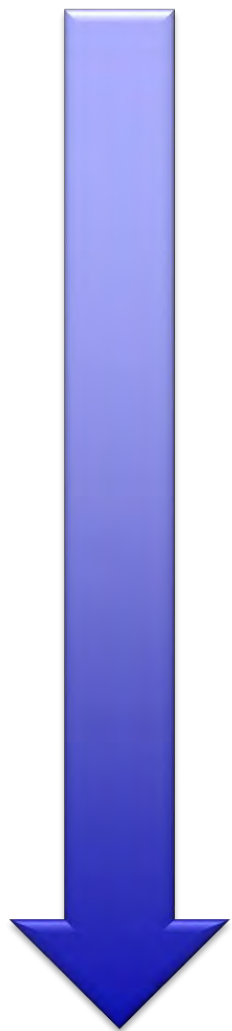




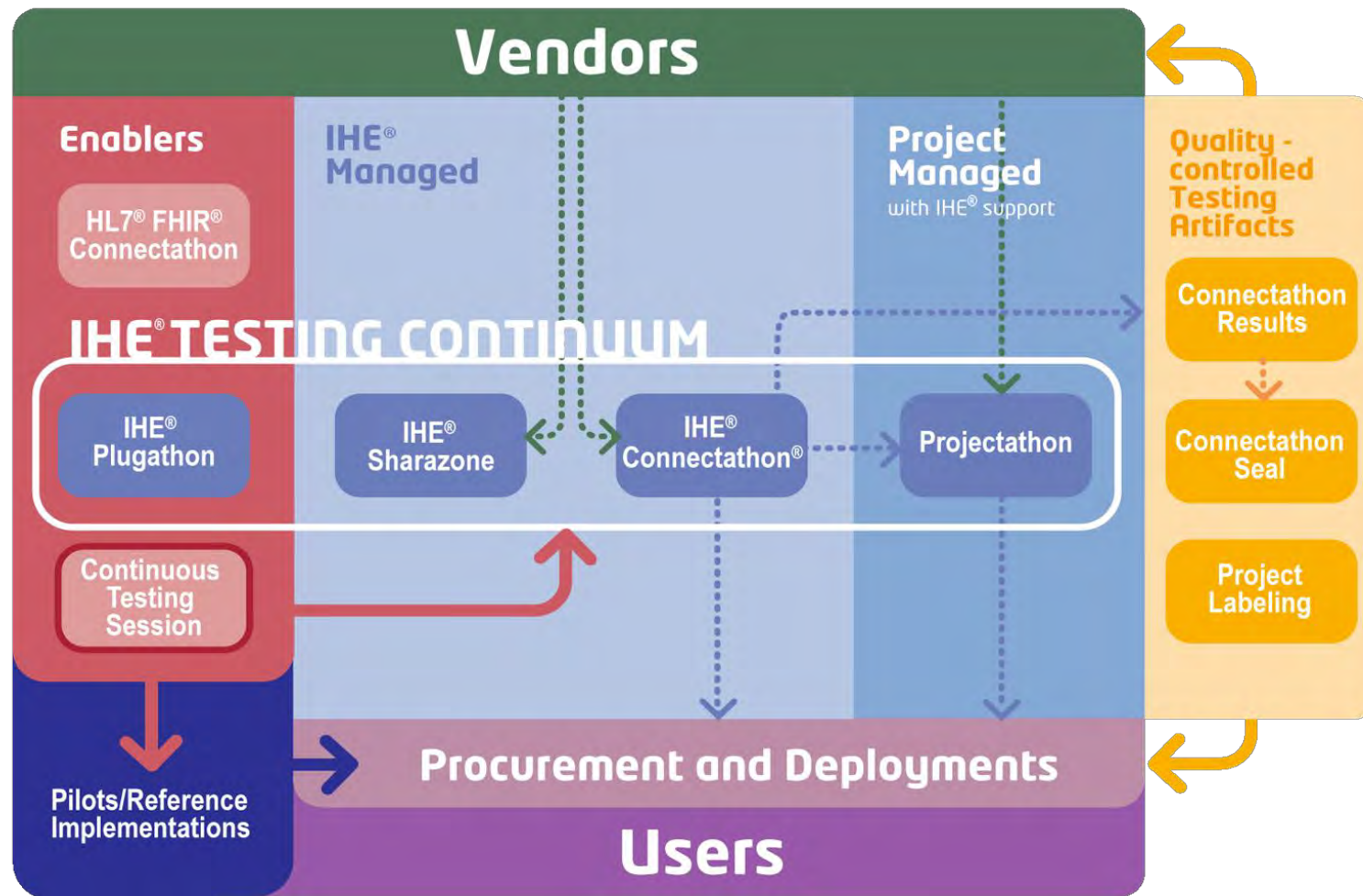
Interoperability is not a simple concept...



From Refined ehealth European Interoperability Framework
EU eHealth Network, 23/10/2015



Testing Continuum



What is an IHE Plugathon?

- An IHE Plugathon is a hands-on interoperability event where developers, startups, and vendors test how their solutions exchange health data using international standards (HL7 FHIR, DICOM, IHE profiles, etc.).
- Organized by IHE (Integrating the Healthcare Enterprise) and partners (IHE Catalyst, national eHealth bodies).
- Focus: early-stage testing and innovation validation in a trusted, collaborative environment.
- Plugathons complement formal IHE Connectathons by encouraging new participants and prototypes.

- Open invitation to vendor and other implementers community
- Advanced testing tools (GAZELLE, a GITB platform)
- Testing organized and supervised by IHE technical management team and monitors
- Thousands of cross-vendor tests performed
- Results recorded and published

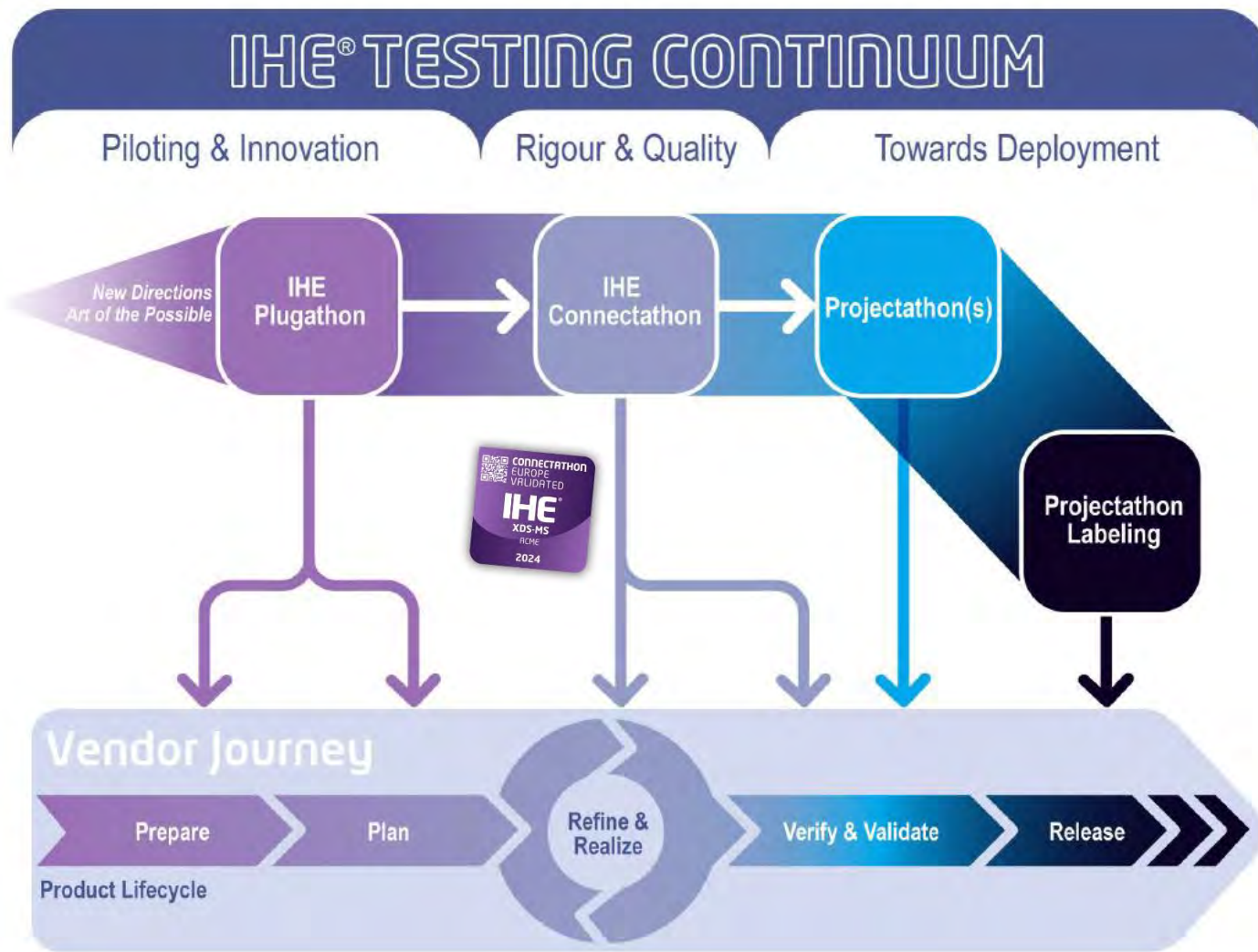


- Countries test their Interoperability specifications
 - National Interop. specifications should use IHE profiles
 - Testing concept same as Connectathon (“familiar”)
 - All eHealth use-cases can be tested in the same way
 - End to end testing like in real life use cases
- Triple purpose
 - Test implementation of the specifications by vendors active in the country
 - Test and refine the quality of your interoperability specifications
 - Establish digital health ecosystems and communities of practice



Efficient!

Testing Continuum and Vendor Journey



What is IHE Gazelle® ?



Open source



Collaborative



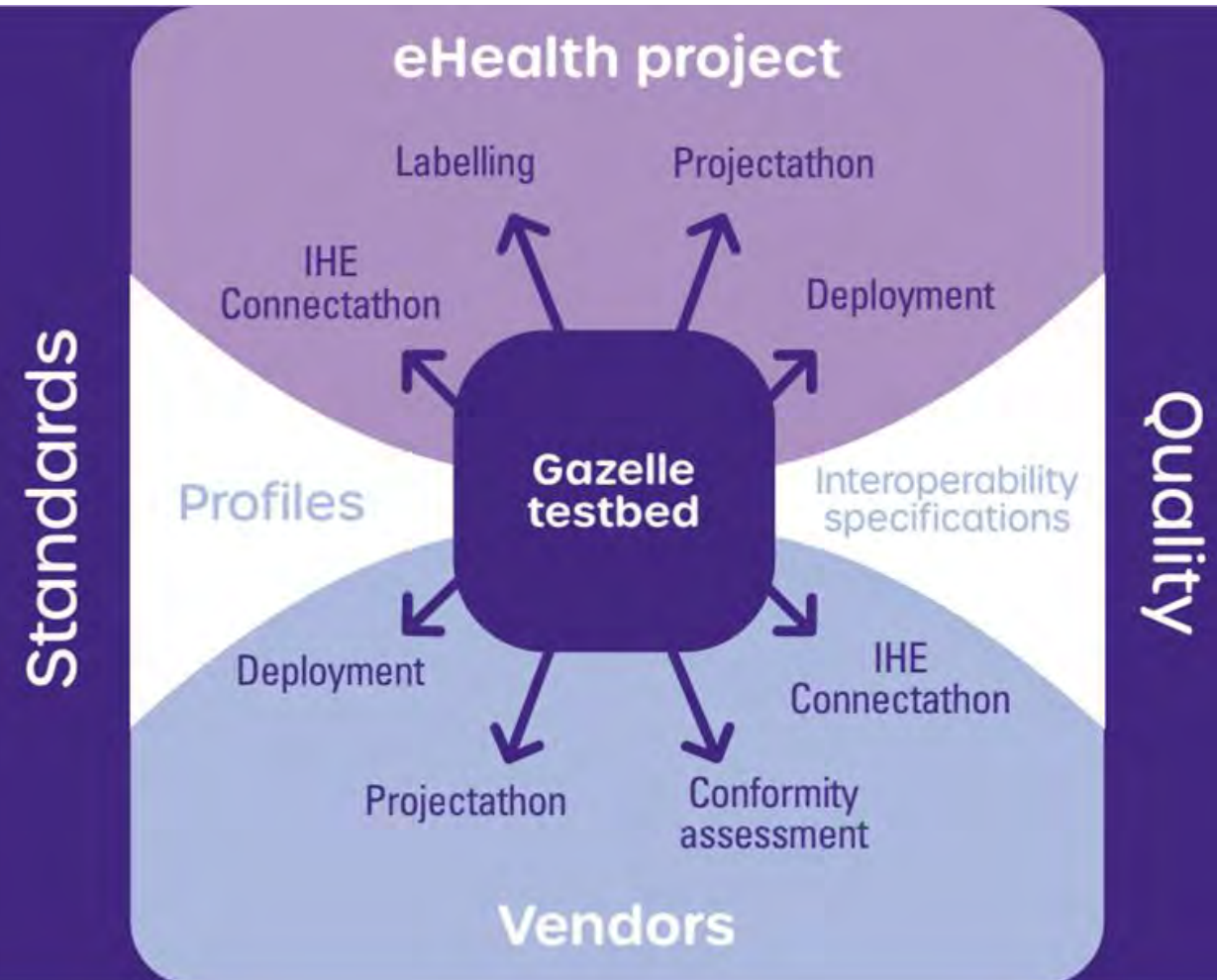
International



Adaptable

Gazelle is an open-source, web-based test platform supporting a wide portfolio of interoperability test tools suited to validate interface conformity to IHE Profiles and project-specific standards-based interoperability specifications.

Vendors can validate their eHealth projects to procure interfaces they deploy.



Enforce interoperability standards by relying on tests



Conformity

System tested alone with a validation tool to verify that it complies with the standard.



Group

Several systems interact together in a coordinated scenario (e.g., a complete care pathway).



Peer-to-peer

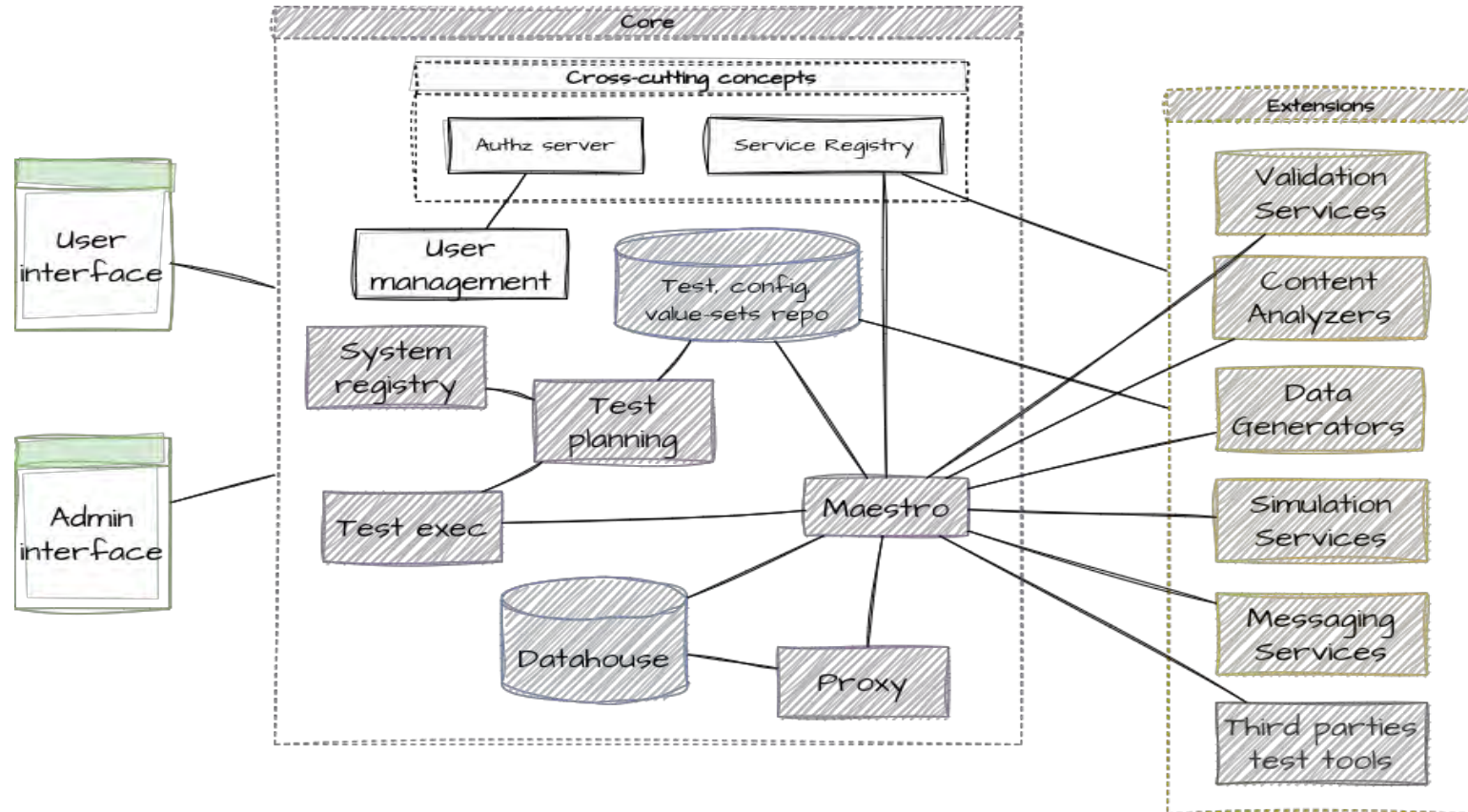
Two systems test their interoperability directly.

Gazelle delivered either as an in-house version or a cloud-based version. It includes:



The new architecture leverages

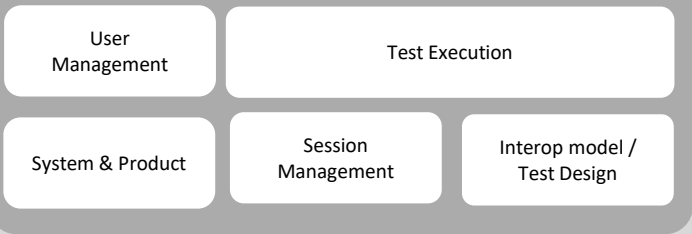
- Java
- Mongo DB
- ReactJS



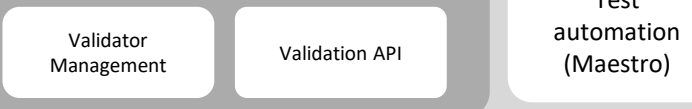
What is the Gazelle® ecosystem?

Gazelle Core

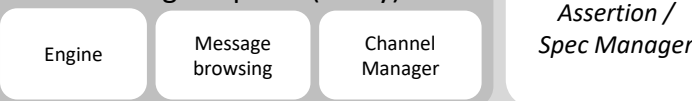
Test Management



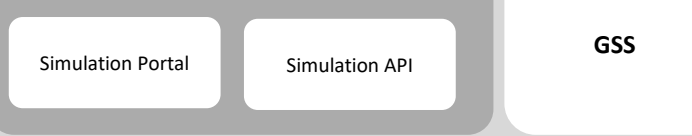
Validation Portal (EVS)



Message Capture (Proxy)

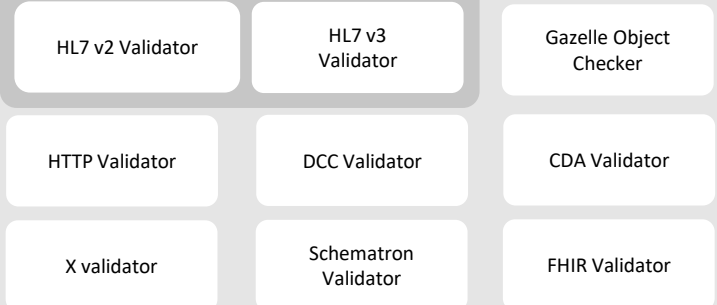


Simulation Portal

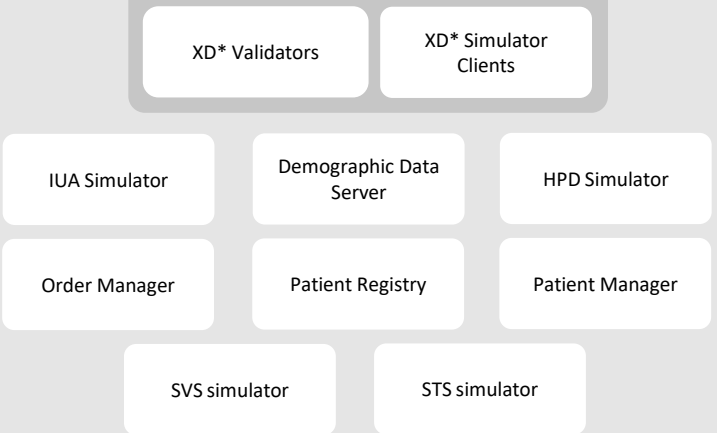


Gazelle Tools

HL7 Validator

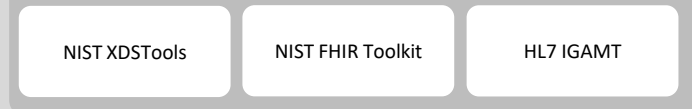


XDStarClient



Ecosystem Tools

NIST



ITB XML/JSON Validators



AHDIS Matchbox



ART-DECOR



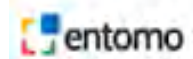
DCM4CHEE



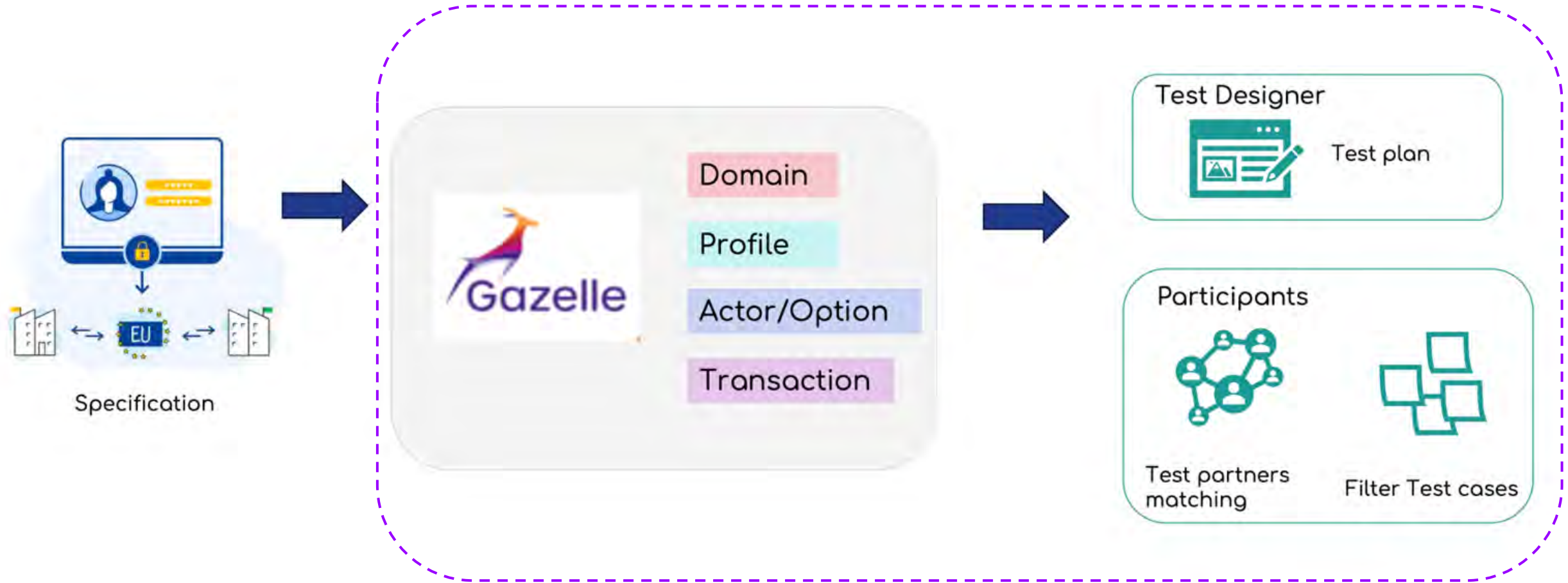
MITRE HL7® FHIR®

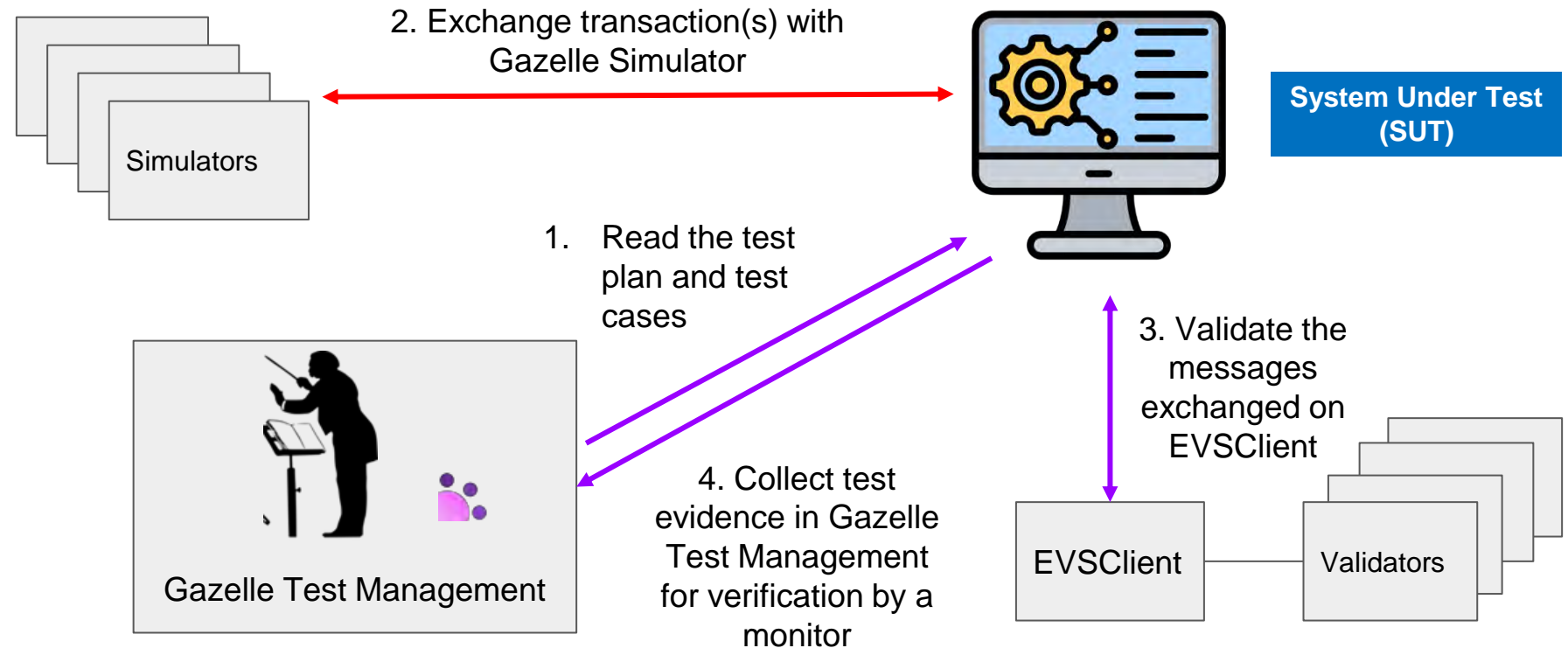


Dicom3tools

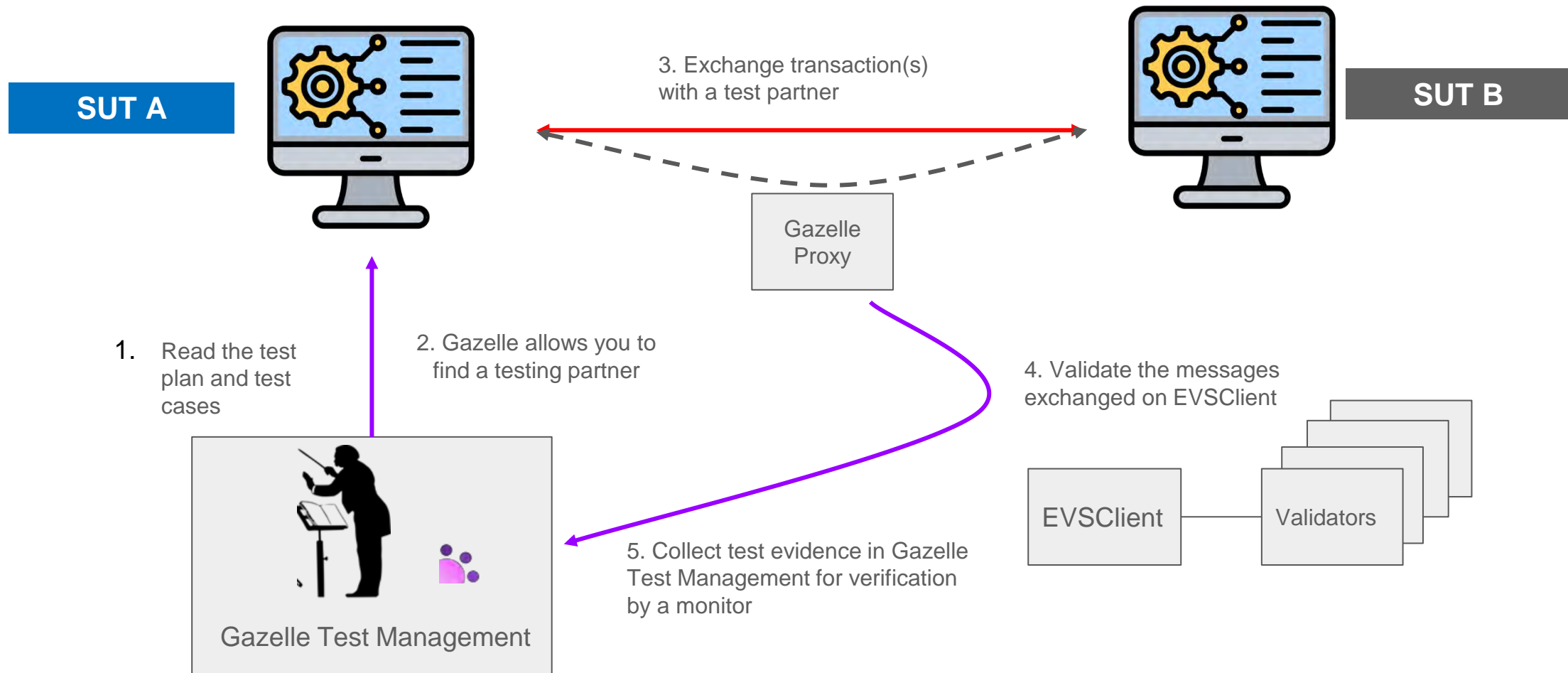


WHO





Peer-To-Peer Testing Process in Gazelle®

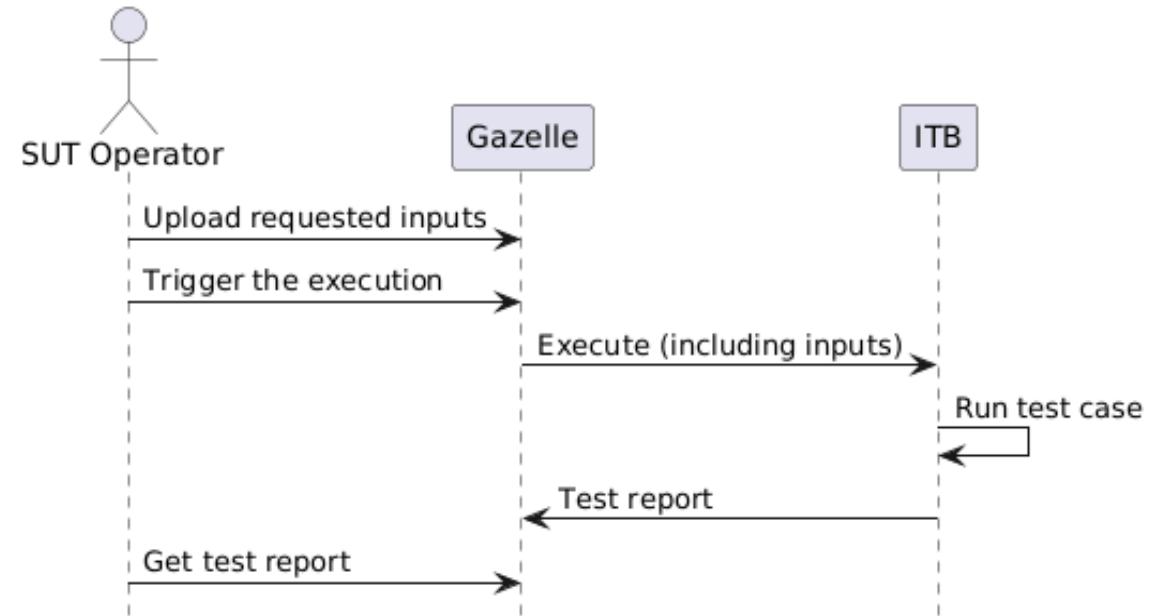


Requires configuration of both the ITB and Gazelle test beds

Information about the test cases (name) as well as the expected inputs shall be used to develop the test script used in Gazelle

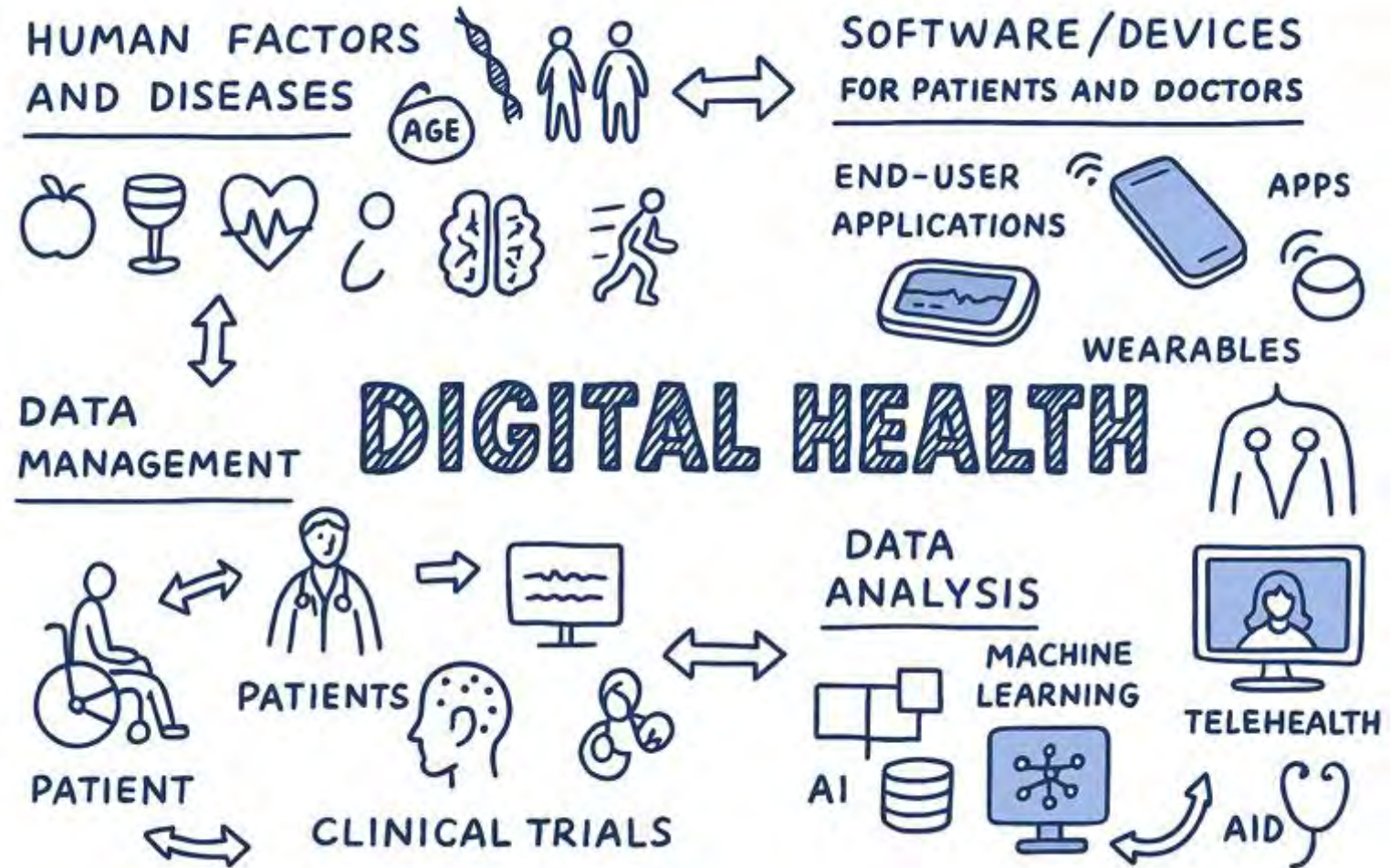
Required API keys

Results will also be visible in ITB



Interoperability is a race without a finish line:

- New clinical knowledge
- New technologies and data resources
- Organization and regulatory shifts
- New requirements of data flow and consumption across the ecosystem
- New data standards to mapped to legacy
- Ensuring compliance is key



The concept of an interoperability labs



Create and operate an **interoperability framework** as the cornerstone of building complex digital transformation strategies in healthcare



Bring experts together and solve problems



Test before you implement



Reuse, collaborate, co-create do not re-invent the wheel



Align implementation with real capacity of the stakeholders and make realistic roadmaps



Perform **continuous education** and capacity building



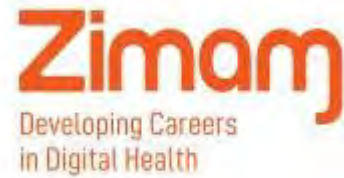
Enable the ecosystem of stakeholders

Human Interoperability – Ecosystems of Stakeholders





Latin America and Caribbean



Middle East



Morocco/Africa



Europe Continuous Testing for EHDS



GLOBAL HEALTH CONNECTOR



GHC and IHE Catalyst join force to develop Interoperability Labs in Sub-Saharan Africa, India and China

- Sub-Saharan Africa
- India
- China
- And beyond

Thank you!

Questions?

