

Technology Viewpoint (Draft)

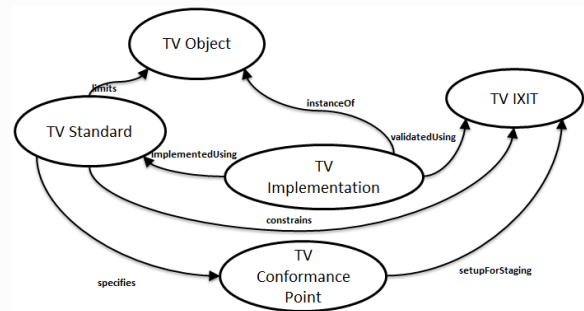
The Technology Viewpoint covers real-world constraints (such as restrictions on the facilities and technologies available to implement the system) applied to the existing computing platforms on which the computational processes must execute.

The specification of the Engineering viewpoint (EV) in the ENVRI RM aims to provide a flexible mapping between the models provided by the other viewpoints ([Science Viewpoint](#), [Information Viewpoint](#), [Computational Viewpoint](#), [Engineering Viewpoint](#)) and the technologies and standards to be adopted for implementing them.

In the specification of the Technology Viewpoint for ENVRI, the engineering viewpoint configurations are mapped to an technology viewpoint objects. Each TV Object is represented as an API definition. The API definitions are provided as OpenAPI templates, which is the implementable standard for APIs, in this case the APIs correspond to generic implementations which can be further customised and OpenAPI is the implementable standard for APIs which can be used to generate template stubs for services and client libraries. Finally, the testing information is also included in the API specifications.

This compact definition of the Technology Viewpoint proposes the use of APIs as the main integration technology between RIs. By leaving the definition of the TV at this level we aim to avoid prescribing implementation technologies for core services and instead concentrate on technologies for RI distribution and integration.

The technology viewpoint defines: technology objects, implementable standards, implementation, conformance points, and IXIT (Implementation eXtra Information for Testing – a name derived from the earlier protocol specific OSI concept of a PIXIT).



Engineering Viewpoint components and their relationships