

SV Object Classification

Science Viewpoint Objects can be grouped according to the way they participate in a behaviour in three categories: **Actor**, **Artefact**, and **Resource** [37].

Actor: A science object that participates in performing a behaviour (Human, Software or Organisation).

Examples of Actor can be

- An specific Environmental Research Scientist, the real world person, e.g. Marine Biologist Tomas Moro.
- An specific **research institution**, real world organisation, such as The Marine Biological Association.
- An specific software system or service, real world functioning or planned system, for instance the ICOS carbon portal.

Artefact: A science object that is mentioned in a behaviour, but is not an active participant in it (participant in the sense of being used or performing a behaviour)

Examples of Resource can be:

- A data set in a particular state: raw, curated, annotated
- Metadata
- A physical sample: magnetic reading, film, photograph, or biological sample, which will be digitised by a RI for preservation and further processing (e.g. the biological samples from which a DNA sequence is obtained)

Resource: A science object that is essential for the performance of an action, requiring allocation or possibly being used up, respect to a behavior.

Examples of Resource can be:

- A pool of processing machines which is allocated to enable a behaviour
- A catalogue which is used as reference for a specific behaviour

It is important to remark that these qualifications are with respect to particular behaviours; an artefact in one behaviour may be an actor in another. For instance, if a sensor is allocated to a certain data collection activity during the "design experiment" behaviour, we can say that the sensor is a resource (allocated to be used). However, if that same sensor is modelled in the context of the "data collection" behaviour, the sensor is an actor (performing the action of collecting data).



Note

The ENVRI RM does not go into greater detail about the definition of instances of these objects because they will depend directly on the context in which the modelling is performed and the specific characteristics of the research infrastructure being modelled.