## 57 SIG - Issue 490: how to model a file

MD gave a summary of the discussions that have taken place among the members of the group that have been tasked with working on the issue and proposed to introduce a property whereby to refer to the content of an information object via an external copy, via a URL or archival identifier.

The details of the property definition can be found [below](#_Pxx_has_representative_1).

**Discussion points**:

* The last paragraph needs to be redrafted as an observation, not as an instruction. Could be turned into an example instead.
* The label also needs to be reconsidered.
* It was proposed that, in order to avoid duplicating P128i, the proposed property could be turned into a guideline. The SIG did not accept this proposal, as this property is analogous to P190 (which in its turn is considered incomplete without the new property) but also much more specific than E73.

**Decision**:

The SIG voted in favor of adding the property, but assigned CEO, MD, and SdS to redraft its scope note to read as an observation, and also to come up with a less controversial label.

**HW**: MD, CEO, SdS

### Pxx has representative copy - definition

**Pxxx has representative copy ()**

Domain:

E90 Symbolic Object

Range:

E25 Human-Made Feature

Subproperty of:

E90 Symbolic Object. P128i is carried by (carries): E18 Physical Thing

Quantification:

many to many (0,n:0,n)

Scope note:

This property associates an instance of E90 Symbolic Object with a complete, identifying representation of its content in the form of a sufficiently readable instance of E25 Human-Made Feature, including, in particular, representations on electronic media, regardless whether they reside internally in clusters of electronic machines, such as in so-called cloud services, or on removable media.

This property only applies to instances of E73 Information Object that can completely be represented by discrete symbols, in contrast to analogue information. The representing object may be more specific than the symbolic level defining the identity condition of the represented. This depends on the type of the information object represented. For instance, if a text has type "Sequence of Modern Greek characters and punctuation marks", it may be represented in a formatted file with particular fonts on a particular machine, meaning however only the sequence of Greek letters. Any additional analogue elements contained in the representing object will not regarded to be part of the represented.

As another example, if the represented object has type "English words sequence", American English or British English spelling variants may be chosen to represent the English word "colour" without defining a different symbolic object.

In a knowledge base, typically, the represented object will appear as a URI without a corresponding file, whereas the representing one may appear by the URL of a binary encoded file existing outside the knowledge base proper, or by the archival identifier of a paper edition. A URL for identifying the copy itself in a knowledge base should only be used as long as the providers support the persistence of that copy under this URL, as it is current practice for "Linked Open Data". Associating the referred copy with a checksum in the knowledge base may help safeguarding the maintainers against unexpected change of content under this URL. If more than one representative copy is referred to, the maintainers should control their mutual consistency at the symbolic level of the object intended to be represented.

Examples:

* Definition of the CIDOC Conceptual Reference Model Version 7.1.1 (E73) /has representative copy/ The content under <https://cidoc-crm.org/sites/default/files/cidoc_crm_v.7.1.1_0.pdf> (E25) on the sever of ICS-FORTH in Heraklion, Greece.  
  [The edition 7.1.1 of the CIDOC CRM is registered under the public URI ["https://doi.org/10.26225/FDZH-X261"](https://doi.org/10.26225/FDZH-X261), [<https://cidoc-crm.org/sites/default/files/cidoc\_crm\_v.7.1.1\_0.pdf>](https://cidoc-crm.org/sites/default/files/cidoc_crm_v.7.1.1_0.pdf)which redirects users to the representative copy under <https://cidoc-crm.org/sites/default/files/cidoc_crm_v.7.1.1_0.pdf>. [<https://cidoc-crm.org/sites/default/files/cidoc\_crm\_v.7.1.1\_0.pdf>](https://cidoc-crm.org/sites/default/files/cidoc_crm_v.7.1.1_0.pdf)ICS-FORTH as organisation is responsible for the persistence of this content under the respective URL to the DOI Foundation]

In first-order logic: