

# FAIR Metric FM-I3

Mark D. Wilkinson, Susanna-Assunta Sansone,  
Erik Schultes, Peter Doorn,  
Luiz Olavo Bonino da Silva Santos, Michel Dumontier

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<i>FIELD</i>	<i>DESCRIPTION</i>
Metric Identifier	FM-I3
Metric Name	Use Qualified References
To which principle does it apply?	I3 - (meta)data include qualified references to other (meta)data
What is being measured?	Relationships within (meta)data, and between local and third-party data, have explicit and ‘useful’ semantic meaning
Why should we measure it?	<p>One of the reasons that HTML is not suitable for machine-readable knowledge representation is that the hyperlinks between one document and another do not explain the nature of the relationship - it is “unqualified”. For Interoperability, the relationships within and between data must be more semantically rich than “is (somehow) related to”.</p> <p>Numerous ontologies include richer relationships that can be used for this purpose, at various levels of domain-specificity. For example, the use of skos for terminologies (e.g. exact matches), or the use of SIO for genomics (e.g. “has phenotype” for the relationship between a variant and its phenotypic consequences).</p> <p>Similarly, dbxrefs must be predicated with a meaningful relationship what is the nature of the cross-reference?</p> <p>Finally, data silos thwart interoperability. Thus, we should reasonably expect that some of the references/relations point outwards to other resources, owned by third-parties; this is one of the requirements for 5 star linked data.</p>
What must be provided?	Linksets (in the formal sense) representing part or all of your resource
How do we measure it?	<p>The linksets must have qualified references</p> <p>At least one of the links must be in a different Web domain (or the equivalent of a different namespace for non-URI identifiers)</p>

What is a valid result?	<ul style="list-style-type: none"> <li>- References are qualified</li> <li>- Qualities are beyond “Xref” or “is related to”</li> <li>- One of the cross-references points outwards to a distinct namespace</li> </ul>
For which digital resource(s) is this relevant?	All
Examples of their application across types of digital resource	None
Comments	