**CIM data exchange principles (that apply equally to the data exchanges of all CIM standard families)**

1. CIM identifiers for shared objects must be:

* unique within the exchange environment
* persistent from one exchange to the next

1. CIM identifiers for shared objects are encouraged to be:

* opaque (meaningless) to avoid the conflict that arises when meaning changes and the Identifier cannot be changed
* globally unique

1. Our standard should enable:

* the mapping of shared object CIM identifiers to local (internal to the application) identifiers
* the mapping of CIM identifiers within one exchange environment to those of another exchange environment

1. We should make choices for using serialization technologies that

* support the requirements of 1. without imposing additional constraints
* are as close to ‘mainstream’ or ‘standard’ usage of the technology as possible to allow use of mainstream tools and align with implementer experience

**Random observations on the current situation:**

* Regarding CIM identifiers:
  + We need to figure out if all shared objects have CIM identifiers. In my opinion, they must in order that associations can be defined.
  + We need to clarify our requirements and expectations regarding the objects whose classes currently don’t have identifiers in CIM. What is their purpose? What does that say about how their values are updated? Must they always be replaced, not modified? How does our change model work to describe changes to properties of these objects?
  + Joep shared an interesting observation in a recent email he sent (which is attached). It occurs to me that our CIM UML model leverages both the ‘I am’ approach with its associations and the ‘I’m called’ with its specification of the .mRID attribute. Giving all classes an identifier would at least make our UML consistently reflect both means of identification for all classes.
* Regarding rdf xml:
  + It seems as if our issue with rdf xml boils down to the fact that CIM does not have a hard requirement for identifier format, but the ways we have envisioned using rdf do. (I’m inferring this from our Wednesday conversation, feel free to correct.) If that is the case, it would seem two options might be:
    - Require that exchanges include both an rdf identifier (of a format specified by -552) and a CIM identifier (of a format specified for a given exchange environment). There would be a requirement defined in -552 that the rdf identifier and the CIM identifier were persisted as a pair across all exchanges. The CIM identifier would be useful for non-61970 rdf exchanges, but any application producing 61970 rdf data exchanges would need to be aware of and support the persistent mapping between the CIM identifier and the rdf identifier.
    - Broaden our thinking relative to what is used as the rdf identifier. An excerpt from a DublinCore website is below.

From DublinCore

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