CRMdig Cleanup

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What is CRMdig

A CRMbase harmonized extension of CRM in order to be able to cover metadata related to the activities surrounding the creation, manipulation, management and use of digital objects especially in relation to CH practice.
Why return to CRMdig?

Bring it to an official stable state. Tie up loose ends. Resolve conceptual probs. Harmonize with ongoing work and other extensions, especially CRMpe.
What needs to be done?

1. Tidy up classes and properties (what is necessary / what not) &
2. Check consistency with CRMbase 7.1.1
3. Check consistency with other extensions (which versions) especially CRMpe (Parthenos Entities Model)
4. Consider overall coherency, general modelling problems
CRM Dig: a Refresher
Digital Events

- E7 Activity
  - E65 Creation
  - E11 Modification
  - E16 Measurement
    - D7 Digital Machine Event
      - D10 Software Execution
      - D12 Data Transfer Event
      - D11 Digital Measurement Event
        - D3 Formal Derivation
        - D2 Digitization Process
Digital Things

- E70_Thing
  - E73_Information_Object
    - D1 Digital Object
      - E54_Dimension
        - D9 Data Object
        - D14 Software
    - E84 Information Carrier
      - D13 Digital Information Carrier
      - D8 Digital Device
  - E22_Human-Made_Object
Digital Creation Events

E7 Activity

E65 Creation

D7 Digital Machine Event

D1 Digital Object

D8 Digital Device

D13 Digital Information Carrier
Formal Derivation

Events
Digital Measurement Events

- D1 Digital Object
- E54_Dimension
- E7 Activity
  - P125 used object of type (was type of object used in)
- E16 Measurement
- D7 Digital Machine Event
  - D11 Digital Measurement Event
    - P40 observed dimension (was observed in)
    - L11 had output (was output of)
    - L18 has modified (was modified by)
    - D9 Data Object
- E55_Type
  - L17 measured thing of type (was type of thing measured by)
  - D13 Digital Information Carrier
    - L19 stores (is stored on)
1. Tidying up

CRMdig was built ‘ground up’ for a project so it contains many classes and properties that pertain to a project level ontology but no a general level ontology

A number of classes and properties could be culled to make the standard more consistent with ongoing modelling practice of the SIG.
Classes to Delete (and why)

**D9 Data Object**: This merge class confuses the nature of the digital object and dimension. The digital object in fact encodes a dimension, but it is not itself a dimension… has properties but they are ad hoc and undesirable. Replace with a property to link a digital object to a dimension perhaps? Something like ‘encodes’? (compare p190 questions)

**D13: Digital Information Carrier**… this was an extension of E84 Information Carrier which was removed. It has a property but that property gives no more information that P128 carries. So, no reason for this class. -- The storage functionality could be merged to D8.

**D21 Person Name**: Obvious reasons.

**D23 Room**: Convenience class that is in fact not that convenient: use E53 Place

**D35 Area**: this class seems to mix disjunct top level classes since it becomes both physical and conceptual -- should be a *digital* feature?
Properties to Delete (and why)

L4 has preferred label: inconsistent with the rest of CRM, redundant to other ontologies
L20 has created: because D9 is removed (but see also D11)
L24 created logfile: creates a file of type ‘logfile’
L29 has responsible organization: unnecessary sub property just use p14
L30 has operator: unnecessary sub property just use p14
L31 has starting date-time: inconsistent modelling, use time span like everyone else
L32: has ending date time: inconsistent modelling, use time span like everyone else
L33: has maker: this property violates event modelling. If it continues to exist then E73 should have ‘has author’
L34 has contractor: unnecessary sub property of an unnecessary subproperty, use p14
Properties to Delete (and why)

L35 has commissioner: unnecessary sub property, use p14
L47 has comment: not ontological at all
L49 is primary area of: if D35 killed, then this should be killed too
L50 is propagated area of: see L49
L51 has first name: inconsistent non ontological modelling, anathema!
L52 has last name: see above
L53 is not uniquely identified by: this is not a way to encode a negation and does not say anything (see also neg properties question)
L55 has inventory number: this is not ontological, please use standard modelling
L56 has pixel width: no standard modelling, use dimension
L57 has pixel height: non standard modelling, use dimension
L59 has serial number: non standard modelling, use E42
L60 documents: unnecessary sub relation
L61 was on going at: again non standard time modelling for convenience sake
Things to Add

- Replace D35 with a property ‘digitally encodes dimension’
- Add general property to D1 Digital Object ‘encodes content’ which is the equivalent of ‘carries’ in physical world (see work of Linked.Art)
- Missing classes to handle typical digital date:
  - Audio
  - Video

(theses could start here and then migrate up to base) -> the digital object IS NOT the thing it encodes
Things to Modify

Scope Note of D1 Digital Object if we integrate CRMpe
Still Missing

No way to model the events related to the creation of a persistent digital object in relation to a virtual digital object

No event classes for digital publishing (quite common phenomenon)