

Values Validation

The following are methods to help validate changes from Elisa-K.

(1) In the existing, released Quantities and Units ontology (which is based on a combination of the DTV spec and SysML's QUDV), make Quantity Value a subclass of Value in addition to being a subclass of Measure. Make its hasNumericValue property, whose range is xsd:decimal, a subproperty of the new hasValue but do not change anything else about it - its range needs to be xsd:decimal, as it is currently. You may need to import the Business Facing Types ontology into Quantities and Units - I don't recall if that's already there.

(2) To test this, go to bls.gov, and model one or two lines from the Employment Situation Summary, Establishment Data seasonally adjusted - <https://www.bls.gov/news.release/empsit.b.htm>, average daily and monthly earnings (since we don't have the industries modeled yet) for September 2016. Hint: these should be individuals of type AverageDailyEarnings and AverageMonthlyEarnings in the EconomicIndicators ontology, but please create them in a new separate example individuals ontology.

(2) Once it works, and the reasoning is happy, then we can carefully also import the ontology containing the Value class into the existing financial dates ontology and try to do something similar. We have many individuals in FBC that already include dates that they were established, etc. that we can test the approach with.

Once we've tested this with several different kinds of values with test individuals, we can start to integrate it into the released ontologies and look for other opportunities where we should leverage this, but I really hope that you'll do this stepwise and test at every step, not make blanket changes to do something that represents, in some cases, a corner case for OWL.

A litmus test would be to add the regular expression for representation of social security numbers and/or FIGIs (which is defined in the FIGI ontology) and make sure it still works for that as well. I am not sure that CCM can handle this yet, but because we will need regular expressions for USIs, LEIs, and eventually UPIs in FIBO, we should ensure that this approach doesn't break our ability to do so.