

## OEO Developer Meeting #55

### Pads:

- Notes from last meeting: <https://etherpad.wikimedia.org/p/oeo-dev-54>
- Pad to this meeting: <https://etherpad.wikimedia.org/p/oeo-dev-55>
- Pad for next meeting: <https://etherpad.wikimedia.org/p/oeo-dev-56>

**Date: 2023-03-09**

### Participants:

- Moderator: Mirjam
- Main reporter: Christian
- Next meeting organiser: Christoph
- Developers with affiliation:
  - Mirjam (OvGU)
  - Ludwig (RLI)
  - Christian (RLI)
  - Ulf (IEE)
  - Lukas (ÖI)
  - Eugenio (OvGU)
- **Preparation:**
- Read last protocol: <https://github.com/OpenEnergyPlatform/ontology/wiki/OEO-developer-meetings>
- Check issues for next release: <https://github.com/OpenEnergyPlatform/ontology/milestones>
- Load software (GitHub, git, Protégé)

### Agenda:

#### *Announcement*

#### *Organisational*

- Note: Team discussions will be deprecated on May 8th
  - move oeo-release-team discussions to GitHub discussions
  - <https://github.com/OpenEnergyPlatform/ontology/discussions/1503>
  - we'll try it out for this release and see how it goes
- Check the open PR: <https://github.com/OpenEnergyPlatform/ontology/pulls>
  - <https://github.com/OpenEnergyPlatform/ontology/pull/1479/> --> suggested changes ok?
  - <https://github.com/OpenEnergyPlatform/ontology/pull/1473/> --> suggested changes ok?
  - <https://github.com/OpenEnergyPlatform/ontology/pull/1475> --> changelog
- OEO-Workshop at openmod
  - Do-A-Thon
  - <https://forum.openmod.org/t/working-with-the-open-energy-ontology/3810>
  - goal: show current uses. give low effort contributions overview
  - <https://github.com/rl-institut/super-repo/blob/production/CONTRIBUTING.md#types-of-interaction>
  - Zielgruppe A+B
- OEFamily Community-Compendium

- Move documentation from Wiki to MkDocs!?
- tutorials will also move there
- brings documentation back into code (which is a pro and a con)
- one voice in favor (wiki is awkward to use)
- one more voice in favor (more features, cleaner)
- third voice: parallel structure with tutorial repository should be avoided
- fourth voice: wiki does have disadvantages, but any documentation should stay in the OEO repository (which would be the case here)
- will be discussed here again once other repositories are updated. currently this seems like the way to go
- Collaboration with OpenCEMS
  - 2023-03-20
  - possible collaboration appointment with
- LNG-Thema?
  - no feedback arrived
  - we'll contact them again and see if anything usable came out of it

### *Release*

- Release 1.14.0 scheduled for 2023-04-03 => Reschedule by one week?
  - easter holidays
  - <https://github.com/OpenEnergyPlatform/ontology/discussions/1503>
  - Thursday 03:30 MS + CH + UM

### *OEO Classes*

- **The definition of Model does not entirely encompass literature definitions -- EA**
  - <https://github.com/OpenEnergyPlatform/ontology/issues/1444>
  - EA shares presentation
  - Create an aristotelian definition
  - Find axioms
  - Idea: classify model [and input data] as function
    - pro: we don't have to explicitly state what a model is but give entities the function, e.g. aggregates, GDCs
    - con: range of function is limited to ICs
  - Implementation is tricky. MS can talk to Fabian about this, maybe he can join in on the next session
  - follow up on model axioms depend on this
  - Paper
    - <https://pubs.cs.uct.ac.za/id/eprint/1399/2/FAIA-330-FAIA200673.pdf>
- **Model-related issues -- MS**
  - Axioms of model <https://github.com/OpenEnergyPlatform/ontology/issues/1060>
  - Model classification <https://github.com/OpenEnergyPlatform/ontology/issues/1128>

1. consider modelling methods in **methodology** instead of model

### calculation:

- ○ ■ ■ *An optimisation is a ~~model calculation~~ **methodology** with the goal to find a best choice or result for at least one variable or function ~~in the model~~.*
- *A simulation is a ~~model calculation~~ that simulates a **methodology that represents the dynamic characteristic of a process or system behaviour from the real world**.*
- also: top-down vs. bottom-up (economic or technological components of the simulation), equilibrium vs. optimization vs. simulation, and intertemporal vs. sequential.
- distinguish between *simulation method* and *simulation process*, etc?

### 2. Modelling dynamics / behaviours

- ○ ■ ■ depict physical, social, economical behaviours/dynamics
  - Suggestions from other Ontologies:
    - *Behaviour is the set of actions and mannerisms made by systems (biological or otherwise) in response to stimuli or inputs, whether internal or external, conscious or subconscious, overt or covert, and voluntary or involuntary.* [http://semanticscience.org/resource/SIO\\_001195](http://semanticscience.org/resource/SIO_001195)
    - [Behavioural process is ]*the process of any action or reaction of a vector organism in response to external or internal stimuli.* [http://purl.obolibrary.org/obo/IDOMAL\\_0002137](http://purl.obolibrary.org/obo/IDOMAL_0002137)
    - dynamic(s) as such is not a term in ontologies --> very broad
  - axioms:
    - *model models some (system or object or dynamics/behavioural processes)*
    - *model calculation covers some (spatial region or sector or temporal region) --> covers would have to be extended to model calculations (not just studies)*
- ○ **There is a lot of energy modelling jargon missing -- EA**
    - <https://github.com/OpenEnergyPlatform/ontology/issues/1480>
- Template - Ontology Workspace (use for joint development) [NAME]
    - Add issue link
    - Collect related terms
    - Create an aristotelian definition
    - Find axioms

OEKG

Other Topics

- **integration of terminology of other ontologies**
  - **mobivoc**: open vocabulary for future-oriented mobility solutions
    - <https://github.com/vocol/mobivoc>
      - Otto (open transport (and trade) ontology) will be produced as first milestone in next project
    - not a real ontology, e.g. doesn't use BFO
    - CC-BY-4.0 license
    - EA invites colleague to discuss this a another oeo dev meeting
  - software ontology **SWO** -- <https://github.com/OpenEnergyPlatform/ontology/issues/1502>
    - <https://github.com/allysonlister/swo>
    - <http://purl.obolibrary.org/obo/swo.owl>
    - <https://www.ebi.ac.uk/ols/ontologies/swo>
    - Publication: <https://jbiomedsem.biomedcentral.com/articles/10.1186/2041-1480-5-25>
    - uses BFO
    - CC-BY-4.0

- Ontology definitions / grades (LH):

- - Glossary / Nomenclature - List of Terms and definitions
    - + Easy to compile; Easy to search, Simple hierarchy
    - - No relationships between terms; No alignment across teams
    - Use: Harmonise naming in one project and model structure
  - Ontology
    - + Structured concepts and relations
    - -
    - Use:
  - Upper-structured Ontology (BFO based Ontology)
    - + Structured concepts and relations, compatible with other ontologies
    - - Dificult to start; Every concept needs to be aligned to the strcuture
    - Use: A community view on a domain; Comparision across models and databases

### Collection of Tasks:

- Discuss model as a function with ontology expert @MS
- Complete ontology definitons @LH
- Documentation in issues @CH