# Circular Economy Ontology Network (CEON) - Actor Module

### Metadata

```
IRI
```

```
http://w3id.org/CEON/ontology/ac
tor/
```

#### Title

Circular Economy Ontology Network (CEON) - Actor Module

#### **Creator**

Eva Blomqvist

### Contributor

Huanyu Li

Mikael Lindecrantz

Robin Keskisärkkä

#### **Date Created**

2023-03-16

#### License

https://github.com/LiUSemWeb/CEON/blob/master/LICENSE

#### **Version Iri**

http://w3id.org/CEON/ontology/actor/0.1/

#### **Version Info**

0.1

#### **Preferred Namespace Prefix**

actor

#### **Preferred Namespace Uri**

http://w3id.org/CEON/ontology/actor/

#### **Description**

The Actor module of CEON (Circular Economy Ontology Network).

#### **Covers Requirements**

In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.1: C0-1, C0-2, C3-4, T3-4

### Classes

### Actor Cvn Role C

IRI http://w3id.org/CE0

N/ontology/actor/Ac

torCVNRole

Sub Class Of ActorCollaborationRole<sup>C</sup>

**Named Individuals** 

collector<sup>ni</sup> dismantler<sup>ni</sup>

manufacturer ni

recycler<sup>ni</sup> reseller<sup>ni</sup> seller<sup>ni</sup>

<u>supplier</u><sup>ni</sup> <u>user</u><sup>ni</sup>

### Actor Collaboration Role C

http://w3id.org/CE0

N/ontology/actor/ActorCollaborationRol

е

Sub Class Of actorODP:Role<sup>C</sup>

**Super Class Of** 

ActorCVNRole<sup>C</sup>

ActorProcessRole C

# Actor Process Role<sup>C</sup>

IRI http://w3id.org/CEO

N/ontology/actor/Ac

torProcessRole

**Sub Class Of** <u>ActorCollaborationRole</u><sup>C</sup>

### Actor Resource Role<sup>C</sup>

IRI http://w3id.org/CEO

N/ontology/actor/Ac

torResourceRole

**Sub Class Of** actorODP:Role<sup>C</sup>

**Named Individuals** 

<u>buyer</u>ni

<u>consumer</u><sup>ni</sup>

<u>issuer</u>ni

owner<sup>ni</sup>

<u>producer</u>ni

<u>provider</u>ni

reseller ni

seller<sup>ni</sup>

<u>supplier</u><sup>ni</sup>

<u>updater</u>ni

<u>user<sup>ni</sup></u>

<u>viewer</u>ni

# Buying Resource<sup>C</sup>

http://w3id.org/CE0

N/ontology/actor/Bu

yingResource

Sub Class Of actorODP:ResourceRelat

ion<sup>c</sup>

**Equivalentclass** <u>actorODP:ResourceRelat</u>

ion<sup>c</sup> and

actorODP:participantRole

<sup>op</sup> value <u>buyer</u><sup>c</sup>

## Cvn Participation <sup>c</sup>

http://w3id.org/CE0

N/ontology/actor/CV

**NParticipation** 

Sub Class Of actorODP:CollaborationP

articipation <sup>C</sup>

actorODP:CollaborationP

articipation c and

actorODP:participationIn

op some

http://w3id.org/CEON/ont

ology/cvn/CVN<sup>c</sup> and

actorODP:participatingAc

tor<sup>op</sup> some

actorODP:Actor<sup>c</sup> and actorODP:participantRole op some ActorCVNRole<sup>c</sup>

# Consuming Resource<sup>C</sup>

http://w3id.org/CE0

N/ontology/actor/ConsumingResource

Sub Class Of actorODP:ResourceRelat

ion<sup>C</sup>

**Equivalentclass** <u>actorODP:ResourceRelat</u>

ion<sup>c</sup> and

actorODP:participantRole

<sup>op</sup> value <u>consumer</u><sup>c</sup>

## Issuing Resource<sup>C</sup>

IRI http://w3id.org/CE0

N/ontology/actor/Is

suingResource

Sub Class Of actorODP:ResourceRelat

<u>ion</u><sup>c</sup>

**Equivalentclass** <u>actorODP:participantRole</u>

<sup>op</sup> value <u>issuer</u><sup>c</sup> and

actorODP:ResourceRelat

ion<sup>c</sup>

# Owning Resource <sup>C</sup>

http://w3id.org/CE0

N/ontology/actor/Ow

ningResource

Sub Class Of <u>actorODP:ResourceRelat</u>

ion<sup>c</sup>

**Equivalentclass** <u>actorODP:participantRole</u>

op value owner<sup>c</sup> and

actorODP:ResourceRelat

<u>ion</u><sup>c</sup>

## Process Participation <sup>C</sup>

http://w3id.org/CE0

N/ontology/actor/Pr ocessParticipation

Sub Class Of

actorODP:CollaborationP

<u>articipation <sup>C</sup></u>

actorODP:participationIn

op some

http://w3id.org/CEON/ont ology/process/Process<sup>C</sup>

and

actorODP:CollaborationP

articipation c and

actorODP:participatingAc

tor<sup>op</sup> some

actorODP:Actor<sup>c</sup> and actorODP:participantRole op some ActorCVNRole<sup>c</sup>

# Producing Resource<sup>C</sup>

IRI http://w3id.org/CEO

N/ontology/actor/Pr

oducingResource

**Sub Class Of** actorODP:ResourceRelat

ion<sup>C</sup>

actorODP:ResourceRelat **Equivalent class** 

ion<sup>c</sup> and

actorODP:participantRole

op value <u>producer</u><sup>C</sup>

## Providing Resource<sup>C</sup>

IRI http://w3id.org/CEO

> N/ontology/actor/Pr ovidingResource

**Sub Class Of** actorODP:ResourceRelat

ion<sup>C</sup>

**Equivalent class** actorODP:ResourceRelat

ion<sup>c</sup> and

actorODP:participantRole

op value provider<sup>c</sup>

# Reselling Resource<sup>C</sup>

http://w3id.org/CE0

N/ontology/actor/Re sellingResource

Sub Class Of actorODP:ResourceRelat

ion<sup>C</sup>

**Equivalentclass** <u>actorODP:ResourceRelat</u>

ion<sup>c</sup> and

actorODP:participantRole

op value <u>reseller</u><sup>c</sup>

## Selling Resource<sup>C</sup>

IRI http://w3id.org/CE0

N/ontology/actor/Se

llingResource

Sub Class Of actorODP:ResourceRelat

ion<sup>c</sup>

**Equivalentclass** <u>actorODP:participantRole</u>

<sup>op</sup> value <u>seller<sup>c</sup></u> and

actorODP:ResourceRelat

ion<sup>c</sup>

# Supplying Resource<sup>C</sup>

http://w3id.org/CE0

N/ontology/actor/SupplyingResource

Sub Class Of actorODP:ResourceRelat

ion<sup>C</sup>

**Equivalentclass** <u>actorODP:participantRole</u>

op value <u>supplier</u> and <u>actorODP:ResourceRelat</u>

<u>ion</u><sup>C</sup>

## Updating Resource<sup>C</sup>

IRI http://w3id.org/CE0

N/ontology/actor/Up

datingResource

Sub Class Of actorODP:ResourceRelat

ion<sup>c</sup>

**Equivalentclass** <u>actorODP:participantRole</u>

<sup>op</sup> value <u>updater</u> <sup>c</sup> and <u>actorODP:ResourceRelat</u>

ion<sup>c</sup>

# Using Resource <sup>C</sup>

http://w3id.org/CE0

N/ontology/actor/Us

ingResource

Sub Class Of actorODP:ResourceRelat

ion<sup>C</sup>

**Equivalentclass** <u>actorODP:participantRole</u>

op value <u>user<sup>c</sup></u> and

actorODP:ResourceRelat

<u>ion</u><sup>c</sup>

### Viewing Resource<sup>C</sup>

IRI http://w3id.org/CE0

N/ontology/actor/Vi

ewingResource

Sub Class Of actorODP:ResourceRelat

<u>ion</u><sup>c</sup>

**Equivalentclass** <u>actorODP:participantRole</u>

<sup>op</sup> value <u>viewer<sup>c</sup></u> and

actorODP:ResourceRelat

ion<sup>c</sup>

# Actor <sup>C</sup>

http://w3id.org/CE0

N/ontology/actorODP

/Actor

# Capability <sup>C</sup>

IRI http://w3id.org/CEO

N/ontology/actorODP

/Capability

**In Domain Of** 

<u>capabilityExtent</u><sup>op</sup>

neededResourceRelation

## Collaboration Participation <sup>C</sup>

IRI http://w3id.org/CEO

> N/ontology/actorODP /CollaborationParti

cipation

**Super Class Of** 

<u>CVNParticipation</u><sup>C</sup> <u>ProcessParticipation</u><sup>C</sup>

# Participation <sup>C</sup>

IRI http://w3id.org/CEO

N/ontology/actorODP

/Participation

### Resource Relation<sup>C</sup>

http://w3id.org/CE0

N/ontology/actorODP /ResourceRelation

Sub Class Of actorODP:Participation<sup>c</sup>

and

actorODP:participatingAc

tor<sup>op</sup> some

actorODP:Actor<sup>c</sup> and actorODP:participatingRe

source op some

http://w3id.org/CEON/ont ology/resourceODP/Reso

urce<sup>c</sup> and

actorODP:participantRole

op some

<u>ActorResourceRole<sup>C</sup></u>

**Super Class Of** 

<u>BuyingResource</u><sup>C</sup>

ConsumingResource<sup>C</sup>

<u>IssuingResource</u><sup>C</sup>

OwningResource C

ProducingResource C

<u>ProvidingResource</u><sup>C</sup>

ResellingResource<sup>C</sup>

SellingResource<sup>C</sup>

<u>SupplyingResource</u><sup>C</sup>

<u>UpdatingResource</u><sup>C</sup>

<u>UsingResource</u><sup>C</sup>

<u>ViewingResource</u><sup>C</sup>

Role<sup>C</sup>

http://w3id.org/CE0

N/ontology/actorODP

/Role

**Super Class Of** 

<u>ActorCollaborationRole</u><sup>C</sup>

<u>ActorResourceRole<sup>C</sup></u>

Cvn<sup>c</sup>

http://w3id.org/CE0

N/ontology/cvn/CVN

Sub Class Of <a href="http://w3id.org/CEON/ont">http://w3id.org/CEON/ont</a>

ology/cvn/Collaboration<sup>C</sup>

Collaboration <sup>C</sup>

http://w3id.org/CE0

N/ontology/cvn/Coll

aboration

Super Class Of <a href="http://w3id.org/CEON/ont">http://w3id.org/CEON/ont</a>

ology/cvn/CVN<sup>C</sup>

Process<sup>C</sup>

http://w3id.org/CE0

N/ontology/process0

DP/Process

### Resource <sup>C</sup>

http://w3id.org/CE0

N/ontology/resource

ODP/Resource

# **Object Properties**

## capability extent op

http://w3id.org/CE0

N/ontology/actor/ca

pabilityExtent

Sub Property Of <u>actorODP:capabilityProp</u>

<u>erty</u>op

Domain <u>actorODP:Capability</u><sup>C</sup>

## needed resource relation op

http://w3id.org/CE0

N/ontology/actor/ne ededResourceRelatio

n

**Sub Property Of** <u>actorODP:capabilityProp</u>

<u>erty</u><sup>op</sup>

Domain actorODP:Capability<sup>C</sup>

# capability property op

IRI http://w3id.org/CE0

N/ontology/actorODP /capabilityProperty

**Super Property Of** 

capabilityExtent<sup>op</sup>

• <u>neededResourceRe</u>

<u>lation</u>op

# participant role op

http://w3id.org/CE0

N/ontology/actorODP /participantRole

# participating actor op

IRI http://w3id.org/CE0

N/ontology/actorODP /participatingActor

# participating resource op

http://w3id.org/CE0

N/ontology/actorODP /participatingResou

rce

# participation in op

http://w3id.org/CE0

N/ontology/actorODP /participationIn

# **Annotation Properties**

| contributor <sup>ap</sup> |  |
|---------------------------|--|
| IRI                       | http://purl.org/dc/<br>terms/contributor |
| created <sup>ap</sup>     |  |
| IRI                       | http://purl.org/dc/<br>terms/created     |
| creator <sup>ap</sup>     |  |
| IRI                       | http://purl.org/dc/<br>terms/creator     |
| description ap            |  |
| IRI                       | http://purl.org/dc/<br>terms/description |
| license <sup>ap</sup>     |  |
| IRI                       | http://purl.org/dc/<br>terms/license     |
| title ap                  |  |
| IRI                       | http://purl.org/dc/<br>terms/title       |

# preferred namespace prefix ap

http://purl.org/voc

ab/vann/preferredNa

mespacePrefix

### preferred namespace uri ap

IRI http://purl.org/voc

ab/vann/preferredNa

mespaceUri

## covers requirements ap

IRI http://www.ontology

designpatterns.org/
schemas/cpannotatio
nschema.owl#coversR

equirements

## Namespaces

```
:
```

http://w3id.org/CEON/ontology/ac
tor/

#### actorODP

http://w3id.org/CEON/ontology/ac
torODP/

#### dcterms

http://purl.org/dc/terms/

#### odp

http://www.ontologydesignpattern
s.org/schemas/cpannotationschema
.owl#

#### owl

```
http://www.w3.org/2002/07/owl#
prov
    http://www.w3.org/ns/prov#
rdf
    http://www.w3.org/1999/02/22-
    rdf-syntax-ns#
rdfs
    http://www.w3.org/2000/01/rdf-
    schema#
vann
    http://purl.org/vocab/vann/
```

# Legend

```
C Clas ses

Obj ect
Pro perti es

Ann otati
on
Pro perti es
```