# Circular Economy Ontology Network (CEON) - Actor Module

#### Metadata

IRI

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

**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://creativecommons.org/licenses/by/4.0/

**Version Iri** 

http://w3id.org/CEON/ontology/actor/0.2/

**Version Info** 

0.2

**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

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

**Named Individuals** 

collector<sup>ni</sup>
dismantler<sup>ni</sup>
manufacturer<sup>ni</sup>
recycler<sup>ni</sup>
reseller<sup>ni</sup>
seller<sup>ni</sup>
supplier<sup>ni</sup>
user<sup>ni</sup>

#### Actor Collaboration Role C

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

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

Super Class Of

ActorCVNRole<sup>C</sup>
ActorProcessRole<sup>C</sup>

### Actor Process Role C

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

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

### Actor Resource Role C

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

**Named Individuals** 

buyerni
consumerni
issuerni
ownerni
producerni
providerni
resellerni
sellerni
supplierni
updaterni
userni

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

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

<u>viewer</u>ni

Equivalentclass actorODP:participantRole op value buyer and actorODP:ResourceRelation actorODP:R

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

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

**Sub Class Of** 

actorODP:CollaborationParticipation<sup>C</sup>

actorODP:participatingActor op some actorODP:Actor and

 $\frac{actorODP:participationIn}{op} some \ \frac{http://w3id.org/CEON/ontology/cvn/CVN}{op} some \ \frac{http://w3id.org/CEON/ontology/cvn/CVN}{op} some$ 

ActorCVNRole<sup>C</sup>

Consuming Resource <sup>c</sup>

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

Equivalentclass actorODP:participantRole op value consumer and actorODP:ResourceRelation

С

Issuing Resource C

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

Equivalentclass actorODP:participantRole op value issuer and actorODP:ResourceRelation actorODP:

Manufacturing Resource <sup>c</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole op value

manufacturer <sup>C</sup>

Owning Resource C

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

Equivalentclass actorODP:participantRole op value owner and actorODP:ResourceRelation actorODP:ResourceRelation actorODP:

Process Participation <sup>C</sup>

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

**Sub Class Of** 

<u>actorODP:CollaborationParticipation</u><sup>C</sup> <u>actorODP:participationIn</u><sup>op</sup> some

http://w3id.org/CEON/ontology/processODP/Process<sup>C</sup> and

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

Producing Resource<sup>C</sup>

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

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole producer

Providing Resource<sup>C</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole op value provider and actorODP:participantRole op value provider and actorODP:

Reselling Resource<sup>C</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole population reseller actorODP:

Selling Resource<sup>C</sup>

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

<u>Equivalentclass</u> <u>actorODP:participantRole<sup>op</sup> value seller<sup>c</sup> and actorODP:ResourceRelation<sup>c</sup></u>

Supplying Resource<sup>C</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole popular supplier supplier and actorODP:participantRole popular supplier and actorODP:participantRole popular supplier suppli

Updating Resource <sup>C</sup>

Sub Class Of actorODP:ResourceRelation C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole population and actorODP:participantRole actorODP:

Using Resource<sup>C</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole population actorODP: value user actorODP:

Viewing Resource<sup>C</sup>

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

<u>Equivalentclass</u> <u>actorODP:ResourceRelation<sup>c</sup> and actorODP:participantRole<sup>op</sup> value <u>viewer<sup>c</sup></u></u>

Actor <sup>C</sup>

http://w3id.org/CEON/ontology/actorODP/Actor

Capability <sup>C</sup>

In Domain Of

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

neededResourceRelation op

Collaboration Participation <sup>C</sup>

http://w3id.org/CEON/ontology/actorODP/CollaborationPartic

ipation

Super Class Of <u>CVNParticipation</u><sup>C</sup>

ProcessParticipation<sup>C</sup>

Participation <sup>C</sup>

http://w3id.org/CEON/ontology/actorODP/Participation

Resource Relation <sup>C</sup>

Sub Class Of actorODP:Participation and actorODP:participantRole op some

ActorResourceRole<sup>C</sup> and actorODP:participatingActor<sup>OP</sup> some actorODP:Actor<sup>C</sup>

and actorODP:participatingResource op some

http://w3id.org/CEON/ontology/resourceODP/ResourceC

**Super Class Of** 

<u>BuyingResource</u><sup>c</sup>

ConsumingResource<sup>C</sup>
IssuingResource<sup>C</sup>

ManufacturingResource<sup>C</sup>

OwningResource C

<u>ProducingResource</u><sup>C</sup>

ProvidingResource<sup>C</sup>

ResellingResource<sup>C</sup>

<u>SellingResource</u><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>

**Super Class Of** 

ActorCollaborationRole C

ActorResourceRole<sup>C</sup>

Cvn<sup>c</sup>

IRI http://w3id.org/CEON/ontology/cvn/CVN

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

Collaboration <sup>C</sup>

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

Process <sup>c</sup>

Resource <sup>c</sup>

## **Object Properties**

## capability extent op

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

Sub Property Of actorODP:capabilityProperty op

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

## needed resource relation op

Sub Property Of actorODP:capabilityProperty op

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

## capability property op

**Super Property Of** 

- capabilityExtent op
- neededResourceRelation op

## participant role op

## participating actor op

### participating resource op

ce

## participation in op

# **Annotation Properties**

contributor <sup>ap</sup>	
IRI	http://purl.org/dc/terms/contributor
created <sup>ap</sup>	
IRI	http://purl.org/dc/terms/created
creator <sup>ap</sup>	
IRI	http://purl.org/dc/terms/creator
description ap	
IRI	http://purl.org/dc/terms/description
license <sup>ap</sup>	
IRI	http://purl.org/dc/terms/license
title <sup>ap</sup>	
IRI	http://purl.org/dc/terms/title
preferred namespace prefix ap	
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix
preferred namespace uri ap	
IRI	http://purl.org/vocab/vann/preferredNamespaceUri
covers requirements <sup>ap</sup>	
IRI	http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#coversRequirements

# Namespaces

```
:
    http://w3id.org/CEON/ontology/actor/
actorODP
    http://w3id.org/CEON/ontology/actorODP/
dcterms
    http://purl.org/dc/terms/
```

```
odp
http://www.ontologydesignpatterns.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

