# 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 C

### Actor Process Role C

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

### Actor Resource Role C

Sub Class Of actorODP:Role C

**Named Individuals** 

buyer<sup>ni</sup>
consumer<sup>ni</sup>
issuer<sup>ni</sup>
owner<sup>ni</sup>
producer<sup>ni</sup>
provider<sup>ni</sup>
reseller<sup>ni</sup>
seller<sup>ni</sup>
supplier<sup>ni</sup>
updater<sup>ni</sup>

user<sup>ni</sup> viewer<sup>ni</sup>

#### Buying 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 buyer<sup>C</sup></u>

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

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

**Sub Class Of** 

actorODP:CollaborationParticipation<sup>C</sup>

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

 $\underline{actor ODP: Collaboration Participation}^{\textbf{c}} \ and \ \underline{actor ODP: participation In}^{\textbf{op}} \ \textbf{some}$ 

http://w3id.org/CEON/ontology/cvn/CVNC

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 <sup>C</sup>

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

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

Manufacturing Resource <sup>c</sup>

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

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

Equivalentclass actorODP:participantRole op value manufacturer and

actorODP:ResourceRelation<sup>c</sup>

Owning Resource C

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole over countries and actorODP:

Process Participation <sup>C</sup>

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

**Sub Class Of** 

actorODP:CollaborationParticipation<sup>C</sup>

actorODP:participatingActor op some actorODP:Actor and

actorODP:CollaborationParticipation<sup>c</sup> and actorODP:participantRole<sup>op</sup> some

ActorCVNRole<sup>c</sup> and actorODP:participationIn<sup>op</sup> some <a href="http://w3id.org/CEON/ontology/processODP/Process">http://w3id.org/CEON/ontology/processODP/Process<sup>c</sup></a>

Producing Resource<sup>C</sup>

Sub Class Of actorODP:ResourceRelation C

Equivalentclass actorODP:participantRole op value producer and actorODP:ResourceRelation actorOD

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 C

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:participantRole op value supplier and actorODP:ResourceRelation actorODP:ResourceRelation

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> IRI http://w3id.org/CEON/ontology/actorODP/ResourceRelation **Sub Class Of** actorODP:participantRole op some ActorResourceRole and actorODP:Participation<sup>C</sup> and actorODP:participatingResource<sup>op</sup> some http://w3id.org/CEON/ontology/resourceODP/Resource<sup>C</sup> and actorODP:participatingActor<sup>op</sup> some actorODP:Actor<sup>c</sup> **Super Class Of** BuyingResource<sup>C</sup> ConsumingResource<sup>C</sup> <u>IssuingResource</u><sup>c</sup> ManufacturingResource<sup>C</sup> OwningResource C ProducingResource<sup>C</sup> ProvidingResource<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> IRI http://w3id.org/CEON/ontology/actorODP/Role **Super Class Of** ActorCollaborationRole C ActorResourceRole<sup>C</sup> Cvn<sup>c</sup> IRI http://w3id.org/CEON/ontology/cvn/CVN **Sub Class Of** http://w3id.org/CEON/ontology/cvn/Collaboration<sup>C</sup> Collaboration <sup>C</sup> IRI http://w3id.org/CEON/ontology/cvn/Collaboration

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

