## 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 <sup>c</sup>

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

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

<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>

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

**Sub Class Of** 

actorODP:CollaborationParticipation<sup>C</sup>

actorODP:participationIn<sup>op</sup> some <a href="http://w3id.org/CEON/ontology/cvn/CVN">http://w3id.org/CEON/ontology/cvn/CVN</a> and <a href="http://w3id.org/CEON/ontology/cvn/CVN">and actorODP:CollaborationParticipation</a> and <a href="http://w3id.org/CEON/ontology/cvn/CVN">and actorODP:participation</a> and <a href="http://w3id.org/CEON/ontology/cvn/CVN">and actorODP:participation</a> some <a href="http://w3id.org/CEON/ontology/cvn/CVN">actorODP:participation</a> and <a href="http://w3id.org/CEON/ontology/cvn/CVN">actorODP:participation</a> and <a href="http://w3id.org/CEON/ontology/cvn/CVN">actorODP:participation</a> some <a href="http://waid.org/ceon/ontology/cvn/CVN">actorODP:participation</a> some <a href="http://waid.org/ceon/ontology/ceon/ontology/ceon/ontology/ceon/ontology/ceon/ontology/ceon/ontology/ceon/ontology/ceon/ontology/

Consuming Resource <sup>c</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole pop value consumer

0

Issuing Resource<sup>C</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole provided issuer

Manufacturing Resource <sup>c</sup>

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

**Equivalentclass** actorODP:participantRole op value manufacturer and

actorODP:ResourceRelation<sup>c</sup>

Owning Resource <sup>C</sup>

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

 $\frac{\text{http://w3id.org/CEON/ontology/processODP/Process}^{\text{c}}}{\text{and}} \\ \frac{\text{actorODP:participantRole}^{\text{op}}}{\text{some}} \\ \frac{\text{ActorCVNRole}^{\text{c}}}{\text{and}} \\$ 

actorODP:CollaborationParticipation actorODP:participatingActor op some

actorODP:Actor<sup>C</sup>

Producing Resource<sup>C</sup>

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:participantRole op value reseller and actorODP:ResourceRelation

Selling Resource<sup>C</sup>

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

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

Supplying Resource<sup>C</sup>

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

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

Updating Resource <sup>C</sup>

Sub Class Of actorODP:ResourceRelation C

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

Using Resource <sup>C</sup>

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

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

Viewing Resource<sup>C</sup>

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

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

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

Actor <sup>C</sup>

IRI 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/Resource<sup>C</sup>

**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>

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 c

IRI http://w3id.org/CEON/ontology/actorODP/Role

**Super Class Of** 

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

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

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

Sub Property Of actorODP:capabilityProperty op

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

### needed resource relation op

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

Sub Property Of actorODP:capabilityProperty op

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

### capability property op

**Super Property Of** 

- capabilityExtent op
- neededResourceRelationop

### 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 ap	
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 <sup>ap</sup>	
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix
preferred namespace uri <sup>ap</sup>	
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

```
c Classes

op Object
Properties

ap Annotation
Properties
```