# 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://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 <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 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> op some <u>ActorCVNRole</u> and <u>actorODP:participatingActor</u> some <u>actorODP:Actor</u> 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:ResourceRelation<sup>c</sup> and actorODP:participantRole<sup>op</sup> value consumer

С

Issuing Resource <sup>C</sup>

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

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

Owning Resource <sup>C</sup>

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

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

Process Participation<sup>C</sup>

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

**Sub Class Of** 

actorODP:CollaborationParticipation<sup>C</sup>

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

actorODP:participationIn op some

http://w3id.org/CEON/ontology/process/Process<sup>c</sup> and

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

ActorCVNRole<sup>C</sup>

Producing Resource<sup>C</sup>

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

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:participantRole op value provider and actorODP:ResourceRelation actorOD

Reselling 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 reseller<sup>c</sup></u>

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 actorODP:ResourceRelation

Updating Resource <sup>C</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole populater actor

Using Resource<sup>C</sup>

Sub Class Of actorODP:ResourceRelation C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole populate user

Viewing Resource<sup>C</sup>

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

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

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>

ipation

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

ProcessParticipation<sup>C</sup>

Participation <sup>C</sup>

Resource Relation <sup>c</sup>

Sub Class Of <u>actorODP:participatingActor^op</u> some <u>actorODP:Actor</u> and

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

 $\underline{actor ODP:} \underline{participating Resource}^{op} \, some \,$ 

http://w3id.org/CEON/ontology/resourceODP/Resource<sup>C</sup> and

actorODP:Participation<sup>C</sup>

Super Class Of

BuyingResource<sup>C</sup>
ConsumingResource<sup>C</sup>
IssuingResource<sup>C</sup>
OwningResource<sup>C</sup>
ProducingResource<sup>C</sup>
ProvidingResource<sup>C</sup>
ResellingResource<sup>C</sup>
SellingResource<sup>C</sup>
SupplyingResource<sup>C</sup>
UpdatingResource<sup>C</sup>
UsingResource<sup>C</sup>
UsingResource<sup>C</sup>

<u>ViewingResource</u><sup>c</sup>

Role <sup>C</sup>

**Super Class Of** 

ActorCollaborationRole<sup>C</sup> 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>

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** 

• capabilityExtentop

• neededResourceRelation op

participant role op

participating actor op		
IRI	http://w3id.org/CEON/ontology/actorODP/participatingActor	
participatin	g resource <sup>op</sup>	
IRI	<pre>http://w3id.org/CEON/ontology/actorODP/participatingResour ce</pre>	
participatio	n in <sup>op</sup>	
IRI	http://w3id.org/CEON/ontology/actorODP/participationIn	

# **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 <sup>ap</sup>		
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 name	space prefix <sup>ap</sup>	
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix	

```
preferred namespace uriap

IRI http://purl.org/vocab/vann/preferredNamespaceUri

covers requirements ap

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
```