

# 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>

#### IRI

<http://w3id.org/CEON/ontology/actor/ActorCVNRole>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ActorCollaborationRole">http://w3id.org/CE0N/ontology/actor/ActorCollaborationRole</a>
<b><u>Sub Class Of</u></b>	<a href="#">actorODP:Role<sup>C</sup></a>
<b><u>Super Class Of</u></b>	<a href="#">ActorCVNRole<sup>C</sup></a> <a href="#">ActorProcessRole<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ActorProcessRole">http://w3id.org/CE0N/ontology/actor/ActorProcessRole</a>
<b><u>Sub Class Of</u></b>	<a href="#">ActorCollaborationRole<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ActorResourceRole">http://w3id.org/CE0N/ontology/actor/ActorResourceRole</a>
<b><u>Sub Class Of</u></b>	<a href="#">actorODP:Role<sup>C</sup></a>
<b><u>Named Individuals</u></b>	<a href="#">buyer<sup>ni</sup></a> <a href="#">consumer<sup>ni</sup></a> <a href="#">issuer<sup>ni</sup></a> <a href="#">owner<sup>ni</sup></a> <a href="#">producer<sup>ni</sup></a> <a href="#">provider<sup>ni</sup></a> <a href="#">reseller<sup>ni</sup></a> <a href="#">seller<sup>ni</sup></a> <a href="#">supplier<sup>ni</sup></a> <a href="#">updater<sup>ni</sup></a> <a href="#">user<sup>ni</sup></a> <a href="#">viewer<sup>ni</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/BuyingResource">http://w3id.org/CE0N/ontology/actor/BuyingResource</a>
<b><u>Sub Class Of</u></b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b><u>Equivalentclass</u></b>	<a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">buyer<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

## Cvn Participation<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/CVNParticipation">http://w3id.org/CE0N/ontology/actor/CVNParticipation</a>
<b><u>Sub Class Of</u></b>	<a href="#">actorODP:CollaborationParticipation<sup>C</sup></a> <a href="#">actorODP:participationIn<sup>op</sup></a> some <a href="http://w3id.org/CE0N/ontology/cvn/CVN&lt;sup&gt;C&lt;/sup&gt;">http://w3id.org/CE0N/ontology/cvn/CVN<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> some <a href="#">ActorCVNRole<sup>C</sup></a> and <a href="#">actorODP:CollaborationParticipation<sup>C</sup></a> and <a href="#">actorODP:participatingActor<sup>op</sup></a> some <a href="#">actorODP:Actor<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/ConsumingResource">http://w3id.org/CEON/ontology/actor/ConsumingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">consumer<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/IssuingResource">http://w3id.org/CEON/ontology/actor/IssuingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">issuer<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/ManufacturingResource">http://w3id.org/CEON/ontology/actor/ManufacturingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">manufacturer<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/OwningResource">http://w3id.org/CEON/ontology/actor/OwningResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">owner<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/ProcessParticipation">http://w3id.org/CEON/ontology/actor/ProcessParticipation</a>
<b>Sub Class Of</b>	<a href="#">actorODP:CollaborationParticipation<sup>C</sup></a> <a href="#">actorODP:participantRole<sup>op</sup></a> some <a href="#">ActorCVNRole<sup>C</sup></a> and <a href="#">actorODP:CollaborationParticipation<sup>C</sup></a> and <a href="#">actorODP:participationIn<sup>op</sup></a> some <a href="http://w3id.org/CEON/ontology/processODP/Process">http://w3id.org/CEON/ontology/processODP/Process<sup>C</sup></a> and <a href="#">actorODP:participatingActor<sup>op</sup></a> some <a href="#">actorODP:Actor<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/ProducingResource">http://w3id.org/CEON/ontology/actor/ProducingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">producer<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ProvidingResource">http://w3id.org/CE0N/ontology/actor/ProvidingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>OP</sup></a> value <a href="#">provider<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ResellingResource">http://w3id.org/CE0N/ontology/actor/ResellingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>OP</sup></a> value <a href="#">reseller<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/SellingResource">http://w3id.org/CE0N/ontology/actor/SellingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>OP</sup></a> value <a href="#">seller<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/SupplyingResource">http://w3id.org/CE0N/ontology/actor/SupplyingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>OP</sup></a> value <a href="#">supplier<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/UpdatingResource">http://w3id.org/CE0N/ontology/actor/UpdatingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>OP</sup></a> value <a href="#">updater<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/UsingResource">http://w3id.org/CE0N/ontology/actor/UsingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>OP</sup></a> value <a href="#">user<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ViewingResource">http://w3id.org/CE0N/ontology/actor/ViewingResource</a>
<b>Sub Class Of</b>	<a href="#">actorODP:ResourceRelation<sup>C</sup></a>
<b>Equivalentclass</b>	<a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">viewer<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

## Actor<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actorODP/Actor">http://w3id.org/CE0N/ontology/actorODP/Actor</a>
------------	---

## Capability<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actorODP/Capability">http://w3id.org/CE0N/ontology/actorODP/Capability</a>
<b>In Domain Of</b>	<a href="#">capabilityExtent<sup>op</sup></a> <a href="#">neededResourceRelation<sup>op</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actorODP/CollaborationParticipation">http://w3id.org/CE0N/ontology/actorODP/CollaborationParticipation</a>
<b>Super Class Of</b>	<a href="#">CVNParticipation<sup>C</sup></a> <a href="#">ProcessParticipation<sup>C</sup></a>

## Participation<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actorODP/Participation">http://w3id.org/CE0N/ontology/actorODP/Participation</a>
------------	---

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

**IRI** <http://w3id.org/CEON/ontology/actorODP/ResourceRelation>

**Sub Class Of** [actorODP:participatingActor](#)<sup>op</sup> some [actorODP:Actor](#)<sup>C</sup> and [actorODP:Participation](#)<sup>C</sup> and [actorODP:participantRole](#)<sup>op</sup> some [ActorResourceRole](#)<sup>C</sup> and [actorODP:participatingResource](#)<sup>op</sup> some <http://w3id.org/CEON/ontology/resourceODP/Resource><sup>C</sup>

**Super Class Of** [BuyingResource](#)<sup>C</sup>  
[ConsumingResource](#)<sup>C</sup>  
[IssuingResource](#)<sup>C</sup>  
[ManufacturingResource](#)<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>  
[ViewingResource](#)<sup>C</sup>

## Role<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/actorODP/Role>

**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** <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** <http://w3id.org/CEON/ontology/cvn/CVN><sup>C</sup>

## Process<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/Process>

## Resource<sup>C</sup>

**IRI** <http://w3id.org/CEON/ontology/resourceODP/Resource>

## Object Properties

### capability extent<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor/capabilityExtent>

**Sub Property Of** [actorODP:capabilityProperty<sup>op</sup>](#)

**Domain** [actorODP:Capability<sup>c</sup>](#)

### needed resource relation<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor/neededResourceRelation>

**Sub Property Of** [actorODP:capabilityProperty<sup>op</sup>](#)

**Domain** [actorODP:Capability<sup>c</sup>](#)

### capability property<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor0DP/capabilityProperty>

**Super Property Of**

- [capabilityExtent<sup>op</sup>](#)
- [neededResourceRelation<sup>op</sup>](#)

### participant role<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor0DP/participantRole>

### participating actor<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor0DP/participatingActor>

### participating resource<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor0DP/participatingResource>

### participation in<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor0DP/participationIn>

## Annotation Properties

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

## Namespaces

:

<http://w3id.org/CE0N/ontology/actor/>

actorODP

<http://w3id.org/CE0N/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

<b>c</b>	Classes
<b>op</b>	Object Properties
<b>ap</b>	Annotation Properties