

# Circular Economy Ontology Network (CEON) - Actor Module

## Metadata

IRI	<a href="http://w3id.org/CEON/ontology/actor/">http://w3id.org/CEON/ontology/actor/</a>
Title	Circular Economy Ontology Network (CEON) - Actor Module
Creator	Huanyu Li
Contributor	Eva Blomqvist Mikael Lindecrantz Robin Keskisärkkä
Date Created	2024-11-13
License	<a href="https://creativecommons.org/licenses/by/4.0/">https://creativecommons.org/licenses/by/4.0/</a>
Version Iri	<a href="http://w3id.org/CEON/ontology/actor/0.3/">http://w3id.org/CEON/ontology/actor/0.3/</a>
Version Info	0.3
Preferred Namespace Prefix	actor
Preferred Namespace Uri	<a href="http://w3id.org/CEON/ontology/actor/">http://w3id.org/CEON/ontology/actor/</a>
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  In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.2: C0-1, C0-2, C3-4, T3-4

## Classes

Actor Cvn Role <sup>c</sup>	
IRI	<a href="http://w3id.org/CEON/ontology/actor/ActorCVNRole">http://w3id.org/CEON/ontology/actor/ActorCVNRole</a>
Sub Class Of	<a href="#">ActorCollaborationRole<sup>c</sup></a>
Named Individuals	<a href="#">collector<sup>ni</sup></a> <a href="#">dismantler<sup>ni</sup></a> <a href="#">manufacturer<sup>ni</sup></a> <a href="#">recycler<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="#">user<sup>ni</sup></a>

## 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:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">buyer<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:participatingActor<sup>op</sup></a> some <a href="#">actorODP:Actor<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/CE0N/ontology/cvn/CVN">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>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ConsumingResource">http://w3id.org/CE0N/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/CE0N/ontology/actor/IssuingResource">http://w3id.org/CE0N/ontology/actor/IssuingResource</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="#">issuer<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/ManufacturingResource">http://w3id.org/CE0N/ontology/actor/ManufacturingResource</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="#">manufacturer<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<sup>C</sup></a>

## Organisation<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/Organisation">http://w3id.org/CE0N/ontology/actor/Organisation</a>
<b>Is Defined By</b>	ISO 59004:2024 - 3.4.1 organization
<b>Description</b>	Person or group of people that has its own functions with responsibilities, authorities, and relationships to achieve its objectives. The concept of organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private (e.g. foundation, union, association, agency, municipality, region, country, intergovernmental agencies). A group of organizations can also be considered as an organization that has, alone or collectively, their own objectives.
<b>Sub Class Of</b>	<a href="#">actorODP:Actor<sup>C</sup></a>

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

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/OwningResource">http://w3id.org/CE0N/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>

## Person<sup>C</sup>

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

**Sub Class Of** [actorODP:Actor<sup>C</sup>](#)

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

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

**Sub Class Of** [actorODP:CollaborationParticipation<sup>C</sup>](#)  
[actorODP:participatingActor<sup>op</sup>](#) some [actorODP:Actor<sup>C</sup>](#) *and*  
[actorODP:participantRole<sup>op</sup>](#) some [ActorProcessRole<sup>C</sup>](#) *and*  
[actorODP:CollaborationParticipation<sup>C</sup>](#) *and* [actorODP:participationIn<sup>op</sup>](#) some  
[http://w3id.org/CE0N/ontology/processODP/Process<sup>C</sup>](http://w3id.org/CE0N/ontology/processODP/Process)

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

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

**Sub Class Of** [actorODP:ResourceRelation<sup>C</sup>](#)

**Equivalentclass** [actorODP:ResourceRelation<sup>C</sup>](#) *and* [actorODP:participantRole<sup>op</sup>](#) value [producer<sup>C</sup>](#)

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

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

**Sub Class Of** [actorODP:ResourceRelation<sup>C</sup>](#)

**Equivalentclass** [actorODP:ResourceRelation<sup>C</sup>](#) *and* [actorODP:participantRole<sup>op</sup>](#) value [provider<sup>C</sup>](#)

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

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

**Sub Class Of** [actorODP:ResourceRelation<sup>C</sup>](#)

**Equivalentclass** [actorODP:participantRole<sup>op</sup>](#) value [reseller<sup>C</sup>](#) *and* [actorODP:ResourceRelation<sup>C</sup>](#)

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

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

**Sub Class Of** [actorODP:ResourceRelation<sup>C</sup>](#)

**Equivalentclass** [actorODP:ResourceRelation<sup>C</sup>](#) *and* [actorODP:participantRole<sup>op</sup>](#) value [seller<sup>C</sup>](#)

## Interested partyStakeholder<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor/Stakeholder">http://w3id.org/CE0N/ontology/actor/Stakeholder</a>
<b>Is Defined By</b>	ISO 59004:2024 - 3.4.2 interested party, stakeholder
<b>Description</b>	Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity. To “perceive itself to be affected” means the perception has been made known to the organization.
<b>Sub Class Of</b>	<a href="#">Person<sup>C</sup></a> or <a href="#">Organisation<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:participantRole<sup>OP</sup></a> value <a href="#">updater<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<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:participantRole<sup>OP</sup></a> value <a href="#">user<sup>C</sup></a> and <a href="#">actorODP:ResourceRelation<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:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>OP</sup></a> value <a href="#">viewer<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>
<b>Super Class Of</b>	<a href="#">Organisation<sup>C</sup></a> <a href="#">Person<sup>C</sup></a>

## Capability<sup>c</sup>

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

**In Domain Of** [capabilityExtent<sup>op</sup>](#)  
[neededResourceRelation<sup>op</sup>](#)

## Collaboration Participation<sup>c</sup>

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

**Super Class Of** [CVNParticipation<sup>c</sup>](#)  
[ProcessParticipation<sup>c</sup>](#)

## Participation<sup>c</sup>

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

**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/CEON/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/CEON/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/CEON/ontology/actorODP/capabilityProperty>

**Super Property Of**

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

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

**IRI** <http://w3id.org/CEON/ontology/actorODP/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** <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 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/cannotation-schema.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/cannotationschema.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

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