

# 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>Sub Class Of</b>	<a href="#">actorODP:Role<sup>C</sup></a>
<b>Super Class Of</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>Sub Class Of</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>Sub Class Of</b>	<a href="#">actorODP:Role<sup>C</sup></a>
<b>Named Individuals</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>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="#">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>Sub Class Of</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:participatingActor<sup>op</sup></a> some <a href="#">actorODP:Actor<sup>C</sup></a> and <a href="#">actorODP:CollaborationParticipation<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:ResourceRelation<sup>c</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">consumer<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:ResourceRelation<sup>c</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">manufacturer<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> <a href="#">hasOrganisationLocation<sup>op</sup></a> some <a href="#">OrganisationLocation<sup>c</sup></a> and <a href="#">hasOrganisationLocation<sup>op</sup></a> only <a href="#">OrganisationLocation<sup>c</sup></a>
<b>In Domain Of</b>	<a href="#">hasOrganisationLocation<sup>op</sup></a> <a href="#">hasOrganisationName<sup>dp</sup></a>
<b>Restriction</b>	<a href="#">hasOrganisationName<sup>dp</sup></a> some <a href="#">Organisation<sup>c</sup></a>

## Organisation Location<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/OrganisationLocation">http://w3id.org/CEON/ontology/actor/OrganisationLocation</a>
<b>Sub Class Of</b>	<a href="http://w3id.org/CEON/ontology/location/Location">http://w3id.org/CEON/ontology/location/Location</a>
<b>In Range Of</b>	<a href="#">hasOrganisationLocation</a> <sup>op</sup>
<b>Restriction</b>	<a href="http://w3id.org/CEON/ontology/location/hasCity_max_1_OrganisationLocation">http://w3id.org/CEON/ontology/location/hasCity_max 1 OrganisationLocation</a> <sup>C</sup> <a href="http://w3id.org/CEON/ontology/location/hasCountry_max_1_OrganisationLocation">http://w3id.org/CEON/ontology/location/hasCountry_max 1 OrganisationLocation</a> <sup>C</sup> <a href="http://w3id.org/CEON/ontology/location/hasPostalCode_max_1_OrganisationLocation">http://w3id.org/CEON/ontology/location/hasPostalCode_max 1 OrganisationLocation</a> <sup>C</sup> <a href="http://w3id.org/CEON/ontology/location/hasStreetAddress_max_1_OrganisationLocation">http://w3id.org/CEON/ontology/location/hasStreetAddress_max 1 OrganisationLocation</a> <sup>C</sup>

## 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</a> <sup>C</sup>
<b>Equivalentclass</b>	<a href="#">actorODP:ResourceRelation</a> <sup>C</sup> and <a href="#">actorODP:participantRole</a> <sup>op</sup> value <a href="#">owner</a> <sup>C</sup>

## Person<sup>C</sup>

<b>IRI</b>	<a href="http://w3id.org/CEON/ontology/actor/Person">http://w3id.org/CEON/ontology/actor/Person</a>
<b>Sub Class Of</b>	<a href="#">actorODP:Actor</a> <sup>C</sup>

## 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</a> <sup>C</sup> <a href="#">actorODP:participatingActor</a> <sup>op</sup> some <a href="#">actorODP:Actor</a> <sup>C</sup> and <a href="#">actorODP:participationIn</a> <sup>op</sup> some <a href="http://w3id.org/CEON/ontology/processODP/Process">http://w3id.org/CEON/ontology/processODP/Process</a> <sup>C</sup> and <a href="#">actorODP:participantRole</a> <sup>op</sup> some <a href="#">ActorProcessRole</a> <sup>C</sup> and <a href="#">actorODP:CollaborationParticipation</a> <sup>C</sup>

## 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</a> <sup>C</sup>
<b>Equivalentclass</b>	<a href="#">actorODP:ResourceRelation</a> <sup>C</sup> and <a href="#">actorODP:participantRole</a> <sup>op</sup> value <a href="#">producer</a> <sup>C</sup>

## 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:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">reseller<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:ResourceRelation<sup>C</sup></a> and <a href="#">actorODP:participantRole<sup>op</sup></a> value <a href="#">seller<sup>C</sup></a>

## Stakeholder<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="#">Organisation<sup>C</sup></a> or <a href="#">Person<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: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>

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

### has organisation location<sup>op</sup>

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

**Sub Property Of** <http://w3id.org/CE0N/ontology/location/hasLocation>

**Domain** [Organisation<sup>c</sup>](#)

**Range** [OrganisationLocation<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/actorODP/capabilityProperty>

**Super Property Of**

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

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

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

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

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

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

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



participation in<sup>op</sup>

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

## Datatype Properties

has organisation name<sup>dp</sup>

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

**Domain** [Organisation<sup>c</sup>](#)

**Range** [xsd:string](#)

## 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	<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

:	<a href="http://w3id.org/CEON/ontology/actor/">http://w3id.org/CEON/ontology/actor/</a>
actorODP	<a href="http://w3id.org/CEON/ontology/actorODP/">http://w3id.org/CEON/ontology/actorODP/</a>
dcterms	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
odp	<a href="http://www.ontologydesignpatterns.org/schemas/cannotationschema.owl#">http://www.ontologydesignpatterns.org/schemas/cannotationschema.owl#</a>
owl	<a href="http://www.w3.org/2002/07/owl#">http://www.w3.org/2002/07/owl#</a>
prov	<a href="http://www.w3.org/ns/prov#">http://www.w3.org/ns/prov#</a>
rdf	<a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#">http://www.w3.org/1999/02/22-rdf-syntax-ns#</a>
rdfs	<a href="http://www.w3.org/2000/01/rdf-schema#">http://www.w3.org/2000/01/rdf-schema#</a>
vann	<a href="http://purl.org/vocab/vann/">http://purl.org/vocab/vann/</a>
xsd	<a href="http://www.w3.org/2001/XMLSchema#">http://www.w3.org/2001/XMLSchema#</a>

## Legend

c	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties