# Circular Economy Ontology Network (CEON) - Actor Module

#### Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Actor Module

Creator

Huanyu Li

Contributor

Eva Blomqvist

Mikael Lindecrantz

Robin Keskisärkkä

**Date Created** 

2024-11-13

License

https://creativecommons.org/licenses/by/4.0/

**Version Iri** 

http://w3id.org/CEON/ontology/actor/0.3/

**Version Info** 

0.3

**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

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

Sub Class Of ActorCollaborationRole C

**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<sup>C</sup>

**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>

supplier<sup>ni</sup> updater<sup>ni</sup> user<sup>ni</sup> viewer<sup>ni</sup>

<u>seller<sup>ni</sup></u>

Buying Resource<sup>C</sup>

Sub Class Of actorODP:ResourceRelation C

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

Cvn Participation C

**Sub Class Of** 

actorODP:CollaborationParticipation<sup>C</sup>

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

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

http://w3id.org/CEON/ontology/cvn/CVN and actorODP:participantRole op

some ActorCVNRole<sup>C</sup>

Consuming Resource c

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

Equivalentclass actorODP:participantRole op value consumer and actorODP:ResourceRelation

С

Issuing Resource <sup>C</sup>

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

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

Manufacturing Resource <sup>c</sup>

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

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

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

actorODP:ResourceRelation<sup>C</sup>

Organisation <sup>c</sup>

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

Is Defined By ISO 59004:2024 - 3.4.1 organization

**Description**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.

Sub Class Of actorODP:Actor C

Owning Resource<sup>C</sup>

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

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

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

Person<sup>C</sup>

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

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

Process Participation <sup>C</sup>

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

**Sub Class Of** 

actorODP:CollaborationParticipation<sup>C</sup>

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

actorODP:CollaborationParticipation<sup>C</sup> and actorODP:participatingActor<sup>Op</sup> some

actorODP:Actor<sup>c</sup> and actorODP:participationIn<sup>op</sup> some http://w3id.org/CEON/ontology/processODP/Process<sup>c</sup>

Producing Resource<sup>C</sup>

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

<u>Equivalentclass</u> <u>actorODP:ResourceRelation</u> and <u>actorODP:participantRole</u> value <u>producer</u>

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>

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

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

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

Selling Resource<sup>C</sup>

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

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

Interested partyStakeholder <sup>c</sup>

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

Is Defined By ISO 59004:2024 - 3.4.2 interested party, stakeholder

**Description** 

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.

Sub Class Of Organisation or Person

Supplying Resource<sup>C</sup>

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole popular supplier

Updating Resource <sup>C</sup>

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

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

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole pop value updater and actorODP:participant actorODP:participantRole pop value updater actorODP:

Using Resource <sup>c</sup>

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

Equivalentclass actorODP:participantRole op value user and actorODP:ResourceRelation

Viewing Resource c

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

Super Class Of

Organisation<sup>c</sup> Person<sup>c</sup> Capability <sup>C</sup>

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

In Domain Of

<u>capabilityExtent</u><sup>op</sup>

neededResourceRelation op

Collaboration Participation <sup>C</sup>

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

ipation

Super Class Of

<u>CVNParticipation</u><sup>c</sup> <u>ProcessParticipation</u><sup>c</sup>

Participation <sup>C</sup>

Resource Relation <sup>c</sup>

Sub Class Of actorODP:participatingActor op some actorODP:Actor and

actorODP:participatingResource op some

http://w3id.org/CEON/ontology/resourceODP/Resource<sup>c</sup> and actorODP:participantRole<sup>op</sup> some ActorResourceRole<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>

**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>

IRI http://w3id.org/CEON/ontology/processODP/Process

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	
participatir	ng resource <sup>op</sup>	
IRI	<pre>http://w3id.org/CEON/ontology/actorODP/participatingResour ce</pre>	
participatio	on in <sup>op</sup>	
IRI	http://w3id.org/CEON/ontology/actorODP/participationIn	

# Annotation Properties

contributor ap	
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 names	pace prefix <sup>ap</sup>
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix

# 

### 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