

Circular Economy Ontology Network (CEON) - Actor Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Actor Module

Publisher

Onto-DESIDE

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Date Created

2024-11-13

Date Issued

2025-06-30

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Version Iri

<http://w3id.org/CEON/ontology/actor/0.4/>

Version Info

0.4

Prior Version

0.3

Preferred Namespace Prefix

ceon-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^C

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

Sub Class Of [ActorCollaborationRole^C](#)

Named Individuals

- [collectorⁿⁱ](#)
- [dismantlerⁿⁱ](#)
- [manufacturerⁿⁱ](#)
- [recyclerⁿⁱ](#)
- [resellerⁿⁱ](#)
- [sellerⁿⁱ](#)
- [supplierⁿⁱ](#)
- [userⁿⁱ](#)

Actor Collaboration Role^C

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

Sub Class Of [actorODP:Role^C](#)

Super Class Of

- [ActorCVNRole^C](#)
- [ActorProcessRole^C](#)

Actor Process Role^C

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

Sub Class Of [ActorCollaborationRole^C](#)

Actor Resource Role^C

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

Sub Class Of [actorODP:Role^C](#)

Named Individuals

- [buyerⁿⁱ](#)
- [consumerⁿⁱ](#)
- [issuerⁿⁱ](#)
- [ownerⁿⁱ](#)
- [producerⁿⁱ](#)
- [providerⁿⁱ](#)
- [repairerⁿⁱ](#)
- [resellerⁿⁱ](#)
- [sellerⁿⁱ](#)
- [supplierⁿⁱ](#)
- [updaterⁿⁱ](#)
- [userⁿⁱ](#)
- [viewerⁿⁱ](#)

Buying Resource^C

| | |
|------------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actor/BuyingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:participantRole^{OP} value buyer^C and actorODP:ResourceRelation^C |

Cvn Participation^C

| | |
|---------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actor/CVNParticipation |
| Sub Class Of | actorODP:CollaborationParticipation^C actorODP:participationIn^{OP} some http://w3id.org/CE0N/ontology/cvn/CVN^C and actorODP:participantRole^{OP} some ActorCVNRole^C and actorODP:CollaborationParticipation^C and actorODP:participatingActor^{OP} some actorODP:Actor^C |

Consuming Resource^C

| | |
|------------------------|--|
| IRI | http://w3id.org/CE0N/ontology/actor/ConsumingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:participantRole^{OP} value consumer^C and actorODP:ResourceRelation^C |

Dismantling Resource^C

| | |
|------------------------|--|
| IRI | http://w3id.org/CE0N/ontology/actor/DismantlingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:ResourceRelation^C and actorODP:participantRole^{OP} value dismantler^C |

Issuing Resource^C

| | |
|------------------------|--|
| IRI | http://w3id.org/CE0N/ontology/actor/IssuingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:ResourceRelation^C and actorODP:participantRole^{OP} value issuer^C |

Manufacturing Resource^C

| | |
|------------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actor/ManufacturingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:participantRole^{OP} value manufacturer^C and actorODP:ResourceRelation^C |

Organisation^C

| | |
|----------------------|---|
| IRI | http://w3id.org/CEON/ontology/actor/Organisation |
| <u>Is Defined By</u> | ISO 59004:2024 - 3.4.1 organization |
| <u>Description</u> | 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. |
| <u>Sub Class Of</u> | actorODP:Actor ^C hasOrganisationLocation ^{op} some OrganisationLocation ^C <i>and</i> hasOrganisationLocation ^{op} only OrganisationLocation ^C |
| <u>In Domain Of</u> | hasOrganisationLocation ^{op} hasOrganisationName ^{dp} |
| <u>Restriction</u> | hasOrganisationName ^{dp} some Organisation ^C |

Organisation Location^C

| | |
|---------------------|---|
| IRI | http://w3id.org/CEON/ontology/actor/OrganisationLocation |
| <u>Sub Class Of</u> | http://w3id.org/CEON/ontology/location/Location ^C |
| <u>In Range Of</u> | hasOrganisationLocation ^{op} |

Owning Resource^C

| | |
|------------------------|---|
| IRI | http://w3id.org/CEON/ontology/actor/OwningResource |
| <u>Sub Class Of</u> | actorODP:ResourceRelation ^C |
| <u>Equivalentclass</u> | actorODP:ResourceRelation ^C <i>and</i> actorODP:participantRole ^{op} value owner ^C |

Person^C

| | |
|---------------------|---|
| IRI | http://w3id.org/CEON/ontology/actor/Person |
| <u>Sub Class Of</u> | actorODP:Actor ^C |

Process Participation^C

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

Sub Class Of [actorODP:CollaborationParticipation^C](#)
[actorODP:participatingActor^{op}](#) some [actorODP:Actor^C](#) *and*
[actorODP:participantRole^{op}](#) some [ActorProcessRole^C](#) *and*
[actorODP:participationIn^{op}](#) some
[http://w3id.org/CEON/ontology/processODP/Process^C](http://w3id.org/CEON/ontology/processODP/Process) *and*
[actorODP:CollaborationParticipation^C](#)

Producing Resource^C

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

Sub Class Of [actorODP:ResourceRelation^C](#)

Equivalentclass [actorODP:ResourceRelation^C](#) *and* [actorODP:participantRole^{op}](#) value [producer^C](#)

Providing Resource^C

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

Sub Class Of [actorODP:ResourceRelation^C](#)

Equivalentclass [actorODP:participantRole^{op}](#) value [provider^C](#) *and* [actorODP:ResourceRelation^C](#)

Recycling Resource^C

IRI <http://w3id.org/CEON/ontology/actor/RecyclingResource>

Sub Class Of [actorODP:ResourceRelation^C](#)

Equivalentclass [actorODP:ResourceRelation^C](#) *and* [actorODP:participantRole^{op}](#) value [recycler^C](#)

Repairing Resource^C

IRI <http://w3id.org/CEON/ontology/actor/RepairingResource>

Sub Class Of [actorODP:ResourceRelation^C](#)

Equivalentclass [actorODP:participantRole^{op}](#) value [repairer^C](#) *and* [actorODP:ResourceRelation^C](#)

Reselling Resource^C

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

Sub Class Of [actorODP:ResourceRelation^C](#)

Equivalentclass [actorODP:participantRole^{op}](#) value [reseller^C](#) *and* [actorODP:ResourceRelation^C](#)

Selling Resource^C

| | |
|------------------------|--|
| IRI | http://w3id.org/CE0N/ontology/actor/SellingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:participantRole^{OP} value seller^C and actorODP:ResourceRelation^C |

Stakeholder^C

| | |
|----------------------|--|
| IRI | http://w3id.org/CE0N/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^C or Person^C |

Supplying Resource^C

| | |
|------------------------|--|
| IRI | http://w3id.org/CE0N/ontology/actor/SupplyingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:participantRole^{OP} value supplier^C and actorODP:ResourceRelation^C |

Taking Back Resource^C

| | |
|------------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actor/TakingBackResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:participantRole^{OP} value collector^C and actorODP:ResourceRelation^C |

Updating Resource^C

| | |
|------------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actor/UpdatingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:ResourceRelation^C and actorODP:participantRole^{OP} value updater^C |

Using Resource^C

| | |
|------------------------|--|
| IRI | http://w3id.org/CE0N/ontology/actor/UsingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:ResourceRelation^C and actorODP:participantRole^{OP} value user^C |

Viewing Resource^C

| | |
|------------------------|--|
| IRI | http://w3id.org/CE0N/ontology/actor/ViewingResource |
| Sub Class Of | actorODP:ResourceRelation^C |
| Equivalentclass | actorODP:ResourceRelation^C and actorODP:participantRole^{op} value viewer^C |

Actor^C

| | |
|-----------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actorODP/Actor |
| Super Class Of | Organisation^C Person^C |

Capability^C

| | |
|---------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actorODP/Capability |
| In Domain Of | capabilityExtent^{op} neededResourceRelation^{op} |

Collaboration Participation^C

| | |
|-----------------------|---|
| IRI | http://w3id.org/CE0N/ontology/actorODP/CollaborationParticipation |
| Super Class Of | CVNParticipation^C ProcessParticipation^C |

Participation^C

| | |
|------------|---|
| IRI | http://w3id.org/CE0N/ontology/actorODP/Participation |
|------------|---|

Resource Relation^c

| | |
|----------------|---|
| IRI | http://w3id.org/CE0N/ontology/actorODP/ResourceRelation |
| Sub Class Of | actorODP:Participation^c and actorODP:participantRole^{op} some ActorResourceRole^c and actorODP:participatingActor^{op} some actorODP:Actor^c and actorODP:participatingResource^{op} some http://w3id.org/CE0N/ontology/resourceODP/Resource^c |
| Super Class Of | BuyingResource^c ConsumingResource^c DismantlingResource^c IssuingResource^c ManufacturingResource^c OwningResource^c ProducingResource^c ProvidingResource^c RecyclingResource^c RepairingResource^c ResellingResource^c SellingResource^c SupplyingResource^c TakingBackResource^c UpdatingResource^c UsingResource^c ViewingResource^c |

Role^c

| | |
|----------------|---|
| IRI | http://w3id.org/CE0N/ontology/actorODP/Role |
| Super Class Of | ActorCollaborationRole^c ActorResourceRole^c |

Cvn^c

| | |
|-----|---|
| IRI | http://w3id.org/CE0N/ontology/cvn/CVN |
|-----|---|

Location^c

| | |
|----------------|---|
| IRI | http://w3id.org/CE0N/ontology/location/Location |
| Super Class Of | OrganisationLocation^c |

Process^c

| | |
|-----|---|
| IRI | http://w3id.org/CE0N/ontology/processODP/Process |
|-----|---|

Resource^c

| | |
|-----|---|
| IRI | http://w3id.org/CE0N/ontology/resourceODP/Resource |
|-----|---|

Object Properties

capability extent^{op}

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

Sub Property Of [actorODP:capabilityProperty^{op}](#)

Domain [actorODP:Capability^c](#)

has organisation location^{op}

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

Sub Property Of [http://w3id.org/CE0N/ontology/location/hasLocation^{op}](http://w3id.org/CE0N/ontology/location/hasLocation)

Domain [Organisation^c](#)

Range [OrganisationLocation^c](#)

needed resource relation^{op}

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

Sub Property Of [actorODP:capabilityProperty^{op}](#)

Domain [actorODP:Capability^c](#)

capability property^{op}

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

Super Property Of

- [capabilityExtent^{op}](#)
- [neededResourceRelation^{op}](#)

participant role^{op}

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

participating actor^{op}

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

participating resource^{op}

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

participation in^{op}

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

has location^{op}

IRI <http://w3id.org/CE0N/ontology/location/hasLocation>

Super Property Of [hasOrganisationLocation^{op}](#)

Datatype Properties

has organisation name^{dp}

IRI <http://w3id.org/CE0N/ontology/actor/has0rganisationName>

Domain [Organisation^c](#)

Range [xsd:string](#)

Annotation Properties

contributor^{ap}

IRI <http://purl.org/dc/terms/contributor>

created^{ap}

IRI <http://purl.org/dc/terms/created>

creator^{ap}

IRI <http://purl.org/dc/terms/creator>

description^{ap}

IRI <http://purl.org/dc/terms/description>

issued^{ap}

IRI <http://purl.org/dc/terms/issued>

license^{ap}

IRI <http://purl.org/dc/terms/license>

| | |
|---|---|
| publisher ^{ap} | |
| IRI | http://purl.org/dc/terms/publisher |
| title ^{ap} | |
| IRI | http://purl.org/dc/terms/title |
| preferred namespace prefix ^{ap} | |
| IRI | http://purl.org/vocab/vann/preferredNamespacePrefix |
| preferred namespace uri ^{ap} | |
| IRI | http://purl.org/vocab/vann/preferredNamespaceUri |
| covers requirements ^{ap} | |
| IRI | http://www.ontologydesignpatterns.org/schemas/cannotation-schema.owl#coversRequirements |

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/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/
xsd
    http://www.w3.org/2001/XMLSchema#

```

Legend

| | |
|----|--------------------------|
| c | Classes |
| op | Object Properties |
| dp | Datatype Properties |
| ap | Annotation Properties |