

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 ^c	
IRI	http://w3id.org/CEON/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/CEON/ontology/actor/ActorCollaborationRole
<u>Sub Class Of</u>	actorODP:Role^C
<u>Super Class Of</u>	ActorCVNRole^C ActorProcessRole^C

Actor Process Role^C

IRI	http://w3id.org/CEON/ontology/actor/ActorProcessRole
<u>Sub Class Of</u>	ActorCollaborationRole^C

Actor Resource Role^C

IRI	http://w3id.org/CEON/ontology/actor/ActorResourceRole
<u>Sub Class Of</u>	actorODP:Role^C
<u>Named Individuals</u>	buyerⁿⁱ consumerⁿⁱ issuerⁿⁱ ownerⁿⁱ producerⁿⁱ providerⁿⁱ resellerⁿⁱ sellerⁿⁱ supplierⁿⁱ updaterⁿⁱ userⁿⁱ viewerⁿⁱ

Buying Resource^C

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

Cvn Participation^C

IRI	http://w3id.org/CEON/ontology/actor/CVNParticipation
<u>Sub Class Of</u>	actorODP:CollaborationParticipation^C actorODP:participatingActor^{op} some actorODP:Actor^C <i>and</i> actorODP:CollaborationParticipation^C <i>and</i> actorODP:participationIn^{op} some http://w3id.org/CEON/ontology/cvn/CVN^C <i>and</i> actorODP:participantRole^{op} some ActorCVNRole^C

Consuming Resource^c

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

IRI	http://w3id.org/CE0N/ontology/actor/OwningResource
Sub Class Of	actorODP:ResourceRelation^c
Equivalentclass	actorODP:participantRole^{op} value owner^c and actorODP:ResourceRelation^c

Person^C

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

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

Process Participation^C

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

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

Producing Resource^C

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

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

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

Providing Resource^C

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

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

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

Reselling Resource^C

IRI <http://w3id.org/CE0N/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:ResourceRelation^C](#) and [actorODP:participantRole^{op}](#) value [seller^C](#)

Interested partyStakeholder^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

Updating Resource^C

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

Using Resource^C

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

In Domain Of [capabilityExtent^{op}](#)
[neededResourceRelation^{op}](#)

Collaboration Participation^c

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

Super Class Of [CVNParticipation^c](#)
[ProcessParticipation^c](#)

Participation^c

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

Resource Relation^c

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

Sub Class Of [actorODP:participantRole^{op}](#) some [ActorResourceRole^c](#) and [actorODP:Participation^c](#) and [actorODP:participatingActor^{op}](#) some [actorODP:Actor^c](#) and [actorODP:participatingResource^{op}](#) some [http://w3id.org/CEON/ontology/resourceODP/Resource^c](http://w3id.org/CEON/ontology/resourceODP/Resource)

Super Class Of [BuyingResource^c](#)
[ConsumingResource^c](#)
[IssuingResource^c](#)
[ManufacturingResource^c](#)
[OwningResource^c](#)
[ProducingResource^c](#)
[ProvidingResource^c](#)
[ResellingResource^c](#)
[SellingResource^c](#)
[SupplyingResource^c](#)
[UpdatingResource^c](#)
[UsingResource^c](#)
[ViewingResource^c](#)

Role^c

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

Super Class Of [ActorCollaborationRole^c](#)
[ActorResourceRole^c](#)

Cvn^C

IRI <http://w3id.org/CEON/ontology/cvn/CVN>

Sub Class Of <http://w3id.org/CEON/ontology/cvn/Collaboration>^C

Collaboration^C

IRI <http://w3id.org/CEON/ontology/cvn/Collaboration>

Super Class Of <http://w3id.org/CEON/ontology/cvn/CVN>^C

Process^C

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

Resource^C

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

Object Properties

capability extent^{op}

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

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

Domain [actorODP:Capability](#)^C

needed resource relation^{op}

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

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

Domain [actorODP:Capability](#)^C

capability property^{op}

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

Super Property Of

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

participant role^{op}

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

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>

license^{ap}

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

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/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

^c	Classes
^{op}	Object Properties
^{ap}	Annotation Properties