

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:participantRole^{op} some ActorCVNRole^C <i>and</i> actorODP:participationIn^{op} some http://w3id.org/CEON/ontology/cvn/CVN^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

Issuing Resource^c

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

Manufacturing Resource^c

IRI	http://w3id.org/CE0N/ontology/actor/ManufacturingResource
Sub Class Of	actorODP:ResourceRelation^c
Equivalentclass	actorODP:ResourceRelation^c and actorODP:participantRole^{op} value manufacturer^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 hasOrganisationLocation^{op} some OrganisationLocation^c and hasOrganisationLocation^{op} only OrganisationLocation^c
In Domain Of	hasOrganisationLocation^{op} hasOrganisationName^{dp}
Restriction	hasOrganisationName^{dp} some Organisation^c

Organisation Location^C

IRI	http://w3id.org/CEON/ontology/actor/OrganisationLocation
Sub Class Of	http://w3id.org/CEON/ontology/location/Location
In Range Of	hasOrganisationLocation ^{op}
Restriction	http://w3id.org/CEON/ontology/location/hasCity_max 1 OrganisationLocation ^C http://w3id.org/CEON/ontology/location/hasCountry_max 1 OrganisationLocation ^C http://w3id.org/CEON/ontology/location/hasPostalCode_max 1 OrganisationLocation ^C http://w3id.org/CEON/ontology/location/hasStreetAddress_max 1 OrganisationLocation ^C

Owning Resource^C

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

Person^C

IRI	http://w3id.org/CEON/ontology/actor/Person
Sub Class Of	actorODP:Actor ^C

Process Participation^C

IRI	http://w3id.org/CEON/ontology/actor/ProcessParticipation
Sub Class Of	actorODP:CollaborationParticipation ^C actorODP:participantRole ^{op} some ActorProcessRole ^C and actorODP:participationIn ^{op} some http://w3id.org/CEON/ontology/processODP/Process ^C and actorODP:participatingActor ^{op} some actorODP:Actor ^C and actorODP:CollaborationParticipation ^C

Producing Resource^C

IRI	http://w3id.org/CEON/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:ResourceRelation^C and actorODP:participantRole^{op} value reseller^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:ResourceRelation^C and actorODP:participantRole^{op} value supplier^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
<u>Sub Class Of</u>	actorODP:ResourceRelation^C
<u>Equivalentclass</u>	actorODP:participantRole^{OP} value user^C and actorODP:ResourceRelation^C

Viewing Resource^C

IRI	http://w3id.org/CE0N/ontology/actor/ViewingResource
<u>Sub Class Of</u>	actorODP:ResourceRelation^C
<u>Equivalentclass</u>	actorODP:participantRole^{OP} value viewer^C and actorODP:ResourceRelation^C

Actor^C

IRI	http://w3id.org/CE0N/ontology/actorODP/Actor
<u>Super Class Of</u>	Organisation^C Person^C

Capability^C

IRI	http://w3id.org/CE0N/ontology/actorODP/Capability
<u>In Domain Of</u>	capabilityExtent^{OP} neededResourceRelation^{OP}

Collaboration Participation^C

IRI	http://w3id.org/CE0N/ontology/actorODP/CollaborationParticipation
<u>Super Class Of</u>	CVNParticipation^C ProcessParticipation^C

Participation^C

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

Resource Relation^C

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

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

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/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>

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/actorODP/capabilityProperty>

Super Property Of

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

participant role^{op}

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

participating actor^{op}

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

participating resource^{op}

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

participation in^{op}

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

Datatype Properties

has organisation name^{dp}

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

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>

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

Legend

c	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties