

Circular Economy Ontology Network (CEON) - Actor Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Actor Module

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Version Iri

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

Version Info

0.4

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/CE0N/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/CE0N/ontology/actor/ActorProcessRole
<u>Sub Class Of</u>	ActorCollaborationRole^C

Actor Resource Role^C

IRI	http://w3id.org/CE0N/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/CE0N/ontology/actor/BuyingResource
<u>Sub Class Of</u>	actorODP:ResourceRelation^C
<u>Equivalentclass</u>	actorODP:ResourceRelation^C <i>and</i> actorODP:participantRole^{op} value buyer^C

Cvn Participation^C

IRI	http://w3id.org/CE0N/ontology/actor/CVNParticipation
<u>Sub Class Of</u>	actorODP:CollaborationParticipation^C actorODP:CollaborationParticipation^C <i>and</i> actorODP:participationIn^{op} some <a href="http://w3id.org/CE0N/ontology/cvn/CVN<sup>C</sup>">http://w3id.org/CE0N/ontology/cvn/CVN^C <i>and</i> actorODP:participantRole^{op} some ActorCVNRole^C <i>and</i> 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: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: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: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 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 ^C
In Range Of	hasOrganisationLocation ^{OP}

Owning Resource^C

IRI	http://w3id.org/CEON/ontology/actor/OwningResource
Sub Class Of	actorODP:ResourceRelation ^C
Equivalentclass	actorODP:ResourceRelation ^C <i>and</i> 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:participationIn ^{OP} some http://w3id.org/CEON/ontology/processODP/Process ^C <i>and</i> actorODP:participantRole ^{OP} some ActorProcessRole ^C <i>and</i> actorODP:participatingActor ^{OP} some actorODP:Actor ^C <i>and</i> 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 <i>and</i> actorODP:ResourceRelation ^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 <i>and</i> actorODP:ResourceRelation ^C

Repairing Resource^C

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

Sub Class Of [actorODP:ResourceRelation^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: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:ResourceRelation^C and actorODP:participantRole^{op} value user^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
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Resource Relation^C

IRI	http://w3id.org/CEON/ontology/actorODP/ResourceRelation
Sub Class Of	actorODP:participatingResource ^{op} some http://w3id.org/CEON/ontology/resourceODP/Resource ^C and actorODP:Participation ^C and actorODP:participantRole ^{op} some ActorResourceRole ^C and actorODP:participatingActor ^{op} some actorODP:Actor ^C
Super Class Of	BuyingResource ^C ConsumingResource ^C IssuingResource ^C ManufacturingResource ^C OwningResource ^C ProducingResource ^C ProvidingResource ^C RepairingResource ^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

Location^C

IRI	http://w3id.org/CEON/ontology/location/Location
Super Class Of	OrganisationLocation ^C

Process^C

IRI	http://w3id.org/CEON/ontology/processODP/Process
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Resource^c

IRI <http://w3id.org/CE0N/ontology/resource0DP/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}](#)

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/CEON/ontology/actor0DP/participatingResource>

participation in^{op}

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

has location^{op}

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

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

Datatype Properties

has organisation name^{dp}

IRI <http://w3id.org/CEON/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