

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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License

<https://github.com/LiUSemWeb/CEON/blob/master/LICENSE>

Version Iri

<http://w3id.org/CEON/ontology/actor/0.1/>

Version Info

0.1

Preferred Namespace Prefix

actor

Preferred Namespace Uri

[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

Classes

Actor Circular Value Network role^C

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

Description The role(s) of an actor in a Circular Value Network, which is a specific type of collaboration.

Sub Class Of [Actor collaboration role^C](#)

Named Individuals

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

Actor collaboration role^C

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

Description The roles of an actor involved in a collaboration.

Sub Class Of [http://w3id.org/CEON/ontology/actorODP/Role^C](http://w3id.org/CEON/ontology/actorODP/Role)

Super Class Of

- [Actor Circular Value Network role^C](#)
- [Actor process role^C](#)

Actor process role^C

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

Description The role(s) of an actor involved in a process.

Sub Class Of [Actor collaboration role^C](#)

Actor resource role^C

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

Description The role(s) of an actor in relation to a resource.

Sub Class Of <http://w3id.org/CEON/ontology/actorODP/Role>^C

Named Individuals

- [actor:buyer](#)ⁿⁱ
- [actor:consumer](#)ⁿⁱ
- [actor:issuer](#)ⁿⁱ
- [actor:owner](#)ⁿⁱ
- [actor:producer](#)ⁿⁱ
- [actor:provider](#)ⁿⁱ
- [actor:reseller](#)ⁿⁱ
- [actor:seller](#)ⁿⁱ
- [actor:supplier](#)ⁿⁱ
- [actor:updater](#)ⁿⁱ
- [actor:user](#)ⁿⁱ
- [actor:viewer](#)ⁿⁱ

Buying resource^C

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

Description The relation where the role of the actor is the buyer of a certain resource.

Sub Class Of [Resource Relation](#)^C

Equivalentclass [Resource Relation](#)^C and <http://w3id.org/CEON/ontology/actorODP/participantRole>
^{op} value [actor:buyer](#)^C

Circular Value Network Participation^C

IRI

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

Description

A participation-relation, that represents the participation of an actor in a CVN with a certain role. For instance, a specific company playing the role of recycler in a certain flow of a CVN. The participation may also be related to a certain time (or time interval).

Sub Class Of

<http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation>^C
<http://w3id.org/CEON/ontology/actorODP/participatingActor>^{op} some
<http://w3id.org/CEON/ontology/actorODP/Actor>^C and
<http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation>^C and
<http://w3id.org/CEON/ontology/actorODP/participantRole>^{op} some [Actor Circular Value Network role](#)^C and <http://w3id.org/CEON/ontology/actorODP/participationIn>^{op} some [Circular Value Network](#)^C

Consuming resource^C

IRI

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

Description

The relation where the role of the actor is the consumer of a certain resource.

Sub Class Of

[Resource Relation](#)^C

Equivalentclass

[Resource Relation](#)^C and <http://w3id.org/CEON/ontology/actorODP/participantRole>^{op} value [actor:consumer](#)^C

Issuing resource^C

IRI

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

Description

The relation where the role of the actor is the issuer of a certain resource.

Sub Class Of

[Resource Relation](#)^C

Equivalentclass

[Resource Relation](#)^C and <http://w3id.org/CEON/ontology/actorODP/participantRole>^{op} value [actor:issuer](#)^C

Owning resource^C

IRI	http://w3id.org/CEON/ontology/actor/OwningResource
Description	The relation where the role of the actor is the owner of a certain resource.
Sub Class Of	Resource Relation ^C
Equivalentclass	http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:owner ^C and Resource Relation ^C

Process Participation^C

IRI	http://w3id.org/CEON/ontology/actor/ProcessParticipation
Description	Participation of a certain actor in a certain process, with a certain role. For instance, a certain department of a recycling company having the role of quality controllant, or material sorter, in a certain recycling process. The participation may also be given a time, e.g. a start and end time.
Sub Class Of	http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation ^C http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation ^C and http://w3id.org/CEON/ontology/actorODP/participatingActor ^{op} some http://w3id.org/CEON/ontology/actorODP/Actor ^C and http://w3id.org/CEON/ontology/actorODP/participationIn ^{op} some http://w3id.org/CEON/ontology/process/Process ^C and http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} some Actor Circular Value Network role ^C

Producing resource^C

IRI	http://w3id.org/CEON/ontology/actor/ProducingResource
Description	The relation where the role of the actor is the producer of a certain resource.
Sub Class Of	Resource Relation ^C
Equivalentclass	Resource Relation ^C and http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:producer ^C

Providing resource^C

IRI	http://w3id.org/CEON/ontology/actor/ProvidingResource
Description	The relation where the role of the actor is the provider of a certain resource.
Sub Class Of	Resource Relation^C
Equivalentclass	Resource Relation^C and http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:provider^C

Reselling resource^C

IRI	http://w3id.org/CEON/ontology/actor/ResellingResource
Description	The relation where the role of the actor is the reseller of a certain resource.
Sub Class Of	Resource Relation^C
Equivalentclass	Resource Relation^C and http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:reseller^C

Selling resource^C

IRI	http://w3id.org/CEON/ontology/actor/SellingResource
Description	The relation where the role of the actor is the seller of a certain resource.
Sub Class Of	Resource Relation^C
Equivalentclass	http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:seller^C and Resource Relation^C

Supplying resource^C

IRI	http://w3id.org/CEON/ontology/actor/SupplyingResource
Description	The relation where the role of the actor is the supplier of a certain resource.
Sub Class Of	Resource Relation^C
Equivalentclass	Resource Relation^C and http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:supplier^C

Updating resource^C

IRI	http://w3id.org/CEON/ontology/actor/UpdatingResource
Description	The relation where the role of the actor is the updater of a certain resource.
Sub Class Of	Resource Relation ^C
Equivalentclass	Resource Relation ^C and http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:updater ^C

Using resource^C

IRI	http://w3id.org/CEON/ontology/actor/UsingResource
Description	The relation where the role of the actor is the user of a certain resource.
Sub Class Of	Resource Relation ^C
Equivalentclass	Resource Relation ^C and http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:user ^C

Viewing resource^C

IRI	http://w3id.org/CEON/ontology/actor/ViewingResource
Description	The relation where the role of the actor is the viewer of a certain resource.
Sub Class Of	Resource Relation ^C
Equivalentclass	http://w3id.org/CEON/ontology/actorODP/participantRole ^{op} value actor:viewer ^C and Resource Relation ^C

Actor^C

IRI	http://w3id.org/CEON/ontology/actorODP/Actor
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Capability^C

IRI	http://w3id.org/CEON/ontology/actorODP/Capability
In Domain Of	capability extent ^{op} needed resource relations ^{op}

Collaboration Participation^C

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

Super Class Of
[Circular Value Network Participation^C](#)
[Process Participation^C](#)

Participation^C

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

Resource Relation^C

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

Description
A relation between a resource, an actor, and the role the actor has in relation to the resource. For instance, the role of owner that a certain actor takes for a certain resource for a certain period of time. Or the seller of a certain resource, until that resource has been sold, and the actor no longer has that role in relation to the resource.

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

Super Class Of
[Buying resource^C](#)
[Consuming resource^C](#)
[Issuing resource^C](#)
[Owning resource^C](#)
[Producing resource^C](#)
[Providing resource^C](#)
[Reselling resource^C](#)
[Selling resource^C](#)
[Supplying resource^C](#)
[Updating resource^C](#)
[Using resource^C](#)
[Viewing resource^C](#)

Role^C

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

Super Class Of [Actor collaboration role^C](#)
[Actor resource role^C](#)

Circular Value Network^C

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

Description A collaboration between actors that constitute a Circular Value Newtworks, implicitly or explicitly set up.

Sub Class Of [http://w3id.org/CEON/ontology/cvn/Collaboration^C](http://w3id.org/CEON/ontology/cvn/Collaboration)

Collaboration^C

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

Super Class Of [Circular Value Network^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>

Description

The extent of this capability, e.g. stating whether there are limits to the capability, such as a maximum amount or size of something.

Sub Property Of <http://w3id.org/CEON/ontology/actorODP/capabilityProperty>^{op}

Domain <http://w3id.org/CEON/ontology/actorODP/Capability>^c

needed resource relations^{op}

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

Description

In order for an actor to have a capability, it needs to have certain resources, e.g. materials, infrastructure, know-how, information etc.

Sub Property Of <http://w3id.org/CEON/ontology/actorODP/capabilityProperty>^{op}

Domain <http://w3id.org/CEON/ontology/actorODP/Capability>^c

capability property^{op}

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

Super Property Of

- [capability extent](#)^{op}
- [needed resource relations](#)^{op}

participant role^{op}

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

participating actor^{op}

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

participating resource^{op}

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

participation in^{op}

IRI <http://w3id.org/CEON/ontology/actorODP/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/cpannotationschema.owl#coversRequirements
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Namespaces

actor

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

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