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/0.2/

Version Info

0.2

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

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
collector [ni]
dismantler [ni]
manufacturer [ni]
recycler [ni]
reseller [ni]
seller [ni]
supplier [ni]
user [ni]

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 actorODP:Role [C]

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 actorODP:Role [c]

Named Individuals
buyer [ni]
consumer [ni]
issuer [ni]
owner [ni]
producer [ni]
provider [ni]
reseller [ni]
seller [ni]
supplier [ni]
updater [ni]
user [ni]
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* actorODP:participantRole [op] value 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
actorODP:CollaborationParticipation [c]
actorODP:participationIn [op] some Circular Value Network [c] *and*
actorODP:participatingActor [op] some actorODP:Actor [c] *and*
actorODP:CollaborationParticipation [c] *and* actorODP:participantRole [op] some Actor
Circular Value Network role [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   actorODP:participantRole ^{op} value consumer ^C *and* Resource Relation ^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* actorODP:participantRole ^{op} value 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   actorODP:participantRole ^{op} value 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
actorODP:CollaborationParticipation ^C
actorODP:participantRole ^{op} some Actor Circular Value Network role ^C *and*
actorODP:participationIn ^{op} some
http://w3id.org/CEON/ontology/processODP/Process ^C *and*
actorODP:CollaborationParticipation ^C *and* actorODP:participatingActor ^{op} some
actorODP:Actor ^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* actorODP:participantRole ^{op} value 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* actorODP:participantRole ^{op} value 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* actorODP:participantRole ^{op} value 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	actorODP:participantRole ^{op} value 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* actorODP:participantRole ^{op} value 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* actorODP:participantRole ^{op} value 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* actorODP:participantRole ^{op} value 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   actorODP:participantRole ^{op} value viewer ^C *and* Resource Relation ^C

Actor ^C

IRI   http://w3id.org/CEON/ontology/actorODP/Actor

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

actorODP:participantRole ^{op} some Actor resource role ^C *and*
actorODP:participatingActor ^{op} some actorODP:Actor ^C *and* actorODP:Participation ^C
and actorODP:participatingResource ^{op} some
http://w3id.org/CEON/ontology/resourceODP/Resource ^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

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 limist to the capability, such as a maximum amount or size of something.
Sub Property Of	actorODP:capabilityProperty ^{op}
Domain	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, infrastrucutre, know-how, information etc.
Sub Property Of	actorODP:capabilityProperty ^{op}
Domain	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

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/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