Circular Economy Ontology Network (CEON) - Actor Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Actor Module

Creator

Eva Blomqvist

Contributor

Huanyu Li

Mikael Lindecrantz

Robin Keskisärkkä

Date Created

2023-03-16

License

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

Version Iri

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

Version Info

0.1

Preferred Namespace Prefix

actor

Preferred Namespace Uri

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

DescriptionThe roles of an actor involved in a collaboration.

Sub Class Of 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

DescriptionThe 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

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

Sub Class Of http://w3id.org/CEON/ontology/actorODP/Role

Named Individuals

actor:buyerⁿⁱ
actor:consumerⁿⁱ
actor:issuerⁿⁱ
actor:ownerⁿⁱ
actor:producerⁿⁱ
actor:providerⁿⁱ
actor:resellerⁿⁱ
actor:sellerⁿⁱ
actor:supplierⁿⁱ
actor:updaterⁿⁱ
actor:userⁿⁱ

Buying resource^C

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

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

Sub Class Of Resource Relation^c

Equivalentclass http://w3id.org/CEON/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole<

and Resource Relation^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

http://w3id.org/CEON/ontology/actorODP/participatingActor^{op} some and http://w3id.org/CEON/ontology/actorODP/participationIn^{op} some and http://w3id.org/CEON/ontology/actorODP/participantRole^{op} some and http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation^c

Consuming resource^C

IRI http://w3id.org/CEON/ontology/actor/ConsumingResource

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

Sub Class Of Resource Relation^C

Equivalentclass http://w3id.org/CEON/ontology/actorODP/participantRole^{op} value

and Resource Relation^c

Issuing resource ^C

IRI http://w3id.org/CEON/ontology/actor/IssuingResource

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

Sub Class Of Resource Relation^C

Equivalentclass http://w3id.org/CEON/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole<

and Resource Relation^c

Owning resource ^C

IRI http://w3id.org/CEON/ontology/actor/OwningResource

DescriptionThe 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 http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole<

and Resource Relation^c

Process Participation ^C

IRI http://w3id.org/CEON/ontology/actor/ProcessParticipation

DescriptionParticipation 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

http://w3id.org/CEON/ontology/actorODP/participatingActor^{op} some and http://w3id.org/CEON/ontology/actorODP/participantRole^{op} some

and http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation and

http://w3id.org/CEON/ontology/actorODP/participationIn^{op} some

Producing resource^C

IRI http://w3id.org/CEON/ontology/actor/ProducingResource

DescriptionThe relation where the role of the actor is the producer of a certain resource.

Sub Class Of Resource Relation^C

Equivalentclass http://w3id.org/CEON/ontology/actorODP/participantRole^{op} value

and Resource Relation^c

Providing resource ^c

IRI http://w3id.org/CEON/ontology/actor/ProvidingResource

DescriptionThe relation where the role of the actor is the provider of a certain resource.

Sub Class Of Resource Relation^C

Equivalentclass http://w3id.org/CEON/ontology/actorODP/participantRole <a href="http://waid.org/ceon.org/ceo

and Resource Relation^c

Reselling resource ^C

IRI http://w3id.org/CEON/ontology/actor/ResellingResource

DescriptionThe relation where the role of the actor is the reseller of a certain resource.

Sub Class Of Resource Relation^C

Equivalentclass http://w3id.org/CEON/ontology/actorODP/participantRole <a href="http://waid.org/ceon.

and Resource Relation^C

Selling resource^C

IRI http://w3id.org/CEON/ontology/actor/SellingResource

DescriptionThe relation where the role of the actor is the seller of a certain resource.

Sub Class Of Resource Relation^C

Equivalentclass Resource Relation and http://w3id.org/CEON/ontology/actorODP/participantRole

^{op} value

Supplying resource ^C

IRI http://w3id.org/CEON/ontology/actor/SupplyingResource

DescriptionThe relation where the role of the actor is the supplier of a certain resource.

Sub Class Of Resource Relation^C

Equivalentclass http://w3id.org/CEON/ontology/actorODP/participantRole <a href="http://waid.org/ceon.

and Resource Relation^c

Updating resource^C

IRI http://w3id.org/CEON/ontology/actor/UpdatingResource

DescriptionThe relation where the role of the actor is the updater of a certain resource.

Sub Class Of Resource Relation^C

EquivalentclassResource Relation^c and http://w3id.org/CEON/ontology/actorODP/participantRole

op value

Using resource ^C

IRI http://w3id.org/CEON/ontology/actor/UsingResource

DescriptionThe relation where the role of the actor is the user of a certain resource.

Sub Class Of Resource Relation^C

Equivalentclass Resource Relation and http://w3id.org/CEON/ontology/actorODP/participantRole

^{op} value

Viewing resource ^C

IRI http://w3id.org/CEON/ontology/actor/ViewingResource

DescriptionThe 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 http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole <a href="http://waid.org/ceon/ontology/actorODP/participantRole<

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

http://w3id.org/CEON/ontology/actorODP/participantRole^{op} some and http://w3id.org/CEON/ontology/actorODP/participatingActor^{op} some and http://w3id.org/CEON/ontology/actorODP/Participation^c and http://w3id.org/CEON/ontology/actorODP/participatingResource^{op} some

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

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/process/Process

Resource ^C

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

Object Properties

capability extent op

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

DescriptionThe 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 http://w3id.org/CEON/ontology/actorODP/capabilityProperty http://waid.org/ceon/ontology/actorODP/capabilityProperty http://waid.

Domain http://w3id.org/CEON/ontology/actorODP/Capability

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 http://w3id.org/CEON/ontology/actorODP/capabilityProperty http://waid.org/ceon/ontology/actorODP/capabilityProperty http://waid.

Domain http://w3id.org/CEON/ontology/actorODP/Capability

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
<u>created</u> ap	
IRI	http://purl.org/dc/terms/created
<u>creator</u> ^{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#covers Requirements

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