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/0.1/actor/

Version Info

0.1

Preferred Namespace Prefix

actor

Preferred Namespace Uri

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

Description

The Actor module of CEON (Circular Economy Ontology Network).

Covers Requirements

What are the roles of this actor in this circular value network/process/in relation to this resource? What are the capabilities of this actor?

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

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

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

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

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

^{op} value

Circular Value Network Participation ^c

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

DescriptionA 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/participationIn^{op} some and 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/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 Resource Relation and http://w3id.org/CEON/ontology/actorODP/participantRole

op value

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 value

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

op value

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

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

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

http://w3id.org/CEON/ontology/actorODP/participationIn^{op} some and http://w3id.org/CEON/ontology/actorODP/participantRole^{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 <a href="http://waid.org/ceon.org/ceo

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

Equivalent classResource Relation and http://w3id.org/CEON/ontology/actorODP/participantRole

^{op} value

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 value

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

and Resource Relation^c

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 value

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

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

and Resource Relation^c

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

op value

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/Participation^c and

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

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

needed resource relations op

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

DescriptionIn 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.org/ceon/ontology/actorODP/capabilityProperty http://waid.org/ceon/ontology/actorODP/capabilityProperty http://waid.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