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://creativecommons.org/licenses/by/4.0/

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 Cvn Role ^c

Sub Class Of ActorCollaborationRole^C

Named Individuals

collectorⁿⁱ
dismantlerⁿⁱ
manufacturerⁿⁱ
recyclerⁿⁱ
resellerⁿⁱ
sellerⁿⁱ
supplierⁿⁱ
userⁿⁱ

Actor Collaboration Role C

Sub Class Of actorODP:Role^C

Super Class Of

ActorCVNRole^C
ActorProcessRole^C

Actor Process Role C

Sub Class Of ActorCollaborationRole^C

Actor Resource Role C

Sub Class Of actorODP:Role^C

Named Individuals

buyerⁿⁱ
consumerⁿⁱ
issuerⁿⁱ
ownerⁿⁱ
producerⁿⁱ
providerⁿⁱ
resellerⁿⁱ
sellerⁿⁱ
supplierⁿⁱ
updaterⁿⁱ
userⁿⁱ

Buying Resource ^C

Sub Class Of actorODP:ResourceRelation^C

<u>viewerⁿⁱ</u>

<u>Equivalentclass</u> <u>actorODP:participantRole^{op} value buyer^c and actorODP:ResourceRelation^c</u>

Cvn Participation ^c

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

Sub Class Of

actorODP:CollaborationParticipation^C

actorODP:participatingActor^{op} some actorODP:Actor^c and

actorODP:CollaborationParticipation^c and actorODP:participantRole^{op} some

<u>ActorCVNRole^c</u> and <u>actorODP:participationIn^{op}</u> some

http://w3id.org/CEON/ontology/cvn/CVNC

Consuming Resource ^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:participantRole op value consumer and actorODP:ResourceRelation

С

Issuing Resource ^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:participantRole op value issuer and actorODP:ResourceRelation actorODP:

Manufacturing Resource ^c

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole op value

manufacturer ^c

Owning Resource ^C

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

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole op value owner owner

Process Participation ^C

Sub Class Of

<u>actorODP:CollaborationParticipation</u>^C <u>actorODP:participationIn</u>^{op} some

http://w3id.org/CEON/ontology/processODP/Process^C and

 $\frac{actorODP:CollaborationParticipation}{c} \frac{c}{and} \frac{actorODP:participantRole}{actorCVNRole} \frac{c}{and} \frac{actorODP:participatingActor}{and} \frac{c}{actorODP:Actor} \frac{c}{and} \frac{actorODP:Actor}{and} \frac{c}{and} \frac{actorODP:participatingActor}{and} \frac{c}{and} \frac{actorODP:Actor}{and} \frac{c}{and} \frac$

Producing Resource ^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:participantRole op value producer and actorODP:ResourceRelation actorOD

Providing Resource^C

Sub Class Of actorODP:ResourceRelation^C

<u>Equivalentclass</u> <u>actorODP:participantRole^{op} value provider^c and actorODP:ResourceRelation^c</u>

Reselling Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole population reseller actorODP:

Selling Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole op value seller actorODP:

Supplying Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole popular supplier actor supplier act

Updating Resource ^C

Sub Class Of actorODP:ResourceRelation C

Equivalentclass actorODP:participantRole op value updater and actorODP:ResourceRelation actorODP:ResourceRelation actorODP:ResourceRelation actorODP:

Using Resource ^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:participantRole op value user and actorODP:ResourceRelation actorODP:Re

Viewing Resource ^C

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

Sub Class Of actorODP:ResourceRelation^C

<u>Equivalentclass</u> <u>actorODP:ResourceRelation^c and actorODP:participantRole^{op} value <u>viewer^c</u></u>

Actor ^C

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

Capability ^C

In Domain Of

<u>capabilityExtent</u>^{op}

neededResourceRelation op

Collaboration Participation ^c

http://w3id.org/CEON/ontology/actorODP/CollaborationPartic

ipation

Super Class Of <u>CVNParticipation</u>^C

ProcessParticipation^C

Participation ^C

http://w3id.org/CEON/ontology/actorODP/Participation

Resource Relation ^c IRI http://w3id.org/CEON/ontology/actorODP/ResourceRelation **Sub Class Of** actorODP:participatingActor^{op} some actorODP:Actor^c and actorODP:participatingResource op some http://w3id.org/CEON/ontology/resourceODP/Resource^c and actorODP:participantRole op some ActorResourceRole and actorODP:Participation^C **Super Class Of** <u>BuyingResource</u>^C <u>ConsumingResource</u>^C <u>IssuingResource</u>^C ManufacturingResource^C OwningResource C ProducingResource^c <u>ProvidingResource</u>^C ResellingResource^c SellingResource^C <u>SupplyingResource</u>^C <u>UpdatingResource</u>^c <u>UsingResource</u>^c <u>ViewingResource</u>^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 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

Sub Property Of actorODP:capabilityProperty op

Domain actorODP:Capability^C

needed resource relation op

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

Sub Property Of actorODP:capabilityProperty op

Domain actorODP:Capability^C

capability property op

Super Property Of

- capabilityExtent op
- neededResourceRelation op

participant role op

participating actor op

participating resource op

ce

participation in op

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
```