Circular Economy Ontology Network (CEON) - Actor Module

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Actor Module

Creator

Huanyu Li

Contributor

Eva Blomqvist

Mikael Lindecrantz

Robin Keskisärkkä

Date Created

2024-11-13

License

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

Version Iri

http://w3id.org/CEON/ontology/actor/0.3/

Version Info

0.3

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

In addition to requirements covered by imported ODPs, covers the following requirements from Onto-DESIDE D3.2: C0-1, C0-2, C3-4, T3-4

Classes

Actor Cvn Role^C

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

Sub Class Of ActorCollaborationRole C

Named Individuals

collectorⁿⁱ
dismantlerⁿⁱ
manufacturerⁿⁱ
recyclerⁿⁱ
resellerⁿⁱ
sellerⁿⁱ
supplierⁿⁱ
userⁿⁱ

Actor Collaboration Role C

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

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
supplierⁿⁱ

updaterⁿⁱ userⁿⁱ viewerⁿⁱ

Buying Resource ^C

Sub Class Of actorODP:ResourceRelation C

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

Cvn Participation C

Sub Class Of

actorODP:CollaborationParticipation^C

actorODP:participationIn^{OP} some http://w3id.org/CEON/ontology/cvn/CVN^C and

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

<u>actorODP:CollaborationParticipation</u> and <u>actorODP:participantRole</u> op some

ActorCVNRole^C

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:ResourceRelation and actorODP:participantRole provided issuer

Manufacturing Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole op value

manufacturer ^c

Organisation ^C

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

Is Defined By ISO 59004:2024 - 3.4.1 organization

Description Person or group

Person or group of people that has its own functions with responsibilities, authorities, and relationships to achieve its objectives. The concept of organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private (e.g. foundation, union, association, agency, municipality, region, country, intergovernmental agencies). A group of organizations can also be considered

as an organization that has, alone or collectively, their own objectives.

Sub Class Of actorODP:Actor C

Owning Resource^C

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

Sub Class Of actorODP:ResourceRelation C

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

Person^C

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

Sub Class Of actorODP:Actor^C

Process Participation ^C

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

Sub Class Of

actorODP:CollaborationParticipation^C

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

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

ActorProcessRole c and actorODP:participationIn op some http://w3id.org/CEON/ontology/processODP/Process c

Producing Resource^C

Sub Class Of actorODP:ResourceRelation^C

<u>Equivalentclass</u> <u>actorODP:ResourceRelation</u> and <u>actorODP:participantRole</u> value <u>producer</u>

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

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

Sub Class Of actorODP:ResourceRelation^C

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

Selling Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:participantRole^{op} value seller^c and actorODP:ResourceRelation^c

Interested partyStakeholder ^c

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

Is Defined By ISO 59004:2024 - 3.4.2 interested party, stakeholder

Description

Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity. To "perceive itself to be affected" means the

perception has been made known to the organization.

Sub Class Of Organisation or Person

Supplying Resource^C

Sub Class Of actorODP:ResourceRelation^C

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

Updating Resource ^C

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

Sub Class Of actorODP:ResourceRelation^C

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

Using Resource ^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole pop value user

Viewing Resource C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole properties value viewer actorODP:

Actor ^C

Super Class Of

Organisation^c Person^c Capability ^C

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

In Domain Of

capabilityExtent op

neededResourceRelation op

Collaboration Participation ^C

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

ipation

Super Class Of

CVNParticipation^c
ProcessParticipation^c

Participation ^C

Resource Relation ^c

Sub Class Of actorODP:participatingResource op some

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

actorODP:Actor^c and actorODP:participantRole^{op} some ActorResourceRole^c

Super Class Of

BuyingResource^C
ConsumingResource^C
IssuingResource^C
ManufacturingResource^C
OwningResource^C
ProducingResource^C
ProvidingResource^C
ProvidingResource^C
ProvidingResource^C
ProvidingResource^C
ProvidingResource^C

ResellingResource^C
SellingResource^C
SupplyingResource^C
UpdatingResource^C
UsingResource^C
ViewingResource^C

Role C

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

Collaboration ^C

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

Super Class Of http://w3id.org/CEON/ontology/cvn/CVN

Process ^C

IRI http://w3id.org/CEON/ontology/processODP/Process

Resource ^C

Object Properties

capability extent op

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

Sub Property Of actorODP:capabilityProperty op

Domain actorODP:Capability^C

needed resource relation op

Sub Property Of actorODP:capabilityProperty op

Domain actorODP:Capability^C

capability property op

Super Property Of

• capabilityExtentop

• neededResourceRelation op

participant role op

participating actor op		
IRI	http://w3id.org/CEON/ontology/actorODP/participatingActor	
participatir	ng resource ^{op}	
IRI	<pre>http://w3id.org/CEON/ontology/actorODP/participatingResour ce</pre>	
participatio	on 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 names	pace prefix ^{ap}
IRI	http://purl.org/vocab/vann/preferredNamespacePrefix

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