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/0.3/

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
sellerni
supplierni
updaterni
userni

Buying Resource^C

Sub Class Of actorODP:ResourceRelation^C

<u>viewer</u>ni

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

Cvn Participation ^c

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

Sub Class Of

actorODP:CollaborationParticipation^C

actorODP:CollaborationParticipation^C and actorODP:participantRole^{Op} some

ActorCVNRole^C and actorODP:participatingActor^{Op} some actorODP:Actor^C and
actorODP:participationIn^{Op} some http://w3id.org/CEON/ontology/cvn/CVNC

Consuming Resource c

Sub Class Of actorODP:ResourceRelation^C

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

С

Issuing Resource ^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole properties and actorODP:participantRole properties actorODP:ResourceRelation actorODP:participantRole properties actorODP:ResourceRelation actorODP:

Manufacturing Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:participantRole op value manufacturer and

actorODP:ResourceRelation^C

Organisation ^C

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

Is Defined By ISO 59004:2024 - 3.4.1 organization

DescriptionPerson 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
hasOrganisationLocation^{op} only OrganisationLocation^c and

hasOrganisationLocation op some OrganisationLocation c

In Domain Of hasOrganisationLocation op

hasOrganisationName dp

Restriction <u>hasOrganisationName^dp</u> some <u>Organisation</u>^c

Organisation Location ^c

Sub Class Of http://w3id.org/CEON/ontology/location/Location

In Range Of hasOrganisationLocation op

Restriction

http://w3id.org/CEON/ontology/location/hasCity_max 1 OrganisationLocation http://w3id.org/CEON/ontology/location/hasCountry_max 1 OrganisationLocation

С

http://w3id.org/CEON/ontology/location/hasPostalCode_max 1

OrganisationLocation^c

http://w3id.org/CEON/ontology/location/hasStreetAddress_max_1

OrganisationLocation^c

Owning Resource ^C

Sub Class Of actorODP:ResourceRelation^C

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

Person^c

Sub Class Of actorODP:Actor^C

Process Participation ^C

Sub Class Of

actorODP:CollaborationParticipation^C

actorODP:CollaborationParticipation^c and actorODP:participatingActor^{op} some actorODP:Actor^c and actorODP:participantRole^{op} some ActorProcessRole^c and

actorODP:participationIn op some

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

Producing Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole producer

Providing Resource^C

Sub Class Of actorODP:ResourceRelation^C

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

Reselling Resource^C

Sub Class Of actorODP:ResourceRelation C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole popular reseller actorODP:

Selling Resource^C

Sub Class Of actorODP:ResourceRelation^C

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

Stakeholder ^c

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

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

DescriptionPerson 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 Person^c or Organisation^c

Supplying Resource^C

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:participantRole op value supplier and actorODP:ResourceRelation

Updating Resource c

Sub Class Of actorODP:ResourceRelation^C

Equivalentclass actorODP:ResourceRelation and actorODP:participantRole populater actorODP:ResourceRelation actorODP:participantRole populater actorODP:ResourceRelation actorODP:participantRole populater actorODP:ResourceRelation actorODP:participantRole populater actorODP:ResourceRelation actorODP:participantRole populater actorO

Using Resource^C

Sub Class Of actorODP:ResourceRelation^C

<u>Equivalentclass</u> <u>actorODP:participantRole op value user and actorODP:ResourceRelation actorODP</u>

Viewing Resource^C

Sub Class Of actorODP:ResourceRelation C

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

Actor ^C

Super Class Of

Organisation^c Person^c

Capability ^C

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

In Domain Of

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

 $\underline{neededResourceRelation}^{op}$

Collaboration Participation ^C

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

ipation

Super Class Of

CVNParticipation^C
ProcessParticipation^C

Participation ^C

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

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

Sub Property Of actorODP:capabilityProperty op

Domain actorODP:Capability^C

has organisation location op

n

Sub Property Of http://w3id.org/CEON/ontology/location/hasLocation

Domain Organisation^C

Range OrganisationLocation^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

participating resource op

ce

participation in ^{op})
IRI	http://w3id.org/CEON/ontology/actorODP/participationIn

Datatype Properties

has organisation name dp

IRI http://w3id.org/CEON/ontology/actor/has0rganisationName

Domain Organisation C

Range xsd:string

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/
xsd
    http://www.w3.org/2001/XMLSchema#
```

Legend

С	Classes
ор	Object Properties
dp	Datatype Properties
ap	Annotation Properties