

# Circular Economy Ontology Network (CEON) - Actor ODP

## Metadata

**IRI**

<http://w3id.org/CEON/ontology/actorODP/>

**Title**

Circular Economy Ontology Network (CEON) - Actor ODP

**Creator**

Eva Blomqvist

**Contributor**

Huanyu Li

Mikael Lindecrantz

Robin Keskisärkkä

**Date Created**

2023-03-17

**License**

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

**Version Iri**

<http://w3id.org/CEON/ontology/actorODP/0.2/>

**Version Info**

0.2

**Preferred Namespace Prefix**

actorODP

**Preferred Namespace Uri**

<http://w3id.org/CEON/ontoloy/actorODP/>

**Description**

A core ODP of the CEON ontology network, defining aspects of the actor concept.

**Covers Requirements**

Covers the following requirements from Onto-DESIDE D3.1: CVN-Process-3, CVN-Actor-1,4,6,7, CVN-Competency-3, CVN-Information-4, C11-1, C11-3, E1-6,6,6,9, E4-10

## Classes

Actor <sup>C</sup>	
IRI	<a href="http://w3id.org/CEON/ontology/actorODP/Actor">http://w3id.org/CEON/ontology/actorODP/Actor</a>
In Domain Of	<a href="#">actorType</a> <sup>op</sup> <a href="#">hasActorLocation</a> <sup>op</sup>
In Range Of	<a href="#">capabilityOf</a> <sup>op</sup> <a href="#">participatingActor</a> <sup>op</sup>

Actor Type <sup>C</sup>	
IRI	<a href="http://w3id.org/CEON/ontology/actorODP/ActorType">http://w3id.org/CEON/ontology/actorODP/ActorType</a>
In Range Of	<a href="#">actorType</a> <sup>op</sup>

## Capability<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/Capability">http://w3id.org/CE0N/ontology/actor0DP/Capability</a>
<b><u>In Domain Of</u></b>	<a href="#">capabilityOf</a> <sup>op</sup> <a href="#">capabilityProperty</a> <sup>op</sup>
<b><u>In Range Of</u></b>	<a href="#">basedOnCapability</a> <sup>op</sup>

## Collaboration Participation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/CollaborationParticipation">http://w3id.org/CE0N/ontology/actor0DP/CollaborationParticipation</a>
<b><u>Sub Class Of</u></b>	<a href="#">Participation</a> <sup>c</sup>
<b><u>In Domain Of</u></b>	<a href="#">basedOnCapability</a> <sup>op</sup> <a href="#">participationIn</a> <sup>op</sup>

## Participation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/Participation">http://w3id.org/CE0N/ontology/actor0DP/Participation</a>
<b><u>Sub Class Of</u></b>	<a href="#">participationTimePoint</a> <sup>dp</sup> <i>exactly 1</i> <a href="#">1</a> <sup>c</sup> <i>or</i> <a href="#">participationStartTime</a> <sup>dp</sup> <i>exactly 1</i> <a href="#">1</a> <sup>c</sup>
<b><u>In Domain Of</u></b>	<a href="#">participantRole</a> <sup>op</sup> <a href="#">participatingActor</a> <sup>op</sup> <a href="#">participationEndTime</a> <sup>dp</sup> <a href="#">participationStartTime</a> <sup>dp</sup> <a href="#">participationTimePoint</a> <sup>dp</sup>
<b><u>Super Class Of</u></b>	<a href="#">CollaborationParticipation</a> <sup>c</sup> <a href="#">ResourceParticipation</a> <sup>c</sup> <a href="#">ResourceRelation</a> <sup>c</sup>

## Resource Participation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/ResourceParticipation">http://w3id.org/CE0N/ontology/actor0DP/ResourceParticipation</a>
<b><u>Sub Class Of</u></b>	<a href="#">Participation</a> <sup>c</sup>
<b><u>In Domain Of</u></b>	<a href="#">participatingObject</a> <sup>op</sup> <a href="#">participatingSubject</a> <sup>op</sup>

## Resource Relation<sup>c</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/ResourceRelation">http://w3id.org/CE0N/ontology/actor0DP/ResourceRelation</a>
<b><u>Sub Class Of</u></b>	<a href="#">Participation</a> <sup>c</sup>
<b><u>In Domain Of</u></b>	<a href="#">participatingResource</a> <sup>op</sup>

## Role<sup>c</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor0DP/Role>

**In Range Of** [participantRole](#)<sup>op</sup>

## Collaboration<sup>c</sup>

**IRI** <http://w3id.org/CE0N/ontology/cvn/Collaboration>

## Process<sup>c</sup>

**IRI** <http://w3id.org/CE0N/ontology/process0DP/Process>

## Resource<sup>c</sup>

**IRI** <http://w3id.org/CE0N/ontology/resource0DP/Resource>

**In Range Of** [participatingResource](#)<sup>op</sup>

## Geometry<sup>c</sup>

**IRI** <http://www.opengis.net/ont/geosparql#Geometry>

**Description** A coherent set of direct positions in space. The positions are held within a Spatial Reference System (SRS).

**In Domain Of**

- [as GML](#)<sup>dp</sup>
- [as GeoJSON](#)<sup>dp</sup>
- [as WKT](#)<sup>dp</sup>

**In Range Of** [hasActorLocation](#)<sup>op</sup>

## Object Properties

### actor type<sup>op</sup>

**IRI** <http://w3id.org/CE0N/ontology/actor0DP/actorType>

**Domain** [Actor](#)<sup>c</sup>

**Range** [ActorType](#)<sup>c</sup>

## based on capability<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/basedOnCapability">http://w3id.org/CE0N/ontology/actor0DP/basedOnCapability</a>
<b>Domain</b>	<a href="#">CollaborationParticipation</a> <sup>c</sup>
<b>Range</b>	<a href="#">Capability</a> <sup>c</sup>

## capability of<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/capabilityOf">http://w3id.org/CE0N/ontology/actor0DP/capabilityOf</a>
<b>Domain</b>	<a href="#">Capability</a> <sup>c</sup>
<b>Range</b>	<a href="#">Actor</a> <sup>c</sup>

## capability property<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/capabilityProperty">http://w3id.org/CE0N/ontology/actor0DP/capabilityProperty</a>
<b>Domain</b>	<a href="#">Capability</a> <sup>c</sup>

## has actor location<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/hasActorLocation">http://w3id.org/CE0N/ontology/actor0DP/hasActorLocation</a>
<b>Domain</b>	<a href="#">Actor</a> <sup>c</sup>
<b>Range</b>	<a href="#">Geometry</a> <sup>c</sup>

## participant role<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participantRole">http://w3id.org/CE0N/ontology/actor0DP/participantRole</a>
<b>Domain</b>	<a href="#">Participation</a> <sup>c</sup>
<b>Range</b>	<a href="#">Role</a> <sup>c</sup>

## participating actor<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participatingActor">http://w3id.org/CE0N/ontology/actor0DP/participatingActor</a>
<b>Domain</b>	<a href="#">Participation</a> <sup>c</sup>
<b>Range</b>	<a href="#">Actor</a> <sup>c</sup>

## participating object<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participatingObject">http://w3id.org/CE0N/ontology/actor0DP/participatingObject</a>
<b>Domain</b>	<a href="#">ResourceParticipation</a> <sup>c</sup>

## participating resource<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participatingResource">http://w3id.org/CE0N/ontology/actor0DP/participatingResource</a>
<b>Domain</b>	<a href="#">ResourceRelation</a> <sup>c</sup>
<b>Range</b>	<a href="#">resourceODP:Resource</a> <sup>c</sup>

## participating subject<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participatingSubject">http://w3id.org/CE0N/ontology/actor0DP/participatingSubject</a>
<b>Domain</b>	<a href="#">ResourceParticipation</a> <sup>c</sup>

## participation in<sup>op</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participationIn">http://w3id.org/CE0N/ontology/actor0DP/participationIn</a>
<b>Domain</b>	<a href="#">CollaborationParticipation</a> <sup>c</sup>
<b>Range</b>	<a href="#">processODP:Process</a> <sup>c</sup> or <a href="#">cvn:Collaboration</a> <sup>c</sup>

## Datatype Properties

### participation end time<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participationEndTime">http://w3id.org/CE0N/ontology/actor0DP/participationEndTime</a>
<b>Domain</b>	<a href="#">Participation</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:gYear</a> <sup>c</sup> or <a href="#">xsd:date</a> <sup>c</sup> or <a href="#">xsd:dateTime</a> <sup>c</sup> or <a href="#">xsd:gMonthYear</a> <sup>c</sup>

### participation start time<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participationStartTime">http://w3id.org/CE0N/ontology/actor0DP/participationStartTime</a>
<b>Domain</b>	<a href="#">Participation</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:date</a> <sup>c</sup> or <a href="#">xsd:gYear</a> <sup>c</sup> or <a href="#">xsd:dateTime</a> <sup>c</sup> or <a href="#">xsd:gMonthYear</a> <sup>c</sup>

### participation time point<sup>dp</sup>

<b>IRI</b>	<a href="http://w3id.org/CE0N/ontology/actor0DP/participationTimePoint">http://w3id.org/CE0N/ontology/actor0DP/participationTimePoint</a>
<b>Domain</b>	<a href="#">Participation</a> <sup>c</sup>
<b>Range</b>	<a href="#">xsd:gMonthYear</a> <sup>c</sup> or <a href="#">xsd:gYear</a> <sup>c</sup> or <a href="#">xsd:dateTime</a> <sup>c</sup> or <a href="#">xsd:date</a> <sup>c</sup>

as GML<sup>dp</sup>

<b>IRI</b>	<a href="http://www.opengis.net/ont/geosparql#asGML">http://www.opengis.net/ont/geosparql#asGML</a>
<b>Is Defined By</b>	<a href="http://www.opengis.net/spec/geosparql/1.0/req/geometry-extension/geometry-as-wkt-literal">http://www.opengis.net/spec/geosparql/1.0/req/geometry-extension/geometry-as-wkt-literal</a>
<b>Description</b>	The GML serialization of a Geometry.
<b>Domain</b>	<a href="#">Geometry</a> <sup>c</sup>
<b>Range</b>	<a href="#">geo:gmlLiteral</a>

as GeoJSON<sup>dp</sup>

<b>IRI</b>	<a href="http://www.opengis.net/ont/geosparql#asGeoJSON">http://www.opengis.net/ont/geosparql#asGeoJSON</a>
<b>Is Defined By</b>	<a href="http://www.opengis.net/spec/geosparql/1.0/req/geometry-extension/geometry-as-wkt-literal">http://www.opengis.net/spec/geosparql/1.0/req/geometry-extension/geometry-as-wkt-literal</a>
<b>Description</b>	The GeoJSON serialization of a Geometry.
<b>Domain</b>	<a href="#">Geometry</a> <sup>c</sup>
<b>Range</b>	<a href="#">geo:geoJSONLiteral</a>

as WKT<sup>dp</sup>

<b>IRI</b>	<a href="http://www.opengis.net/ont/geosparql#asWKT">http://www.opengis.net/ont/geosparql#asWKT</a>
<b>Is Defined By</b>	<a href="http://www.opengis.net/spec/geosparql/1.0/req/geometry-extension/geometry-as-wkt-literal">http://www.opengis.net/spec/geosparql/1.0/req/geometry-extension/geometry-as-wkt-literal</a>
<b>Description</b>	The WKT serialization of a Geometry.
<b>Domain</b>	<a href="#">Geometry</a> <sup>c</sup>
<b>Range</b>	<a href="#">geo:wktLiteral</a>

## Annotation Properties

contributor<sup>ap</sup>

<b>IRI</b>	<a href="http://purl.org/dc/terms/contributor">http://purl.org/dc/terms/contributor</a>
------------	---

created<sup>ap</sup>

<b>IRI</b>	<a href="http://purl.org/dc/terms/created">http://purl.org/dc/terms/created</a>
------------	---

creator<sup>ap</sup>

<b>IRI</b>	<a href="http://purl.org/dc/terms/creator">http://purl.org/dc/terms/creator</a>
------------	---

description <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/description">http://purl.org/dc/terms/description</a>
license <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/license">http://purl.org/dc/terms/license</a>
title <sup>ap</sup>	
IRI	<a href="http://purl.org/dc/terms/title">http://purl.org/dc/terms/title</a>
preferred namespace prefix <sup>ap</sup>	
IRI	<a href="http://purl.org/vocab/vann/preferredNamespacePrefix">http://purl.org/vocab/vann/preferredNamespacePrefix</a>
preferred namespace uri <sup>ap</sup>	
IRI	<a href="http://purl.org/vocab/vann/preferredNamespaceUri">http://purl.org/vocab/vann/preferredNamespaceUri</a>
covers requirements <sup>ap</sup>	
IRI	<a href="http://www.ontologydesignpatterns.org/schemas/cpannotation-schema.owl#coversRequirements">http://www.ontologydesignpatterns.org/schemas/cpannotation-schema.owl#coversRequirements</a>
definition <sup>ap</sup>	
IRI	<a href="http://www.w3.org/2004/02/skos/core#definition">http://www.w3.org/2004/02/skos/core#definition</a>
pref label <sup>ap</sup>	
IRI	<a href="http://www.w3.org/2004/02/skos/core#prefLabel">http://www.w3.org/2004/02/skos/core#prefLabel</a>

## Namespaces

: <http://w3id.org/CEON/ontology/actorODP/>  
 cvn <http://w3id.org/CEON/ontology/cvn/>  
 dcterms <http://purl.org/dc/terms/>  
 geo <http://www.opengis.net/ont/geosparql#>  
 odp <http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#>  
 owl <http://www.w3.org/2002/07/owl#>

**processODP**

<http://w3id.org/CEON/ontology/processODP/>

**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#>

**resourceODP**

<http://w3id.org/CEON/ontology/resourceODP/>

**skos**

<http://www.w3.org/2004/02/skos/core#>

**vann**

<http://purl.org/vocab/vann/>

**xsd**

<http://www.w3.org/2001/XMLSchema#>

## Legend

c	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties