

Circular Economy Ontology Network (CEON) - Actor ODP

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Actor ODP

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Version Iri

<http://w3id.org/CEON/ontology/actorODP/0.1/>

Version Info

0.1

Preferred Namespace Prefix

actorODP

Preferred Namespace Uri

<https://w3id.org/CEON/ontology/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 ^c | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/Actor |
| Description | An agent able to act in the context of a circular value network, e.g. an organisation, person. |
| In Domain Of | has actor type ^{op} |
| In Range Of | Relates to the actor holding the capability. ^{op} has participating actor ^{op} |

Actor Type^C

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/ActorType |
| Description | The type of an actor, e.g. the type of company, or a specific subtype based on the organisations capabilities. |
| In Range Of | has actor type ^{op} |

Capability^C

| | |
|---------------------|--|
| IRI | http://w3id.org/CEON/ontology/actorODP/Capability |
| Description | Something that the actor is capable of doing, e.g. performing a certain role in a process, based on some properties, such as access to infrastructure, resources and know-how. |
| In Domain Of | Relates to the actor holding the capability. ^{op} capability property ^{op} |
| In Range Of | based on capability ^{op} |

Collaboration participation^C

| | |
|---------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/CollaborationParticipation |
| Description | The relation involving the role of a certain actor with respect to a value network or a process in such a network, e.g. an organisation (actor) acting as the recycler (role) in a glass recycling value network (network) at a specific point or period in time. Or an organisation (actor) acting as the dismantler (role) in a dismantling step of a building deconstruction process (process step) at a specific point or period in time. |
| Sub Class Of | Participation ^C |
| In Domain Of | based on capability ^{op} is a participation in ^{op} |

Participation^c

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

Sub Class Of [time point](#)^{dp} *exactly 1* [1](#)^c *or* [start time](#)^{dp} *exactly 1* [1](#)^c

In Domain Of [has participant role](#)^{op}
[has participating actor](#)^{op}
[start time](#)^{dp}
[time point](#)^{dp}

Super Class Of [Collaboration participation](#)^c
[Resource Relation](#)^c

Resource Relation^c

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

Description The relation involving the role of a certain actor with respect to a certain resource, e.g. an organisation or individual (actor) owning (role) a specific product (resource) at a specific point or period in time.

Sub Class Of [Participation](#)^c

In Domain Of [has participating resource](#)^{op}

Role^c

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

Description A role that an actor can take in a specific context. Applies both to roles in the context of resources, such as owner, manufacturer, reseller etc. of that resource, as well as roles in relation to a circular value network, such as recycler, dismantler, transporter etc., in relation to a material flow.

In Range Of [has participant role](#)^{op}

Collaboration^c

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

Description A collaboration between a set of actors.

Process^c

IRI <http://w3id.org/CEON/ontology/process/Process>

Resource^c

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

In Range Of [has participating resource^{op}](#)

Object Properties

has actor type^{op}

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

Description The type of the actor.

Domain [Actor^c](#)

Range [Actor Type^c](#)

based on capability^{op}

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

Description An actor participates in a collaboration based on that it has some capability that is useful for the collaboration.

Domain [Collaboration participation^c](#)

Range [Capability^c](#)

Relates to the actor holding the capability.capability of^{op}

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

Domain [Capability^c](#)

Range [Actor^c](#)

capability property^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/capabilityProperty |
| Description | Relates some properties to the capability, such as the parameters of it, or the needed resources. |
| Domain | Capability ^c |

has location^{op}

| | |
|---------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/hasLocation |
| Domain | Actor ^c or resourceODP:Resource ^c |

has participant role^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/participantRole |
| Description | Holds the value of the role of the participant in this participation relation. |
| Domain | Participation ^c |
| Range | Role ^c |

has participating actor^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/participatingActor |
| Description | Holds the value of the actor involved in this participation relation. |
| Domain | Participation ^c |
| Range | Actor ^c |

has participating resource^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/participatingResource |
| Description | The resource that this participation relation relates to, i.e. for which the actor holds the specified role. |
| Domain | Resource Relation ^c |
| Range | resourceODP:Resource ^c |

is a participation in^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/participationIn |
| Description | The collaboration or process that this participation relates to. |
| Domain | Collaboration participation ^c |
| Range | Collaboration ^c or process:Process ^c |

Datatype Properties

end time^{dp}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/participationEndTime |
| Description | The end of a time interval. |
| Range | xsd:gMonthYear ^c or xsd:dateTime ^c or xsd:date ^c or xsd:gYear ^c |

start time^{dp}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/participationStartTime |
| Description | The start of a time interval. |
| Domain | Participation ^c |
| Range | xsd:date ^c or xsd:gYear ^c or xsd:dateTime ^c or xsd:gMonthYear ^c |

time point^{dp}

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

Description The point in time when something took place or was valid.

Domain [Participation](#)^c

Range [xsd:date](#)^c or [xsd:dateTime](#)^c or [xsd:gMonthYear](#)^c or [xsd:gYear](#)^c

Annotation Properties

contributor^{ap}

IRI <http://purl.org/dc/terms/contributor>

creator^{ap}

IRI <http://purl.org/dc/terms/creator>

description^{ap}

IRI <http://purl.org/dc/terms/description>

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/actorODP/>

cvn

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

dcterms

<http://purl.org/dc/terms/>

odp

<http://www.ontologydesignpatterns.org/schemas/cpannotationschema.owl#>

owl

<http://www.w3.org/2002/07/owl#>

process

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

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/>

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