## Circular Economy Ontology Network (CEON) - Process ODP

#### Metadata

IRI

http://w3id.org/CEON/ontology/pr
ocessODP/

Title

Circular Economy Ontology Network (CEON) - Process ODP

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**Date Created** 

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**Version Iri** 

http://w3id.org/CEON/ontology/processODP/0.2/

**Version Info** 

0.2

**Preferred Namespace Prefix** 

processODP

**Preferred Namespace Uri** 

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

**Description** 

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

**Covers Requirements** 

Covers the following requirements from Onto-DESIDE D3.1: CVN-Process-3,4,5, C3-1, C4-2, C4-5, C4-7, C4-9, C13-2, E2-6

## Classes

Process <sup>C</sup>	
IRI	http://w3id.org/CE0 N/ontology/process0 DP/Process
Description	An activity in the context of a circular value network, handling resources.
In Domain Of	hasPart <sup>op</sup> has process execution <sup>op</sup> has process type <sup>op</sup> nextProcess <sup>op</sup> resultingSituation <sup>op</sup> occursAtTime <sup>dp</sup>
In Range Of	hasPart <sup>op</sup> nextProcess <sup>op</sup>
Super Class Of	<u>Transformation</u> <sup>C</sup>

### Process execution <sup>C</sup>

http://w3id.org/CE0

N/ontology/process0 DP/ProcessExecution

**Description** An execution of a specific

process.

In Domain Of hasExecutionInput<sup>op</sup>

<u>hasExecutionOutput<sup>op</sup></u>

nextExecution op

occursAtLocation op

In Range Of

has process execution op

<u>nextExecution</u> op

Super Class Of <u>TransformationExecution</u>

С

## Process type <sup>C</sup>

http://w3id.org/CE0

N/ontology/process0

DP/ProcessType

**Description** The type of a process.

In Range Of has process type op

#### Situation <sup>C</sup>

http://w3id.org/CE0

N/ontology/process0

DP/Situation

In Domain Of is Setting For op

In Range Of

intialSituation op

<u>resultingSituation</u><sup>op</sup>

#### Transformation <sup>C</sup>

http://w3id.org/CE0

N/ontology/process0 DP/Transformation

Sub Class Of Process C

**In Domain Of** 

<u>hasInput</u><sup>op</sup>

<u>hasOutput<sup>op</sup></u>

hasTransformationExecut

ion<sup>op</sup>

intialSituation op

### Transformation Execution <sup>C</sup>

http://w3id.org/CE0

N/ontology/process0 DP/TransformationEx

ecution

Sub Class Of Process execution<sup>C</sup>

In Range Of <u>hasTransformationExecut</u>

ion<sup>op</sup>

## **Object Properties**

participation in op

http://w3id.org/CE0

N/ontology/actorODP /participationIn

has execution input  $^{\mbox{\scriptsize op}}$ 

http://w3id.org/CE0

N/ontology/process0 DP/hasExecutionInpu

t

**Domain** Process execution <sup>C</sup>

has execution output op

http://w3id.org/CE0

N/ontology/process0 DP/hasExecutionOutp

ut

**Domain** Process execution <sup>c</sup>

has input op

IRI http://w3id.org/CE0

N/ontology/process0

DP/hasInput

**Domain** Transformation C

has output op

http://w3id.org/CE0

N/ontology/process0

DP/hasOutput

**Domain** Transformation C

has part<sup>op</sup>

http://w3id.org/CE0

N/ontology/process0

DP/hasPart

Domain Process<sup>C</sup>

Range Process<sup>C</sup>

has process execution op

http://w3id.org/CE0

N/ontology/process0 DP/hasProcessExecut

ion

**Description** A process can have

specific executions.

Domain Process<sup>C</sup>

Range Process execution<sup>C</sup>

### has process type op

http://w3id.org/CE0

N/ontology/process0 DP/hasProcessType

**Description**The type of the process.

**Domain** Process<sup>C</sup>

Range Process type<sup>C</sup>

#### has transformation execution op

http://w3id.org/CE0

N/ontology/process0 DP/hasTransformatio

nExecution

**Domain** Transformation C

Range <u>TransformationExecution</u>

С

## intial situation op

http://w3id.org/CE0

N/ontology/process0 DP/intialSituation

**Domain** Transformation C

Range Situation<sup>C</sup>

is setting for op

http://w3id.org/CE0

N/ontology/process0 DP/isSettingFor

Domain Situation C

next execution op

http://w3id.org/CE0

N/ontology/process0 DP/nextExecution

Domain Process execution<sup>c</sup>

Range Process execution<sup>C</sup>

next process op

http://w3id.org/CE0

N/ontology/process0

DP/nextProcess

Domain Process<sup>C</sup>

Range Process<sup>C</sup>

occurs at location op

http://w3id.org/CE0

N/ontology/process0 DP/occursAtLocation

Domain Process execution C

## resulting situation op

IRI http://w3id.org/CE0

N/ontology/process0 DP/resultingSituati

on

Domain Process<sup>C</sup>

Range Situation<sup>C</sup>

## **Datatype Properties**

occurs at time <sup>dp</sup>

http://w3id.org/CE0

N/ontology/process0

DP/occursAtTime

Domain Process<sup>c</sup>

Range xsd:dateTime

# **Annotation Properties**

contributorap	
IRI	http://purl.org/dc/ terms/contributor
created <sup>ap</sup>	
IRI	http://purl.org/dc/ terms/created
<u>creator</u> <sup>ap</sup>	
IRI	http://purl.org/dc/ terms/creator
description ap	
IRI	http://purl.org/dc/ terms/description
license <sup>ap</sup>	
IRI	http://purl.org/dc/ terms/license
title <sup>ap</sup>	
IRI	http://purl.org/dc/ terms/title

## preferred namespace prefix ap

http://purl.org/voc

ab/vann/preferredNa

 ${\tt mespacePrefix}$ 

#### preferred namespace uri ap

IRI http://purl.org/voc

ab/vann/preferredNa

mespaceUri

### covers requirements ap

IRI http://www.ontology

designpatterns.org/
schemas/cpannotatio
nschema.owl#coversR

equirements

### Namespaces

:

http://w3id.org/CEON/ontology/pr
ocessODP/

#### actorODP

http://w3id.org/CEON/ontology/ac
torODP/

#### dcterms

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

#### odp

http://www.ontologydesignpattern
s.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

```
Clas
     ses
     Obj
     ect
ор
     Pro
     perti
     es
     Dat
     atyp
dp
     Pro
     perti
     es
     Ann
     otati
     on
ар
     Pro
     perti
     es
```