

# Circular Economy Ontology Network (CEON) - Process ODP

## Metadata

### IRI

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

### Title

Circular Economy Ontology Network (CEON) - Process ODP

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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>

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**IRI** <http://w3id.org/CEON/ontology/processODP/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** [Transformation](#)<sup>c</sup>

## Process execution<sup>c</sup>

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**IRI** <http://w3id.org/CEON/ontology/processODP/ProcessExecution>

**Description** An execution of a specific process.

**In Domain Of** [hasExecutionInput](#)<sup>op</sup>  
[hasExecutionOutput](#)<sup>op</sup>  
[nextExecution](#)<sup>op</sup>  
[occursAtLocation](#)<sup>op</sup>

**In Range Of** [has process execution](#)<sup>op</sup>  
[nextExecution](#)<sup>op</sup>

**Super Class Of** [TransformationExecution](#)<sup>c</sup>

## Process type<sup>c</sup>

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**IRI** <http://w3id.org/CEON/ontology/processODP/ProcessType>

**Description** The type of a process.

**In Range Of** [has process type](#)<sup>op</sup>

## Situation<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/Situation>

**In Domain Of** [isSettingFor](#)<sup>op</sup>

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

## Transformation<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/Transformation>

**Sub Class Of** [Process](#)<sup>c</sup>

**In Domain Of** [hasInput](#)<sup>op</sup>  
[hasOutput](#)<sup>op</sup>  
[hasTransformationExecution](#)<sup>op</sup>  
[initialSituation](#)<sup>op</sup>

## Transformation Execution<sup>c</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/TransformationExecution>

**Sub Class Of** [Process execution](#)<sup>c</sup>

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

## Object Properties

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

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

### has execution input<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/hasExecutionInput>

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

has execution output<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/hasExecutionOutput>

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

has input<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/hasInput>

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

has output<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/hasOutput>

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

has part<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/hasPart>

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

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

has process execution<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/hasProcessExecution>

**Description** A process can have specific executions.

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

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

has process type<sup>op</sup>

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**IRI** <http://w3id.org/CEON/ontology/processODP/hasProcessType>

**Description** The type of the process.

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

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

has transformation execution<sup>op</sup>

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**IRI** <http://w3id.org/CEON/ontology/processODP/hasTransformationExecution>

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

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

intial situation<sup>op</sup>

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**IRI** <http://w3id.org/CEON/ontology/processODP/intialSituation>

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

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

is setting for<sup>op</sup>

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**IRI** <http://w3id.org/CEON/ontology/processODP/isSettingFor>

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

next execution<sup>op</sup>

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**IRI** <http://w3id.org/CEON/ontology/processODP/nextExecution>

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

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

next process<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/nextProcess>

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

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

occurs at location<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/occursAtLocation>

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

resulting situation<sup>op</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/resultingSituation>

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

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

## Datatype Properties

occurs at time<sup>dp</sup>

**IRI** <http://w3id.org/CEON/ontology/processODP/occursAtTime>

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

**Range** [xsd:dateTime](#)

## Annotation Properties

contributor<sup>ap</sup>

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

created<sup>ap</sup>

**IRI** <http://purl.org/dc/terms/created>

creator<sup>ap</sup>

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

description<sup>ap</sup>

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<sup>ap</sup>

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

preferred namespace uri<sup>ap</sup>

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

covers requirements<sup>ap</sup>

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

## Namespaces

:

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

**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

c

Classes

op

Object Properties

dp

Datatype Properties

ap

Annotation Properties