

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/0.1/>

Version Info

0.1

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, CVN-Input/Output-1,3,4, C3-1, C4-2, C4-5, C4-7, C4-9, C13-2, E2-6

Classes

Process Participation^c

IRI

<http://w3id.org/CEON/ontology/actor/ProcessParticipation>

Restriction

[actorODP:participationIn](#)^{op} some [actor:ProcessParticipation](#)^c

Process^C

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

Description An activity in the context of a circular value network, handling resources.

In Domain Of [has part](#)^{op}
[hasProcessExecution](#)^{op}
[hasProcessType](#)^{op}
[next process](#)^{op}

In Range Of [has part](#)^{op}
[next process](#)^{op}

Super Class Of [Transformation](#)^C

ProcessExecution^C

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

Description An execution of a specific process.

In Range Of [hasProcessExecution](#)^{op}

ProcessType^C

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

Description The type of a process.

In Range Of [hasProcessType](#)^{op}

Situation^C

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

Description A situation that may involve some resources and actors, i.e. a state of affairs at a certain point in time.

In Domain Of [is the setting for](#)^{op}

In Range Of [initial situation](#)^{op}
[resulting situation](#)^{op}

Transformation^c

| | |
|---------------------|--|
| IRI | http://w3id.org/CEON/ontology/processODP/Transformation |
| Description | A process that transforms some situation into another situation, i.e. changes the state of affairs of some actor, resource etc. |
| Sub Class Of | Process^c |
| In Domain Of | has input^{op} has output^{op} initial situation^{op} occurs in location^{op} resulting situation^{op} |

Object Properties

participation in^{op}

| | |
|------------|---|
| IRI | http://w3id.org/CEON/ontology/actorODP/participationIn |
|------------|---|

has input^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/hasInput |
| Description | The situation before the transformation takes place, i.e. the state of affairs before the process takes places, such as the set of components before they are assembled into a product. |
| Domain | Transformation^c |

has output^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/hasOutput |
| Description | The output situation of a transformation, i.e. the state of affairs after the transformation took place. |
| Domain | Transformation^c |

has part^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/hasPart |
| Description | A process can consists of several part, which are sub-processes. |
| Domain | Process ^c |
| Range | Process ^c |

hasProcessExecution^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/hasProcessExecution |
| Description | A process can have specific executions. |
| Domain | Process ^c |
| Range | ProcessExecution ^c |

hasProcessType^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/hasProcessType |
| Description | The type of the process. |
| Domain | Process ^c |
| Range | ProcessType ^c |

initial situation^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/initialSituation |
| Description | The situation before executing a process. |
| Domain | Transformation ^c |
| Range | Situation ^c |

is the setting for^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/isSettingFor |
| Description | The thing(s) that this situation is the setting for, e.g. a resource that is in a certain state. |
| Domain | Situation ^c |

next process^{op}

| | |
|--------------------|--|
| IRI | http://w3id.org/CEON/ontology/processODP/nextProcess |
| Description | A relation between one process and the next one following it in some sequence of processes, e.g. a sequence of transformations in a material flow. |
| Domain | Process ^c |
| Range | Process ^c |

occurs in location^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/occursInLocation |
| Description | The location in which a transformation takes place, e.g. the factory location where something is manufactured. |
| Domain | Transformation ^c |

resulting situation^{op}

| | |
|--------------------|---|
| IRI | http://w3id.org/CEON/ontology/processODP/resultingSituation |
| Description | The situation after the execution of a process. |
| Domain | Transformation ^c |
| Range | Situation ^c |

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/processODP/>

actor

<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/>

Legend

c

Classes

op

Object Properties

ap

Annotation Properties