

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/0.4/>

Version Info

0.4

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

Covers the following requirements from Onto-DESIDE D3.2: CE1-1, CE3-5, CE7-4, CE7-5, CE8-2, CE10-7, CE12-1, C3-1, C4-2, C4-5, C4-7, C4-9, C13-2, E2-6

Classes

Location ^C	
IRI	http://w3id.org/CEON/ontology/location/Location
In Range Of	occursAtLocation^{OP}

Description ^C	
IRI	http://w3id.org/CEON/ontology/processODP/Description
Super Class Of	Plan^C

Event^C

IRI <http://w3id.org/CE0N/ontology/processODP/Event>

Super Class Of [Process^C](#)

Plan^C

IRI <http://w3id.org/CE0N/ontology/processODP/Plan>

Sub Class Of [Description^C](#)

Restriction [hasPart^{op}](#) some [Plan^C](#)

Plan Execution^C

IRI <http://w3id.org/CE0N/ontology/processODP/PlanExecution>

Sub Class Of [Situation^C](#)
[duringTime^{op}](#) some [TimeInterval^C](#) or [occursAtTime^{dp}](#) some [xsd:dateTime^C](#)

In Domain Of [followsExecution^{op}](#)
[precedesExecution^{op}](#)
[occursAtTime^{dp}](#)

Restriction [followsExecution^{op}](#) some [PlanExecution^C](#)
[hasPart^{op}](#) some [PlanExecution^C](#)
[isSettingFor^{op}](#) some [PlanExecution^C](#)
[precedesExecution^{op}](#) some [PlanExecution^C](#)
[satisfiesPlan^{op}](#) some [PlanExecution^C](#)

Super Class Of [Transition^C](#)

Process^C

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

Is Defined By ISO 59004:2024 - 3.5.5 process

Description Set of interrelated or interacting activities that transforms inputs into outputs.

Sub Class Of [Event^C](#)

In Domain Of [hasInput^{op}](#)
[hasOutput^{op}](#)

Super Class Of [TransformationProcess^C](#)

Situation^c

IRI	http://w3id.org/CE0N/ontology/processODP/Situation
<u>In Domain Of</u>	isSettingFor ^{op}
<u>Restriction</u>	isSettingFor ^{op} some Situation ^c
<u>Super Class Of</u>	PlanExecution ^c

Time Interval^c

IRI	http://w3id.org/CE0N/ontology/processODP/TimeInterval
<u>In Domain Of</u>	endTime ^{dp} startTime ^{dp}
<u>In Range Of</u>	duringTime ^{op}

Transformation Process^c

IRI	http://w3id.org/CE0N/ontology/processODP/TransformationProcess
<u>Sub Class Of</u>	Process ^c

Transition^c

IRI	http://w3id.org/CE0N/ontology/processODP/Transition
<u>Sub Class Of</u>	PlanExecution ^c
<u>In Domain Of</u>	affectedObject ^{op} duringTime ^{op}
<u>Restriction</u>	isSettingFor ^{op} some Transition ^c affectedObject ^{op} <i>min</i> 1 Transition ^c

Object Properties

affected object^{op}

IRI	http://w3id.org/CE0N/ontology/processODP/affectedObject
<u>Sub Property Of</u>	isSettingFor ^{op}
<u>Domain</u>	Transition ^c

during time^{op}

IRI <http://w3id.org/CE0N/ontology/processODP/duringTime>

Sub Property Of [isSettingFor^{op}](#)

Domain [Transition^c](#)

Range [TimeInterval^c](#)

follows execution^{op}

IRI <http://w3id.org/CE0N/ontology/processODP/followsExecution>

Sub Property Of [isSettingFor^{op}](#)

Domain [PlanExecution^c](#)

has input^{op}

IRI <http://w3id.org/CE0N/ontology/processODP/hasInput>

Domain [Process^c](#)

has output^{op}

IRI <http://w3id.org/CE0N/ontology/processODP/hasOutput>

Domain [Process^c](#)

has part^{op}

IRI <http://w3id.org/CE0N/ontology/processODP/hasPart>

has plan execution^{op}

IRI <http://w3id.org/CE0N/ontology/processODP/hasPlanExecution>

Description A plan can have specific executions.

is setting for^{op}

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

Super Property Of

- [affectedObject](#)^{op}
- [duringTime](#)^{op}
- [followsExecution](#)^{op}
- [occursAtLocation](#)^{op}
- [precedesExecution](#)^{op}

Domain

[Situation](#)^c

occurs at location^{op}

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

Sub Property Of [isSettingFor](#)^{op}

Range <http://w3id.org/CEON/ontology/location/Location>^c

precedes execution^{op}

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

Sub Property Of [isSettingFor](#)^{op}

Domain [PlanExecution](#)^c

satisfies plan^{op}

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

Datatype Properties

end time^{dp}

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

Domain [TimeInterval](#)^c

occurs at time^{dp}

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

Domain [PlanExecution](#)^c

Range [xsd:dateTime](#)

start time^{dp}

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

Domain [TimeInterval^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/cpannotation/schema.owl#coversRequirements>

Namespaces

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