

Circular Economy Ontology Network (CEON) - Process ODP

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Process ODP

Creator

Huanyu Li

Contributor

Eva Blomqvist
Mikael Lindecrantz
Robin Keskisärkkä

Date Created

2024-11-13

License

<https://creativecommons.org/licenses/by/4.0/>

Version Iri

<http://w3id.org/CEON/ontology/processODP/0.3/>

Version Info

0.3

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

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

Process^c

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

In Domain Of

[hasInput](#)^{op}
[hasOutput](#)^{op}
[hasPart](#)^{op}
[has process execution](#)^{op}
[hasProcessType](#)^{op}
[nextProcess](#)^{op}

In Range Of

[hasPart](#)^{op}
[nextProcess](#)^{op}

Restriction

[has process execution](#)^{op} some [Process](#)^c

Super Class Of

[Transformation](#)^c

Process Execution^c

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

In Domain Of

[hasExecutionInput](#)^{op}
[hasExecutionOutput](#)^{op}
[initalSituation](#)^{op}
[nextExecution](#)^{op}
[occursAtLocation](#)^{op}
[resultingSituation](#)^{op}
[occursAtTime](#)^{dp}

In Range Of

[has process execution](#)^{op}
[nextExecution](#)^{op}

Restriction

[hasExecutionInput](#)^{op} some [ProcessExecution](#)^c
[hasExecutionOutput](#)^{op} some [ProcessExecution](#)^c

Super Class Of

[TransformationExecution](#)^c

Process Type^c

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

In Range Of

[hasProcessType](#)^{op}

Situation^C

IRI	http://w3id.org/CEON/ontology/processODP/Situation
<u>In Domain Of</u>	isSettingFor ^{op}
<u>In Range Of</u>	intialSituation ^{op} resultingSituation ^{op}
<u>Restriction</u>	isSettingFor ^{op} some Situation ^C

Transformation^C

IRI	http://w3id.org/CEON/ontology/processODP/Transformation
<u>Sub Class Of</u>	Process ^C
<u>In Domain Of</u>	hasTransformationExecution ^{op}
<u>Restriction</u>	hasTransformationExecution ^{op} some Transformation ^C

Transformation Execution^C

IRI	http://w3id.org/CEON/ontology/processODP/TransformationExecution
<u>Sub Class Of</u>	ProcessExecution ^C
<u>In Range Of</u>	hasTransformationExecution ^{op}

Object Properties

has execution input^{op}

IRI	http://w3id.org/CEON/ontology/processODP/hasExecutionInput
<u>Domain</u>	ProcessExecution ^C

has execution output^{op}

IRI	http://w3id.org/CEON/ontology/processODP/hasExecutionOutput
<u>Domain</u>	ProcessExecution ^C

has input^{op}

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

Domain [Process](#)^c

has output^{op}

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

Domain [Process](#)^c

has part^{op}

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

Domain [Process](#)^c

Range [Process](#)^c

has process execution^{op}

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

Description A process can have specific executions.

Super Property Of [hasTransformationExecution](#)^{op}

Domain [Process](#)^c

Range [ProcessExecution](#)^c

has process type^{op}

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

Domain [Process](#)^c

Range [ProcessType](#)^c

has transformation execution^{op}

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

Sub Property Of [has process execution^{op}](#)

Domain [Transformation^c](#)

Range [TransformationExecution^c](#)

intial situation^{op}

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

Domain [ProcessExecution^c](#)

Range [Situation^c](#)

is setting for^{op}

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

Domain [Situation^c](#)

next execution^{op}

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

Domain [ProcessExecution^c](#)

Range [ProcessExecution^c](#)

next process^{op}

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

Domain [Process^c](#)

Range [Process^c](#)

occurs at location^{op}

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

Domain [ProcessExecution^c](#)

Range [http://w3id.org/CEON/ontology/location/Location^c](http://w3id.org/CEON/ontology/location/Location)

resulting situation^{op}

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

Domain [ProcessExecution^c](#)

Range [Situation^c](#)

Datatype Properties

occurs at time^{dp}

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

Domain [ProcessExecution^c](#)

Range [xsd:dateTime](#)

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/>

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