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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Date Created

2024-12-17

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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/CEON/ontology/processODP/Event`

Super Class Of   [Process](#) ^C

Plan ^C

IRI   `http://w3id.org/CEON/ontology/processODP/Plan`

Sub Class Of   [Description](#) ^C

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

Plan Execution ^C

IRI   `http://w3id.org/CEON/ontology/processODP/PlanExecution`

Sub Class Of

[Situation](#) ^C
[occursAtTime](#) ^{dp} some [xsd:dateTime](#) ^C *or* [duringTime](#) ^{op} some [TimeInterval](#) ^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/CEON/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/CEON/ontology/processODP/Situation
In Domain Of	isSettingFor [op]
Restriction	isSettingFor [op] some Situation [C]
Super Class Of	PlanExecution [C]

Time Interval [C]

IRI	http://w3id.org/CEON/ontology/processODP/TimeInterval
In Domain Of	endTime [dp] startTime [dp]
In Range Of	duringTime [op]

Transformation Process [C]

IRI	http://w3id.org/CEON/ontology/processODP/TransformationProcess
Sub Class Of	Process [C]

Transition [C]

IRI	http://w3id.org/CEON/ontology/processODP/Transition
Sub Class Of	PlanExecution [C]
In Domain Of	affectedObject [op] duringTime [op]
Restriction	isSettingFor [op] some Transition [C] affectedObject [op] *min* 1 Transition [C]

Object Properties

affected object [op]

IRI	http://w3id.org/CEON/ontology/processODP/affectedObject
Sub Property Of	isSettingFor [op]
Domain	Transition [C]

during time ^{op}

IRI	http://w3id.org/CEON/ontology/processODP/duringTime
Sub Property Of	isSettingFor ^{op}
Domain	Transition ^c
Range	TimeInterval ^c

follows execution ^{op}

IRI	http://w3id.org/CEON/ontology/processODP/followsExecution
Sub Property Of	isSettingFor ^{op}
Domain	PlanExecution ^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

has plan execution ^{op}

IRI	http://w3id.org/CEON/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/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