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

DescriptionAn 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

DescriptionAn 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

DescriptionThe 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

DescriptionThe 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

DescriptionA process can consists of several part, which are sub-processes.

Domain Process^C

Range Process^C

 $has Process Execution \\ ^{op}$

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

DescriptionA process can have specific executions.

Domain Process^c

Range <u>ProcessExecution</u>^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/intialSituation

DescriptionThe situation before executing a process.

Domain <u>Transformation</u>^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

DescriptionThe situation after the execution of a process.

Domain <u>Transformation</u>^c

Range Situation^C

Annotation Properties

<u>contributor</u> ap	
IRI	http://purl.org/dc/terms/contributor
created ^{ap}	
IRI	http://purl.org/dc/terms/created
<u>creator</u> ^{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#covers Requirements

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

Classes

Object Properties

ap Annotation Properties