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

2023-03-23

License

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

Version Iri

http://w3id.org/CEON/ontology/processODP/0.2/

Version Info

0.2

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

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	hasPart ^{op} has process execution ^{op} has process type ^{op} nextProcess ^{op} resultingSituation ^{op} occursAtTime ^{dp}
In Range Of	hasPart ^{op} nextProcess ^{op}
Super Class Of	Transformation ^c

Process execution ^C

IRI	`http://w3id.org/CEON/ontology/processODP/ProcessExecution`
Description	An execution of a specific process.
In Domain Of	hasExecutionInput ^{op} hasExecutionOutput ^{op} nextExecution ^{op} occursAtLocation ^{op}
In Range Of	has process execution ^{op} nextExecution ^{op}
Super Class Of	TransformationExecution ^C

Process type ^C

IRI	`http://w3id.org/CEON/ontology/processODP/ProcessType`
Description	The type of a process.
In Range Of	has process type ^{op}

Situation ^C

IRI	`http://w3id.org/CEON/ontology/processODP/Situation`
In Domain Of	isSettingFor ^{op}
In Range Of	intialSituation ^{op} resultingSituation ^{op}

Transformation ^C

IRI	`http://w3id.org/CEON/ontology/processODP/Transformation`
Sub Class Of	Process ^C
In Domain Of	hasInput ^{op} hasOutput ^{op} hasTransformationExecution ^{op} intialSituation ^{op}

Transformation Execution ^C

IRI	`http://w3id.org/CEON/ontology/processODP/TransformationExecution`
Sub Class Of	Process execution ^C
In Range Of	hasTransformationExecution ^{op}

Object Properties

participation in ^{op}

IRI	`http://w3id.org/CEON/ontology/actorODP/participationIn`

has execution input ^{op}

IRI	`http://w3id.org/CEON/ontology/processODP/hasExecutionInput`
Domain	Process execution ^c

has execution output ^{op}

IRI	`http://w3id.org/CEON/ontology/processODP/hasExecutionOutput`
Domain	Process execution ^c

has input ^{op}

IRI	`http://w3id.org/CEON/ontology/processODP/hasInput`
Domain	Transformation ^c

has output ^{op}

IRI	`http://w3id.org/CEON/ontology/processODP/hasOutput`
Domain	Transformation ^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.
Domain	Process ^c
Range	Process execution ^c

has process type ^{op}

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

has transformation execution ^{op}

IRI	`http://w3id.org/CEON/ontology/processODP/hasTransformationExecution`
Domain	Transformation ^c
Range	TransformationExecution ^c

intial situation ^{op}

IRI	`http://w3id.org/CEON/ontology/processODP/intialSituation`
Domain	Transformation ^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	Process execution ^c
Range	Process execution ^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	Process execution ^c

resulting situation ^{op}

IRI	http://w3id.org/CEON/ontology/processODP/resultingSituation
Domain	Process ^c
Range	Situation ^c

Datatype Properties

occurs at time ^{dp}

IRI	http://w3id.org/CEON/ontology/processODP/occursAtTime
Domain	Process ^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/

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/

xsd

    http://www.w3.org/2001/XMLSchema#

Legend

c	Classes
op	Object Properties
dp	Datatype Properties
ap	Annotation Properties