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/0.3/

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
Is Defined By	ISO 59004:2024 - 3.5.5 process
Description	Set of interrelated or interacting activities that transforms inputs into outputs.
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} intialSituation ^{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
In Domain Of	isSettingFor ^{op}
In Range Of	intialSituation ^{op} resultingSituation ^{op}
Restriction	isSettingFor ^{op} some Situation ^C

Transformation ^C

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

Transformation Execution ^C

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

Object Properties

has execution input ^{op}

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

has execution output ^{op}

IRI	http://w3id.org/CEON/ontology/processODP/hasExecutionOutput
Domain	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

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/cpannotation schema.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