Circular Economy Ontology Network (CEON) - Resource ODP

Metadata

IRI

http://w3id.org/CEON/ontology/resourceODP/

Title

Circular Economy Ontology Network (CEON) - Resource ODP

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Version Iri

http://w3id.org/CEON/ontology/resourceODP/0.3/

Version Info

0.3

Preferred Namespace Prefix

resourceODP

Preferred Namespace Uri

http://w3id.org/CEON/ontology/resourceODP/

Description

A core ODP of the CEON ontology network defining aspects of the resource concept.

Covers Requirements

Covers the following requirements from Onto-DESIDE D3.1: CVN-Resource-1,3, CVN-Composition-1,2, CVN-ResrouceType-4, C7-3, E2-2, E4-6, E5-1, E6-3, T3-1.

Classes

Location ^C

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

Batch of objects [c]

IRI	`http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects`
Description	A batch of objects is a collection of physical objects that are of the same type, e.g. a set of items (product objects) adhering to the same product model.
Sub Class Of	Resource [c] has physical object [op] only Physical object [c] *and* has physical object [op] some Physical object [c]
In Domain Of	batch size [dp]
In Range Of	has batch [op]
Restriction	batch size [dp] *exactly* 1 Batch of objects [c]

Constituent [c]

IRI	`http://w3id.org/CEON/ontology/resourceODP/Constituent`
Description	A constituent is a component of object.
In Range Of	has constituent [op]

Digital object [c]

IRI	`http://w3id.org/CEON/ontology/resourceODP/DigitalObject`
Sub Class Of	Resource [c]

Information [c]

IRI	`http://w3id.org/CEON/ontology/resourceODP/Information`
Description	Information is an abstract concept that represents any kind of interpretations. For instance, information can be data generated by software systems or data used by people for communications.
Sub Class Of	Resource [c]
In Domain Of	containsInformation [op] isAbout [op]
In Range Of	containsInformation [op] is realization of [op]

Matter [c]

IRI	`http://w3id.org/CEON/ontology/resourceODP/Matter`
Description	A matter is a physical substance.
In Range Of	has matter [op]

Physical object ^C

IRI http://w3id.org/CEON/ontology/resourceODP/PhysicalObject

Description

A physical object is a collection of matter.

Sub Class Of

Resource ^C
has constituent ^{op} some Constituent ^C *and* has constituent ^{op} only Constituent ^C
has matter ^{op} some Matter ^C *and* has matter ^{op} only Matter ^C

In Domain Of

has constituent ^{op}
has matter ^{op}

In Range Of has physical object ^{op}

Resource ^C

IRI http://w3id.org/CEON/ontology/resourceODP/Resource

Description

A resource able to be handled in the context of a circular value network, e.g. data generated by software systems in the CVN, materials or prooducts as physical objects handled in the CVN.

In Domain Of hasResourceLocation ^{op}

Super Class Of

Batch of objects ^C
Digital object ^C
Information ^C
Physical object ^C
Set of objects ^C

Set of objects ^C

IRI http://w3id.org/CEON/ontology/resourceODP/SetOfObjects

Description

A set of objects is a set of physical objects (items) that can be of different types, i.e. different kinds of items.

Sub Class Of

Resource ^C
has batch ^{op} only Batch of objects ^C *and* has batch ^{op} some Batch of objects ^C
has physical object ^{op} only Physical object ^C *and* has physical object ^{op} some Physical object ^C

In Domain Of has batch ^{op}

Object Properties

has location ^{op}

IRI   http://w3id.org/CEON/ontology/location/hasLocation

Super Property Of   hasResourceLocation ^{op}

contains information ^{op}

IRI   http://w3id.org/CEON/ontology/resourceODP/containsInformation

Sub Property Of   hasPart ^{op}

Domain   Information ^c

Range   Information ^c

has batch ^{op}

IRI   http://w3id.org/CEON/ontology/resourceODP/hasBatch

Description   hasBatch intends to represent that a set of objects can be captured by a number of batches where each batch contains a number of physical objects.

Domain   Set of objects ^c

Range   Batch of objects ^c

has constituent ^{op}

IRI   http://w3id.org/CEON/ontology/resourceODP/hasConstituent

Description   hasConstitutent intends to represent that a physical object can have a collection of composing components.

Sub Property Of   hasPart ^{op}

Domain   Physical object ^c

Range   Constituent ^c

has matter ^{op}

IRI   http://w3id.org/CEON/ontology/resourceODP/hasMatter

Description   hasMatter intends to represent that a physical object can have a collection of matter.

Domain   Physical object ^c

Range   Matter ^c

has part ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/hasPart
Super Property Of	• containsInformation ^{op} • has constituent ^{op}

has physical object ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/hasPhysicalObject
Description	hasPhysicalObject intends to represent that a batch of objects or a set of objects can have composing components of physical objects.
Domain	Set of objects ^c *or* Batch of objects ^c
Range	Physical object ^c

has resource location ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/hasResourceLocation
Sub Property Of	location:hasLocation ^{op}
Domain	Resource ^c
Range	location:Location ^c

is about ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/isAbout
Domain	Information ^c

is realization of ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/isRealizationOf
Range	Information ^c

Datatype Properties

batch size ^{dp}

IRI	http://w3id.org/CEON/ontology/resourceODP/batchSize
Description	batchSize intends to repsent how many physical objects are belong to a batch of objects.
Domain	Batch of objects ^c
Range	xsd:nonNegativeInteger

Annotation Properties

description ^{ap}

IRI   http://purl.org/dc/elements/1.1/description

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

definition ^{ap}

IRI   http://www.w3.org/2004/02/skos/core#definition

pref label [ap]
IRI   http://www.w3.org/2004/02/skos/core#prefLabel

Namespaces

:

    http://w3id.org/CEON/ontology/resourceODP/

dc

    http://purl.org/dc/elements/1.1/

dcterms

    http://purl.org/dc/terms/

geo

    http://www.opengis.net/ont/geosparql#

location

    http://w3id.org/CEON/ontology/location/

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#

skos

    http://www.w3.org/2004/02/skos/core#

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