Circular Economy Ontology Network (CEON) - Resource ODP

Metadata

IRI

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

Title

Circular Economy Ontology Network (CEON) - Resource ODP

Publisher

Onto-DESIDE

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Version Iri

http://w3id.org/CEON/ontology/resourceODP/0.5/

Version Info

0.5

Prior Version

0.4

Preferred Namespace Prefix

ceon-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.

Covers the following requirements from Onto-DESIDE D3.2: CE1-2, CE3-3, CE4-3, CE5-2, CE9-1, CE10-1, CE11-8, CE12-2, CE12-4, C7-3, E2-2, E4-6, E5-1, E6-3, T3-1, T19-1, T20-1, T22-2.

Classes

Location ^C

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

Asset ^C

IRI	http://w3id.org/CEON/ontology/resourceODP/Asset
Super Class Of	Information ^C Resource ^C

Batch Of Objects ^C

IRI	http://w3id.org/CEON/ontology/resourceODP/BatchOfObjects
Sub Class Of	Resource ^C hasPhysicalObject ^{op} some PhysicalObject ^C *and* hasPhysicalObject ^{op} only PhysicalObject ^C
In Domain Of	batchID ^{dp} batchLabel ^{dp} batchSize ^{dp}
In Range Of	hasBatch ^{op}
Restriction	batchSize ^{dp} *exactly* 1 BatchOfObjects ^C

Constituent ^C

IRI	http://w3id.org/CEON/ontology/resourceODP/Constituent
In Range Of	hasConstituent ^{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
Sub Class Of	Asset ^C
In Domain Of	containsInformation ^{op} isAbout ^{op}
In Range Of	containsInformation ^{op} isRealizationOf ^{op}

Matter [C]

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

In Range Of   hasMatter [op]

Physical Object [C]

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

Sub Class Of

Resource [C]
hasConstituent [op] some Constituent [C] *and* hasConstituent [op] only Constituent [C]
hasMatter [op] only Matter [C] *and* hasMatter [op] some Matter [C]

In Domain Of

hasConstituent [op]
hasMatter [op]

In Range Of   hasPhysicalObject [op]

Resource [C]

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

Is Defined By   ISO 59004:2024 - 3.1.5 resource

Sub Class Of

Asset [C]
hasResourceCondition [op] some ResourceCondition [C] *and* hasResourceCondition [op] only ResourceCondition [C]
hasResourceProperty [op] some ResourceProperty [C] *and* hasResourceProperty [op] only ResourceProperty [C]
hasResourceQuality [op] some ResourceQuality [C] *and* hasResourceQuality [op] only ResourceQuality [C]

In Domain Of

hasResourceCondition [op]
hasResourceLocation [op]
hasResourceProperty [op]
hasResourceQuality [op]

Super Class Of

BatchOfObjects [C]
DigitalObject [C]
PhysicalObject [C]
SetOfObjects [C]

Resource Condition [C]

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

In Range Of   hasResourceCondition [op]

Resource Property ^C

IRI	`http://w3id.org/CEON/ontology/resourceODP/ResourceProperty`
In Range Of	hasResourceProperty ^{op}

Resource Quality ^C

IRI	`http://w3id.org/CEON/ontology/resourceODP/ResourceQuality`
In Range Of	hasResourceQuality ^{op}

Set Of Objects ^C

IRI	`http://w3id.org/CEON/ontology/resourceODP/SetOfObjects`
Sub Class Of	Resource ^C hasBatch ^{op} some BatchOfObjects ^C *and* hasBatch ^{op} only BatchOfObjects ^C hasPhysicalObject ^{op} some PhysicalObject ^C *and* hasPhysicalObject ^{op} only PhysicalObject ^C
In Domain Of	hasBatch ^{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`
Domain	SetOfObjects ^C
Range	BatchOfObjects ^C

has constituent ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/hasConstituent
Sub Property Of	hasPart ^{op}
Domain	PhysicalObject ^c
Range	Constituent ^c

has matter ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/hasMatter
Domain	PhysicalObject ^c
Range	Matter ^c

has part ^{op}

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

has physical object ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/hasPhysicalObject
Domain	BatchOfObjects ^c *or* SetOfObjects ^c
Range	PhysicalObject ^c

has resource condition ^{op}

IRI	http://w3id.org/CEON/ontology/resourceODP/hasResourceCondition
Domain	Resource ^c
Range	ResourceCondition ^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

has resource property ^{op}

IRI	`http://w3id.org/CEON/ontology/resourceODP/hasResourceProperty`
Domain	Resource ^c
Range	ResourceProperty ^c

has resource quality ^{op}

IRI	`http://w3id.org/CEON/ontology/resourceODP/hasResourceQuality`
Domain	Resource ^c
Range	ResourceQuality ^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 id ^{dp}

IRI	`http://w3id.org/CEON/ontology/resourceODP/batchID`
Domain	BatchOfObjects ^c
Range	xsd:string

batch label ^{dp}

IRI	`http://w3id.org/CEON/ontology/resourceODP/batchLabel`
Domain	BatchOfObjects ^c
Range	xsd:string

batch size ^{dp}

IRI	http://w3id.org/CEON/ontology/resourceODP/batchSize
Domain	BatchOfObjects ^c
Range	xsd:nonNegativeInteger

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

issued ^{ap}

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

license ^{ap}

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

publisher ^{ap}

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

title ^{ap}

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

preferred namespace prefix ^{ap}

IRI	http://purl.org/vocab/vann/preferredNamespacePrefix

<table>
<tr><td colspan="2">preferred namespace uri ^{ap}</td></tr>
<tr><td>IRI</td><td><code>http://purl.org/vocab/vann/preferredNamespaceUri</code></td></tr>
</table>

<table>
<tr><td colspan="2">covers requirements ^{ap}</td></tr>
<tr><td>IRI</td><td><code>http://www.ontologydesignpatterns.org/schemas/cpannotation schema.owl#coversRequirements</code></td></tr>
</table>

Namespaces

:

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

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#`

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