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.

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} only PhysicalObject ^C *and* hasPhysicalObject ^{op} some 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} only Constituent ^C *and* hasConstituent ^{op} some 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} only ResourceCondition ^C *and* hasResourceCondition ^{op} some ResourceCondition ^C hasResourceProperty ^{op} some ResourceProperty ^C *and* hasResourceProperty ^{op} only ResourceProperty ^C hasResourceQuality ^{op} only ResourceQuality ^C *and* hasResourceQuality ^{op} some 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	SetOfObjects ^c *or* BatchOfObjects ^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

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