Data Catalog Vocabulary (DCAT)

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This document is also available in this non-normative format: diff to previous version

Abstract

DCAT is an RDF vocabulary designed to facilitate interoperability between data catalogs published on the Web. This document defines the schema and provides examples for its use.

By using DCAT to describe datasets in data catalogs, publishers increase discoverability and enable applications easily to consume metadata from multiple catalogs. It further enables decentralized publishing of catalogs and facilitates federated dataset search across sites. Aggregated DCAT metadata can serve as a manifest file to facilitate digital preservation.

Status of This Document

This section describes the status of this document at the time of its publication. Other documents may supersede this document. A list of current W3C publications and the latest revision of this technical report can be found in the W3C technical reports index at https://www.w3.org/TR/.

The original DCAT vocabulary was developed at DERI, refined by the eGov Interest Group, and then finally standardized by the Government Linked Data (GLD) Working Group.

DCAT incorporates terms from pre-existing vocabularies, where stable terms with appropriate meanings could be found, such as foaf:homepage and dct:title. Informal summary definitions of these terms are included here for convenience, while complete definitions are available in the provided authoritative references. Changes to definitions in those references, if any, will supersede the summaries given in this specification. Note that conformance to DCAT (Section 3) concerns usage of only the terms in the DCAT namespace itself, so possible changes to the external definitions will not affect conformance of DCAT implementations.

This document was published by the Government Linked Data Working Group as an Editor's Draft.

Comments regarding this document are welcome. Please send them to public-gld-comments@w3.org (archives).

Please see the Working Group's implementation report.

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1. Introduction §

This section is non-normative.

Data can come in many formats, ranging from spreadsheets over XML and RDF to various speciality formats. DCAT does not make any assumptions about the format of the datasets described in a catalog. Other, complementary vocabularies may be used together with DCAT to provide more detailed format-specific information. For example, properties from the VoID vocabulary [void] can be used to express various statistics about a DCAT-described dataset if that dataset is in RDF format.

This document does not prescribe any particular method of deploying data expressed in DCAT. DCAT is applicable in many contexts including RDF accessible via SPARQL endpoints, embedded in HTML pages as RDFa, or serialized as e.g. RDF/XML or Turtle. The examples in this document use Turtle simply because of Turtle's readability.

2. Namespaces §

The namespace for DCAT is `http://www.w3.org/ns/dcat#`. However, it should be noted that DCAT makes extensive use of terms from other vocabularies, in particular Dublin Core. DCAT itself defines a minimal set of classes and properties of its own. A full set of namespaces and prefixes used in this document is shown in the table below.

Prefix	Namespace
dcat	http://www.w3.org/ns/dcat#
dct	http://purl.org/dc/terms/
dctype	http://purl.org/dc/dcmitype/
foaf	http://xmlns.com/foaf/0.1/
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#
vcard	http://www.w3.org/2006/vcard/ns#
xsd	http://www.w3.org/2001/XMLSchema#

3. Conformance §

As well as sections marked as non-normative, all authoring guidelines, diagrams, examples, and notes in this specification are non-normative. Everything else in this specification is normative.

The key words *MAY* and *SHOULD* in this document are to be interpreted as described in BCP 14 [RFC2119] [RFC8174] when, and only when, they appear in all capitals, as shown here.

A data catalog conforms to DCAT if:

- It is organized into datasets and distributions.
- An RDF description of the catalog itself and its datasets and distributions is available (but the choice of RDF syntaxes, access protocols, and access policies is not mandated by this specification).
- The contents of all metadata fields that are held in the catalog, and that contain data about the catalog itself and its dataset and distributions, are included in this RDF description, expressed using the appropriate classes and properties from DCAT, except where no such class or property exists.
- All classes and properties defined in DCAT are used in a way consistent with the semantics declared in this specification.
- DCAT-compliant catalogs *MAY* include additional non-DCAT metadata fields and additional RDF data in the catalog's RDF description.

A **DCAT profile** is a specification for data catalogs that adds additional constraints to DCAT. A data catalog that conforms to the profile also conforms to DCAT. Additional constraints in a profile *MAY* include:

- A minimum set of required metadata fields
- Classes and properties for additional metadata fields not covered in DCAT
- Controlled vocabularies or URI sets as acceptable values for properties
- Requirements for specific access mechanisms (RDF syntaxes, protocols) to the catalog's RDF description

4. Vocabulary Overview §

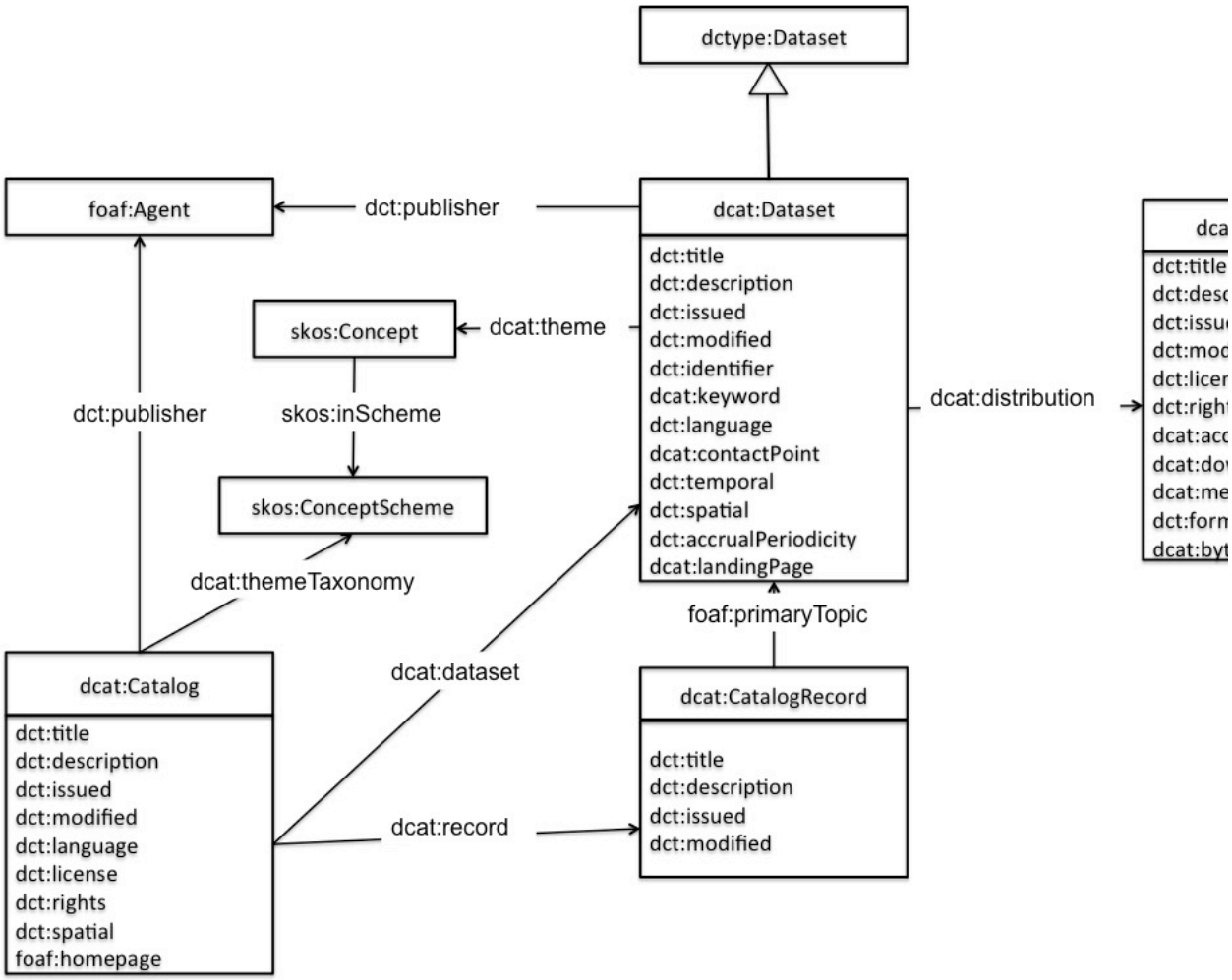
This section is non-normative.

DCAT is an RDF vocabulary well-suited to representing government data catalogs such as Data.gov and data.gov.uk. DCAT defines three main classes:

- dcat:Catalog represents the catalog
- dcat:Dataset represents a dataset in a catalog.
- dcat:Distribution represents an accessible form of a dataset as for example a downloadable file, an RSS feed or a web service that provides the data.

Notice that a dataset in DCAT is defined as a "collection of data, published or curated by a single agent, and available for access or download in one or more formats". A dataset does not have to be available as a downloadable file. For example, a dataset that is available via an API can be defined as an instance of dcat:Dataset and the API can be defined as an instance of dcat:Distribution. DCAT itself does not define properties specific to APIs description. These are considered out of the scope of this version of the vocabulary. Nevertheless, this can be defined as a profile of the DCAT vocabulary.

Another important class in DCAT is dcat:CatalogRecord which describes a dataset entry in the catalog. Notice that while dcat:Dataset represents the dataset itself, dcat:CatalogRecord represents the record that describes a dataset in the catalog. The use of the CatalogRecord is considered optional. It is used to capture provenance information about dataset entries in a catalog. If this distinction is not necessary then CatalogRecord can be safely ignored.



All RDF examples in this document are written in Turtle syntax [turtle].

4.1 Basic Example §

This example provides a quick overview of how DCAT might be used to represent a government catalog and its datasets.

First, the catalog description:

```
:catalog
    a dcat:Catalog ;
    dct:title "Imaginary Catalog" ;
```

```
    rdfs:label "Imaginary Catalog" ;
    foaf:homepage <http://example.org/catalog> ;
    dct:publisher :transparency-office ;
    dct:language <http://id.loc.gov/vocabulary/iso639-1/en>  ;
    dcat:dataset :dataset-001  , :dataset-002 , :dataset-003 ;
    .
```

The publisher of the catalog has the relative URI :transparency-office. Further description of the publisher can be provided as in the following example:

```
:transparency-office
    a foaf:Organization ;
    rdfs:label "Transparency Office" ;
    .
```

The catalog lists each of its datasets via dcat:dataset property. In the example above, an example dataset was mentioned with the relative URI :dataset-001. A possible description of it using DCAT is shown below:

```
:dataset-001
    a dcat:Dataset ;
    dct:title "Imaginary dataset" ;
    dcat:keyword "accountability","transparency" ,"payments" ;
    dct:issued "2011-12-05"^^xsd:date ;
    dct:modified "2011-12-05"^^xsd:date ;
    dcat:contactPoint <http://example.org/transparency-office/contact> ;
    dct:temporal <http://reference.data.gov.uk/id/quarter/2006-Q1> ;
    dct:spatial <http://www.geonames.org/6695072> ;
    dct:publisher :finance-ministry ;
    dct:language <http://id.loc.gov/vocabulary/iso639-1/en>  ;
    dct:accrualPeriodicity <http://purl.org/linked-data/sdmx/2009/code#freq-W>  ;
    dcat:distribution :dataset-001-csv ;
    .
```

In order to express frequency of update in the example above, we chose to use an instance from the Content-Oriented Guidelines developed as part of the W3C Data Cube Vocabulary efforts. Additionally, we chose to describe the spatial and temporal coverage of the example dataset using URIs from Geonames and the Interval dataset from data.gov.uk, respectively. A contact point is also provided where comments and feedback about the dataset can be sent. Further details about the contact point, such as email address or telephone number, can be provided using VCard [vcard-rdf].

The dataset distribution :dataset-001-csv can be downloaded as a 5Kb CSV file. This information is represented via an RDF resource of type dcat:Distribution.

```
:dataset-001-csv
    a dcat:Distribution ;
    dcat:downloadURL <http://www.example.org/files/001.csv> ;
    dct:title "CSV distribution of imaginary dataset 001" ;
    dcat:mediaType "text/csv" ;
    dcat:byteSize "5120"^^xsd:decimal ;
    .
```

4.2 Classifying datasets §

The catalog classifies its datasets according to a set of domains represented by the relative URI :themes. SKOS can be used to describe the domains used:

```
:catalog dcat:themeTaxonomy :themes .
```

```
:themes
    a skos:ConceptScheme ;
    skos:prefLabel "A set of domains to classify documents" ;
```

```
    .
```

```
:dataset-001 dcat:theme :accountability  .
```

Notice that this dataset is classified under the domain represented by the relative URI :accountability. It is recommended to define the concept as part of the concepts scheme identified by the URI :themes that was used to describe the catalog domains. An example SKOS description:

```
:accountability
    a skos:Concept ;
    skos:inScheme :themes ;
    skos:prefLabel "Accountability" ;
    .
```

4.3 Describing catalog records metadata §

If the catalog publisher decides to keep metadata describing its records (i.e. the records containing metadata describing the datasets), dcat:CatalogRecord can be used. For example, while :dataset-001 was issued on 2011-12-05, its description on Imaginary Catalog was added on 2011-12-11. This can be represented by DCAT as in the following:

```
:catalog  dcat:record :record-001  .
```

```
:record-001
    a dcat:CatalogRecord ;
    foaf:primaryTopic :dataset-001 ;
    dct:issued "2011-12-11"^^xsd:date ;
    .
```

4.4 A dataset available only behind some Web page §

:dataset-002 is available as a CSV file. However :dataset-002 can only be obtained through some Web page where the user needs to click some links, provide some information and check some boxes before accessing the data

```
:dataset-002
    a dcat:Dataset ;
    dcat:landingPage <http://example.org/dataset-002.html> ;
    dcat:distribution :dataset-002-csv ;
    .
:dataset-002-csv
    a dcat:Distribution ;
    dcat:accessURL <http://example.org/dataset-002.html> ;
    dcat:mediaType "text/csv" ;
    .
```

Notice the use of dcat:landingPage and the definition of the dcat:Distribution instance.

4.5 A dataset available as download and behind some Web page §

On the other hand, :dataset-003 can be obtained through some landing page but also can be downloaded from a known URL.

```
:dataset-003
    a dcat:Dataset ;
    dcat:landingPage <http://example.org/dataset-003.html> ;
    dcat:distribution :dataset-003-csv ;
    .
:dataset-003-csv
    a dcat:Distribution ;
```

```
    dcat:downloadURL <http://example.org/dataset-003.csv> .
    dcat:mediaType "text/csv" ;
    .
```

Notice that we used dcat:downloadURL with the downloadable distribution and that the other distribution through the landing page does not have to be defined as a separate dcat:Distribution instance.

5. Vocabulary specification §

The definitions (including domain and range) of terms outside the dcat namespace are provided here only for convenience and must not be considered normative. The authoritative definitions of these terms are in the corresponding specifications: [DC11], [FOAF], [RDF-SCHEMA], [SKOS-REFERENCE], [xmlschema-2] and [vcard-rdf].

5.1 Class: Catalog §

The following properties are recommended for use on this class: catalog record, dataset, description, homepage, language, license, publisher, release date, rights, spatial, themes, title, update date

RDF Class:	**dcat:Catalog**
Definition:	A data catalog is a curated collection of metadata about datasets.
Usage note:	Typically, a web-based data catalog is represented as a single instance of this class.
See also:	Catalog record, Dataset

5.1.1 Property: title §

RDF Property:	**dct:title**
Definition:	A name given to the catalog.
Range:	rdfs:Literal

5.1.2 Property: description §

RDF Property:	**dct:description**
Definition:	A free-text account of the catalog.
Range:	rdfs:Literal

5.1.3 Property: release date §

RDF Property:	**dct:issued**
Definition:	Date of formal issuance (e.g., publication) of the catalog.

RDF Property:	**dct:issued**
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
See also:	dataset release date, catalog record listing date and distribution release date

5.1.4 Property: update/modification date §

RDF Property:	**dct:modified**
Definition:	Most recent date on which the catalog was changed, updated or modified.
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
See also:	dataset modification date, catalog record modification date and distribution modification date

5.1.5 Property: language §

RDF Property:	**dct:language**
Definition:	The language of the catalog. This refers to the language used in the textual metadata describing titles, descriptions, etc. of the datasets in the catalog.
Range:	dct:LinguisticSystem Resources defined by the Library of Congress (1, 2) *SHOULD* be used. If a ISO 639-1 (two-letter) code is defined for language, then its corresponding IRI *SHOULD* be used; if no ISO 639-1 code is defined, then IRI corresponding to the ISO 639-2 (three-letter) code *SHOULD* be used.
Usage note:	Multiple values can be used. The publisher might also choose to describe the language on the dataset level (see dataset language).

5.1.6 Property: homepage §

RDF Property:	**foaf:homepage**
Definition:	The homepage of the catalog.
Range:	foaf:Document
Usage note:	foaf:homepage is an inverse functional property (IFP) which means that it should be unique and precisely identify the catalog. This allows smushing various descriptions of the catalog when different URIs are used.

5.1.7 Property: publisher §

RDF Property:	**dct:publisher**
Definition:	The entity responsible for making the catalog online.
Usage note:	Resources of type foaf:Agent are recommended as values for this property.
See also:	Class: Organization/Person

5.1.8 Property: spatial/geographic §

RDF Property:	**dct:spatial**
Definition:	The geographical area covered by the catalog.
Range:	dct:Location

5.1.9 Property: themes §

RDF Property:	**dcat:themeTaxonomy**
Definition:	The knowledge organization system (KOS) used to classify catalog's datasets.
Domain:	dcat:Catalog
Range:	skos:ConceptScheme

5.1.10 Property: license §

RDF Property:	**dct:license**
Definition:	This links to the license document under which the **catalog** is made available and **not the datasets**. Even if the license of the catalog applies to all of its datasets and distributions, it should be replicated on each distribution.
Range:	dct:LicenseDocument
See also:	catalog rights, distribution license

5.1.11 Property: rights §

RDF Property:	**dct:rights**
Definition:	This describes the rights under which the **catalog** can be used/reused and **not the datasets**. Even if theses rights apply to all the catalog datasets and distributions, it should be replicated on each distribution.
Range:	dct:RightsStatement
See also:	catalog license, distribution rights

5.1.12 Property: dataset §

RDF Property:	**dcat:dataset**
Definition:	A dataset that is part of the catalog.
Sub property of:	dct:hasPart
Domain:	dcat:Catalog
Range:	dcat:Dataset

5.1.13 Property: catalog record §

RDF Property:	**dcat:record**
Definition:	A catalog record that is part of the catalog.
Domain:	dcat:Catalog
Range:	dcat:CatalogRecord

5.2 Class: Catalog record §

The following properties are recommended for use on this class: description, listing date, primary topic, title, update date

RDF Class:	**dcat:CatalogRecord**
Definition:	A record in a data catalog, describing a single dataset.
Usage note	This class is optional and not all catalogs will use it. It exists for catalogs where a distinction is made between metadata about a *dataset* and metadata about the *dataset's entry in the catalog*. For example, the *publication date* property of the *dataset* reflects the date when the information was originally made available by the publishing agency, while the publication date of the *catalog record* is the date when the dataset was added to the

RDF Class:	dcat:CatalogRecord
	catalog. In cases where both dates differ, or where only the latter is known, the *publication date* should only be specified for the catalog record. Notice that the W3C PROV Ontology [prov-o] allows describing further provenance information such as the details of the process and the agent involved in a particular change to a dataset.
See also	Dataset

If a catalog is represented as an RDF Dataset with named graphs (as defined in [sparql11-query]), then it is appropriate to place the description of each dataset (consisting of all RDF triples that mention the dcat:Dataset, dcat:CatalogRecord, and any of its dcat:Distributions) into a separate named graph. The name of that graph should be the IRI of the catalog record.

5.2.1 Property: title §

RDF Property:	dct:title
Definition:	A name given to the record.
Range:	rdfs:Literal

5.2.2 Property: description §

RDF Property:	dct:description
Definition:	free-text account of the record.
Range:	rdfs:Literal

5.2.3 Property: listing date §

RDF Property:	dct:issued
Definition:	The date of listing the corresponding dataset in the catalog.
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
Usage note:	This indicates the date of listing the dataset in the catalog and not the publication date of the dataset itself.
See also:	dataset release date

5.2.4 Property: update/modification date §

RDF Property:	dct:modified
Definition:	Most recent date on which the catalog entry was changed, updated or modified.
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
Usage note:	This indicates the date of last change of a catalog entry, i.e. the catalog metadata description of the dataset, and not the date of the dataset itself.
See also:	dataset modification date

5.2.5 Property: primary topic §

RDF Property:	foaf:primaryTopic
Definition:	Links the catalog record to the dcat:Dataset resource described in the record.
Usage note:	foaf:primaryTopic property is functional: each catalog record can have at most one primary topic i.e. describes one dataset.

5.3 Class: Dataset §

The following properties are recommended for use on this class: contact point, description, distribution, frequency, identifier, keyword, landing page, language, publisher, release date, spatial coverage, temporal coverage, theme, title, update date,

RDF Class:	dcat:Dataset
Definition:	A collection of data, published or curated by a single agent, and available for access or download in one or more formats.
Sub class of:	dctype:Dataset
Usage note:	This class represents the actual dataset as published by the dataset publisher. In cases where a distinction between the actual dataset and its entry in the catalog is necessary (because metadata such as modification date and maintainer might differ), the *catalog record* class can be used for the latter.
See also:	Catalog record

5.3.1 Property: title §

RDF Property:	dct:title
Definition:	A name given to the dataset.

RDF Property:	dct:title
Range:	rdfs:Literal

5.3.2 Property: description §

RDF Property:	dct:description
Definition:	free-text account of the dataset.
Range:	rdfs:Literal

5.3.3 Property: release date §

RDF Property:	dct:issued
Definition:	Date of formal issuance (e.g., publication) of the dataset.
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
Usage note:	This property should be set using the first known date of issuance.

5.3.4 Property: update/modification date §

RDF Property:	dct:modified
Definition:	Most recent date on which the dataset was changed, updated or modified.
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
Usage note:	The value of this property indicates a change to the actual dataset, not a change to the catalog record. An absent value may indicate that the dataset has never changed after its initial publication, or that the date of last modification is not known, or that the dataset is continuously updated.
See also:	frequency

5.3.5 Property: language §

RDF Property:	dct:language
Definition:	The language of the dataset.

RDF Property:	**dct:language**
Range:	dct:LinguisticSystem Resources defined by the Library of Congress (1, 2) *SHOULD* be used. If a ISO 639-1 (two-letter) code is defined for language, then its corresponding IRI *SHOULD* be used; if no ISO 639-1 code is defined, then IRI corresponding to the ISO 639-2 (three-letter) code *SHOULD* be used.
Usage note:	• This overrides the value of the catalog language in case of conflict. • If the dataset is available in multiple languages, use multiple values for this property. If each language is available separately, define an instance of dcat:Distribution for each language and describe the specific language of each distribution using dct:language (i.e. the dataset will have multiple dct:language values and each distribution will have one of these languages as value of its dct:language property).

5.3.6 Property: publisher §

RDF Property:	**dct:publisher**
Definition:	An entity responsible for making the dataset available.
Usage note:	Resources of type foaf:Agent are recommended as values for this property.
See also:	Class: Organization/Person

5.3.7 Property: frequency §

RDF Property:	**dct:accrualPeriodicity**
Definition:	The frequency at which dataset is published.
Range:	dct:Frequency (A rate at which something recurs)

5.3.8 Property: identifier §

RDF Property:	**dct:identifier**
Definition:	A unique identifier of the dataset.
Range:	rdfs:Literal
Usage note:	The identifier might be used as part of the URI of the dataset, but still having it represented explicitly is useful.

5.3.9 Property: spatial/geographical coverage §

RDF Property:	dct:spatial
Definition:	Spatial coverage of the dataset.
Range:	dct:Location (A spatial region or named place)

5.3.10 Property: temporal coverage §

RDF Property:	dct:temporal
Definition:	The temporal period that the dataset covers.
Range:	dct:PeriodOfTime (An interval of time that is named or defined by its start and end dates)

5.3.11 Property: theme/category §

RDF Property:	dcat:theme
Definition:	The main category of the dataset. A dataset can have multiple themes.
Sub property of:	dct:subject
Domain:	dcat:Dataset
Range:	skos:Concept
Usage note:	The set of skos:Concepts used to categorize the datasets are organized in a skos:ConceptScheme describing all the categories and their relations in the catalog.
See also:	catalog themes taxonomy

5.3.12 Property: keyword/tag §

RDF Property:	dcat:keyword
Definition:	A keyword or tag describing the dataset.
Domain:	dcat:Dataset
Range:	rdfs:Literal

5.3.13 Property: contact point §

RDF Property:	**dcat:contactPoint**
Definition:	Link a dataset to relevant contact information which is provided using VCard [vcard-rdf].
Domain:	dcat:Dataset
Range:	vcard:Kind

5.3.14 Property: dataset distribution §

RDF Property:	**dcat:distribution**
Definition:	Connects a dataset to its available distributions.
Domain:	dcat:Dataset
Range:	dcat:Distribution

5.3.15 Property: landing page §

RDF Property:	**dcat:landingPage**
Definition:	A Web page that can be navigated to in a Web browser to gain access to the dataset, its distributions and/or additional information.
Sub property of:	foaf:page
Domain:	dcat:Dataset
Range:	foaf:Document
Usage note:	If the distribution(s) are accessible only through a landing page (i.e. direct download URLs are not known), then the landing page link *SHOULD* be duplicated as accessURL on a distribution. (see example 4.4)

5.4 Class: Distribution §

The following properties are recommended for use on this class: access URL, byte size, description, download URL, format, license, media type, release date, rights, title, update date

RDF class:	**dcat:Distribution**
Definition:	Represents a specific available form of a dataset. Each dataset might be available in different forms, these forms might represent different formats of the dataset or different

RDF class:	dcat:Distribution
	endpoints. Examples of distributions include a downloadable CSV file, an API or an RSS feed
Usage note:	This represents a general availability of a dataset it implies no information about the actual access method of the data, i.e. whether it is a direct download, API, or some through Web page. The use of dcat:downloadURL property indicates directly downloadable distributions.

5.4.1 Property: title §

RDF Property:	dct:title
Definition:	A name given to the distribution.
Range:	rdfs:Literal

5.4.2 Property: description §

RDF Property:	dct:description
Definition:	free-text account of the distribution.
Range:	rdfs:Literal

5.4.3 Property: release date §

RDF Property:	dct:issued
Definition:	Date of formal issuance (e.g., publication) of the distribution.
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
Usage note:	This property should be set using the first known date of issuance.
See also:	dataset release date

5.4.4 Property: update/modification date §

RDF Property:	dct:modified
Definition:	Most recent date on which the distribution was changed, updated or modified.

RDF Property:	**dct:modified**
Range:	rdfs:Literal encoded using the relevant ISO 8601 Date and Time compliant string and typed using the appropriate XML Schema datatype [xmlschema-2]
See also:	dataset modification date

5.4.5 Property: license §

RDF Property:	**dct:license**
Definition:	This links to the license document under which the distribution is made available.
Range:	dct:LicenseDocument
See also:	distribution rights, catalog license

5.4.6 Property: rights §

RDF Property:	**dct:rights**
Definition:	Information about rights held in and over the distribution.
Range:	dct:RightsStatement
Usage note:	dct:license, which is a sub-property of dct:rights, can be used to link a distribution to a license document. However, dct:rights allows linking to a rights statement that can include licensing information as well as other information that supplements the licence such as attribution.
See also:	distribution license, catalog rights

5.4.7 Property: access URL §

RDF Property:	**dcat:accessURL**
Definition:	A landing page, feed, SPARQL endpoint or other type of resource that gives access to the distribution of the dataset
Domain:	dcat:Distribution
Range:	rdfs:Resource
Usage note:	• Use accessURL, and not downloadURL, when it is definitely not a download or when you are not sure whether it is.

RDF Property:	**dcat:accessURL**
	• If the distribution(s) are accessible only through a landing page (i.e. direct download URLs are not known), then the landing page link *SHOULD* be duplicated as accessURL on a distribution. (see example 4.4)
See also	distribution download URL

5.4.8 Property: download URL §

RDF Property:	**dcat:downloadURL**
Definition:	A file that contains the distribution of the dataset in a given format
Domain:	dcat:Distribution
Range:	rdfs:Resource
Usage note:	dcat:downloadURL is a specific form of dcat:accessURL. Nevertheless, DCAT does not define dcat:downloadURL as a subproperty of dcat:accessURL not to enforce this entailment as DCAT profiles may wish to impose a stronger separation where they only use accessURL for non-download locations.
See also	distribution access URL

5.4.9 Property: byteSize §

RDF Property:	**dcat:byteSize**
Definition:	The size of a distribution in bytes.
Domain:	dcat:Distribution
Range:	rdfs:Literal typed as xsd:decimal.
Usage note:	The size in bytes can be approximated when the precise size is not known.

5.4.10 Property: media type §

RDF Property:	**dcat:mediaType**
Definition:	The media type of the distribution as defined by IANA.
Sub property of:	dct:format

RDF Property:	**dcat:mediaType**
Domain:	dcat:Distribution
Range:	dct:MediaTypeOrExtent
Usage note:	This property *SHOULD* be used when the media type of the distribution is defined in IANA, otherwise dct:format *MAY* be used with different values.
See also:	format

5.4.11 Property: format §

RDF Property:	**dct:format**
Definition:	The file format of the distribution.
Range:	dct:MediaTypeOrExtent
Usage note:	dcat:mediaType *SHOULD* be used if the type of the distribution is defined by IANA.

5.5 Class: Concept scheme §

RDF Class:	**skos:ConceptScheme**
Definition:	The knowledge organization system (KOS) used to represent themes/categories of datasets in the catalog.
See also:	catalog themes, dataset theme

5.6 Class: Concept §

RDF Class:	**skos:Concept**
Definition:	A category or a theme used to describe datasets in the catalog.
Usage note:	It is recommended to use either skos:inScheme or skos:topConceptOf on every skos:Concept used to classify datasets to link it to the concept scheme it belongs to. This concept scheme is typically associated with the catalog using dcat:themeTaxonomy
See also:	catalog themes, dataset theme

5.7 Class: Organization/Person §

RDF Classes:	**foaf:Person for people and foaf:Organization for government agencies or other entities.**
Usage note:	FOAF [FOAF] provides sufficient properties to describe these entities.

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B. Change history §

Changes since the W3C Candidate Recommendation 05 November 2013:

- Section 5.4 Property: download URL; usage note added to clarify the relationship to dcat:accessURL
- Section 5.1: A domain row is added to the table describing dcat:themeTaxonomy property
- Section 5.3: A domain row is added to the tables describing dcat:theme, dcat:keyword and dcat:contactPoint properties
- Section 5.4: A domain row is added to the table describing dcat:accessURL, dcat:downloadURL, dcat:byteSize and dcat:mediaType properties
- Section 5: clarified that this spec is non-normative concerning terms outside the DCAT namespace, and added normative references for those terms.

Changes since the second W3C Last Call working Draft 01 August 2013:

- Section 4.1: the provided example is extended with example usage of properties dct:spatial, dct:temporal and dcat:contactPoint
- Section 5.4 Property: access URL; definition and usage note texts clarified
- Section 5.4 Property: download URL; usage note saying "this value is a URL" is removed as it is confusing given that the range is rdfs:Resource
- Section 5.3 Property: contact point; change range from vcard:VCard to vcard:Kind. These two classes are equivalent however vcard:VCard is deprecated.
- Section 5.3 Property: language; usage note is expanded to describe the case of multiple language datasets.
- Section 4. Clarification text regarding versioning is added: "DCAT itself does not define properties specific to APIs description. These are considered out of the scope of this version of the vocabulary. Nevertheless, this can be defined as a profile of the DCAT vocabulary."

Changes since W3C Last Call working Draft 12 March 2013:

- Section 4: diagram updated with new properties
- Section 4: add text to clarify describing datasets available via API
- Section 5.1: description of properties `dct:issued` and `dct:modified` updated
- Section 5.1: `dct:rights` added
- Section 5.2: description of properties `dct:issued` and `dct:modified` updated
- Section 5.3: description of properties `dct:issued` and `dct:modified` updated

- Section 5.3: `dcat:contactPoint` added
- Section 5.4: description of properties `dct:issued` and `dct:modified` updated
- Section 5.4: `dct:rights` added
- Section 5.5: split into two sections 5.5 and 5.6

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C.1 Normative references §

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