



## **Webinar DCAT-AP Major Release – 30 august 2019 – Meeting Minutes**

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Abstract	This document presents the minutes of the DCAT-AP major release 3rd webinar held on 30 August 2019.

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## 1. AGENDA

1. Opening
2. Presentation of DCAT 2
3. Comparison of DCAT 2 vs DCAT-AP
4. Next Steps

## 2. MINUTES

### 2.1. A. Opening

The meeting was opened by SEMIC team, the participants were welcomed and the agenda was presented. Emphasis was put on the purpose of this webinar: to present the new DCAT proposal (DCAT 2) and discuss the impact of those possible changes to DCAT-AP. Previously suggested changes by the community have been discussed in former webinars.

The analysis presented in this webinar is based on the [DCAT- Version 2 W3C Working Draft published on 28 May 2019](#) and updated based on the on [DCAT- Version 2 W3C Editor's Draft](#) published on 27 August 2019.

### 2.2. Presentaion of DCAT 2

The first part of the presentation was an overview of the main classes of DCAT 2 and the main changes from DCAT 2014 to DCAT 2. Examples of usage were not covered in this presentation. This information can be found in the [current documentation of DCAT 2](#).

The SEMIC technical team presented the DCAT 2 main classes:

- **Catalogued Resource** class (*[dcat:Resource](#)*): **new class**, added in this revision of DCAT 2. It is the class of all cataloged resources, the super-class of *[dcat:Dataset](#)*, *[dcat:DataService](#)*, *[dcat:Catalog](#)* and any other member of a *[dcat:Catalog](#)*.
  - *New property added in DCAT 2<sup>1</sup>: [dcat:qualifiedRelation](#).*
  - *Properties added in this class in this revision of DCAT 2<sup>2</sup>: [dct:accessRights](#), [dct:conformsTo](#), [dct:creator](#), [dct:type](#), [dct:relation](#), [prov:qualifiedAttribution](#), [odrl:hasPolicy](#), [dct:isReferencedBy](#).*
- **Catalog** class (*[dcat:Catalog](#)*): currently made a subclass of *[dcat:Dataset](#)*. provision for catalogs to be composed of other catalogs is also enabled.
  - *New properties added in DCAT 2: [dcat:service](#), [dcat:catalog](#)*
  - *Properties added in this revision of DCAT 2: [dct:hasPart](#)*
- **Catalog Record** class (*[dcat:Catalog](#)*)
  - *Properties added in this class this revision of DCAT 2: [dct:conformsTo](#)*
- **Dataset** class (*[dcat:Dataset](#)*): the sub-class relationship of *[dctype:Dataset](#)* from DCAT 2014 has been removed in DCAT 2.

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<sup>1</sup> Properties newly added in dcat namespace in this revision of DCAT 2

<sup>2</sup> Existing properties (from other namespaces) but newly added to DCAT 2 classes in the context of DCAT 2

- New properties added in DCAT 2: [dcat:spatialResolutionMeters](#), [dcat:temporalResolution](#)
- Properties added in this class this revision of DCAT 2: [prov:wasGeneratedBy](#)
- **Distribution** class ([dcat:Distribution](#))
  - New properties added in DCAT 2: [dcat:accessService](#), [dcat:spatialResolutionMeters](#), [dcat:temporalResolution](#), [dcat:compressFormat](#), [dcat:packageFormat](#)
  - Properties added in this class in this revision of DCAT 2: [odrl:hasPolicy](#), [dct:conformsTo](#)
- **Data Service** class ([dcat:DataService](#)): **new class**, added in this revision of DCAT 2, to support cataloging of various kinds of data services. A collection of operations that provides access to one or more datasets or data processing functions. Sub-class of [dcat:Resource](#) and [dctype:Service](#).
  - New properties added in DCAT 2: [dcat:endPointURL](#), [dcat:endPointDescription](#), [dcat:servesDataset](#)
  - Properties added in this class in this revision of DCAT 2: [dct:licence](#), [dct:accessRights](#)
- **Concept Scheme** ([skos:ConceptScheme](#)), **Concept** ([skos:Concept](#)), **Person** ([foaf:Person](#)) **Organization** ([foaf:Organization](#)): no changes in these classes.
- **Relationship** class ([dcat:Relationship](#)): **new class**, added in this revision of DCAT 2. An association class for attaching additional information to a relationship between DCAT Resources.
  - New properties added in DCAT 2: [dcat:hadRole](#)
  - Properties added in this class in this revision of DCAT 2: [dct:relation](#)
- **Role** class ([dcat:Role](#)): **new class**, added in this revision of DCAT 2. Role is the function of a resource or agent with respect to another resource, in the context of resource attribution or resource relationships.
- **Period of Time** class ([dct:PerioOfTime](#)): **new class**, added in this revision of DCAT 2. An interval of time that is named or defined by its start and end.
  - New properties added in DCAT 2: [dcat:startDate](#), [dcat:endDate](#)
  - Properties added in this class in this revision of DCAT 2: [time:hasBeginning](#), [time:hasEnd](#)
- **Location** class ([dct:Location](#)): **new class**, added in this revision of DCAT 2. A spatial region or named place.
  - New properties added in DCAT 2: [dcat:bbox](#), [dcat:centroid](#)
  - Properties added in this class in this revision of DCAT 2: [loctn:geometry](#), [w3cgeo:lat](#), [w3cgeo:long](#), [w3cgeo:alt](#). In the latest editors' draft, properties like altitude, longitude and latitude are not included so they will probably not be added in the final release.

Qualified terms from [PROV-O] and additional forms are used to fully express the semantics of some relationships, like relationships between datasets and agents and relationships between datasets and other resources. The new property [dcat:qualifiedRelation](#) and a new class [dcat:Relationship](#) are added to DCAT 2 to support relationships between datasets or other resources. For more information please refer to: [13.2 Relationships between datasets and other resources](#)

### 2.3. Comparison of DCAT 2 vs DCAT-AP

A brief review is presented of all the changes in DCAT 2 in terms of new parameters added, parameters added and already existed in DCAT-AP and GeoDCAT-AP and new features added and declared as *features-at-risk*<sup>3</sup>.

- **Catalog** class (***dcat:Catalog***)
  - Properties added in this class this revision of DCAT 2, available in DCAT-AP: *dct:hasPart*
  - New properties added in DCAT 2, marked as *features-at-risk*: *dcat:service, dcat:catalog*
- **Catalogued Resource** class (***dcat:Resource***): **new class**, added in this revision of DCAT 2.
  - Properties added in this class this revision of DCAT 2, available in DCAT-AP: *dct:accessRights, dct:conformsTo, dct:relation, dct:type*
  - Properties added in this class in this revision of DCAT 2, available in GeoDCAT-AP: *dct:creator, prov:qualifiedAttribution*
  - New properties added in DCAT 2, marked as *features-at-risk*: *dcat:qualifiedRelation, prov:qualifiedAttribution*
- **Catalog Record** class (***dcat:CatalogRecord***)
  - Properties added in this class in this revision of DCAT 2, available in DCAT-AP: *dct:conformsTo*
- **Dataset** class (***dcat:Dataset***)
  - Properties added in this class in this revision of DCAT 2, available in GeoDCAT-AP: *prov:wasGeneratedBy*
  - Properties added in this class in this revision of DCAT 2, marked as *features-at-risk*: *prov:wasGeneratedBy*
  - New properties added in DCAT 2, marked as *features-at-risk*: *dcat:spatialResolutionMeters, dcat:temporalResolution*
- **Distribution** class (***dcat:Distribution***)
  - Properties added in this revision of DCAT 2, available in DCAT-AP: *dct:conformsTo*
  - New properties added in DCAT 2, marked as *features-at-risk*: *dcat:accessService, dcat:packageFormat, odrl:haspolicy*
- **Data Service** class (***dcat:DataService***): **new class** added in this revision of DCAT 2.
  - New properties added in DCAT 2: *dcat:endPointURL, dcat:endPointDescription, dcat:servesDataset*
  - Properties added in this class in this revision of DCAT 2: *dct:licence, dct:accessRights*
- **Relationship** class (***dcat:Relationship***): **new class** added in this revision of DCAT 2, marked as *feature-at-risk*.
  - New properties added in DCAT 2, marked as *features-at-risk*: *dcat:hadRole*
- **Role** class (***dcat:Role***): **new class** added in DCAT 2, marked as *feature-at-risk*.

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<sup>3</sup> Features at risk are features that are pending further evidence of implementation, as documented in [Data Catalog Vocabulary \(DCAT\) - Version 2 W3C Editor's Draft 01 September 2019](#) in [D.2 Features at risk](#)

- **Period of Time** class (**dct:PerioOfTime**): **new class** added in this revision of DCAT 2.
  - New properties added in DCAT 2, marked as **features-at-risk**: **dcat:startDate, dcat:enddate**
- **Location** class (**dct:Location**) **new class** added in this revision of DCAT 2.
  - New properties added in DCAT 2, marked as **features-at-risk**: **dcat:bbox, dcat:centroid**
  - Properties added in this class in this revision of DCAT 2, available in GeoDCAT-AP: **locn: geometry**
  - Properties that will probably not be added in the final release of DCAT 2: **w3cgeo:lat, w3cgeo:long, w3cgeo:alt**

#### 2.4. Discussion

After presenting the comparison of DCAT 2 vs DCAT-AP (which parameters from DCAT-AP and GeoDCAT-AP were introduced in DCAT 2, which features are new in DCAT 2, which features are in risk etc) , the SEMIC team moderator suggested to start discussing how to proceed, what are the risks and what features from DCAT 2 we want to include in the DCAT-AP major release.

A participant initiated the discussion by expressing his interest in DCAT-AP adopting DCAT 2 Data Service class to open up APIs and data services. The SEMIC team replied that SEMIC is in favor of including Data Service class in DCAT-AP. Regarding the newly introduced Catalogued Resource class, it is not sure if it is of interest/benefit for DCAT-AP.

The SEMIC team moderator also noted that the Data Service may be a feature at risk It may not be implemented in the final version of DCAT 2. Up to now we were adding things in DCAT-AP and DCAT is adopting them. We may still want to have Data Service in DCAT-AP, even if DCAT does not implement it. They therefore may choose to remove the at risk feature and may want to implement it because we consider it important. A participant noted that this implies that including Data Service in DCAT-AP, is a message that its usage is encouraged (not mandatory) and it covers the risk if this is not eventually included in DCAT 2. SEMIC team noted that it cannot be mandatory because not every catalog will have data services, thus it will only make things more complicated.

Another participant made two comments. Specifically, he noted that:

1. it's good that the Catalog class **dcat:Catalog** is made a subclass of **dcat:Dataset** , and this is important to follow in DCAT-AP. When Catalog class is explicitly a subclass of Dataset (which is logical), it makes possible to use rich properties (inherited) from Dataset also to describe Catalogs, which provides new opportunities. This was not an issue, but a very important change which he salutes! It is a big feature of the new DCAT. On the same topic, another participant mentioned that in Sweden, they have discussed if contact points on catalog level need to be there. This will not be a problem anymore with this feature (Catalog subclass of Dataset).
2. DCAT 2 is moving away from the main terminology which may affect the label of the profile.

The SEMIC team provided the following answers:

- Regarding comment. #2: There is a change in terminology of profile and application profile and this sounds quite interesting. The work on profiles in



DCAT is still in an early stage and thus it is too soon to think of changing the name of DCAT-AP. DCAT-AP is called this way to emphasize on the application profile extension. We will wait to see if we need to change the name, once W3C is finished with the naming of profiles.

Next, some comments posted on chat were addressed. There was a comment about **dcat:Resource** raising the question if it is possible in the future to include information models in a catalog. The SEMIC team moderator asked if this means to have a catalog of information models, or also including the information models behind the datasets? The participant who raised the question, replied that there is also a need for describing the datasets and changing them. There will probably be a national information model on how to exchange this information model and it is important to have this as a DCAT resource. The SEMIC team replied that this is related to the information model itself. The ADMS and Joinup portals were indicated, where information and communities are available for semantic information. There might be some hints there on how to do that.

Another two questions were raised through chat:

1. Why (in Dataset **dcat:Dataset** and Distribution **dcat:Distribution**) spatial resolution **dcat:spatialResolutionInMeters** is in meters while temporal resolution **dcat:temporalResolution** is not specified (in units)?
2. What is the difference between **dcat:startDate** and **time:hasBeginning**?

These were quite specific questions and the presenter was addressed to answer them. The SEMIC presenter referred to the definition of each property, to provide an answer to the questions raised.

1. Regarding question #1, a participant noted that temporal resolution has a range a duration. In this range a resolution is defined. In spatial resolution this is in the name of the property. Temporal Resolution is more flexible. Another participant commented that temporal resolution is one dimension and easy to express. While spatial resolution is more complex as the grid could be square / polygons expressed in meters or like GPS coordinates etc.
2. Regarding question #2, by definition **dcat:startDate** is the start of the period, while **time:hasBeginning** is about the beginning of the period of interval. When we use these properties, we need to define a period, but also to refer to a time interval. A participant mentioned that **time:hasBeginning** and **time:hasEnd** point to a named event where we don't have an exact period of time for. The exact period start and end would not be available here in this case. Another participant also added that the reason is that **time:hasBeginning** and **time:hasEnd** is something that is used. The other properties are kept for backward compatibility. Time ontology is very rigorous and **time:hasBeginning** has a range of uses that are not exactly overlapping with the use of **dcat:startDate**. The former participant also noted that the difference is that **dcat:startDate** and **dcat:endDate** require a literal, while **time:hasBeginning** and **time:hasEnd** uses a less specific time. The presenter also mentioned that **dcat:startDate** and **dcat:endDate** are also marked as features-at-risk, and therefore **time:hasBeginning** and **time:hasEnd** should be used as more stable. The later participant commented that **time:hasBeginning** and **time:hasEnd** allows comparisons of periods.

SEMIC team moderator indicated that there are two possibilities, regarding DCAT 2 specific questions. Although we could have a DCAT-AP that is more advanced

compared to DCAT 2, participants were encouraged to take the discussion to W3C. He indicated the following options:

- Try to make suggestions as DCAT-AP WG to W3C
- Try to interact with W3C 1 by 1.

Another participant noted (in chat) that for **dcat:DataService** we need a way to express "available formats" (0..\*). He inquired whether this had been up for discussion in the W3C revision. The SEMIC team requested to elaborate on this a little more. The participant noted that distributions need to be repeated. There is no way to express data services and in what ways data can be resolved. Not all data services deliver data. If we are to include them in the datasets, we have no way to express formats. It was a question to see if there is knowledge about this issue being discussed in W3C.

SEMIC team moderator noted that APIs tend to be self-describing. They tend to provide human readable and machine-readable descriptions. It is a surprise to see a distribution link because at the endpoint there is everything needed. The participant thinks there could be a need for adding this. It is good to have it in a catalog.

Another participant mentioned that one of the major requirements regarding a portal is that you should have the ability to filter on datasets and this is a tedious task to repeat. If you don't have a way of telling what formats are available, you still need to indicate this as distributions. Without a way of indicating different formats, a lot of editing is needed, which is not desired. SEMIC team noted that a data service can be expressed in all these formats. It was also mentioned that we need to think a little bit more on the impact. The interaction is not that much. It is more about the mandatory properties of the dataset. The participant replied that this is necessary because you get a lot of pollution with different distributions on the same dataset. The SEMIC team still sees the point since the different formats will have a different way of calling them. However, if someone wants to proactively get them, he would have a different URL. It is unclear if this can be avoided. The participant noted that information is needed on how to add parameters to the URL. Unless this information is available through a specific property, this should be verified by checking the endpoint description documentation. SEMIC team moderator noted that W3C is not in favor of including a URL but the whole Swagger file in the documentation. Moving the format in the data service may be tricky. The complication can be included in the dataset. The question that occurs here is at what point this is going to make everything more complicated in general.

The participant said that we should distinguish between two types of the use of Data Service. One full fledged data service description with more metadata fields and the other as a light version with endpoint description and endpoint url. He noted that there is the problem of disconnecting dataset and data service, which may serve as a way to attract their (W3C) interest .

The SEMIC team moderator highlighted that the right thing to do is to raise the issue within W3C group since this is something they may have missed, or a more complicated endpoint description should be used. We may not have the capacity to follow-up with the knowledge of certain participants, so it was suggested to raise the point directly to W3C.

At this point, SEMIC team moderator suggested moving to a more structural discussion on changes from DCAT 2 and elaborate on what do we do with them. We should have DCAT-AP 2.0 ready by October and another meeting just before and just

after public consultation time. We need to move proactively towards the next major version.

He highlighted that he sees the usage of Catalogued Resource and its utilization as a way to accommodate application profiles but he has to recognize he is unconvinced since DCAT-AP is already an application profile. He leaves this for discussion later.

He also noted that there is no doubt that we want to be able to model APIs and people to access APIs of datasets. We should conclude that we will adopt in DCAT-AP the Data Service class and all that this implies. This could work even without the Resource class. If we would introduce the Resource class, there is definitely no negative effect. He is also in favor of adopting `prov:wasGeneratedBy` in `dcat:Dataset`. Anything we adopt will probably be optional or recommended. We will propose something on the safe side. Discussion in the community will possibly then make something mandatory. It is important to allow people to document provenance and relationship roles. He assumes that this is not something all portals need to provide. He will maintain something more on the recommended side.

Regarding temporal and spatial resolutions, we are not sure exactly what to propose. The discussion was mainly on how spatial resolution is defined. The audience was addressed to reflect based on their experience and use. It may be convenient but optional. If the proposal from W3C is good enough, what do we do with these?

Based on the aforementioned remarks, a participant emphasized that the main question here is *why we do the DCAT-AP new version*. Is it important to search for information or to transfer information?

SEMIC team moderator acknowledged that this is a good comment. We cannot forget we have GeoDCAT-AP. We can always go there to describe datasets with a lot more information on geolocation and temporal resolution. We see that W3C is integrating a lot of GeoDCAT-AP into DCAT 2. But we already have GeoGeoDCAT-AP, meaning these features are not missing.

Another participant mentioned that the issue of scoping is also related to the work on the base application profile. Some other participant also wanted to support this idea because when you are describing enterprise assets that are not open, DCAT and DCAT-AP are attractive and there are not many alternatives. He was happy to see the newly introduced Catalogued Resource class, but he was also expecting a Data Asset class to describe data assets that are just somewhere behind an application (sometimes 90% of data assets). You cannot really make an equivalent. If DCAT-AP can go beyond open data to also address enterprise data, this could be interesting. The former participant that initiated this discussion, noted that with DCAT-AP we get a lot of options to choose from. DCAT is also encouraging thinking about profiles. From a user perspective, it's nice to choose between what profile you would like to use, to get a more tailored user experience. We should think of the profiles as a way of helping implementers and users switching between types of fields needed to be provided. SEMIC team moderator replied that this is difficult to assess at this point. The participant agrees to different profiles for different target groups. It doesn't exclude other uses of DCAT within the European scene. The other participant involved in this discussion mentioned that his feelings are mixed. It is nice to have a maximum reuse of ontologies. He's also in favor of things being minimalistic.

At this point SEMIC team moderator concluded the webinar and thanked everyone for participating. He indicated that minutes of the webinar will be sent with the documented discussion and proposals on what to take from DCAT 2 into DCAT-AP will be put on DCAT-AP GitHub. The discussion can be continued there (in GitHub).

## **2.5. Next Steps**

As next steps:

- Proposals will be placed as issues in GitHub regarding features from DCAT 2 to be included into DCAT-AP.
- A webinar on DCAT-AP could still happen towards the end of September.
- For more specific issues related to DCAT 2, please make suggestions as DCAT-AP WG to W3C on <https://github.com/w3c/dxwg/issues/> or to [public-dxwg-comments@w3.org](mailto:public-dxwg-comments@w3.org).
- Public review period for DCAT-AP v2.0 starts on 4 October 2019.
- Major Release to be published in November.

## **2.6. Closing remarks and discussion**

The SEMIC team thanked everyone who participated in this Webinar and expressed their satisfaction regarding engagement of participants in the process.

## Annex I. DOCUMENT METADATA

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\*: to be completed if possible