

1 July 2015

# Data Service: Changes in RDF/XML format from week 40, 2015 (export release 03/2015)

## 1. Release schedule

Dear Sir or Madam

As part of the scheduled Linked Data service release planning<sup>1</sup> of the German National Library (DNB), the next changes in the conversion and the data modelling will take place on 1 October 2015.

(There may be disruptions to the interfaces and the Data Shop during the technical changeover between 08:00 and 12:00 on this day.)

Mirroring the schedule of the export releases, updated full copies of the Integrated Authority File (GND) and the bibliographic data of the DNB will be made available for downloading in RDF/XML and Turtle format in February, June and October<sup>2</sup>.

# 2. RDF/XML format

There will be changes to the XML syntax itself of the GND and DNB bibliographic data conversion in the 03/2015 export release. This is necessitated by the internal use of a new library to generate these. The changes are being made in preparation for the plans to offer further serialisation forms (especially JSON-LD) in the future.

Semantically there will be no difference to the previous format: the XML data will still describe the same RDF graph and the same triples as before.

There may be consequences for users who process the data as XML or plain text.

<sup>&</sup>lt;sup>1</sup> https://wiki.dnb.de/x/wgcbBQ

<sup>&</sup>lt;sup>2</sup> http://datendienst.dnb.de/cgi-bin/mabit.pl?userID=opendata&pass=opendata&cmd=login

The main differences are:

All literals with no other data type are now explicitly given with the data type "xsd:string"<sup>3</sup>, e.g.

<dc:title rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Herz und Seele</dc:title>

This will have a corresponding effect on the file size of the dump files.

Blank nodes will now always be given an automatically generated nodeID which is only valid within the file. It is alphanumeric and consists of 15 characters.

An example from http://d-nb.info/gnd/1026329221:

Previously

<gndo:preferredNameEntityForThePerson rdf:parseType="Resource">

<gndo:forename>Pattewar</gndo:forename>

<gndo:surname>Seema</gndo:surname>

</gndo:preferredNameEntityForThePerson>

From Export Release 03/2015

<gndo:preferredNameEntityForThePerson>

<rdf:Description rdf:nodeID="node19nes5gg7x3">

<gndo:forename

- rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Pattewar</gndo:forename> <gndo:surname
- rdf:datatype="http://www.w3.org/2001/XMLSchema#string">Seema</gndo:surname> </rdf:Description>
- </gndo:preferredNameEntityForThePerson>

The sample files provided for the other changes (see below) contain further, complete examples.

This change will not take effect in the ZDB conversion until export release 01/2016.

#### 3. GND conversion changes

The following GND conversion changes are planned for the 03/2015 export release:

- Improvement: The ORCID number is issued as an additional identifier with the object property "<owl:sameAs>". The ORCID<sup>4</sup> (Open Researcher and Contributor ID) is a non-proprietary, predominantly numeric code for the unique identification of academic authors. It has been possible to record this number in the GND since mid-March 2015. (Sample records: Identifier 1049560450, 140312463, 1011711818)
- Debug: Four-figure BC year specifications issued with data type "xsd:gYear"<sup>5</sup> have now also been given valid values.
   (Sample records: Identifier 118502476, 118545485, 118613472)

<sup>&</sup>lt;sup>3</sup> http://www.w3.org/TR/xmlschema-2/#string

<sup>&</sup>lt;sup>4</sup> http://orcid.org/

<sup>&</sup>lt;sup>5</sup> http://www.w3.org/TR/xmlschema-2/%23gYear

# 4. Bibliographic data conversion changes

The following bibliographic data conversion changes are planned for the 03/2015 export release:

- Debug: The "dcterms: isPartOf", "dcterms: hasPart", "dcterms: isFormatOf", "dc: relation", "rdau: P60278", "rdau: P60261" properties of linked ZDB titles were hitherto wrongly issued with URIs to the non-information resource, i.e. the RDF description of the journal. In future, the link target will be the information resource (i.e. the journal). The URIs will therefore change from http://ld.zdb-services.de/data/<ZDBID> to http://ld.zdb-services.de/resource/<ZDBID> (Sample records: Identifier 010002251, 010000119, 010000348)
- Improvement: Details of the price, type of cover, etc. will now also be issued for journal descriptions. The property "rdau:P60521", "has terms of availability", is used for this. The previously used property "rdau:P60001" is also being changed to "rdau:P60521" in the implementation of this element in monograph descriptions.
- (Sample records: Identifier 017155827, 016209281, 1050181700, 101262935X)
  Improvement: Classification information according to the subject category scheme "Thema"<sup>6</sup> are issued in the rdf element "dc:subject" in the bibliographic data. Since mid-May 2014, the bibliographic data which were given in the New Release Service of the DNB have contained subject classification details according to "Thema".
  (Sample data record: Identifier 1065191693, 1066473110, 1066471770)

#### 5. ZDB conversion changes

Debug: The "dc:relation" property, which contains horizontal links (parallel editions), previously referred - wrongly - to URIs of the non-information resource, i.e. the RDF description of the journal. In future, the link target will be the information resource (i.e. the journal) as in the other title link relationships. The URIs will therefore change from http://ld.zdb-services.de/data/<ZDBID> to http://ld.zdb-services.de/resource/<ZDBID>

(Sample records: Identifier 19-x (IDN 010000119), 60-7 (010000445), 800780-9 (IDN 014440563)

<sup>&</sup>lt;sup>6</sup> http://www.editeur.org/151/Thema/

# 6. Sample files and other information

Sample files, including notified changes, are scheduled to be made available in the next few days under the following file names: "GNDTiteITestRelease03\_2015RDF.RDF" for Integrated Authority File GND authority data, "DNBTiteITestRelease03\_2015RDF.RDF" for DNB bibliographic data, and "ZDBTiteITestRelease03\_2015RDF.RDF" for bibliographic data of the German Union Catalogue of Serials (ZDB) http://datendienst.dnb.de/cgi-bin/mabit.pl?userID=testdat&pass=testdat&cmd=login.

Information on the Linked Data Service of the German National Library can be found on our website at http://www.dnb.de/EN/lds.

The German text of this circular is available at http://www.dnb.de/datendienstinfo; the English version is available at http://www.dnb.de/EN/dataservicesnews.

Please do not hesitate to contact us should you have any questions.

Yours sincerely, on behalf of Deutsche Nationalbibliothek (German National Library) Heike Eichenauer (Digital Services) and Jana Hentschke (Information Infrastructure and Preservation)

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