



Exploring cultural data from UNESCO using semantic technologies:

Review examples of RDF triplets and graphs

María Auxilio Medina Nieto¹, Gudelia Pilar Pérez Conde²

Universidad Politécnica de Puebla

¹Departamento de Posgrado

²Ingeniería en Tecnologías de la Información

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From CSV to RDF in turtle syntax



COUNTRY_ID	COUNTRY_NAME_EN
AFG	Afghanistan
ALB	Albania
DZA	Algeria
ASM	American Samoa
AND	Andorra
AGO	Angola
AA	Anguilla
ATG	Antigua and Barbuda
ARG	Argentina
ARM	Armenia
ABW	Aruba
AUS	Australia
AZE	Azerbaijan
AUT	Austria
BHS	Bahamas
BHR	Bahrain
BGD	Bangladesh



```
countries.ttl
1 @prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .
2 @prefix owl: <http://www.w3.org/2002/07/owl#> .
3 @prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .
4 <http://localhost:3333/0> <http://localhost:3333/COUNTRY_ID> "AFG";
5 <http://localhost:3333/COUNTRY_NAME_EN> "Afghanistan" .
6 <http://localhost:3333/1> <http://localhost:3333/COUNTRY_ID> "ALB";
7 <http://localhost:3333/COUNTRY_NAME_EN> "Albania" .
8 <http://localhost:3333/2> <http://localhost:3333/COUNTRY_ID> "DZA";
9 <http://localhost:3333/COUNTRY_NAME_EN> "Algeria" .
10 <http://localhost:3333/3> <http://localhost:3333/COUNTRY_ID> "ASM";
11 <http://localhost:3333/COUNTRY_NAME_EN> "American Samoa" .
12 <http://localhost:3333/4> <http://localhost:3333/COUNTRY_ID> "AND";
13 <http://localhost:3333/COUNTRY_NAME_EN> "Andorra" .
14 <http://localhost:3333/5> <http://localhost:3333/COUNTRY_ID> "AGO";
```



Transform Preview

Available Namespaces: rdf rdfs owl xsd void + Add Manage

R [index] Add type...

-IIDENTIFICADOR -> L COUNTRY_ID
Add object...

-PAIS -> L COUNTRY_NAME_EN
Add object...

Add property...



Data: CSV vs RDF

SDG11_COUNTRY	
COUNTRY_ID	COUNTRY_NAME_EN
AFG	Afghanistan
ALB	Albania
DZA	Algeria
ASM	American Samoa

```
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .  
@prefix owl: <http://www.w3.org/2002/07/owl#> .  
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .  
<http://localhost:3333/0> <http://localhost:3333/COUNTRY_ID> "AFG";  
<http://localhost:3333/COUNTRY_NAME_EN> "Afghanistan" .
```

Examples of RDF triplets

Some triplets about Mexico:

```
<http://localhost:3333/129>
```

```
<http://localhost:3333/COUNTRY_ID> "MEX";
```

```
<http://localhost:3333/COUNTRY_NAME_EN> "Mexico" .
```

Use of a prefix to simplify data

```
@prefix ws:<http://localhost:3333> .
```

```
ws:0 ws:COUNTRY_ID "AFG";
```

```
ws:COUNTRY_NAME_EN "Afghanistan".
```

```
ws:1 ws:COUNTRY_ID "ALB";
```

```
ws:COUNTRY_NAME_EN "Albania".
```

Use of a prefix to simplify data

```
@prefix ws:<http://localhost:3333> .
```

```
ws:0 ws:COUNTRY_ID "AFG";
```

```
ws:COUNTRY_NAME_EN "Afghanistan".
```

```
ws:1 ws:COUNTRY_ID "ALB";
```

```
ws:COUNTRY_NAME_EN "Albania".
```

Transforming data using a column name instead of a row index ₁

RDF Schema alignment

The RDF schema alignment skeleton below specifies how the RDF data that will get generated from your grid-shaped data. The cells in each record of your data will get placed into nodes within the skeleton. Configure the skeleton by specifying which column to substitute into which node.

Base URI: <http://localhost:3333/> [Edit](#)

RDF skeleton [RDF Preview](#)

Available prefixes: rdf owl rdfs foaf [+ Add](#) [Manage](#)

COUNTRY_NAME_EN URI Add type	<input type="checkbox"/> X > :COUNTRY_ID → <input type="checkbox"/> X > :COUNTRY_NAME_EN → Add property	<input type="checkbox"/> COUNTRY_ID Cell <input type="checkbox"/> COUNTRY_NAME_EN Cell
--	---	---

Transforming data using a column name instead of a row index ₂

```
@prefix rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#> .  
@prefix owl: <http://www.w3.org/2002/07/owl#> .  
@prefix rdfs: <http://www.w3.org/2000/01/rdf-schema#> .  
@prefix foaf: <http://xmlns.com/foaf/0.1/> .  
  
<http://localhost:3333/Afghanistan> <http://localhost:3333/COUNTRY_ID> "AFG";  
  <http://localhost:3333/COUNTRY_NAME_EN> "Afghanistan" .
```


Thanks a lot! 😊



María Auxilio Medina Nieto

Departamento de Posgrado

maria.medina@uppuebla.edu.mx, mauxmedina@gmail.com

Gudelia Pilar Pérez Conde

Ingeniería en Tecnologías de la Información

gudelia.perez353@uppuebla.edu.mx

