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Introducing Wikidata to the Linked Data Web

Fredo Erxleben , **Michael Günther** ,
Markus Krötzsch , Julian Mendez
and Denny Vrandečić

ISWC, 21th October 2014



WIKIMEDIA
FOUNDATION

About Wikidata

- Launched on 30th October 2012
 - 15,817,444 item pages
 - 12,674 active users
- (state of 1st October 2014)



Douglas Adams ^(Q42)

[\[edit\]](#)

English writer and humorist

[\[edit\]](#)

Also known as:

[Douglas Noël Adams](#)

[Douglas Noel Adams](#)

[DNA](#)

[Bop Ad](#)

[\[edit\]](#)

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 [Wikipedia pages linked to this item](#) |
 [Wikinews pages linked to this item](#) |
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 [Wikisource pages linked to this item](#) |
 [Wikivoyage pages linked to this item](#) |
 [Pages on other sites linked to this item](#)

Statements

birth name (monolingual text)	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="font-size: 0.8em;"> <input type="checkbox"/> <input type="checkbox"/> </div> <div style="flex-grow: 1;"> <p>Douglas Noël Adams (English)</p> <p style="color: #0070C0;">▶ 1 reference</p> </div> <div style="text-align: right;"> <p>[edit]</p> </div> </div>
[add]	
participant	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="font-size: 0.8em;"> <input type="checkbox"/> <input type="checkbox"/> </div> <div style="flex-grow: 1;"> <p>Monty Python's Flying Circus</p> <p style="color: #0070C0;">▶ 1 reference</p> </div> <div style="text-align: right;"> <p>[edit]</p> </div> </div>
[add]	
BIBSYS identifier	<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="font-size: 0.8em;"> <input type="checkbox"/> <input type="checkbox"/> </div> <div style="flex-grow: 1;"> <p>x90196888</p> <p style="color: #0070C0;">▼ 0 references</p> </div> <div style="text-align: right;"> <p>[edit]</p> </div> </div>
[add]	

- [Main page](#)
- [Community portal](#)
- [Project chat](#)
- [Create a new item](#)
- [Item by title](#)
- [Recent changes](#)
- [Random item](#)
- [Help](#)
- [Donate](#)

Language select

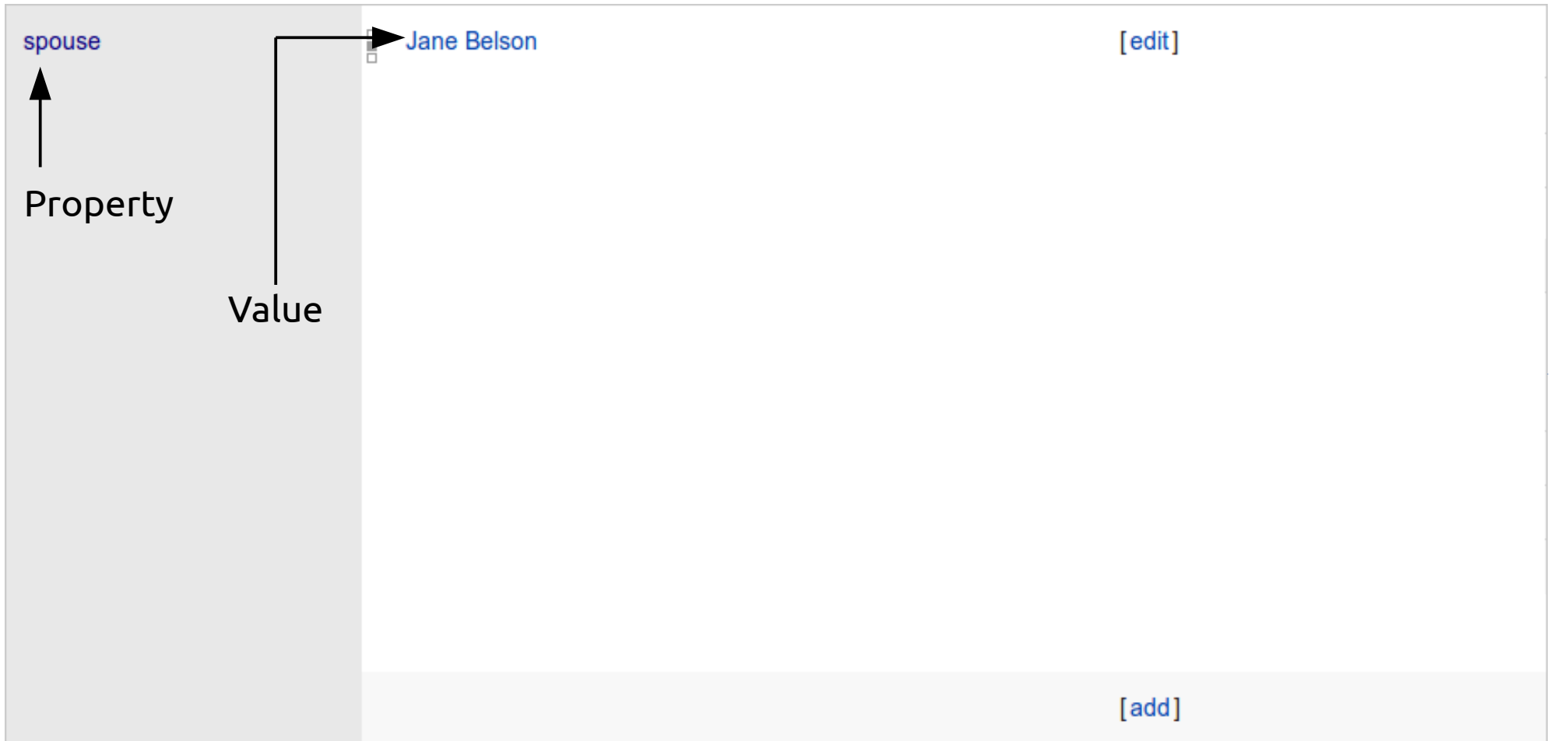
English ▼

Select

Tools

- [What links here](#)
- [Related changes](#)
- [Special pages](#)
- [Printable version](#)
- [Permanent link](#)
- [Page information](#)
- [Concept URI](#)
- [Cite this page](#)

About Wikidata



Statement

About Wikidata



Statement

About Wikidata

The image shows a Wikidata statement for the property 'spouse' with the value 'Jane Belson'. The interface includes a table of qualifiers for the statement, a list of references, and buttons for editing and adding more data. Annotations on the left side of the screenshot identify the 'Property' (spouse) and 'Value' (Jane Belson) components. A bracket on the right side groups the 'start date' and 'end date' rows under the label 'Qualifiers'. The 'References' section is also annotated with an arrow pointing to the reference table.

spouse	Jane Belson	[edit]
start date	25 November 1991	Qualifiers
end date	11 May 2001	
▼ 1 reference		
reference URL	http://www.nndb.com/people/731/000023662/	[edit]
original language	English	
title (string)	Douglas Adams	
publisher	NNDB	
date retrieved	7 December 2013	
[add reference]		
[add]		

Statement

Wikidata RDF

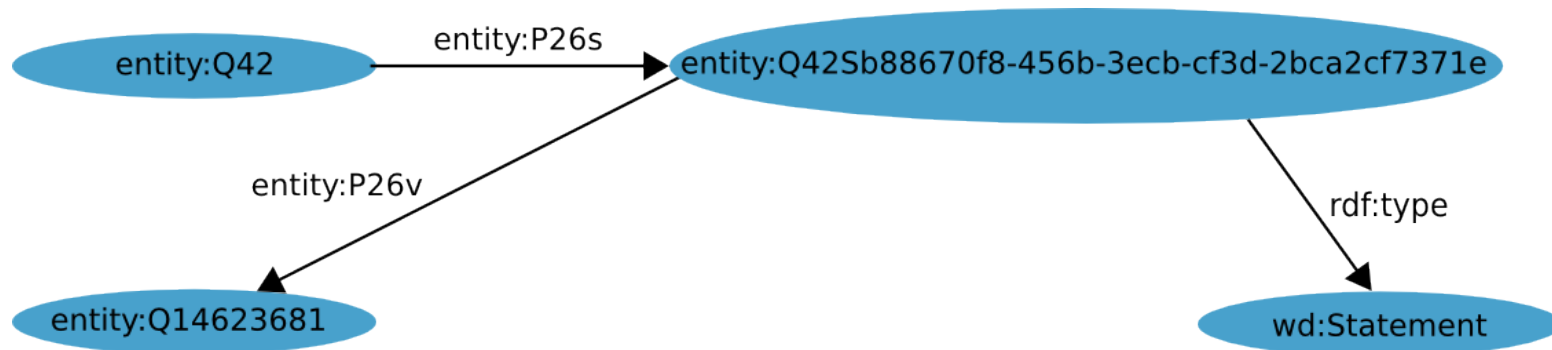
- Entities (items and properties) are represented with uniform URIs

`http://www.wikidata.org/entity/<id>`

Wikidata RDF

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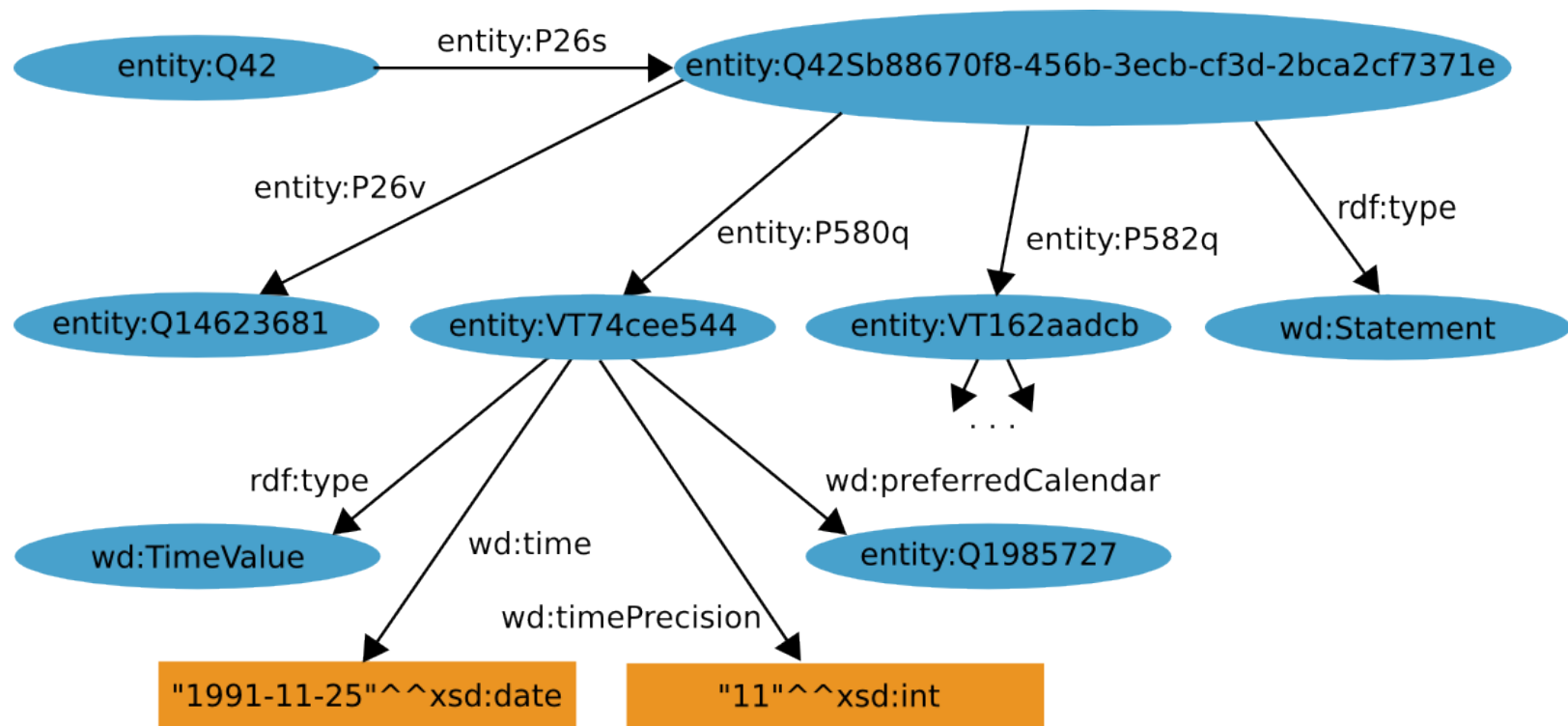
`http://www.wikidata.org/entity/<id>`



Wikidata RDF

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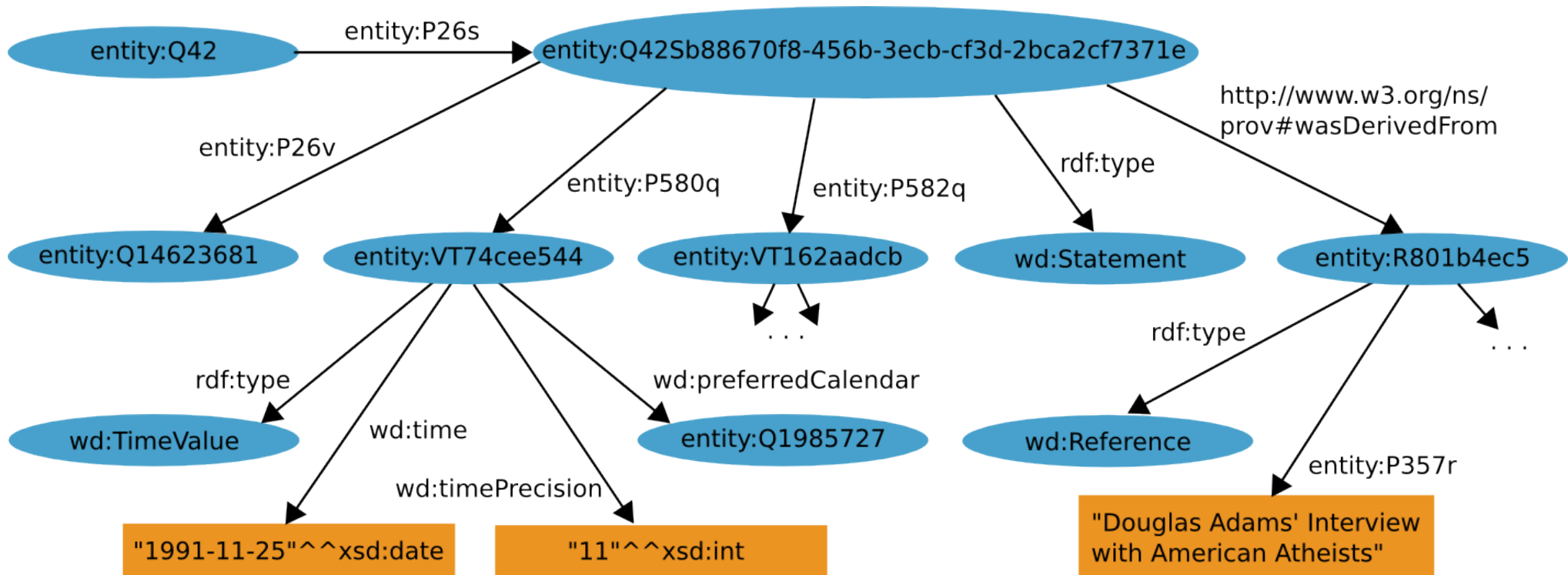
`http://www.wikidata.org/entity/<id>`



Wikidata RDF

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`http://www.wikidata.org/entity/<id>`



Wikidata RDF

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- Additional simple-statements dump

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- Individual dumps for statements, terms and sitelinks

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- IRIs

Entities <http://www.wikidata.org/entity/<entityID>>

Statements

<http://www.wikidata.org/entity/<entityID><UUID>>

Values <http://www.wikidata.org/entity/V<hash>>

References <http://www.wikidata.org/entity/R<hash>>

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- OWL compatible

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- OWL compatible
- Reuse of third-party vocabulary
- Links to 17 other RDF datasets

Wikidata RDF

File Topic	File size	Triples	Content
instances	61M	23,319,232	rdf:type relations
taxonomy	1.3M	332,210	rdfs:subclassOf relations
simple-statement	571M	133,381,203	simplified statements
statements	2.9G	381,429,952	statements
terms	1.3G	239,663,640	labels, aliases, descriptions
properties	1.4M	130,536	properties
sitelinks	1.3G	275,716,008	sitelinks

Generated with Wikidata Toolkit

https://www.mediawiki.org/wiki/Wikidata_Toolkit

Summary and Conclusion

- Over one billion triples
- Generated every month
- Next steps:
 - Integrating more datasets
 - Completing Wikidata RDF service
 - SPARQL endpoint



<http://tools.wmflabs.org/wikidata-exports/rdf>