



# Linked Data: A 30-Minute Crash Course!

Tom Heath

Lead Researcher  
Talis Systems Ltd

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# Outline

- No “hard sell” about Linked Data, just the basic concepts
- A basic introduction to the topic
  - Graphs
  - RDF Triples
  - URIs for documents and things
  - Links between (things in different) data sets
- A brief mention of some useful data sets
- Outline of the hands-on session



# What is a Graph?

Tom





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Tom



Talis



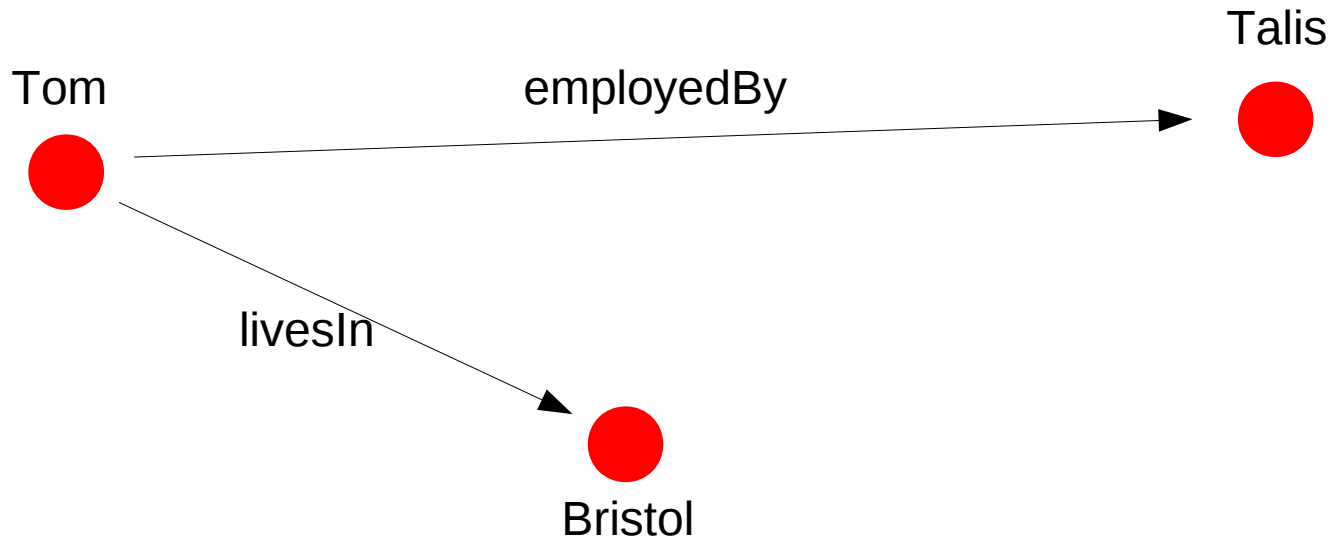


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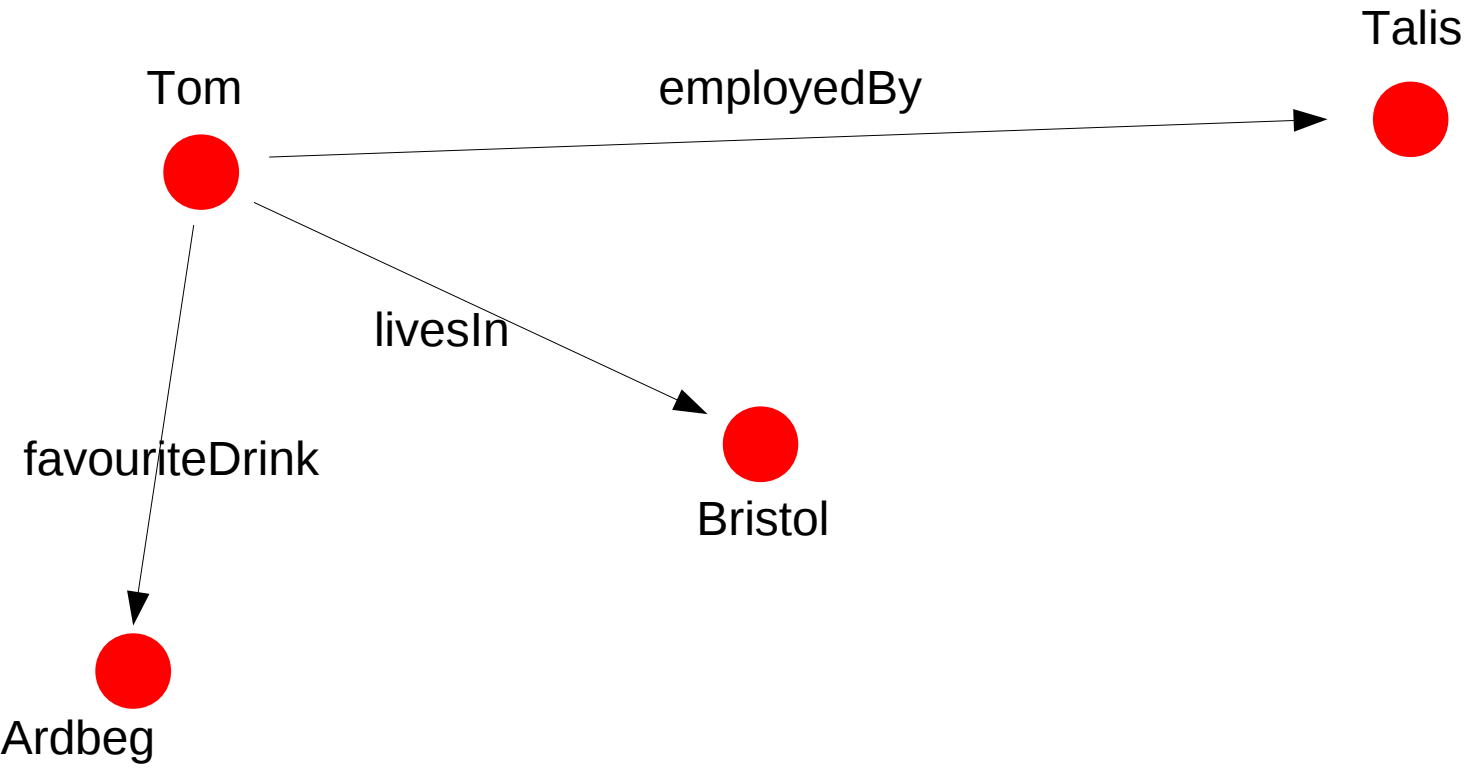


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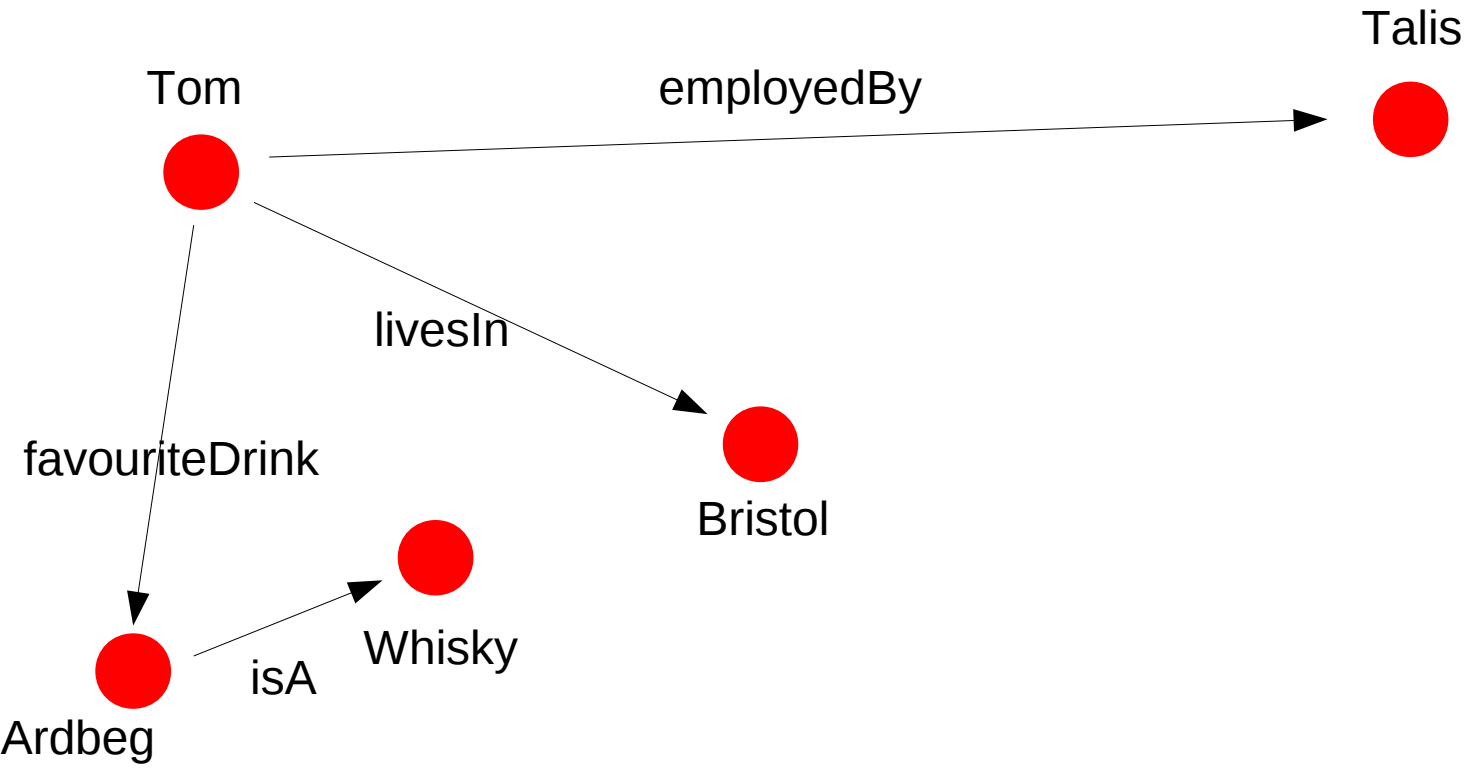


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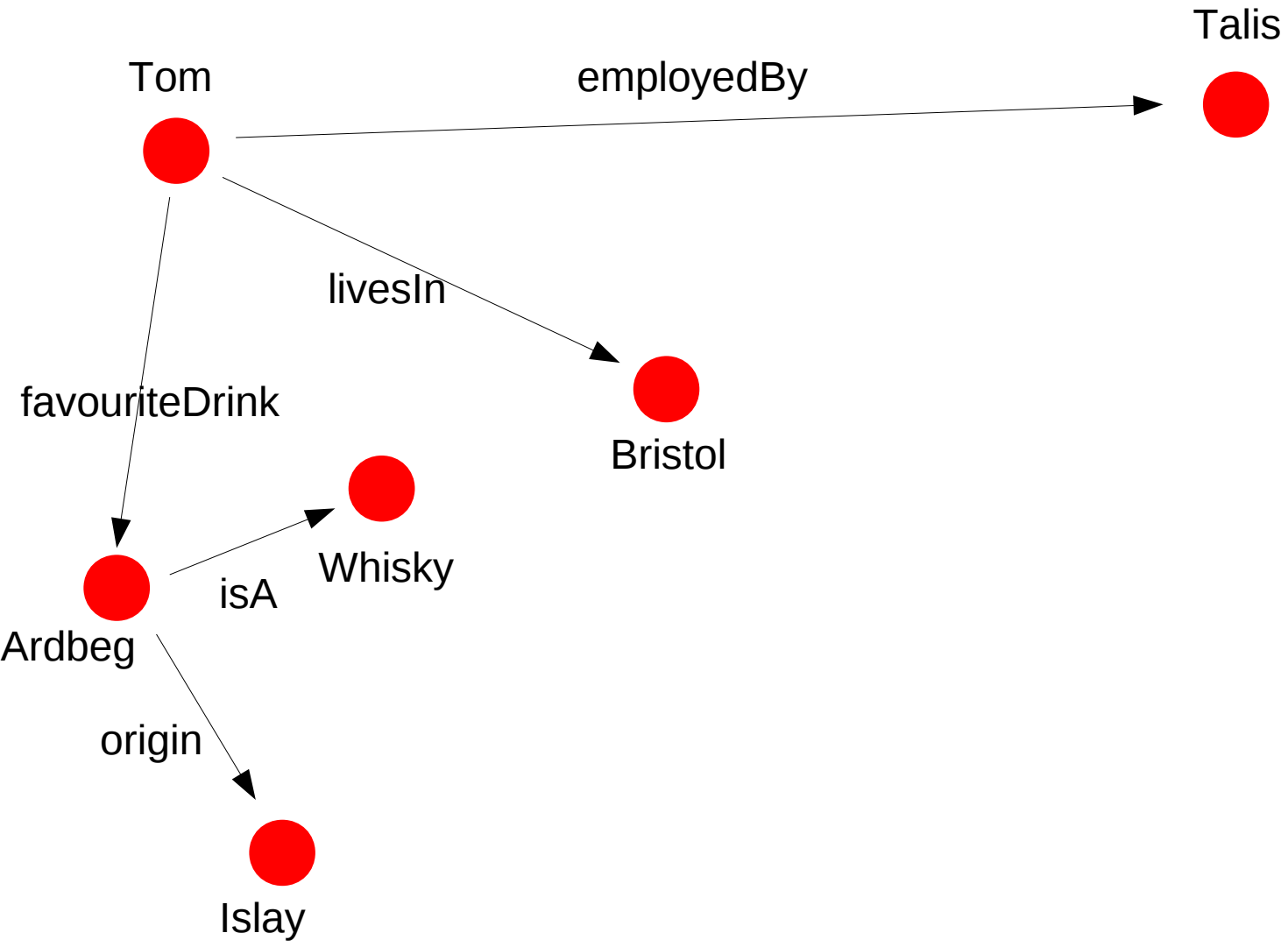
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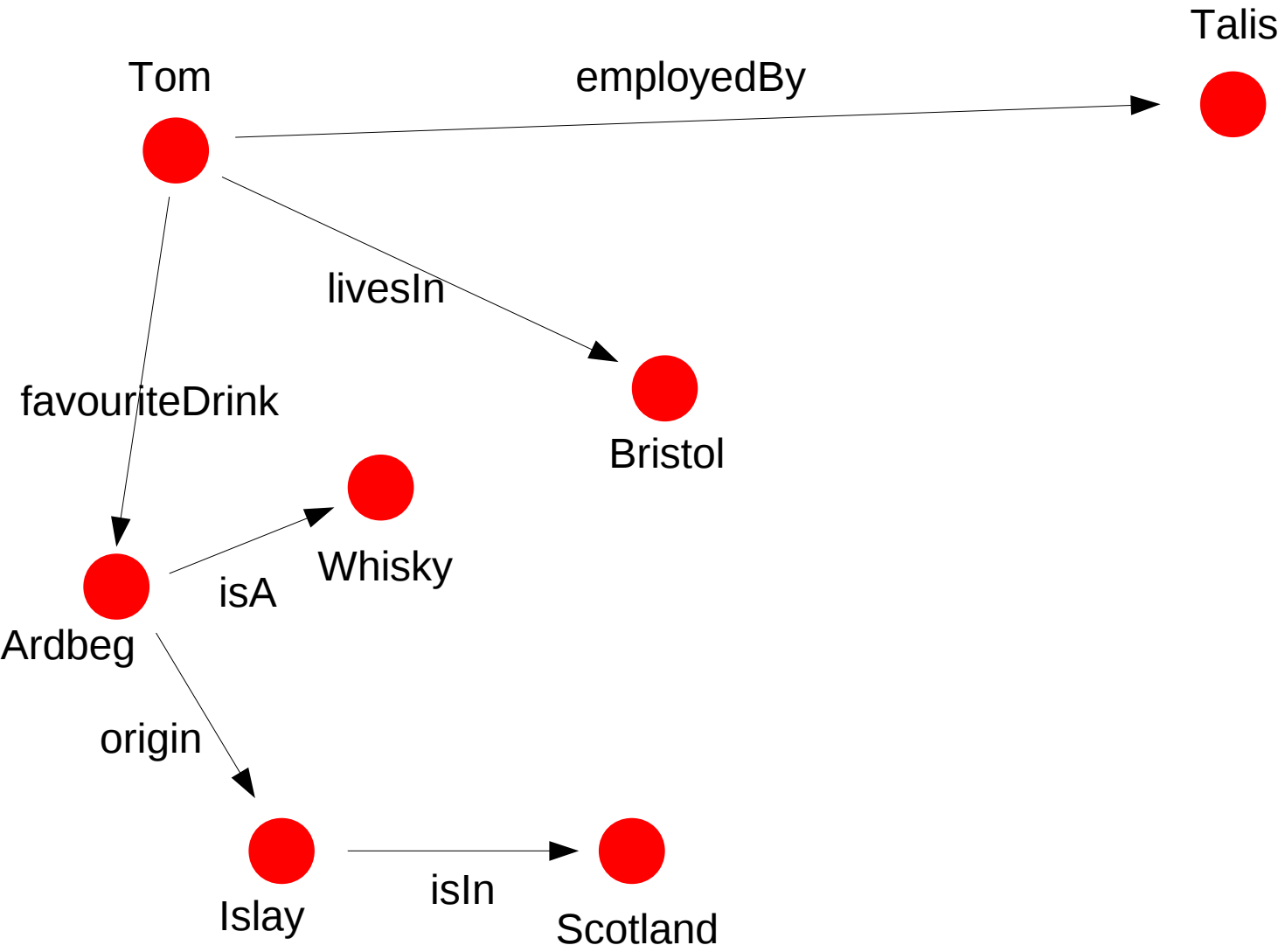


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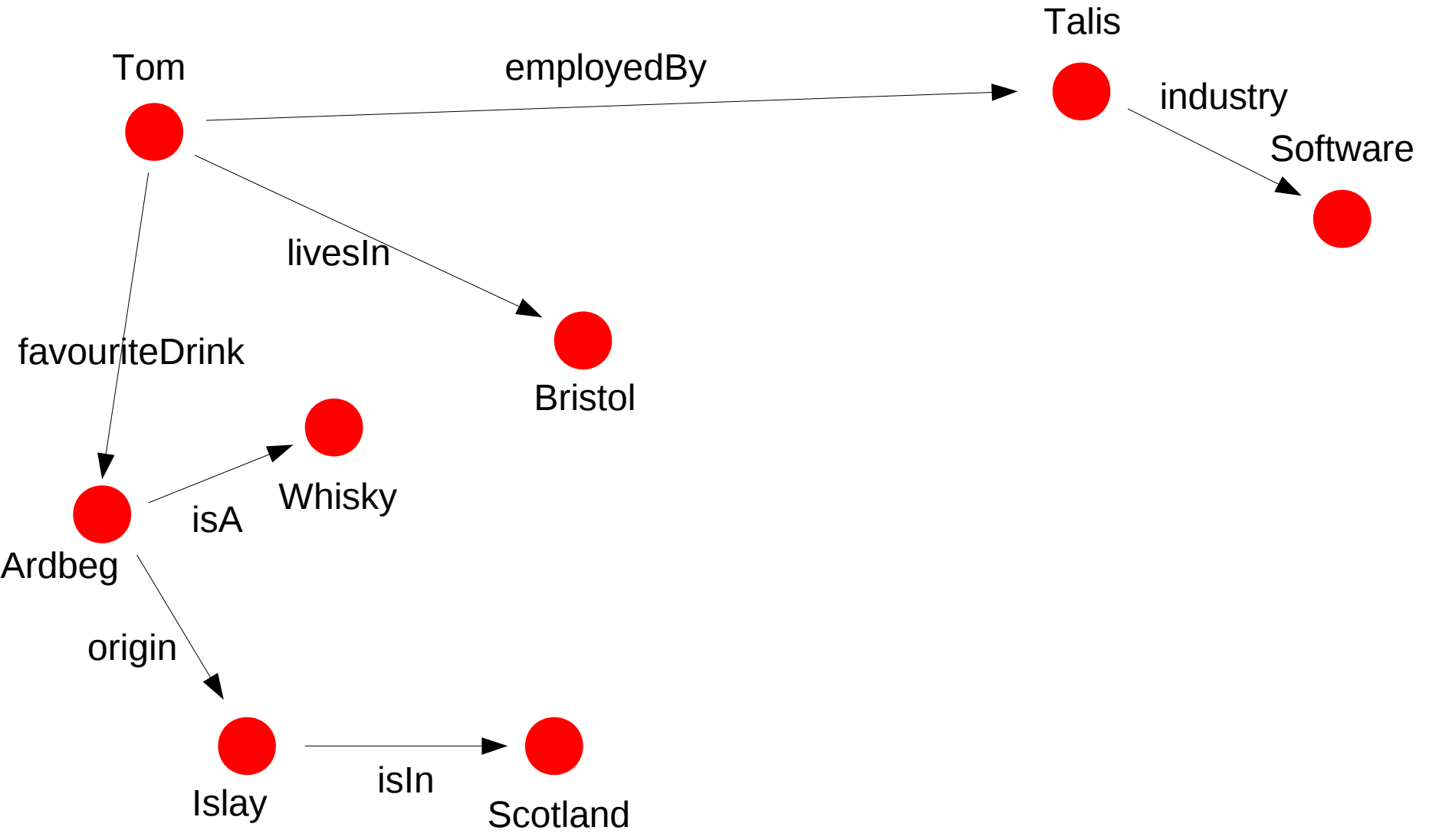


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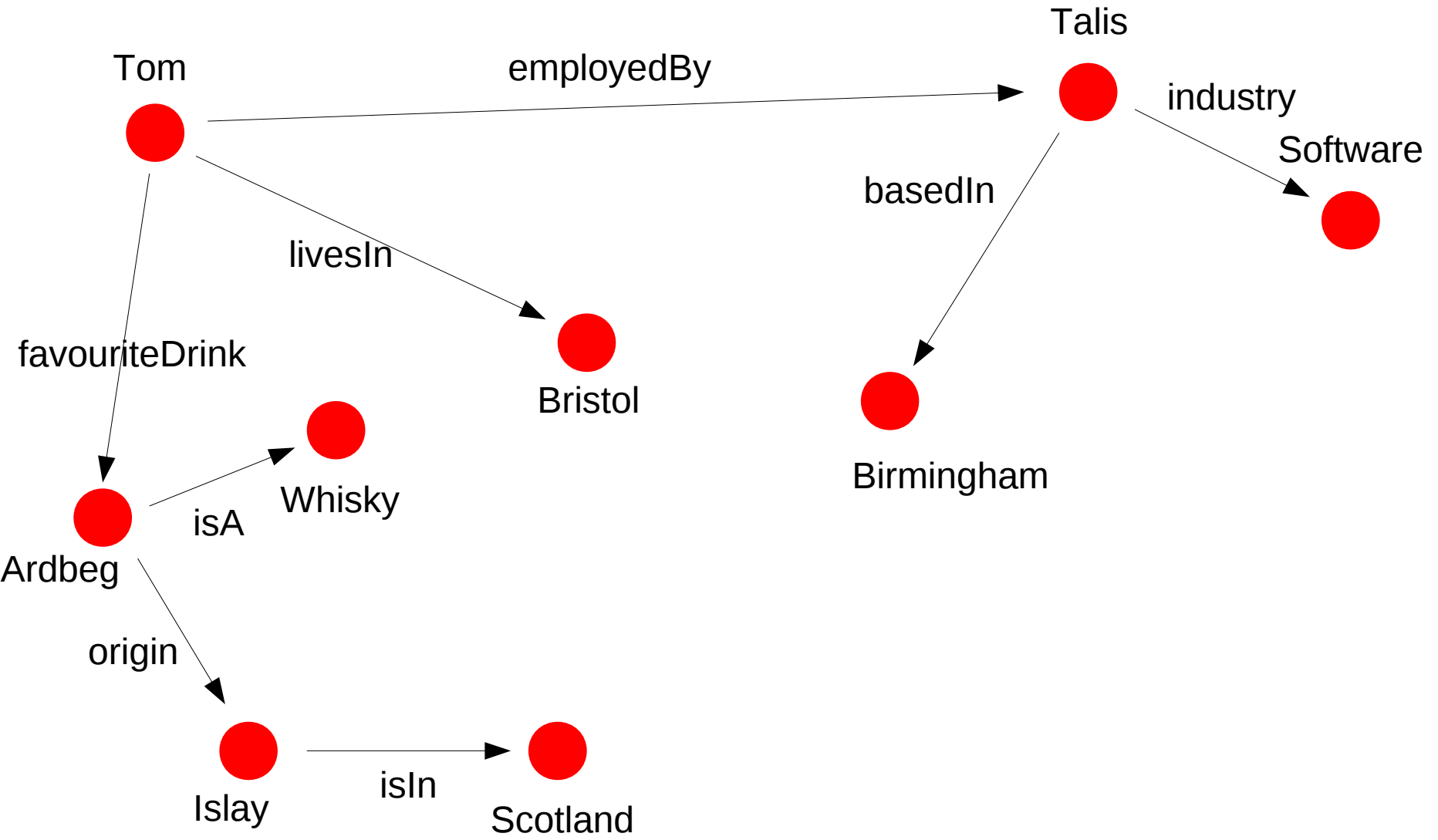


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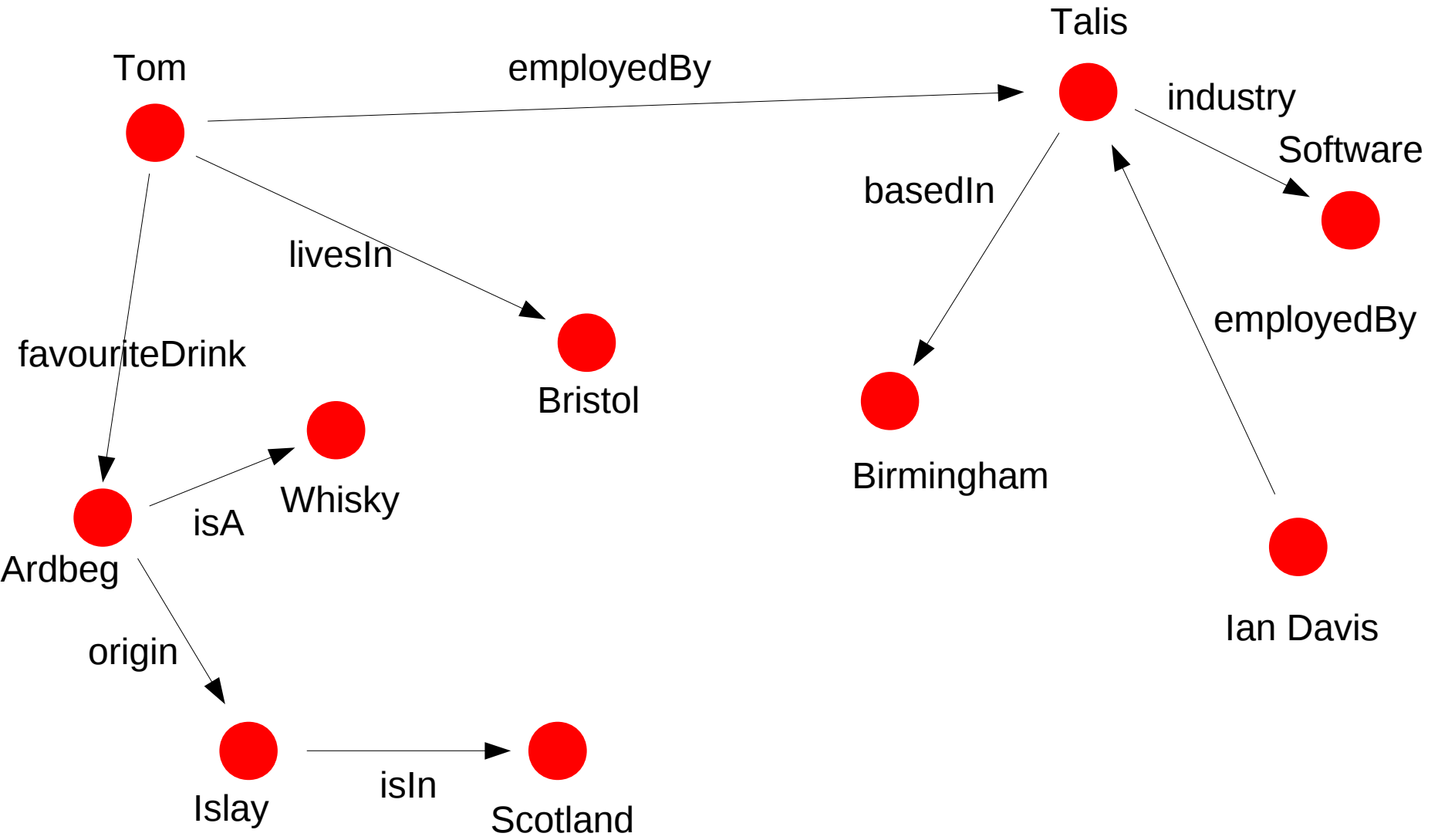


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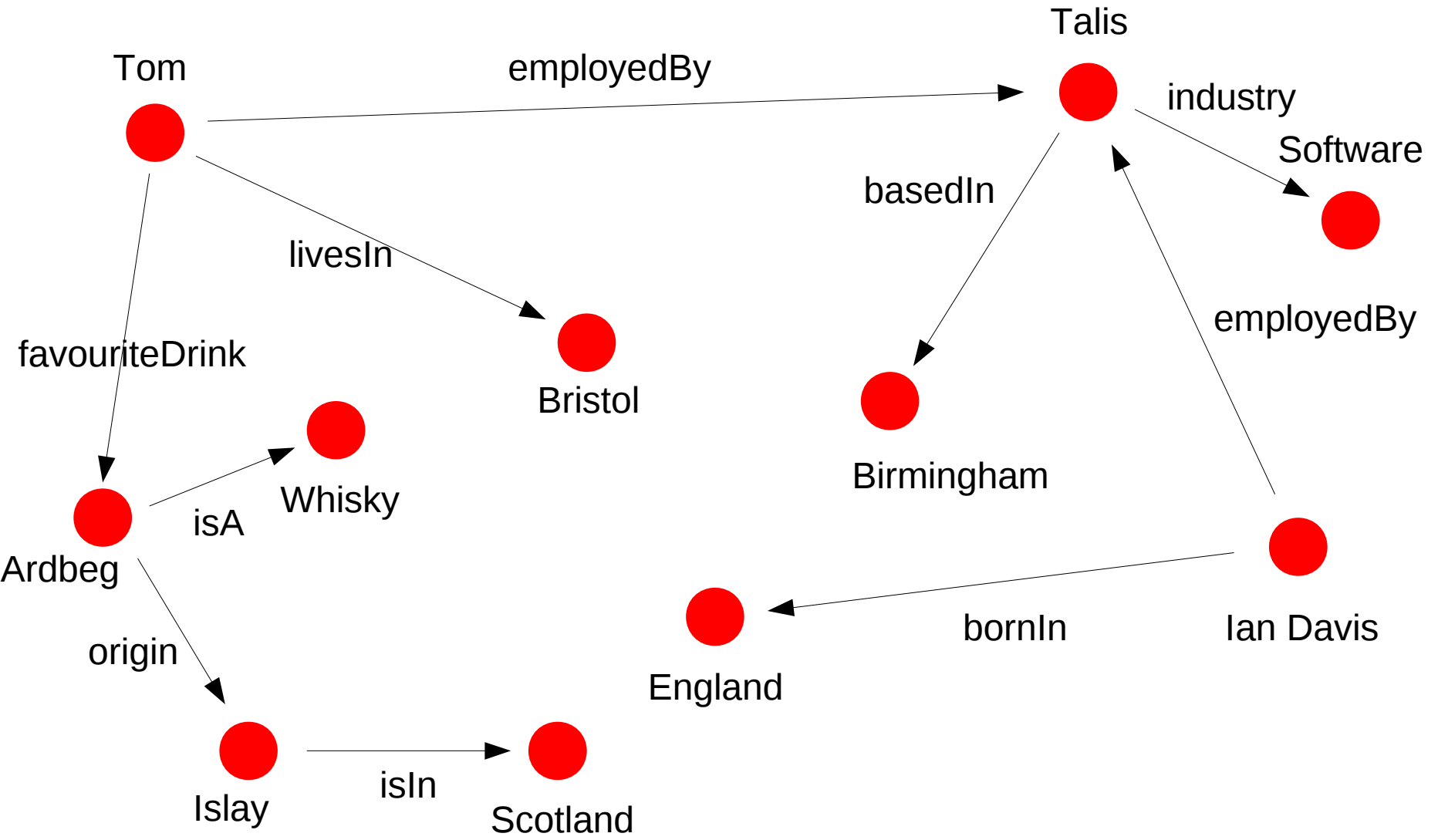


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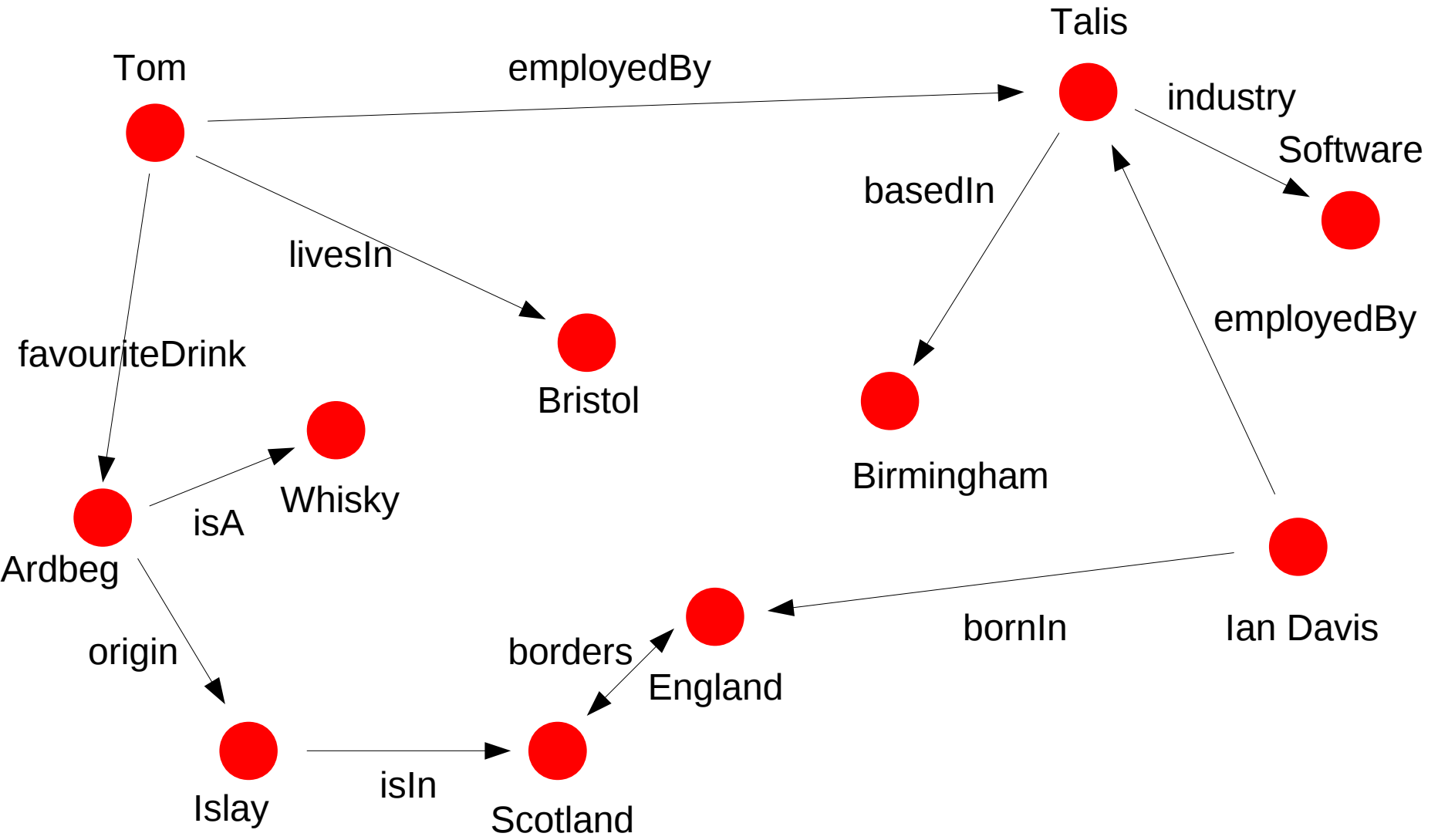


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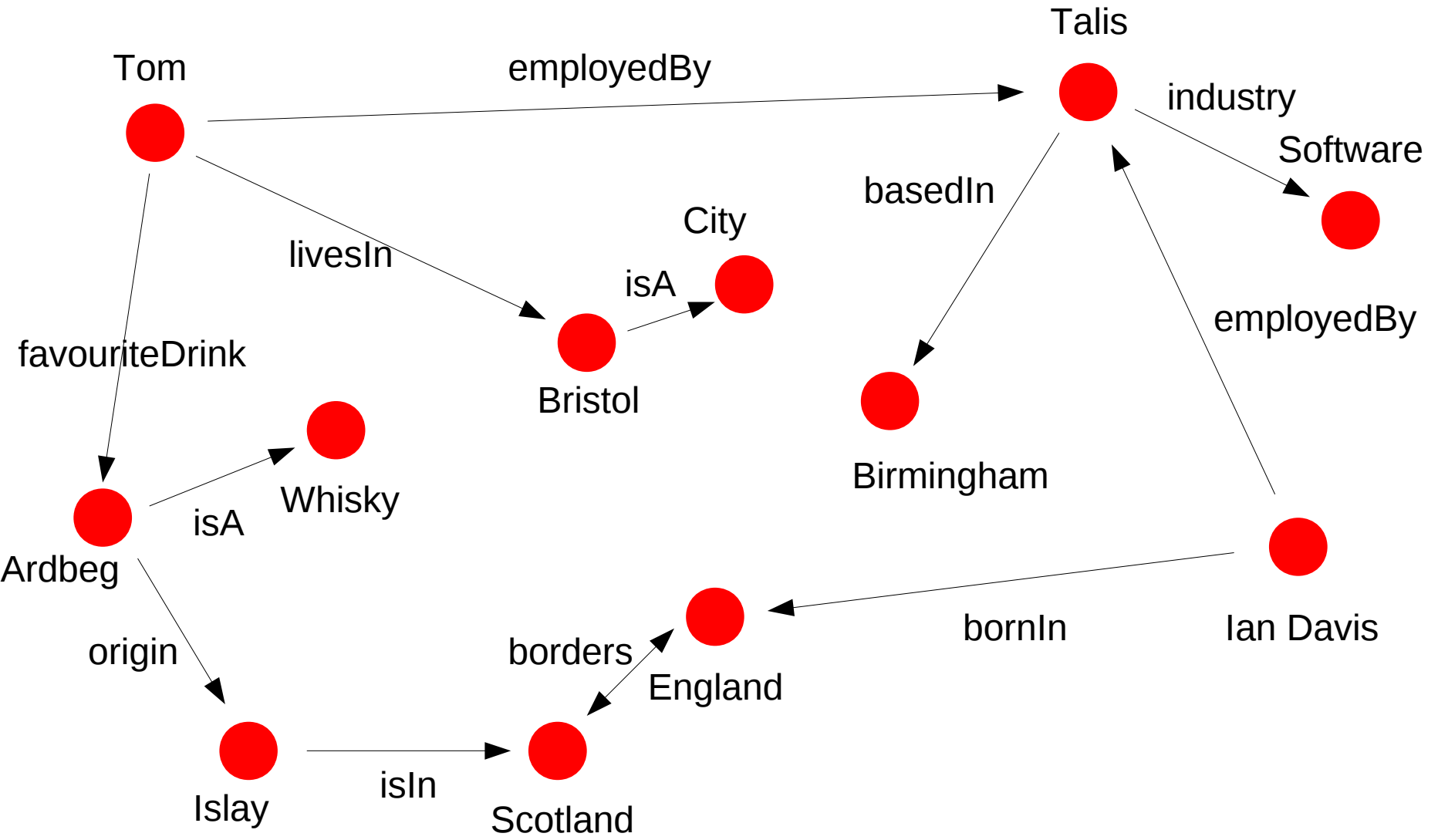


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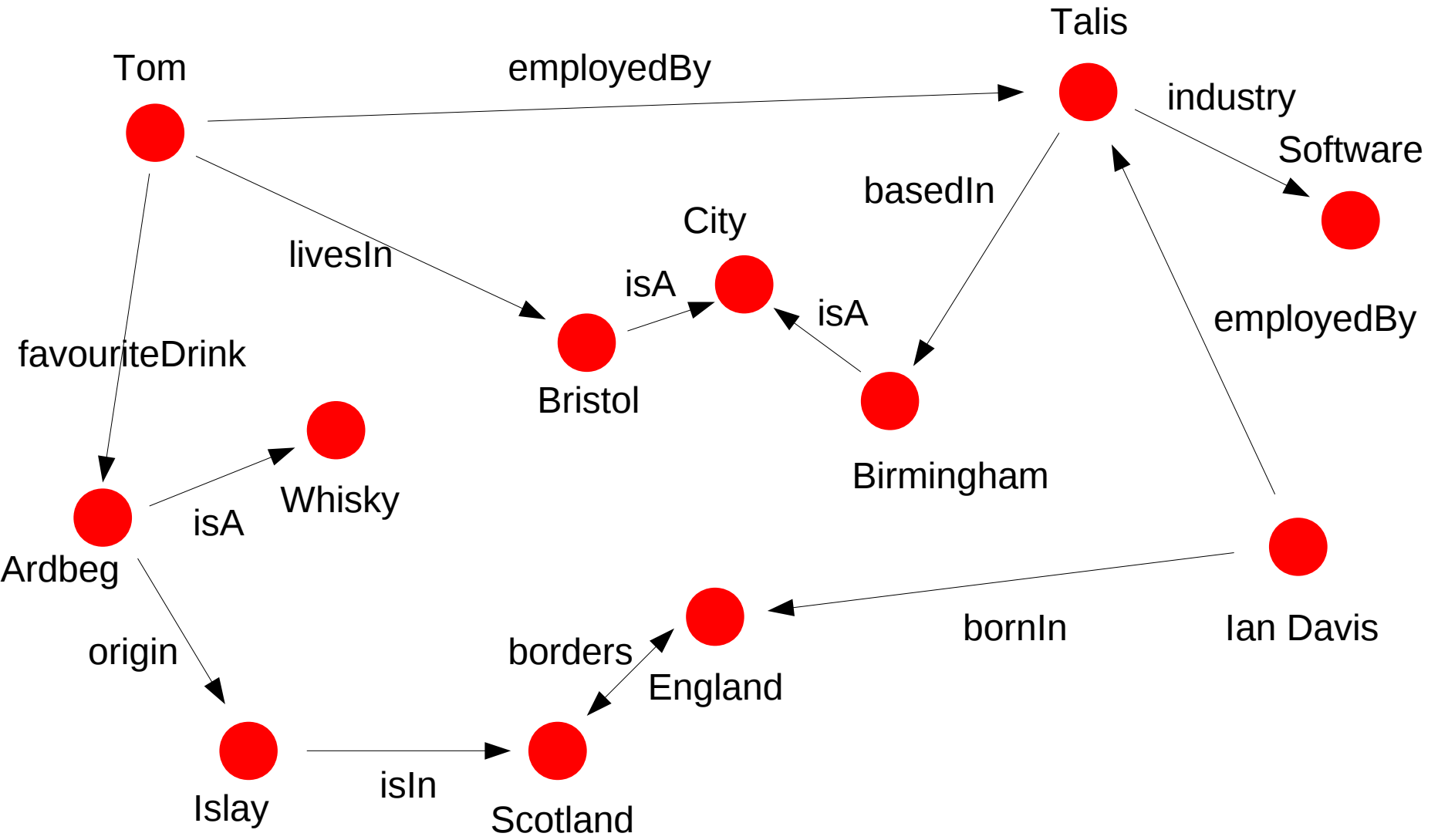
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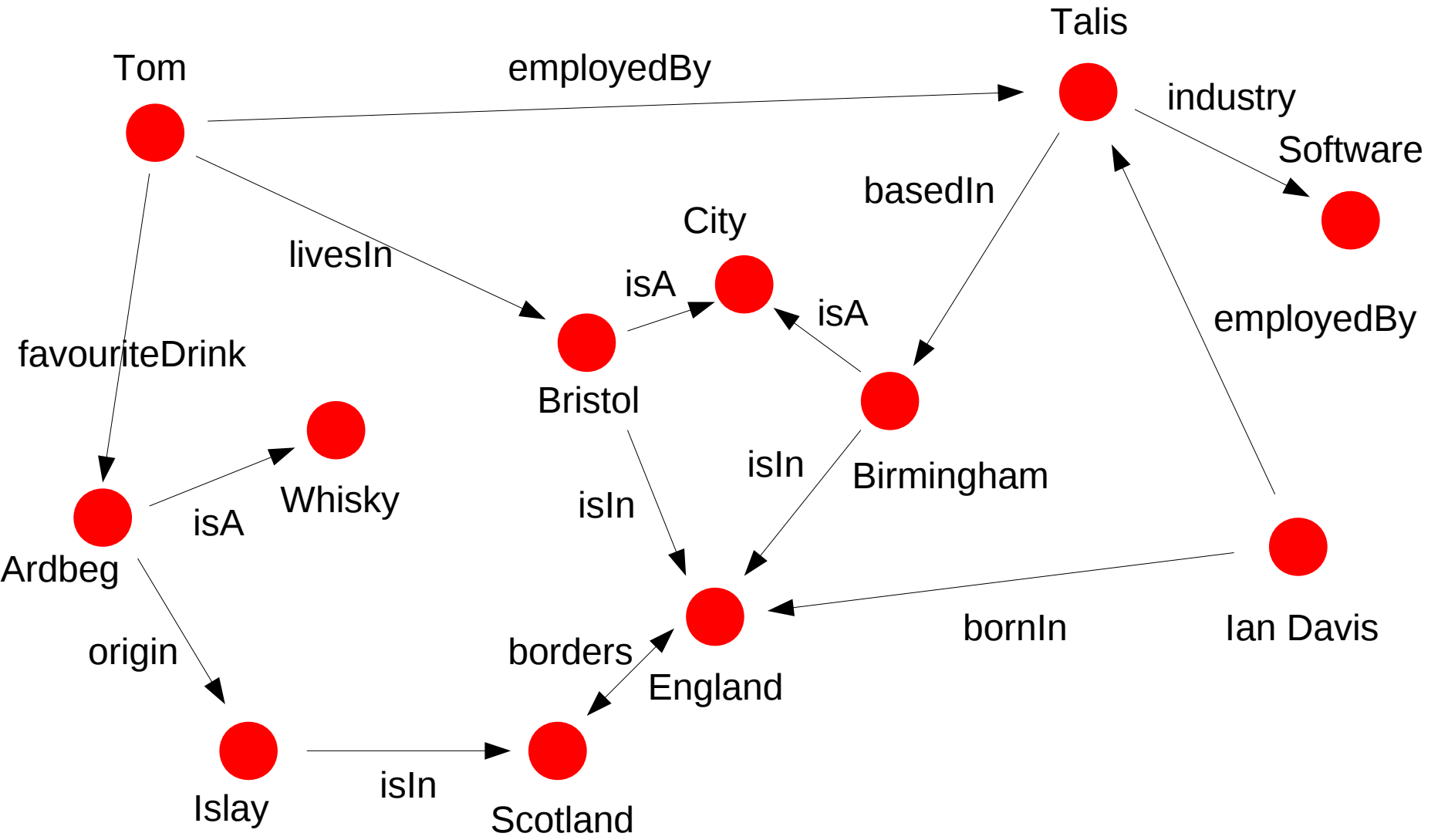




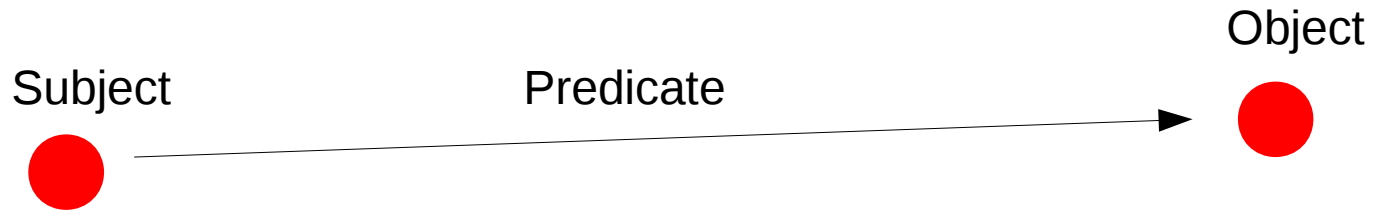
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# The RDF Data Model: Triples



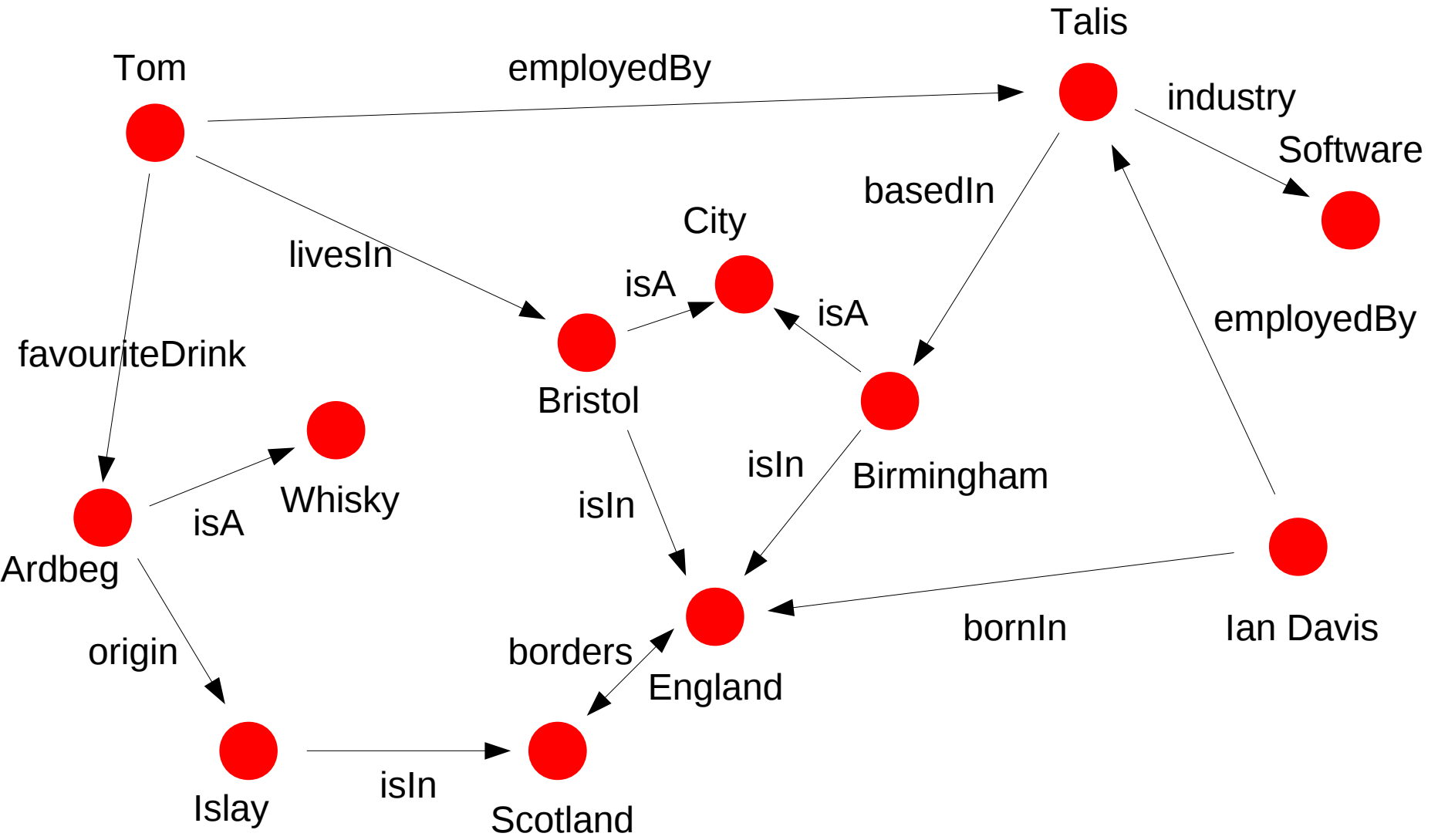


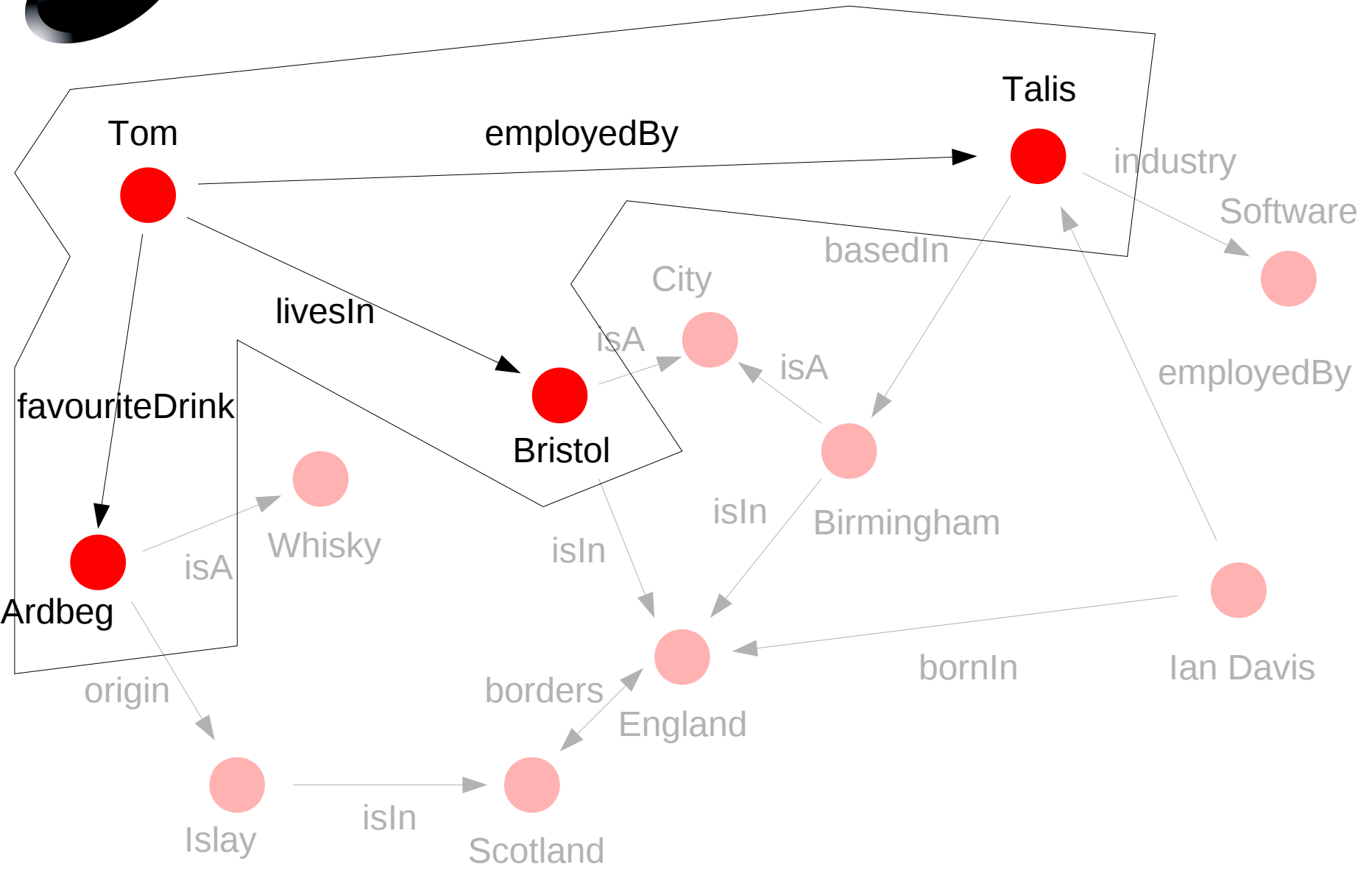
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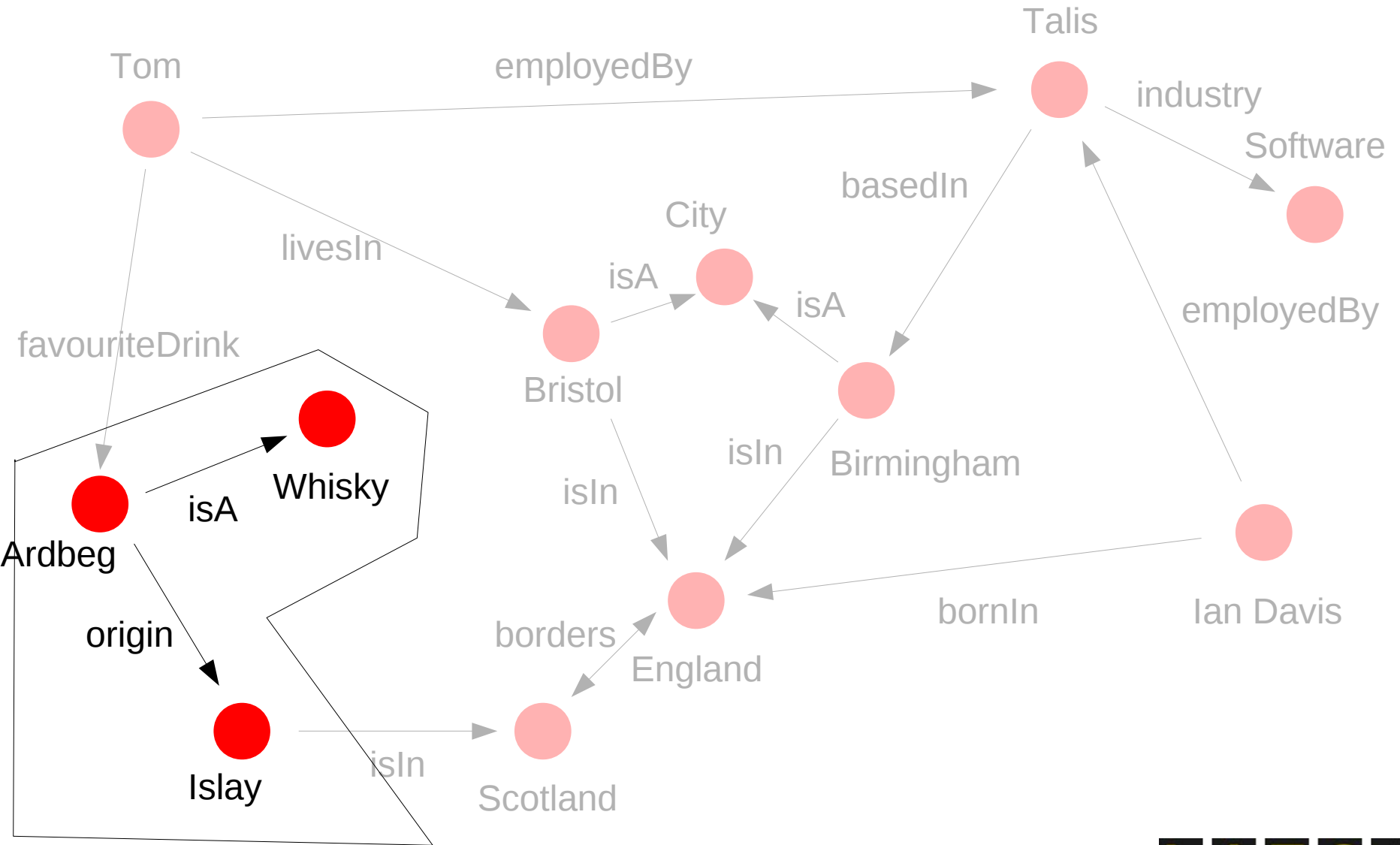


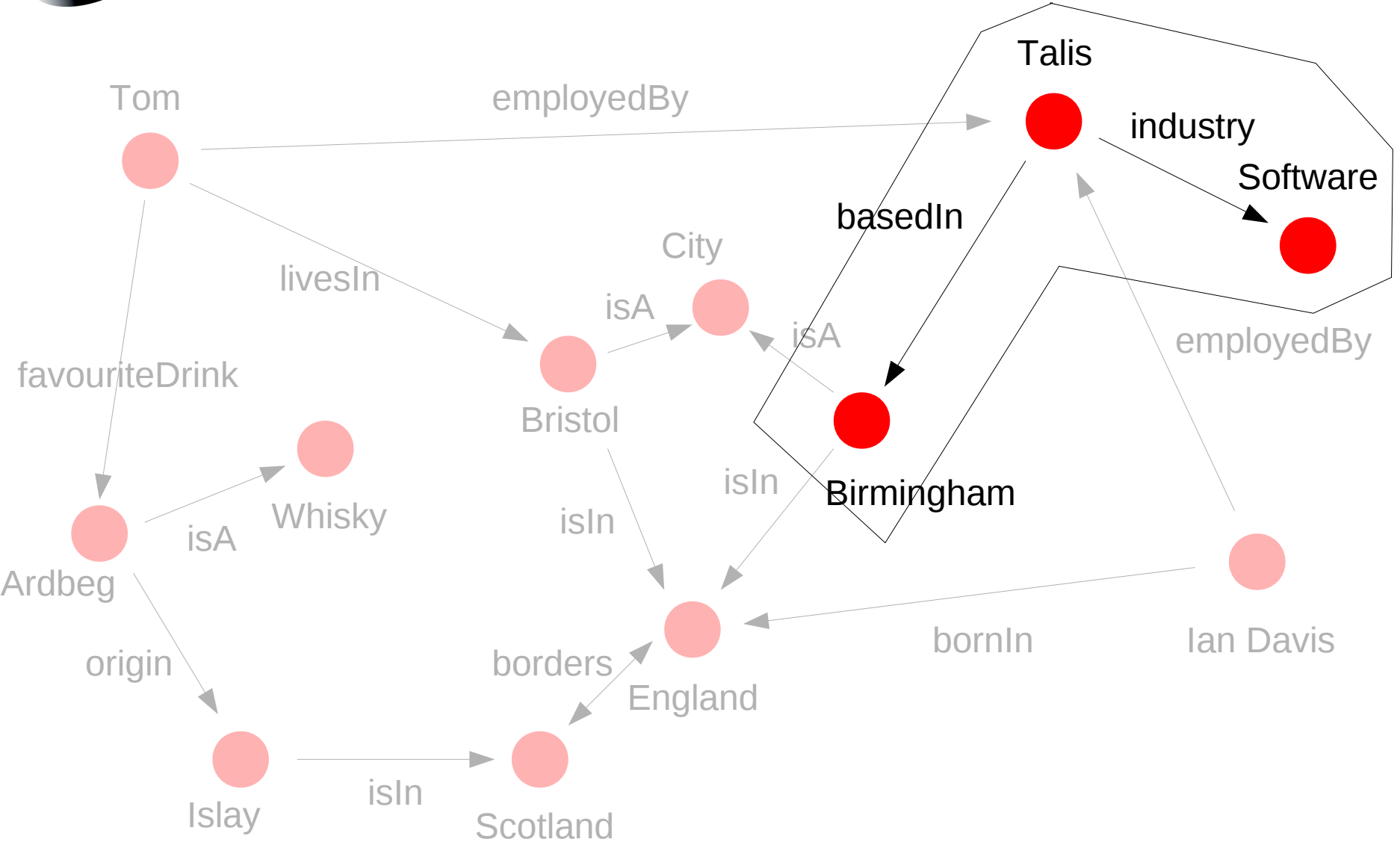


# 1 Graph, 15 RDF Triples

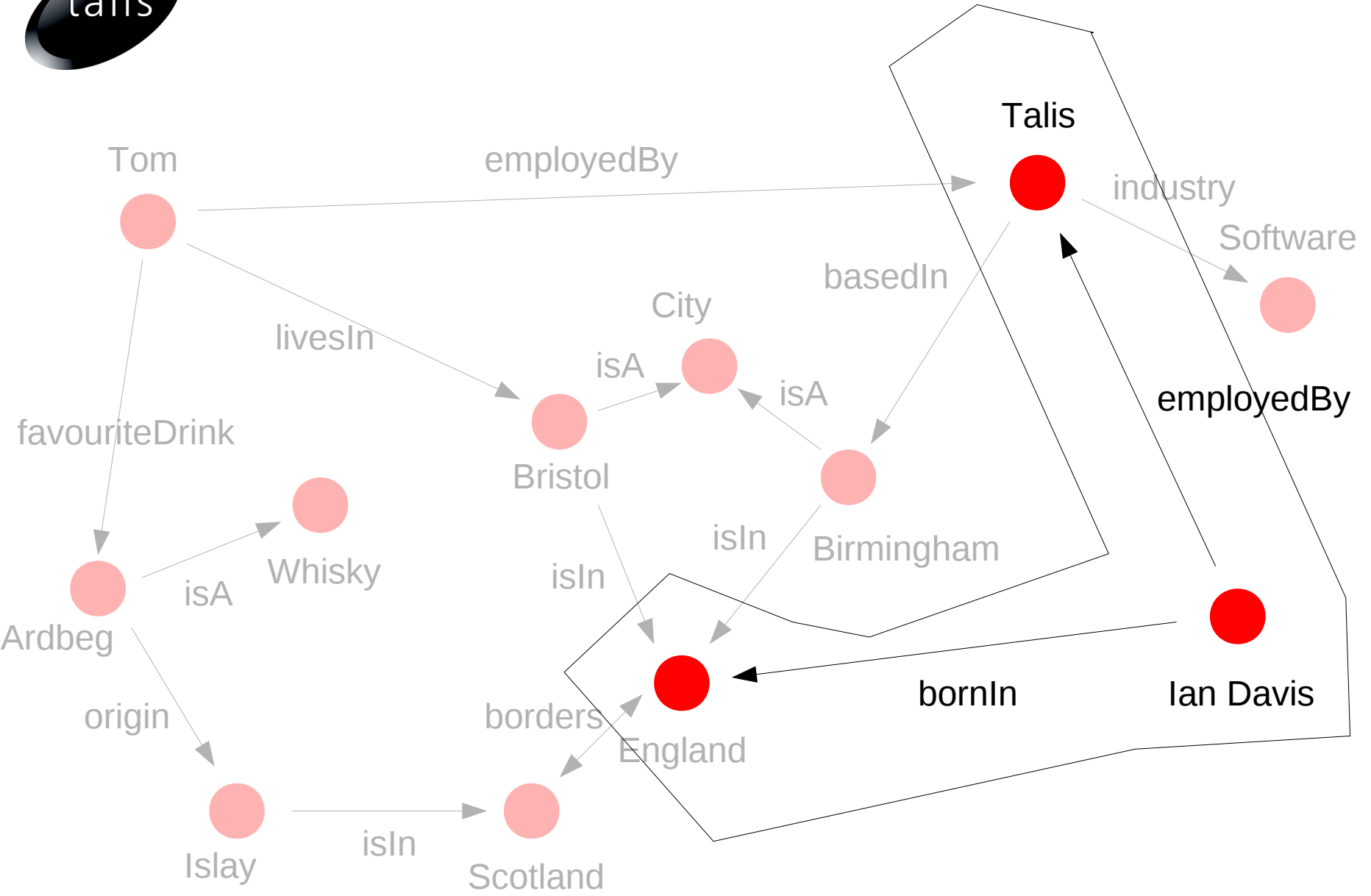


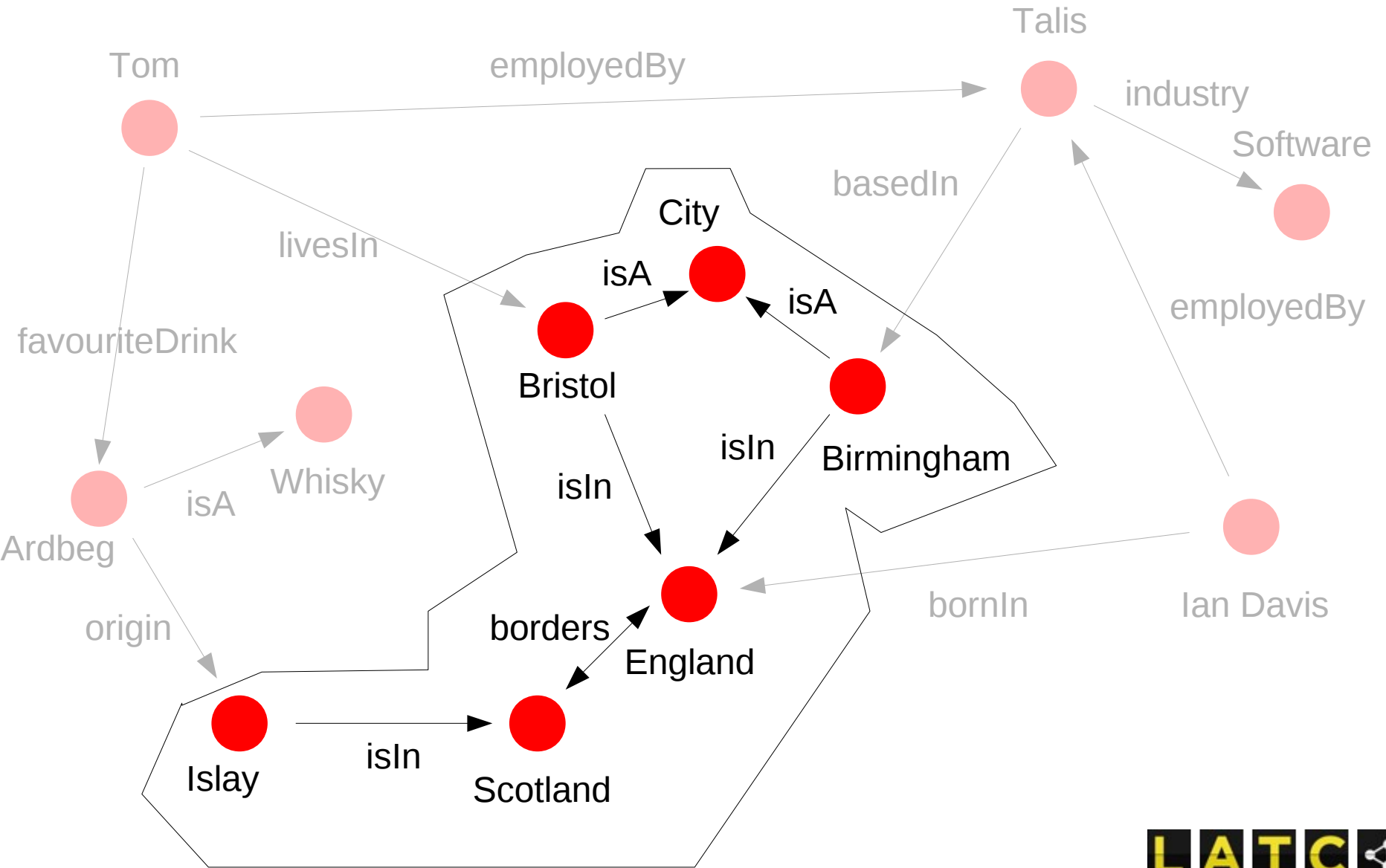






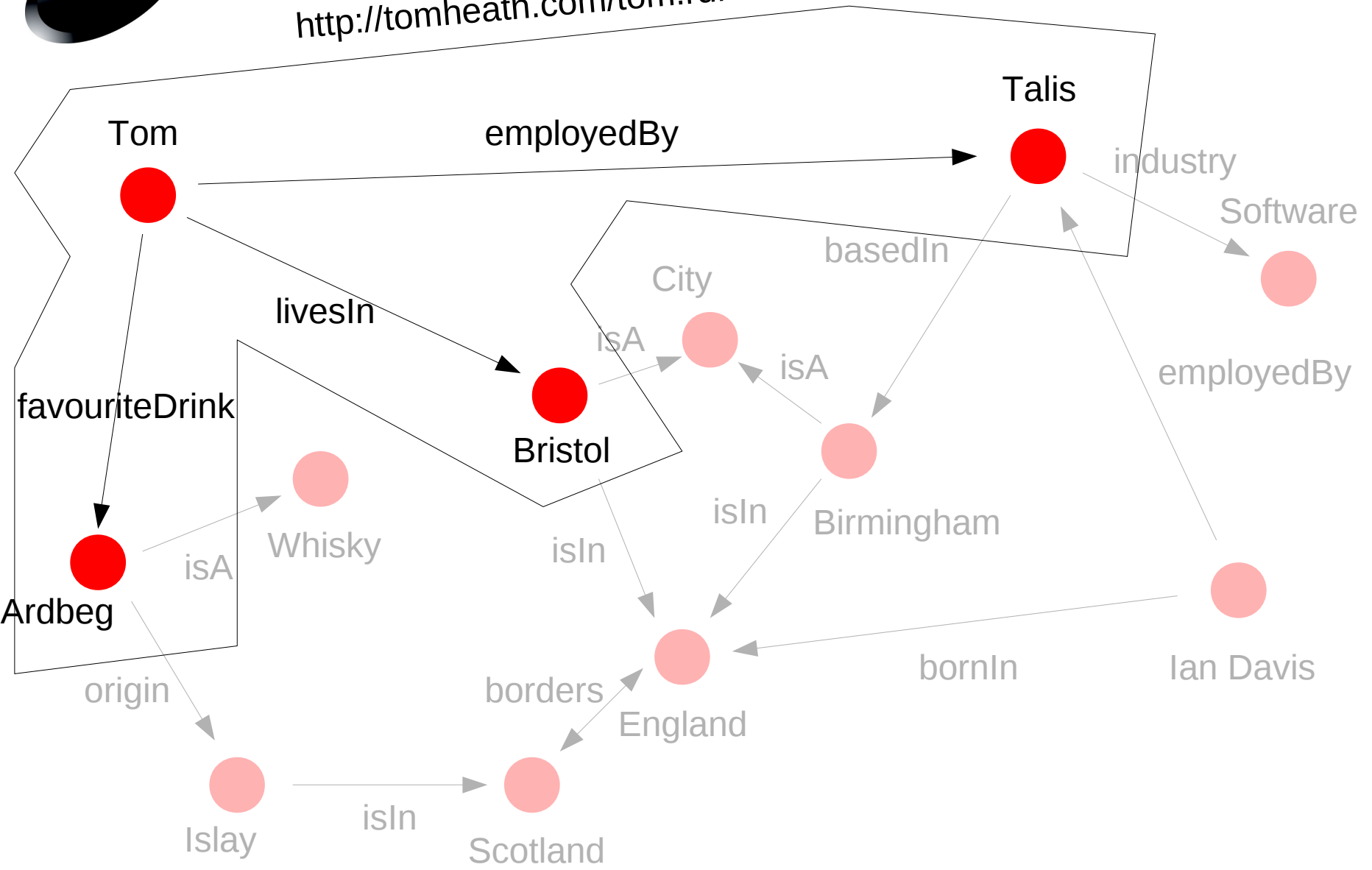


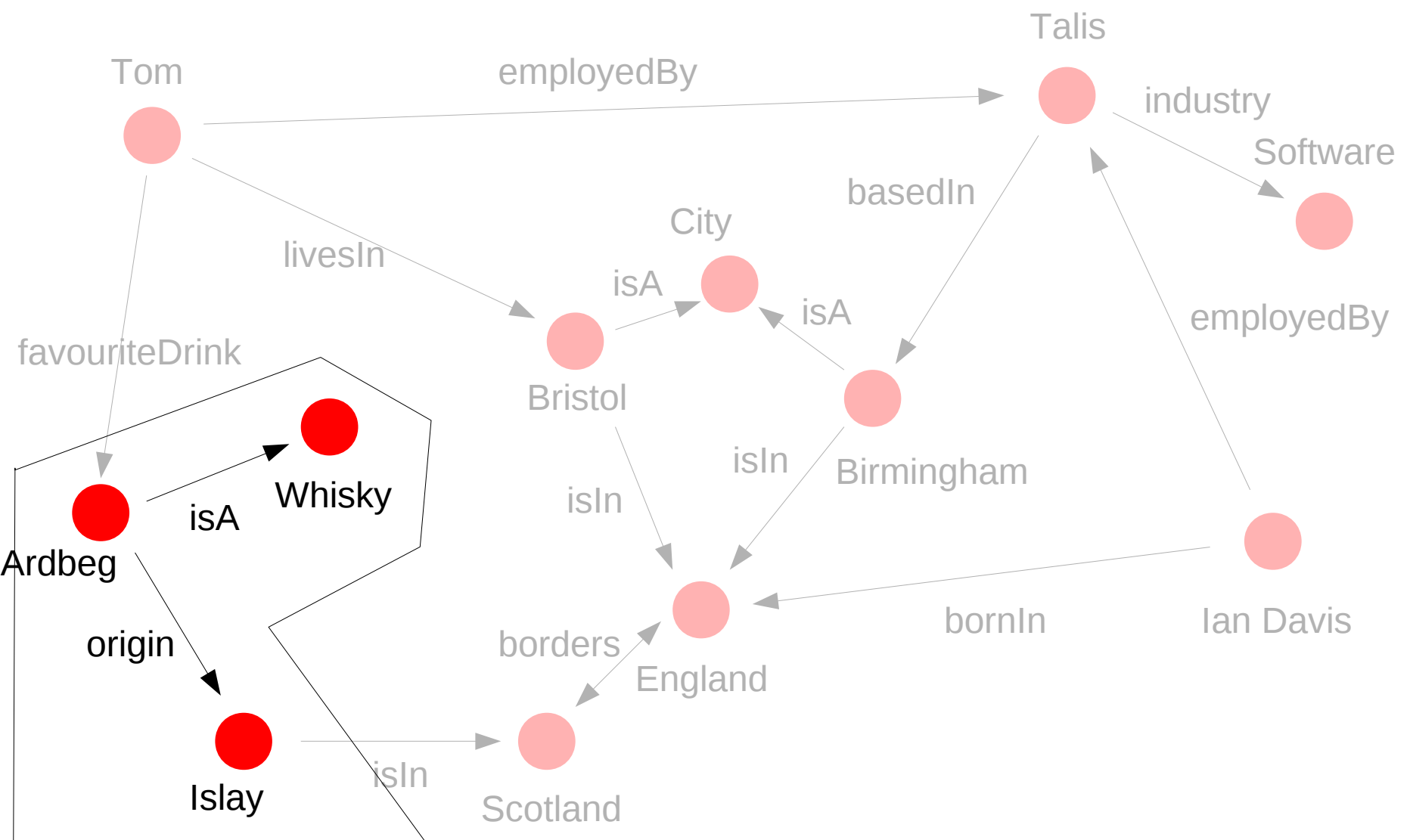






<http://tomheath.com/tom.rdf>

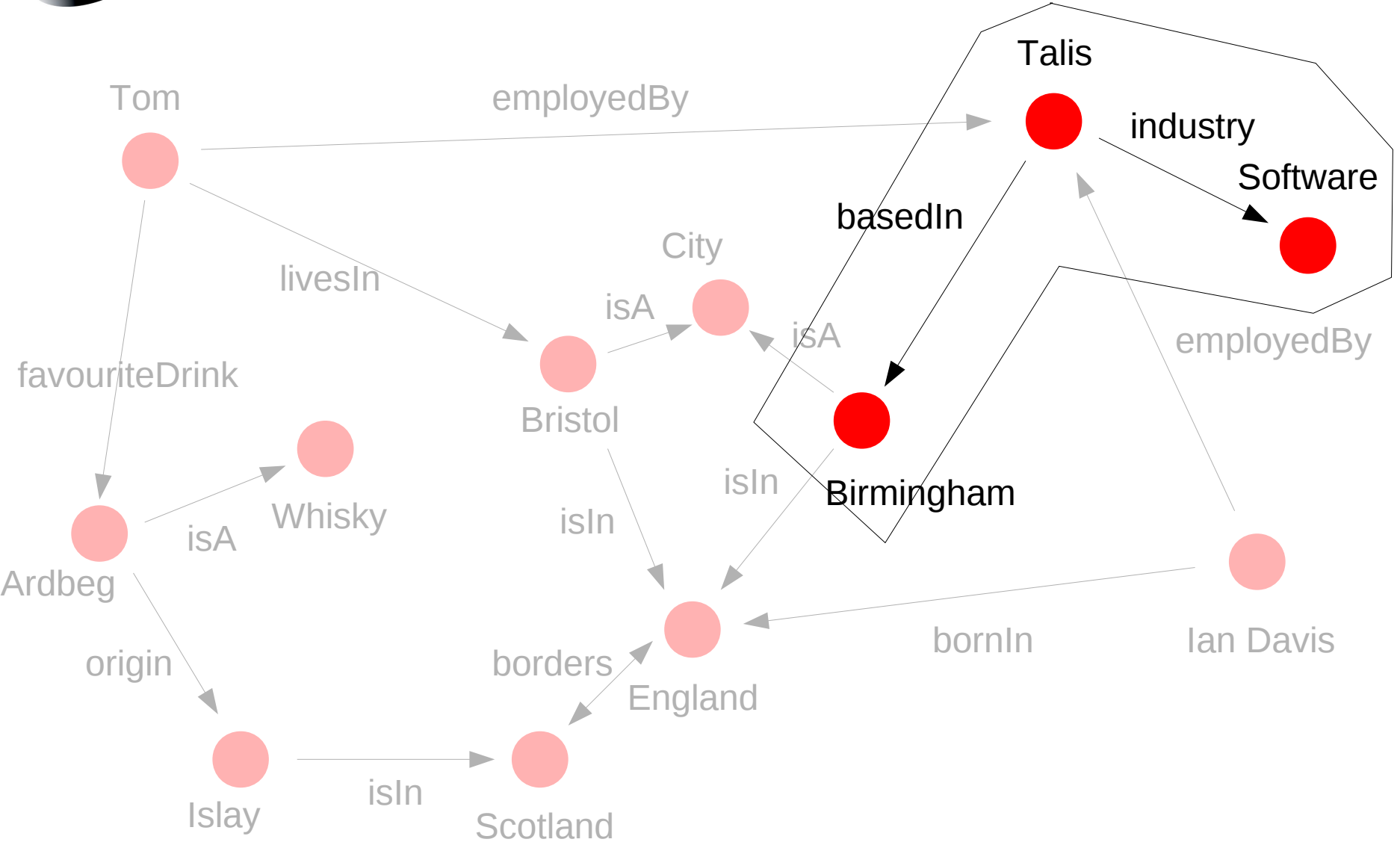


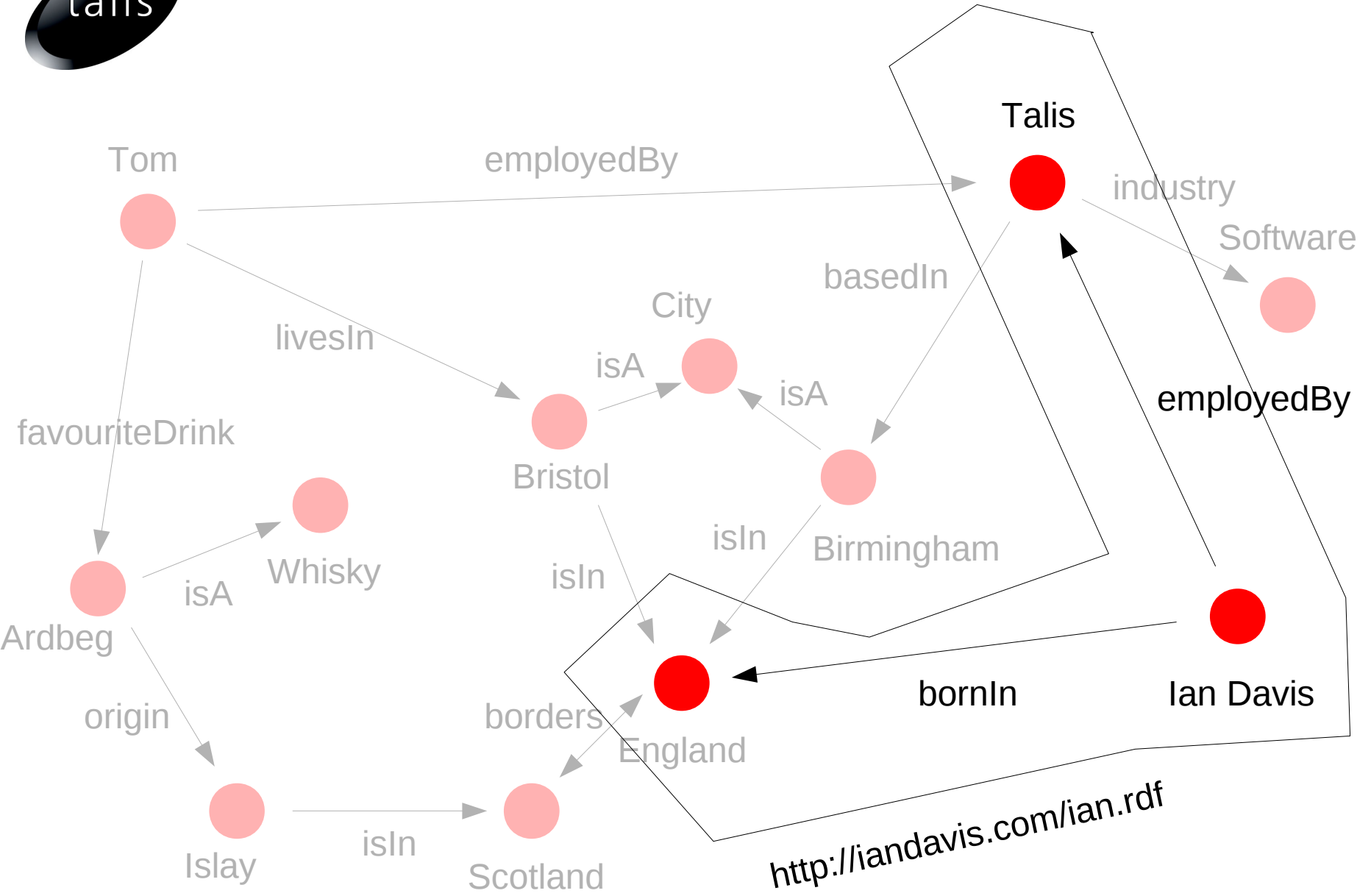


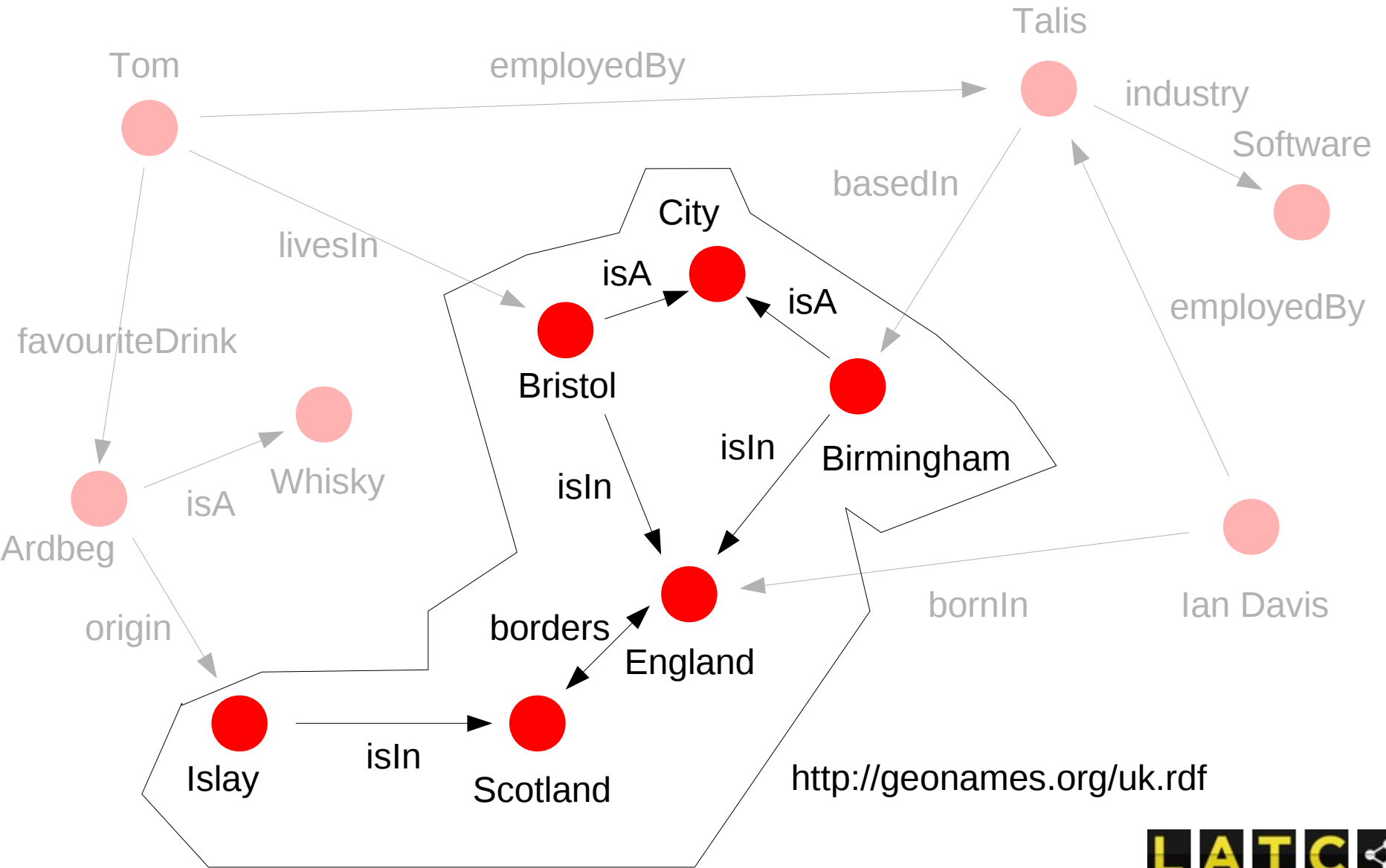
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<http://www.talis.com/talis.rdf>

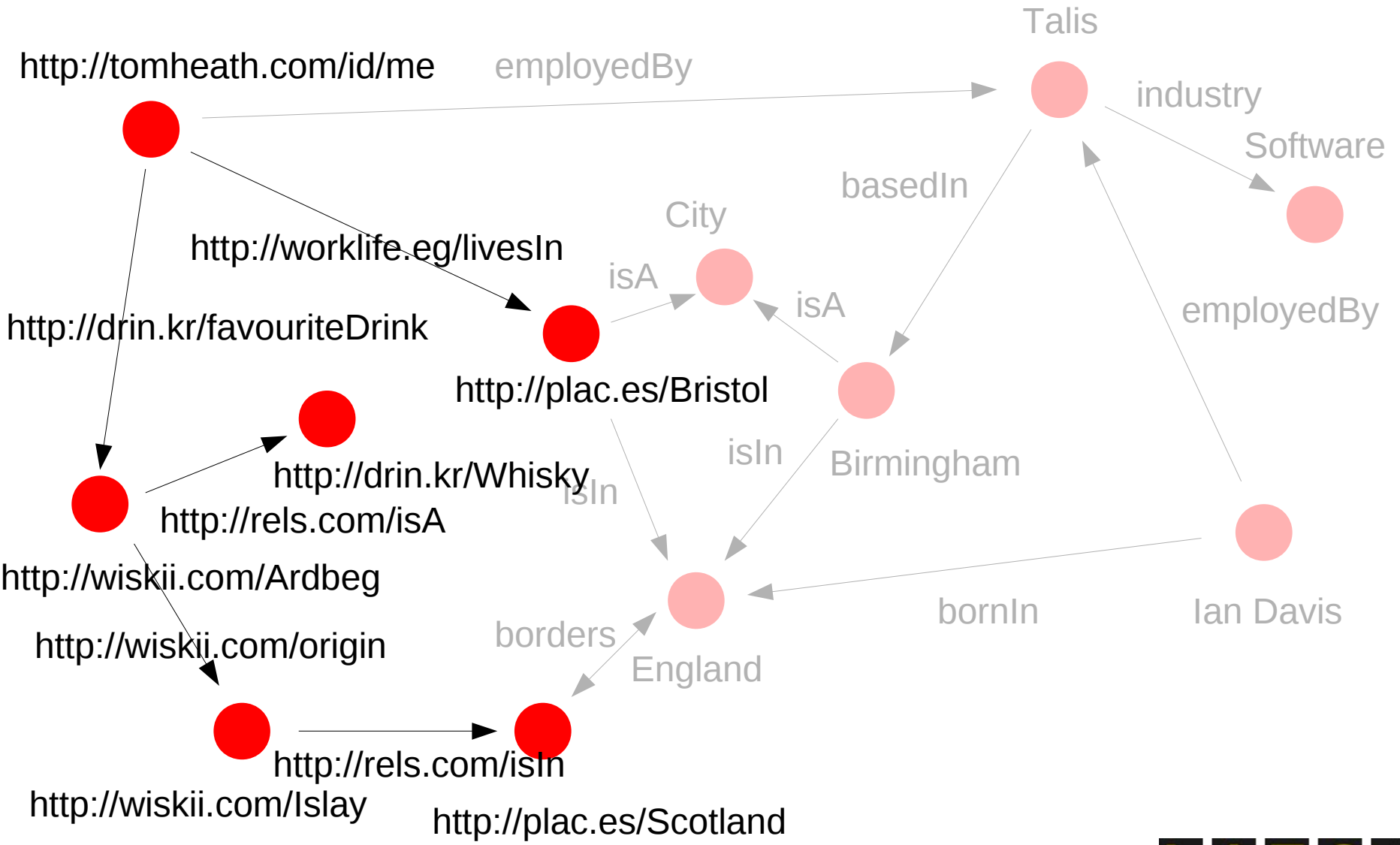






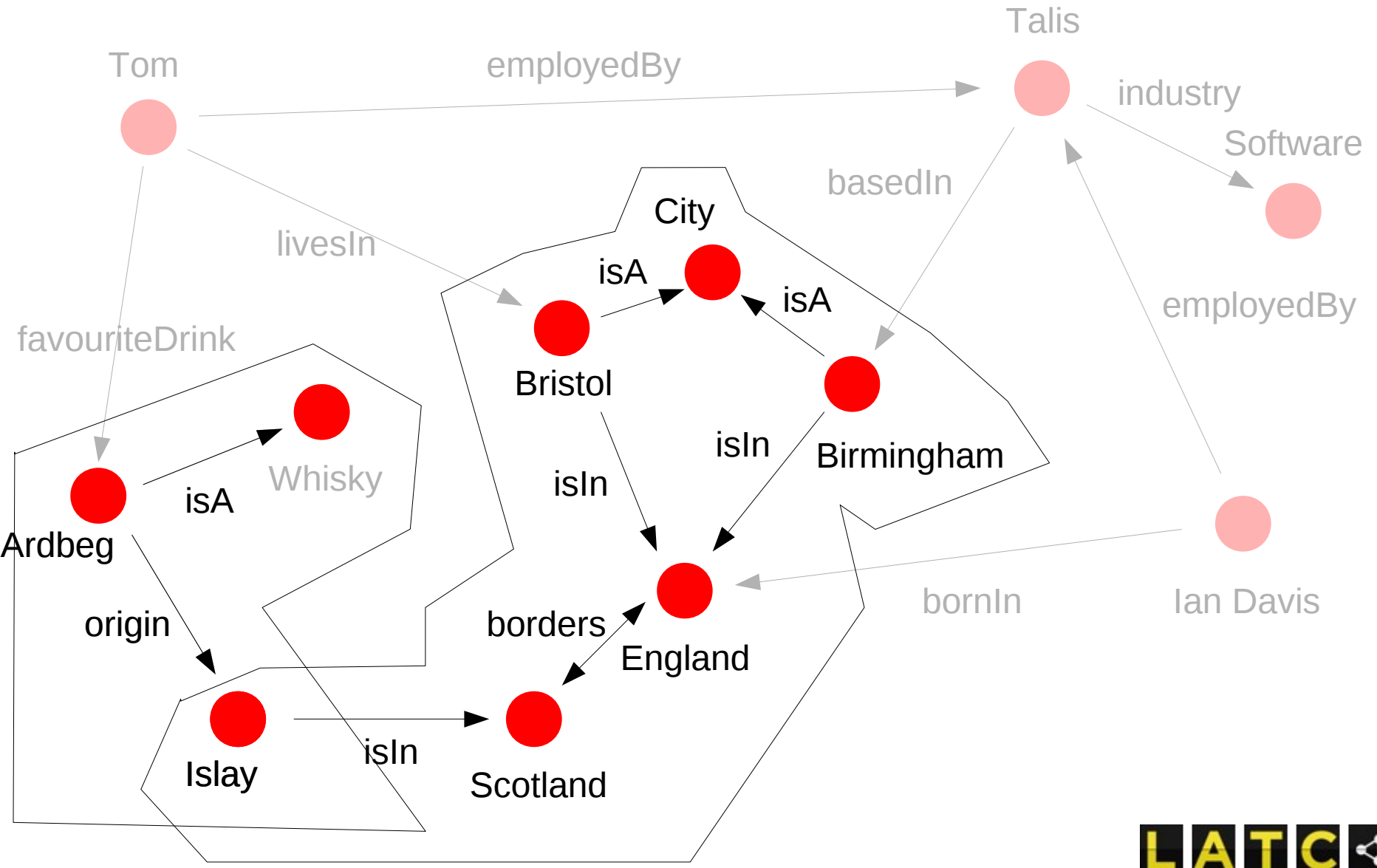


# URIs for All Things (Not Just for Documents)



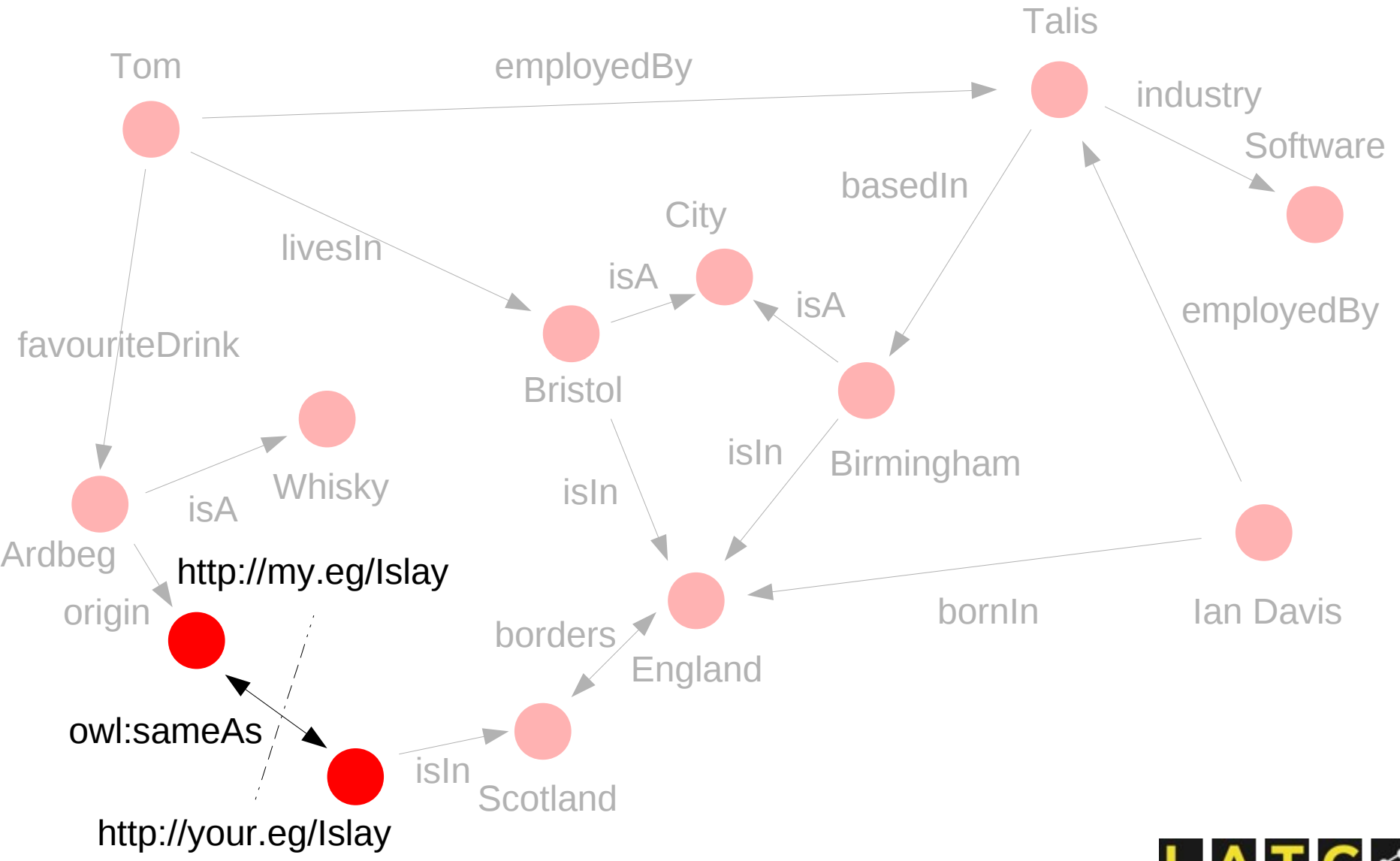


# Talking About the Same Thing





# Talking About the Same Thing



## Useful Data Sets

- Dbpedia: RDF descriptions of everything that has a Wikipedia page <<http://dbpedia.org/>>
- Geonames: data set about geographic locations, with RDF descriptions <<http://geonames.org/>>
- owl:sameAs links exist between many places that feature in both DBpedia and Geonames



# Anatomy of a Simple Linked Data Application

1. Look up a URI (HTTP GET)
2. Receive some RDF data in response (maybe via a redirect)
3. Do something useful with the data
4. Inspect the data for links to related things
5. Look up the URIs of related things
6. Go to Step 2.

# Linked Data Hands-On Session

- Build a simple city guide based on existing Linked Data sources
- Start with a seed URI for a city of your choice
- Populate a SimpleGraph object with data retrieved by looking up this URI
- Look for outgoing links in the data
- Look these up and add the resulting data to your SimpleGraph / Thing object
- Show some/all of the data you have retrieved as a Web page city guide



# Instructions

- <http://tomheath.com/stuff/sssw2011/>



## Questions?

- Contact Info
  - [tom.heath@talis.com](mailto:tom.heath@talis.com)
  - <http://tomheath.com/id/me>
  - <http://www.talis.com/>
  - @tommyh (twitter)
- Slides
  - <http://tomheath.com/slides/2011-07-cercedilla-linked-data-a-30-minute-crash-course.pdf>

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