



Dev8d summary

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- What is Dev8d
- People attending Dev8d
- Linked data London meetup
- Dev8d talks
- The ones I attended
 - Cloud workshop (Amazon Ec2 tutorial)
 - Clojure
 - Microsoft Zentity
 - Google application engine workshop
 - Python lab
- Other benefits
- Conclusions

- Dev8D is a coding event in the UK
- Organised by DevCSI (<http://dev8d.jiscinvolve.org/>)
 - Organisation which fosters generation of new ideas by providing a good environment for development of applications in UK
 - DevCSI is managed by UKOLN (<http://www.ukoln.ac.uk/>) and funded by the JISC (<http://www.jisc.ac.uk/>)
- Dev8D structure
 - Set of workshops, coding dojos, talks, etc.
 - Common areas for people to talk and ask (base camp, project zone)
 - Many people together learning the same things with different ideas on mind
 - New ideas come up from learning new tools
 - Bounties for each technology

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- Linked data London meetup
 - People from the linked data community
 - Talks about linked data applications
 - Success stories of linked data applications
 - BBC, UK government, all developed by Talis
- People from Fujitsu, interested in Linked data (and other technologies) and other companies
- People from U Edinburgh (OGSA-DAI)
- People from U Southampton
- People interested in programming hardware devices
- Basically computer science freaks

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- Linked data talks
- Linked Data: Implications for Applications
- BBC Wildlife Finder
 - (<http://www.bbc.co.uk/wildlifefinder/>) allows people to access DDB data about wild life.
 - Vocabulary + Linked data application
- UK Government Linked Data use case, John Sheridan & Jeni Tennison (data.gov.uk)
- Leigh Dodds & Andy Seaborne (Talis) – SPARQL 101 workshop
 - + questions to Andy
- A web-developer API for (Government) linked data

Linked Data Meetup Conclusions

- Focused in promoting Linked data
- They showed nice use cases
 - Which show lots of data linked
 - From powerful organisations
 - Technology mainly provided by Talis:
<http://blogs.talis.com/nodalities/2010/03/jisc-calls-for-linked-data-projects-talis-can-help.php>
- Lots of people from the Linked Data community
 - Possibility of asking many questions about your own developments
 - Possibility of giving talks/tutorials

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- Pipes lab (Yahoo Pipes, promoting access to Linked Data, using different Google, services)
- Arduino workshop (beginners and experts)
- Clojure lab
- Cloud workshop
- iPhone workshop
- Ruby on Rails lab
- Discussions about genetic algorithms,
- Scanning and Recognition / DIY Scientific Instruments / Multicore Processing
- Microsoft Zentity, Scala, Google application engine,
- Python + accessing SPARQL endpoints with python libraries
- Lightning talks (15 minutes each)
- ...

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- “dialect” of LISP
- Functional programming
- You define functions which can be arguments of other functions
- Java integration
- <http://delicias.dia.fi.upm.es/wiki/index.php/Dev8dTalks/Clojure>

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- Workshop about how to use Amazon EC2 (and Linode demo)
- What is Amazon EC2 + features
 - Elastic computing
 - AMIs = ISOs in Amazon
 - Cons: is like a live CD, 78\$ per month (to just run an instance)
 - Static (moveable) IPs, you can assign your won DNS
 - Persistent storage through an EBS volume (S3 mounted as a volume)
- How to
 - start a new machine
 - deploy services in it
 - access this machine
 - save data in the Amazon cloud

- Cost for one hour, launching 2 VM, playing with them, 1GB used: 0,56\$
- <http://delicias.dia.fi.upm.es/wiki/index.php/Dev8dTalks/AmazonEC2Tutorial>
- Linonde demo: similar to Amazon but it maintains the VM state
- Very useful if you want to make some experiments
 - Just install your environment (in about 5-15 minutes)
 - Run it

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- Microsoft Zentity is repository platform with services around it
 - Has a hierarchy for the management of a research group: entities like publications, thesis, papers
 - Everything is an object
- First thing: learn power shell for develop anything in Zentity
 - We add resources (me, my papers, etc) and we get them developing code
- It uses LINQ (Language-Integrated Query) for accessing resources.

- It has a basic inference engine:
 - Carlos is a person (terminal command, it adds Carlos as a resource/entity).
 - adding relationship: Carlos knows steven.
 - Carlos knows ?.
- on top of Zentity you can build different visualizations or ways for accessing elements in Zentity
- It seems a good tool if you have time for developing all the entities in a Microsoft platform

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- Based on the book “Using Google App Engine” from O'Reilly
- How to develop simple applications that use the Google application engine
 - Based on python
 - The book focuses in those people who know anything about Web development
 - How to use the console, logs, browse your application, etc.
 - All using Google technology
- Discussion about MapReduce, Hadoop and the next generation of large data storage approaches
- All the workshop is here:
http://wiki.2010.dev8d.org/w/Google_Workshop

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- Python for web interaction
 - We learned how to access wikipedia and dbpedia, retrieving some of their content, manipulate it and presenting it
 - All using Python libraries
 - In 2 to 3 hours
- First, quick introduction to Python
 - Data types, flow control, classes, functions, use of tabular spaces, etc.
 - <http://www.slideshare.net/azaro42/python-web-tutorial>
- Second: development of the application for web interaction
 - Urllib (`url = urllib.urlopen(url)`)
 - Urllib2 (`request = urllib2.Request(url)`)
 - Urlparse
 - rdflib

```
1 from rdflib import ConjunctiveGraph, URLInputSource, Namespace
2
3 prop = Namespace("http://dbpedia.org/property/")
4 origin = prop['origin']
5
6 topgraph = ConjunctiveGraph()
7 count = 0
8 for nt in ntitles:
9     graph = ConjunctiveGraph()
10    dburi = 'http://dbpedia.org/data/%s.rdf' % nt
11    try:
12        graph.parse(URLInputSource(dburi))
13        topgraph += graph
14        count += 1
15    except:
16        pass
17    sys.stdout.write('.')
18    sys.stdout.flush()
19
20 query = "SELECT ?band ?origin WHERE { ?band prop:origin ?origin . }"
21 res = topgraph.query(query, initNs={'prop' : prop})
22
```

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- OGSA-DAI people was there
 - I chased them until I got what I needed:
 - How to run tests in OGSA-DAI
 - Very good framework for running them
 - Based on Ruby and YAML
 - Run tests, automatic generation of reports, time to be configured: 5 minutes (if you configures it previously)
- Linked data people was there
 - I chased Andy Seaborne until he explained me how Jena's (D)ARQ worked and why it was that fast
- You meet lots of people
- Bounties: lots of good prices for winners

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- Good place to learn new technologies
- You generate new ideas by learning and associating with your own expertise
- Many people around
 - Possibility of solving your own questions
 - Lots of contacts to do
- How much was it?: it was for free!
 - They even provided you accommodation in a hostel (in dorms, 1 metro station away)
 - Breakfast, lunch, social dinner and some beers included



Any question?