



ODI Learning in Tanzania

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<http://tanzania.learndata.info>



Open data publication platforms



Outcomes

Evaluate a number of different approaches for publishing open data.

Publish a dataset on one of the many available platforms.



Types

Specialist Solution

- + Easy to get setup and maintain.
- + Open Data focused
- + Clear workflows for publishing open data
- + Visualisation tools
- + Data mashing tools
- + Best for transactional data

Integrated Solution

- + No new platform to learn
- + Data is provided in parallel to web pages
- + No separation from authoritative data
- + Easy discovery of data
- + Best for reference data
- + Best for Linked Open Data



Key characteristics of specialist solution

Separate from your main org website

Designed to publish open data, not to fulfill other org goals

Examples: data.gov.uk | data.cityofchicago.org | data.sncf.com



Key characteristics of integrated solution

It is your main website

Publishes data alongside everything else that the organisation does

Examples: bbc.co.uk/programmes | southampton.ac.uk | gov.uk



Merging specialist and integrated

Method 1: *Build the functionality of your current website into a new open data platform.*

Example: [West Sussex Country Council](#)

Method 2: *Hide the specialist solution behind your main website and use it as a loosely coupled CMS.*

Example: [southampton.ac.uk](#)



The sliding scale of specialist solutions

1. Catalogue: Point to data (leave it at source)
2. Re-present: Provide data services (leave it at source)
3. Host the data: Be the source
4. Control the data: Be the authority
5. Be the hub: Host the data and processor



Specialist Solutions



comprehensive knowledge
archive network

<http://www.flickr.com/photos/okfn>



 Content created by
The Open Data Institute

Overview



Open Knowledge Foundation Supported

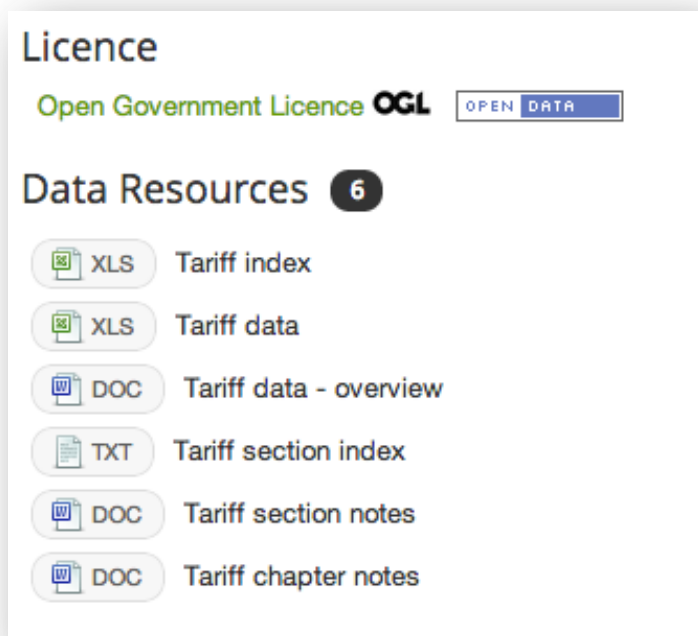
Data Catalogue

Open Source

Feels like a record manager


Simple API and search

Lots of community tools



<http://demo.ckan.org/>



 Content created by
The Open Data Institute

Evolution of CKAN (v1.4)



Early) Dataset catalogue (data.gov.uk)

no data hosted or searched

Mid) Data and dataset catalogue

no data hosted but it is searchable

Now) Integrated data driven web site

data platform is integrated with data, search and content





Features

Publish, Store and Manage Data and **Metadata**

Visual and **Geospatial**

Social

Full Stored **History**

Federate Your Data With Other Organizations

Rich RESTful JSON API for **Developers**



Overview



Prix des carburants - J-7

Information

Table

Map

Analyze

Export

API

Share

	Nom	Marque	Carburant	Prix Gazole	Prix SP95	Prix SP98
1	MME POGGIO	Total	Gazole	1.35	1.56	1.63
2	RELAIS HAGONDANGE	Total	Gazole/E10	1.367		
3	AGIP CAVAILLON CLEMENCEAU	Agip	Gazole/E10/SP98	1.36		1.59
4	Carrefour Market	Carrefour Market	Gazole/SP95	1.337	1.589	1.58
5	INTERMARCHE RABASTENS	Intermarché	Gazole	1.317	1.519	1.539
6	DAINVILDIS	Leclerc	SP95		1.476	
7	LES BERJALLIENS	Total	Gazole/E10/SP98	1.36		1.59
8	Avia Iecourbe	Avia	Gazole	1.46	1.7	1.72
9	Sarl STATION KLEBER	Elan	Gazole/SP95/SP98	1.79	1.94	1.96
10	BP PARIS PAUL DOUMER	BP	Gazole/E10	1.439		
11	RELAIS TOTAL MARECHAL DAVOUT	Total	Gazole/E10/SP98	1.365		1.648
12	ESSO DU MIN	Esso Express	E10	1.222		1.502
13	INTERMARCHE LILLEBONNE	Intermarché	Gazole/SP95/SP98	1.259	1.499	1.529
14	CARREFOUR GRUCHET	Carrefour	Gazole/SP95	1.189	1.429	1.529
15	SARL PICHON	Avia	Gazole/SP95/SP98	1.34	1.53	1.57

Data as a Service (DaaS)

Hosted enterprise solution

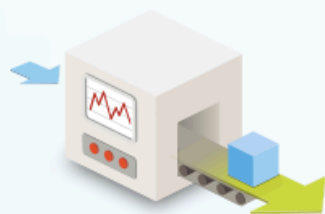
Query based API (3-Star)

EU Based

Closed source



Features



Prepare data

- Collect from any source
- Read every kind of formats
- Understand all data types
- Make datasets findable & reusable



Reuse data

- Full-featured secured API
- Standard access formats
- Interactive & shareable visualization
- Web extensions & open source



Scale services

- Big data technologies
- 100% cloud-based
- API factory
- Monitoring



Overview



Data as a Service (DaaS)

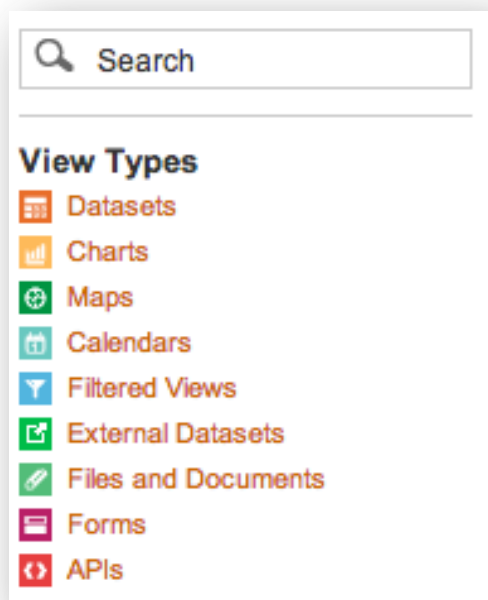
Hosted enterprise solution

Allows user created content

Full linked API (5-Star)

US Based

Closed source



Features



Data **Publishing**, Optimized for Business Users

Flexible **Metadata** Management

Federate Your Data With Other Organizations

Metrics of the Success of Your Initiative in Real-time

Anyone Can Create **Maps** and **Charts**

Data Becomes **Social**

Developers Are Supported Every Step of the Way



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Integrated solutions


Integrated solutions expose data using the current infrastructure (web pages).

Data driven web site

Best for reference and live data



The developers secret



Search

[Home](#) > [Business and self-employed](#) > [Imports and exports](#)

Trade Tariff

Search the tariff

[View all sections](#) [A-Z Index](#)

This tariff is for 6 August 2014 [change date](#)

Trade between the UK and All countries [change country](#)

Section	Chapters	Title
I	1 to 5	Live animals; animal products
II	6 to 14	Vegetable products
III	15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes
IV	16 to 24	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes
V	25 to 27	Mineral products
VI	28 to 38	Products of the chemical or allied industries
VII	39 to 40	Plastics and articles thereof; rubber and articles thereof
VIII	41 to 43	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)
IX	44 to 46	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basket-ware and wickerwork

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"id": 1,
"position": 1,
"title": "Live animals; animal products",
"numeral": "I",
"chapter_from": "01",
"chapter_to": "05",
"section_note_id": 1

"id": 2,
"position": 2,
"title": "Vegetable products",
"numeral": "II",
"chapter_from": "06",
"chapter_to": "14",
"section_note_id": 6

"id": 3,
"position": 3,
"title": "Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes",
"numeral": "III",
"chapter_from": "15",
"chapter_to": "15",
"section_note_id": null
},
{
  "id": 4,
  "position": 4,
  "title": "Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes",
  "numeral": "IV",
  "chapter_from": "16",
  "chapter_to": "24",
  "section_note_id": null
},
{
  "id": 5,
  "position": 5,
  "title": "Mineral products",
```



Linked data

Amazing but challenging to publish and use

EEE Building

<http://id.southampton.ac.uk/building/32> ← This is the URI

Detail

Facilities

Services

Energy

Site: Highfield Campus
 Construction: 2006
 Architect: John McAslan & Partners
 Features: Building 32 is non-residential

[View Disability Report for this Building](#)

Occupants

- Electronics & Computer Science
- Southampton Education School
- Agents, Interactions & Complexity
- Web & Internet Science
- Leadership School Improve & Effectiveness
- Lifelong & Work-Related Learning
- Mathematics & Science Education
- Social Justice & Inclusive Education
- Teaching Only Staff
- Deanery




ton.ac.uk/building/32

→ rooms:Building, <http://id.southampton.ac.uk/ns/UoSBuilding>

→ "EEE Building"

Occupant → Electronics & Computer Science, Southampton Education School, Agents, Interactions & Complexity, Web & Internet Science, ...show 8 more...

Location → "32" <http://id.southampton.ac.uk/ns/building-code-scheme>

Locations:within → Highfield Campus

→ <http://www.soton.ac.uk/estates/ourestate/buildings/highfield/32.html>

→ "50.9364157" [^xsd:float](#)

→ "-1.395905" [^xsd:float](#)

outhampton.ac.uk/ns/disabledGoPage → <http://www.disabledgo.com/en/access-guide/building->

Locations:easting → "442544" [^xsd:integer](#)

Locations:northing → "115392" [^xsd:integer](#)

Organization → University of Southampton

outhampton.ac.uk/ns/ombielName → "Bldg 32 (EEE)"

Feature → Building 32 is non-residential

outhampton.ac.uk/ns/buildingDate → "2006"

outhampton.ac.uk/ns/buildingArchitect → John McAslan & Partners

patial → "POLYGON((-1.3961073411331264 50.93683868764933,-1.3958347895092957 50.9368567227702,-1.3956958407975968 50.9368567227702,-1.3959558923017397 50.93603859197583,-1.3961073411331264 50.93683868764933))"

outhampton.ac.uk/ns/electricityTimeSeries → "elec/b32/ekw"

← is spatialrelations:within of ← 32 / 3077, 32 / 1015, Physical and Applied Science Faculty Deanery, Social and Human Sciences Faculty Deanery, ...show 54 more...

← is foaf:depicts of ← <http://data.southampton.ac.uk/image-archive/buildings/raw/32.jpg>, <http://data.southampton.ac.uk/image-archive/buildings/1000/32.jpg>, <http://data.southampton.ac.uk/image-archive/buildings/800/32.jpg>, <http://data.southampton.ac.uk/image-archive/buildings/600/32.jpg>, ...show 5 more...

← is event:place of ← RAeS Solent Branch Christmas Special Lecture - The Red Arrows



a Building

Google
 Information Ltd & Bluelight, The GeoInformation Group

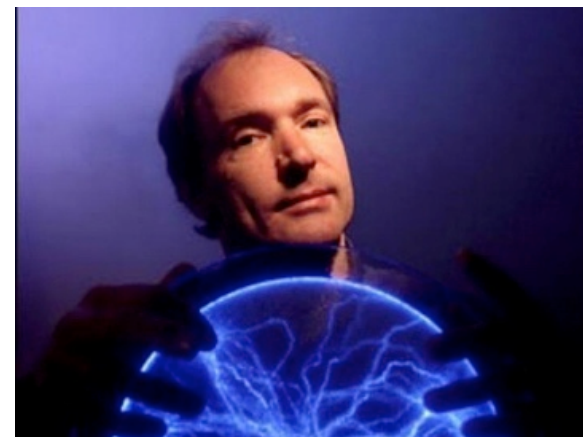




Formats, Structures and Files

Data formats are complex and have ~~suffered~~ benefited from years of development in many different domains.

One thing is bringing them all together.



Recap

Specialist Solution	Integrated Solution
<ul style="list-style-type: none">+ Easy to get setup and maintain.+ Open Data focused+ Clear workflows for publishing open data+ Visualisation tools+ Data mashing tools+ Best for transactional data	<ul style="list-style-type: none">+ No new platform to learn+ Data is provided in parallel to web pages+ No separation from authoritative data+ Easy discovery of data+ Best for reference data+ Best for Linked Open Data

Both great for open data

Integrated solutions more suited for building a web of linked data



Exercise

Each table will have one of the publication platforms to explore.

Your task is to publish a prescribed dataset on this platform, with an associated open data certificate.

