Microsoft
Open Technologies

Open Data Platform for China Government

– Open Source, Open Standards and Open Data

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I am

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Agenda

- Background of Government Open Data
- Open Data Portal (CKAN) + Open Standard (OData)
- Open Data Platform Architectures and Functions
- Case Study
- References

Open Data Defined

Making public data broadly accessible and usable by humans and machines, free of any technological, legal or usability barriers

Legal Constraints

Publishable Data

A movement that benefits all actors in the modern society and economy

Open Data Around the World

"Release of public sector information creates opportunities for innovative use and reuse of data, and allows the commercial, research, and community sectors to add value."

Australian Government [2013]

"It enables data-driven decision making: parliamentarians, policy makers, civil society organizations and individuals can see progress and make accurate, informed decisions on issues that affect people's lives."

Kenya Open Data Initiative [2013]

"Openness will strengthen our democracy and promote efficiency and effectiveness in Government."

Barack Obama, President of the United States [January 2009]

"The next generation of innovation in… academic research or public services will be possible because we find new ways to harness and learn from data."

World Economic Forum [December 2013]

"It makes the government more accountable to citizens and strengthens our democracy. It brings us better public services and it feeds economic and social growth."

Data.gov.uk [2013]

"By opening up more data, and through innovative use of technology, we can crowd-source ideas and co-create applications with the wider community."

Tharman Shanmugaratnam, Singapore Deputy Prime Minister [April 2013]

"Not only are we making more effective decisions through improved use of data, but also involving communities, making them more informed and empowering them to deal with future challenges."

World Economic Forum [January 2013]

Open Source Data Portal Platform - CKAN

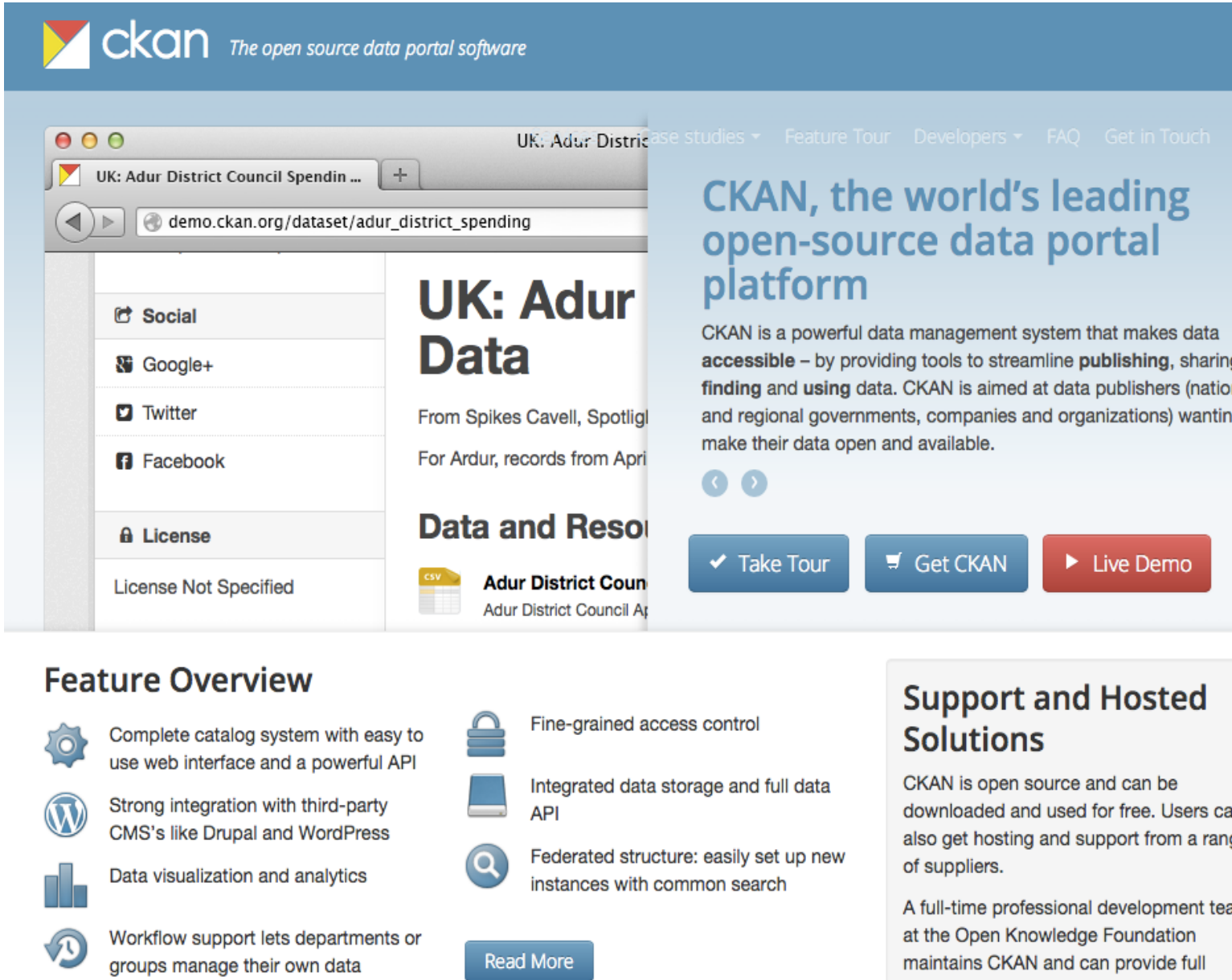
- OKFN CKAN

OKFN is a non-for-profit UK organization and develop the CKAN OSS product, a leading Open Data Catalogue and Indexing content management system running on Linux Ubuntu

- CKAN Open Data site examples:

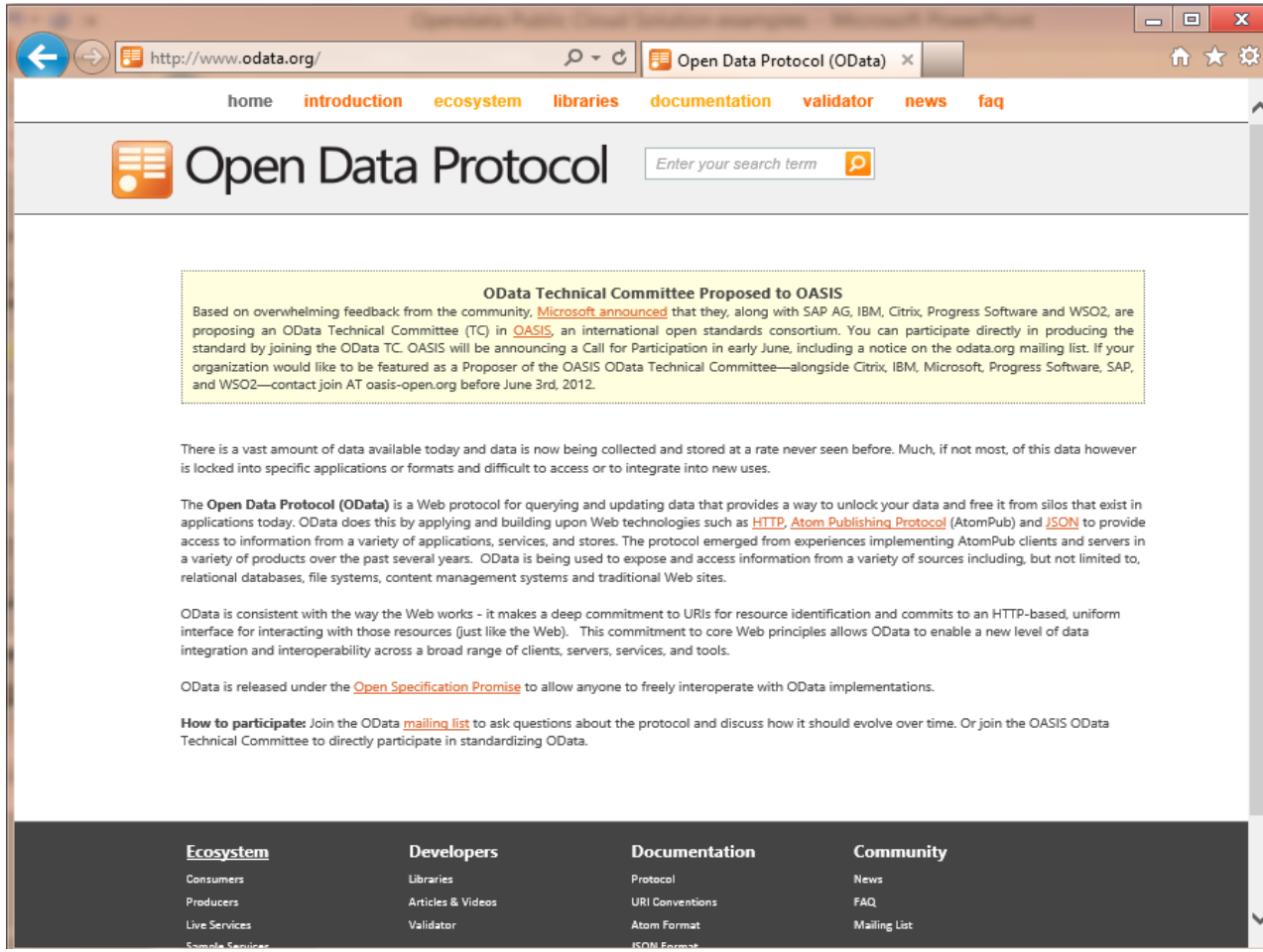
- data.gov.uk UK government web site CKAN integrated with Drupal and Azure Datamarket hosting UK Weather opendata dataset

- USA data.gov with Socrata, Drupal



Open Data – OData moving to Standards

- Opening data silos through OData protocol – multi-platform and multi-vendor
- Open Data protocol, built on web standards open spec moving to standardization
- OASIS Approves Odata 4.0 Submitted by Microsoft, IBM, SAP, Citrix, Progress Software and WSO2
- OData ecosystem and supported products/services



OData
Open Data Protocol

OASIS
Advancing open standards for the information society

Microsoft .NET

Breeze

ISO

JayData

Apache Olingo™

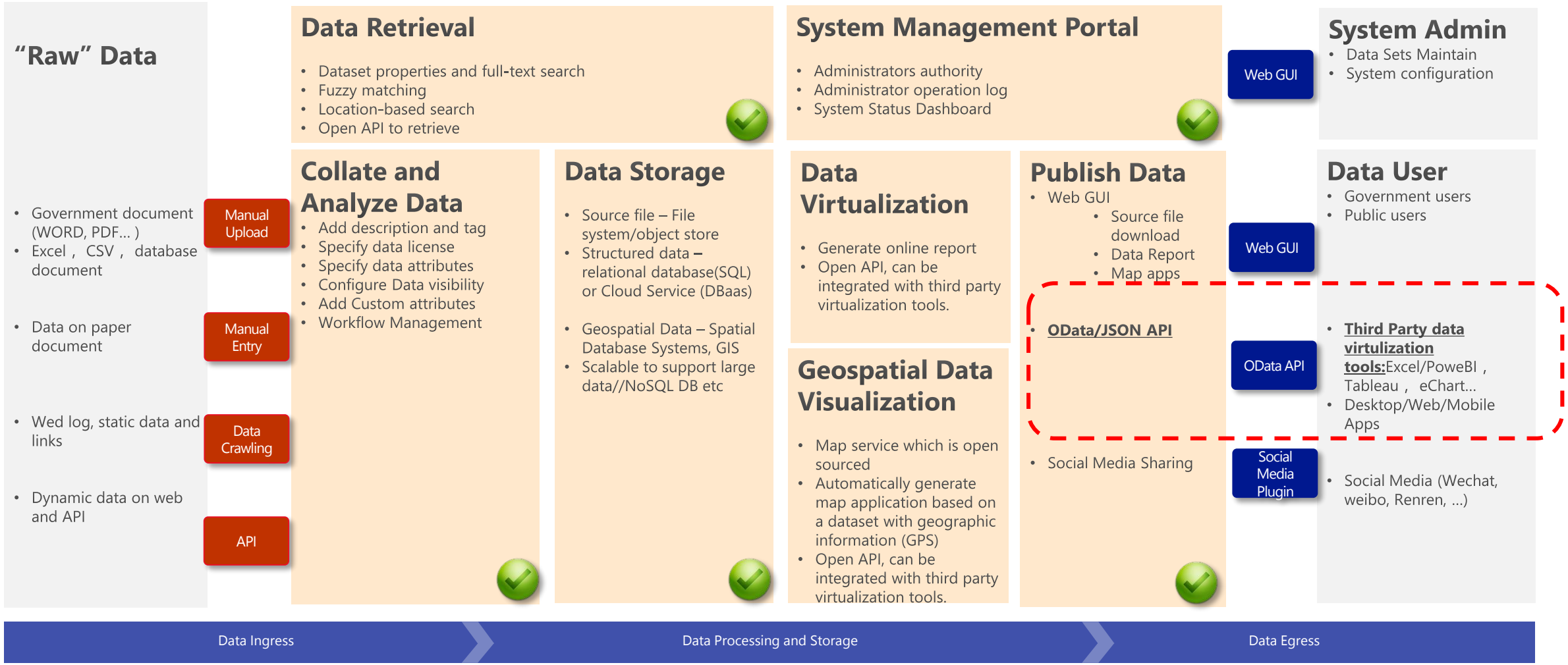
CKAN + OData = Open Data Platform

- **MS Open Tech's Contribute to OSS project**
  - OData plugin for CKAN
  - OData feeds generator for JDBC
  - OData Producer for SugarCRM
  - CKAN Images on VM Depot

- **Business project**
  - Open Data Project for Chinese Government
  - Powered on Azure Public Cloud

- **Ecosystem**
  - Juhe Dataset's API support OData
  - Odata.org community
  - National Open Data Contest

Open Data Platform Architecture



Data Import – Process Government Data, Document and links

- Three steps: Create Data Sets -> Import Data -> Configure Data

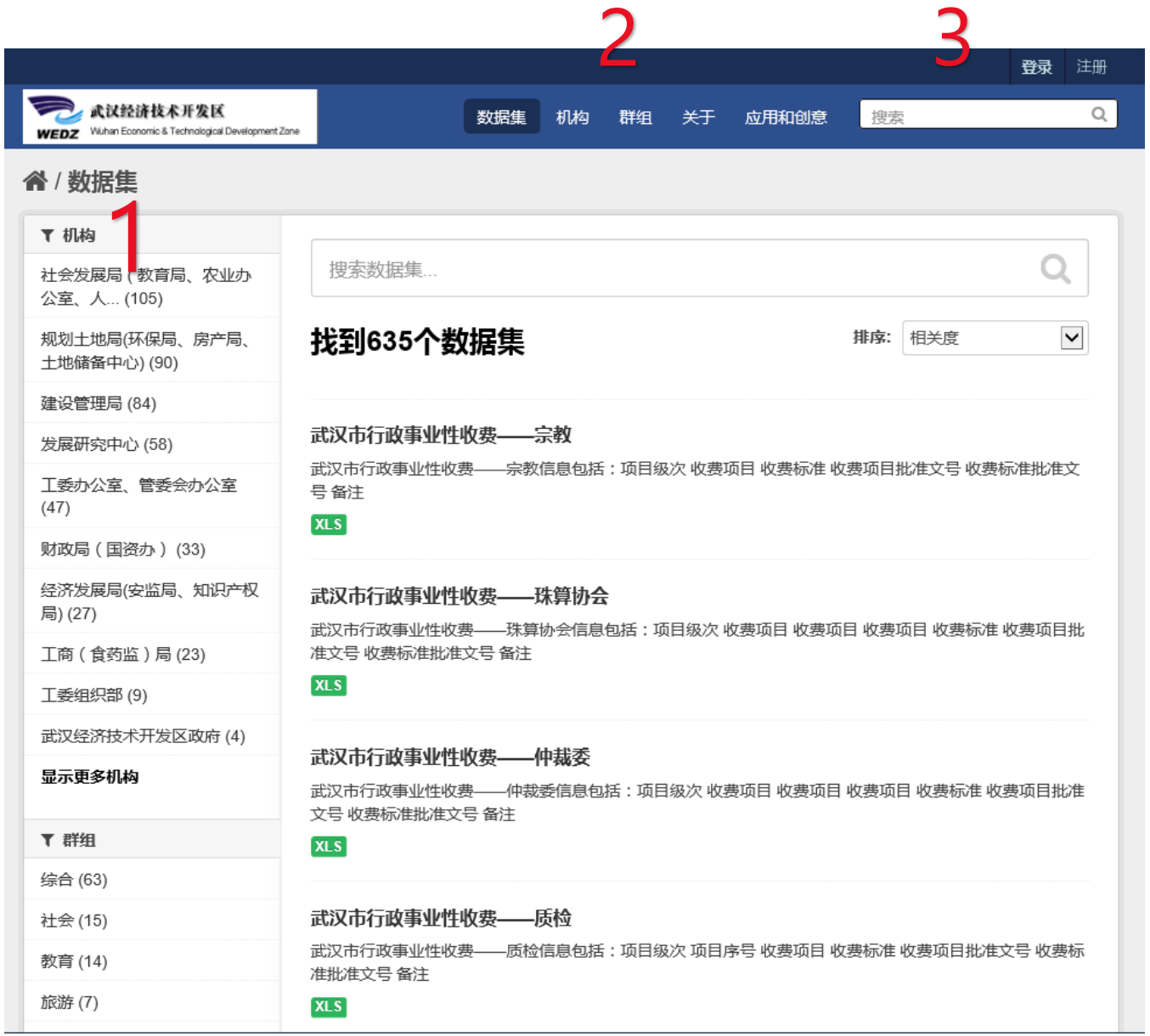
- Support multiple document format– WORD, EXCEL, CSV, JPG, HTML, URL…

Data Collate, Category and Search

1. Data Sets Query in different Category –Organization，Groups, Data types, attributions…

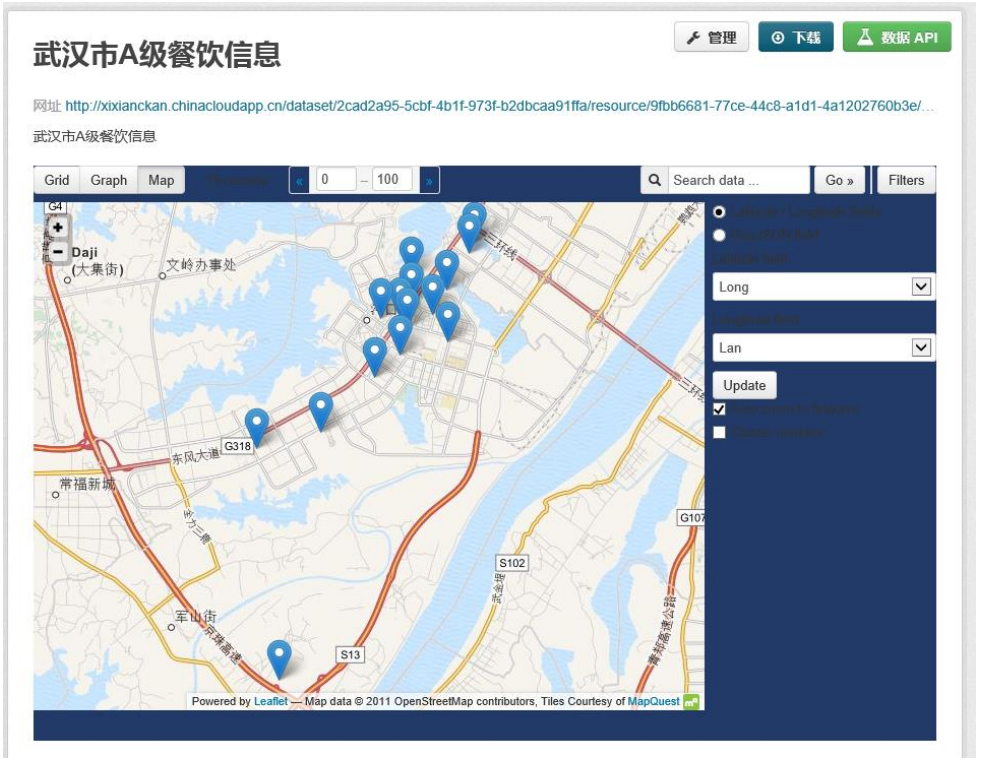
2. Three view points :Data Sets, Organization and Groups

3. Full text search and fuzzy matching



Data Virtualization – GIS as example

- When Data entry contains geographic information(GIS), like latitude and longitude, open data platform will automatically generate a map application
- Open Data Platform support basic Charting tools



Case Study in China

Government Open Data Platform in China

References

1. Odata.org
2. CKAN.org
3. OData Plugin for CKAN in GitHub - https://github.com/msopentechcn
4. CKAN Images on VM Depot China - https://vmdepot.msopentech.cn

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