UBDC Data Services and Collection

Big Data Workshop for Local Authorities - 12 Nov 2015

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Urban Big Data Centre
UBDC Data Services

Data Service
- IT Infrastructure
- Data Scientists
- Data Acquisition
- Data Products
- Data Access

Outreach & knowledge exchange

Training & capacity building

An ESRC Data Investment

Urban Big Data Centre
Overview - IT Infrastructure

UBDC Cluster
- Housed within UoG central IT
- Over 0.5 PB storage capacity
- 1 TB memory
- 10 GB network
- Linux and Windows servers
- Virtual Machine Monitor

Data Stores
- SQL Databases (PostgreSQL ....)
- NoSQL (Mongo / Neo4j ...)
- DDN Web Object Store
Overview – Data Access / Products

- Open Data
- Safeguarded
- Controlled
Data Access - Open Data

Open Data Portal
• UBDC’s open data products
• Collection of core open data resources
• Metadata and links to open data

Geoserver / ArcGIS server
• Spatial data products
Geoserver

- EEA
- Census
Data Access - Safeguarded Data

- Acquired data resources
- UBDC Data products (iMCD)
- Web services / API’s
- UBDC End User Licence Agreement
- Restricted Data Portal (Downloads)
- Virtual Machine
  - Multiple Linux / Windows OS
  - Scalable h/w resources
  - Configurable software installation
  - External user account for remote access
  - Monitored environment
  - Snapshots
Overview – Data Scientists

- Support data acquisition
- Support research proposals
- ETL
- Data analysis
- Data tools / utilities
- Data visualisation
- Support data management