

Oxford Archaeology and the Challenges of Going Open Source in Geomatics

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Oxford Archaeology

- independent archaeology and heritage practice
- 250 staff
- founded in 1973
- educational charity
- strategic commitment “Open Archaeology”



Open Archaeology

Open data

Open standards

Open Source



Open Source

- making/developing our own software open source
- using open source stuff:

Linux (SuSE)

NX

Solaris

Python

OpenOffice.org

FreeMind

Alfresco

PDFCreator

Joomla

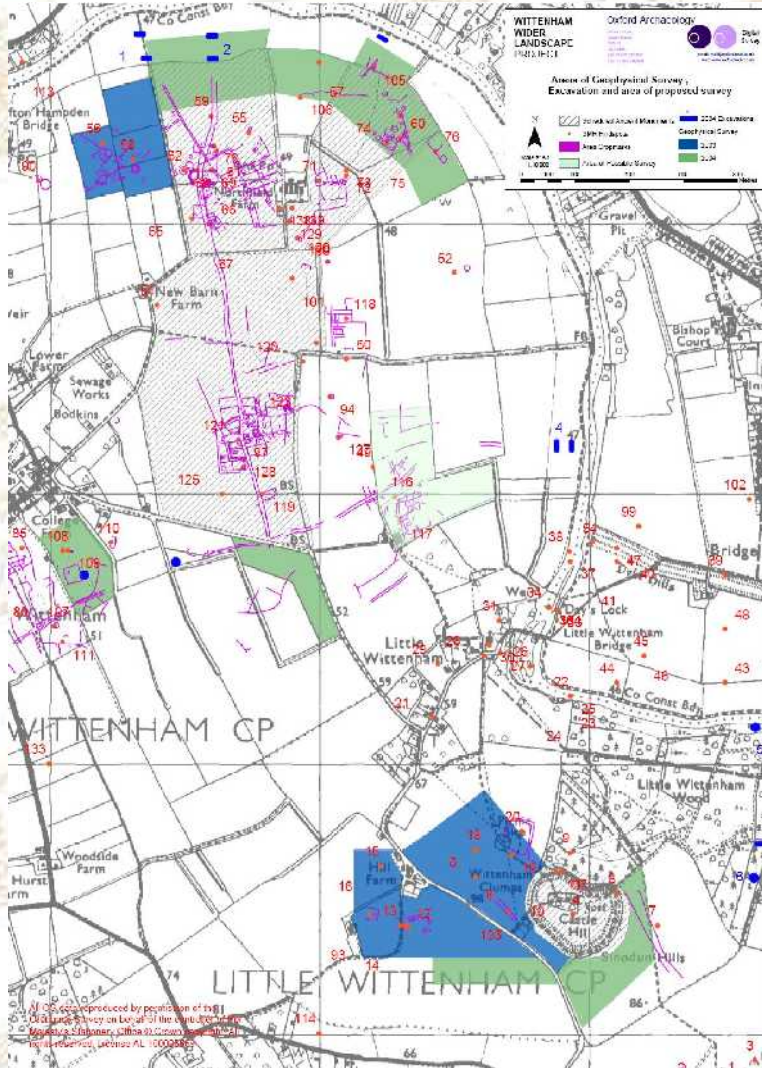
GanttProject

LifeRay

PostgreSQL

(and some GIS bits...)

Spatial Data



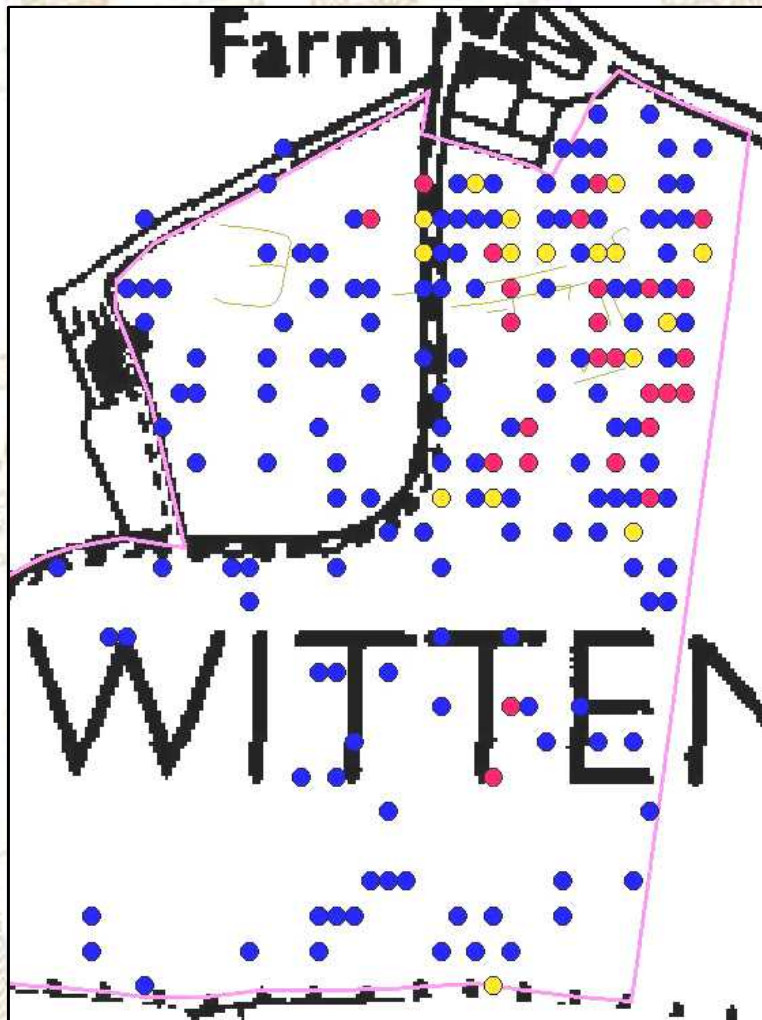
- Landscape surveys
- Historic maps

Spatial Data



- Landscape surveys
- Historic maps
- Aerial photos
- Geophysics

Spatial Data



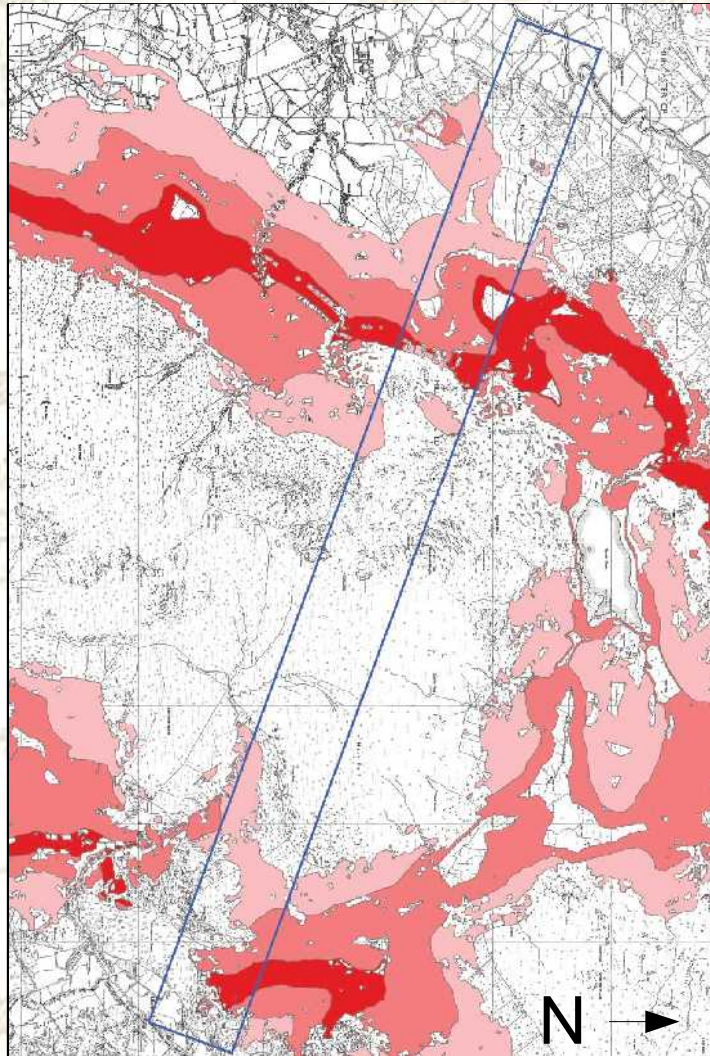
- Landscape surveys
- Historic maps
- Aerial photos
- Geophysics
- Site plans
- Artefact distributions

Spatial Data



- Landscape surveys
- Historic maps
- Aerial photos & geophysics
- Site plans
- Artefact distributions
- Finds

Spatial Data



- Landscape surveys
- Historic maps
- Aerial photos & geophysics
- Site plans
- Artefact distributions
- Finds
- Analysis

Legacy: ArcGIS and AutoCAD

- Pros

- Easier to find staff
- Wide support base
- Lots of extra features

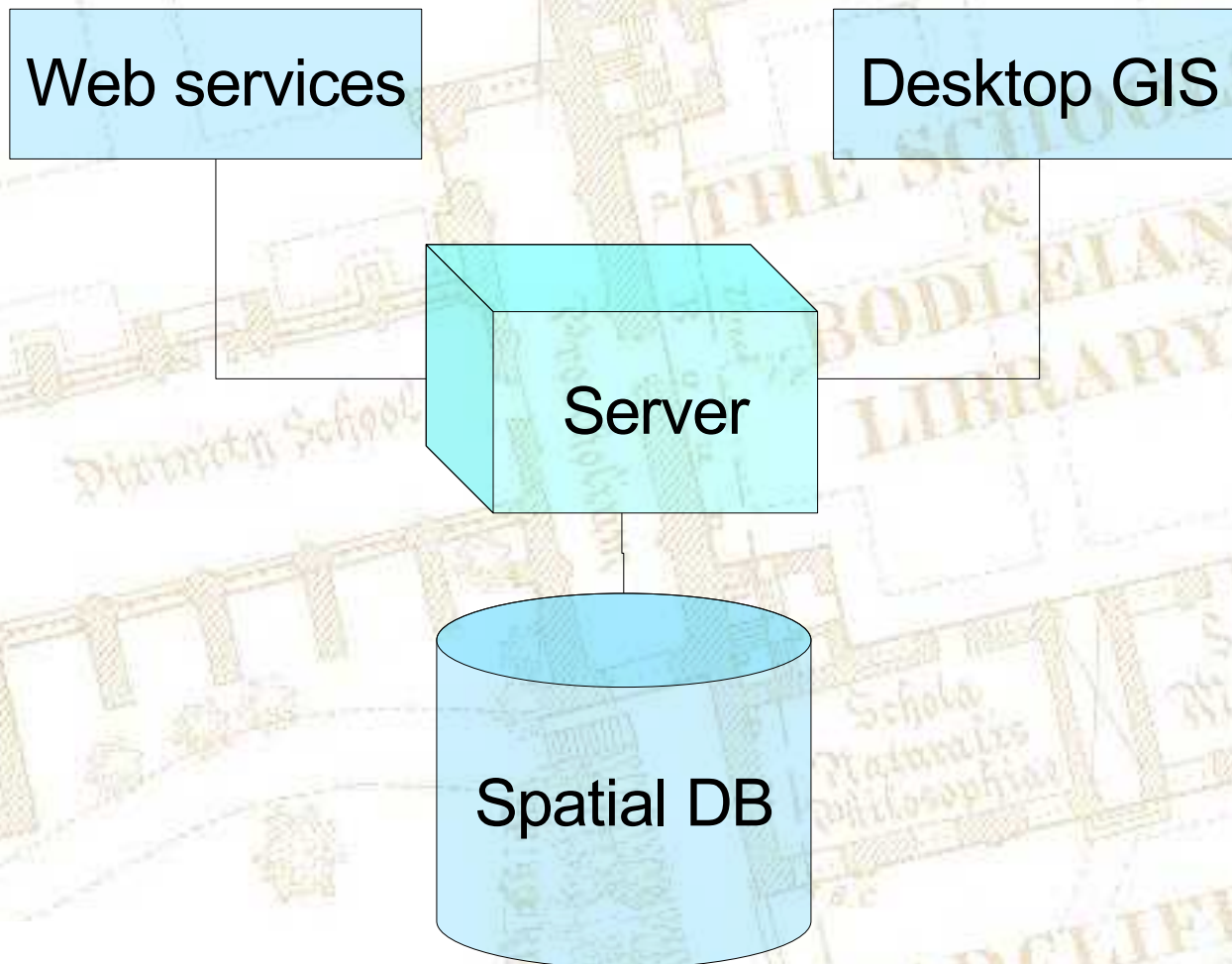


- Cons

- Cost (but CHEST agreement)
- Cross-formatting
- Interoperability
- Backwards compatibility
- Published standards

Autodesk®

A Spatial Data Infrastructure?



The Challenges

- Choice
- Overlap
- Standards
- Updatability
- Functionality
- Staff Training
- Documentation
- Changing specs
- Legacy migration
- Independent review
- Platform-dependence
- File structures/formats



A historical architectural plan of a university campus, likely Oxford, showing various buildings and courtyards. The plan is drawn in a light brown or tan color on a white background. Key buildings labeled include the Sheldonian Theatre at the top, the Bodleian Library in the center, and Radcliffe Square at the bottom. Other smaller buildings are labeled with Latin names such as 'Schola Philosophiae', 'Schola Musicae', and 'Schola Naturalis Philosophiae'. The text 'The Big Question' is overlaid in a large, bold, black font at the top center. Below it, the question 'How do you get the BIG picture?' is written in a smaller, black font, with 'BIG' in all caps and larger than the other words.

The Big Question

How do you get the
BIG
picture?

3 Proposals

An independent reporting webgroup

An abstract SDI framework

Generic models





oxfordarchaeology

exploring the human journey



<http://thehumanjourney.net/>

oxford archaeology: exploring the human journey