Oxford Archaeology and the Challenges of Going Open Source in Geomatics

Chris Puttick
&
Leif Isaksen
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)
  Solaris
  OpenOffice.org
  Alfresco
  Joomla
  LifeRay
  NX
  Python
  FreeMind
  PDFCreator
  GanttProject
  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
A Spatial Data Infrastructure?

- Web services
- Desktop GIS
- Server
- Spatial DB
The Challenges

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

How do you get the BIG picture?
3 Proposals

An independent reporting webgroup

An abstract SDI framework

Generic models