Towards Interoperability
fostering Partnerships Across
Oceans of Information

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What is the Arts and Humanities Data Service?

AHDS and ECAI: an agenda for collaboration

Interoperability for Archaeology

Interoperability in the Arts and Humanities Data Service

Interoperability – some thoughts for AHDS and ECAI

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Aims and Objectives

To collect, catalogue, preserve and encourage the re-use of digital research data created by UK-Based academics funded from UK research grants

The AHDS is jointly funded by

AHDS
The main activities of the **AHDS** are:

- Digital archiving
- Enabling access to existing data via the Internet
- Encouraging and describing good practice in IT
The **AHDS** works on behalf of:

- Research community
- Teaching community
- Learning community

... in the UK Arts and Humanities

These communities seek access to global data, therefore the **AHDS** has a global task!
ECAI and the AHDS: an agenda for collaboration

If you haven’t already noticed ...
...AHDS, PNC and ECAI share common goals
ECAI and the AHDS: memorandum of understanding

Guides to Good Practice
Standards
Supporting ECAI-BI Team
Training and communications
E-publishing
Digital Preservation Focus

Interoperability of data sets
Why should data providers think about interoperability?

Question: how do you get what you want as a researcher / data provider

Premise: There is too much information in the world already!

Answer: focus on interoperability
A user wants information about Westerwood, where there is a Roman fort and a stretch of the Antonine wall near Glasgow.

They could go to Goggle and find some information on the site ... and a lot else besides!

... this data is not authoritative, is incomplete, is unstable, and may be out of date.

Interoperability in Archaeology
Alternatively the user could go to Canmore, the online catalogue of the National Monuments Record of Scotland

www.rcahms.gov.uk
... or the user could have gone to the online catalogue of SCRAN and searched for Westerwood.

www.scran.ac.uk
... and and found pictures of the Antonine wall and aerial photographs of the fort.
Interoperability 1 – the ADS

- Or they could have gone to the West of Scotland Archaeology Service SMR (www.wosas.org.uk)
- Or they could have gone to the Hunterian Museum at Glasgow University where the Romans in Scotland are listed (www.gla.ac.uk/museum)
- Or they could go to Portable Antiquities scheme to find any metal detector finds (www.finds.org.uk)
- Or Cornucopia (www.cornucopia.org.uk)
Interoperability 1 – the ADS

End-user needs to join services together manually – and learn multiple interfaces
(tired and confused)

Current services offer mix of discover, access and use functionality

Data providers shouting louder and louder about their web sites
(tired and disappointed)

End-user

PAS  NMRS  WOSAS  SCrán  Museum
Doing serial searches like this is **boring and unnecessary**

- slows down the user
- reduces impact of data sets
- makes tracking changes impossible
- result of poor information architecture
Interoperability 1 – the ADS

Interoperability!

introducing... ArchSearch
an *interoperating* portal from the ADS
http://ads.ahds.ac.uk/catalogue/

Different databases are presented as a single entity.

The machines do the talking and the combining not us.
Interoperability 1 – the ADS

Data Providers co-operating (High Impact!)

Happiness

Presentation Layer

End-user (Blissfully unaware)

Happiness

PAS  Canmore  SCFRAN  Wosas  X  Y  Z

Z39.50
Bath Profile
CIMI Profile
XML
DC Metadata
HTTP
OAI
RSS ...
But it’s not as simple as that...

Different types of linkage required for different data sets

Different types of information can be exchanged

Different presentation layers are possible (to be encouraged?)

Standards, standards, standards ...
THE ADS

Wosas Etc…

Canmore etc…

HTTP

Z39.50

ADS Presentation Server

Various Options

CFM

AHDS Presentation Server

AHDS Portal

THE WORLD

Other Portals

Other Presentation Servers

End-user

THE ADS

Other Presentation Servers
It’s not as simple as that!

The ADS is part of the AHDS

Different types of information may be exchanged

Different techniques will be needed for different operations

Different presentations will be needed for different communities
Interoperability 2 – the AHDS

Original AHDS Architecture

UK Education Information Architecture

Arts and Humanities Portal

Z39.50
Server / Client
Exchanges based
on shared Dublin
Core element set

ADS HDS OTA PADS VADS
Interoperability 2 – the AHDS

It wasn’t as simple as that!

Subtle differences in DC implementation
Result - proof of concept
BUT - difficult to roll out to users
SO – time to tinker with architecture
ALSO – new tools now available (XML? OAI?)
Challenges to the AHDS Portal

This is still only schematic

New layers in the architecture

XML work to be done (with ECAI?)

English Language dominates

Other middleware services involved too

What about the users?
Interoperability 3 – AHDS and ECAI

**ADS, AHDS and ECAI: platforms for collaboration**

- ADS mixed economy portal alive already
- AHDS “plug and play portal” soon
- ECAI Clearing House
- Connecting our different systems together
- AHDS needs to work on time and space
- ECAI needs m2m connections
It may not be simple ...

AHDS licensing regime
AHDS meets TimeMap
AHDS responsive to external pressures
Language
What else does AHDS have to do?
... but a great deal is possible in a short time...

ADS Z39.50 server (codename “HEIRPort”) – pilot project for linking?

We don’t need to sort out language just yet?

Mutual benefits now

Long term gain also?
Item level
Description from ADS, HDS, VADS …

Archives

News Feed

HTTP

RSS

“Item level”
Description from ADS, HDS, VADS …

Z39.50

OAI?

Collection level
Description from ADS, HDS, VADS …

AHDS Portal
Presentation

options

End-user

Time Map
Presentation

ECAI Portal
In Conclusion therefore

AHDS, ECAI and many of the people here share common goals

We can share expertise and knowledge

We can also share data

Pilot Project?

Interoperability is a process not an event

Let’s keep the momentum going!

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