



# **An Open Source System for the Inventory and Management of Immovable Cultural Heritage**

**HEIRNET-FISH Meeting**

Edinburgh, Scotland, November 26, 2013



The Getty Conservation Institute



# **Background and Rationale**



The Getty Conservation Institute



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## Publications & Resources

- AATA Online
- Project Bibliographies (searchable)
- ▶ Teaching & Learning Resources
- ▼ PDF Publications
  - **Volume II, Illustrated Examples**
- ▶ Books for Purchase
- ▶ Conservation Perspectives, The GCI Newsletter
- GCI e-Bulletin
- ▶ Multimedia (videos & slideshows)
- GCI Reference Collection (for materials analysis)
- ▶ Lectures & Conferences
- Research Assistance at GCI Information Center
- Conservation Collection at Research Library
- Links to Cultural Heritage Policy Documents
- Other Conservation Websites

## Recording, Documentation, and Information Management for the Conservation of Heritage Places: Illustrated Examples

Edited by Rand Eppich and Amel Chabbi  
2008  
164 pages

[Download in sections](#)

### Volume II: *Illustrated Examples*

This volume contains a series of illustrated case studies that demonstrates the successful use of diverse approaches to recording and documentation in a variety of situations. The examples cover a wide range of site typologies from individual buildings to cultural landscapes, and run the gamut of documentation techniques from hand survey to laser scanning. In each case, the approach to documentation is based, first and foremost, on the conservation needs of the site and the context in which the work takes place; technology, tools, and high-tech gadgets are secondary considerations.

**Downloadable in sections.**

**Introduction.** Pages i–10. (PDF, 23pp., 1.3MB)

[Download PDF](#)

### *Related Publications*

- [Volume I: Guiding Principles](#)

# 2014 Watch Map







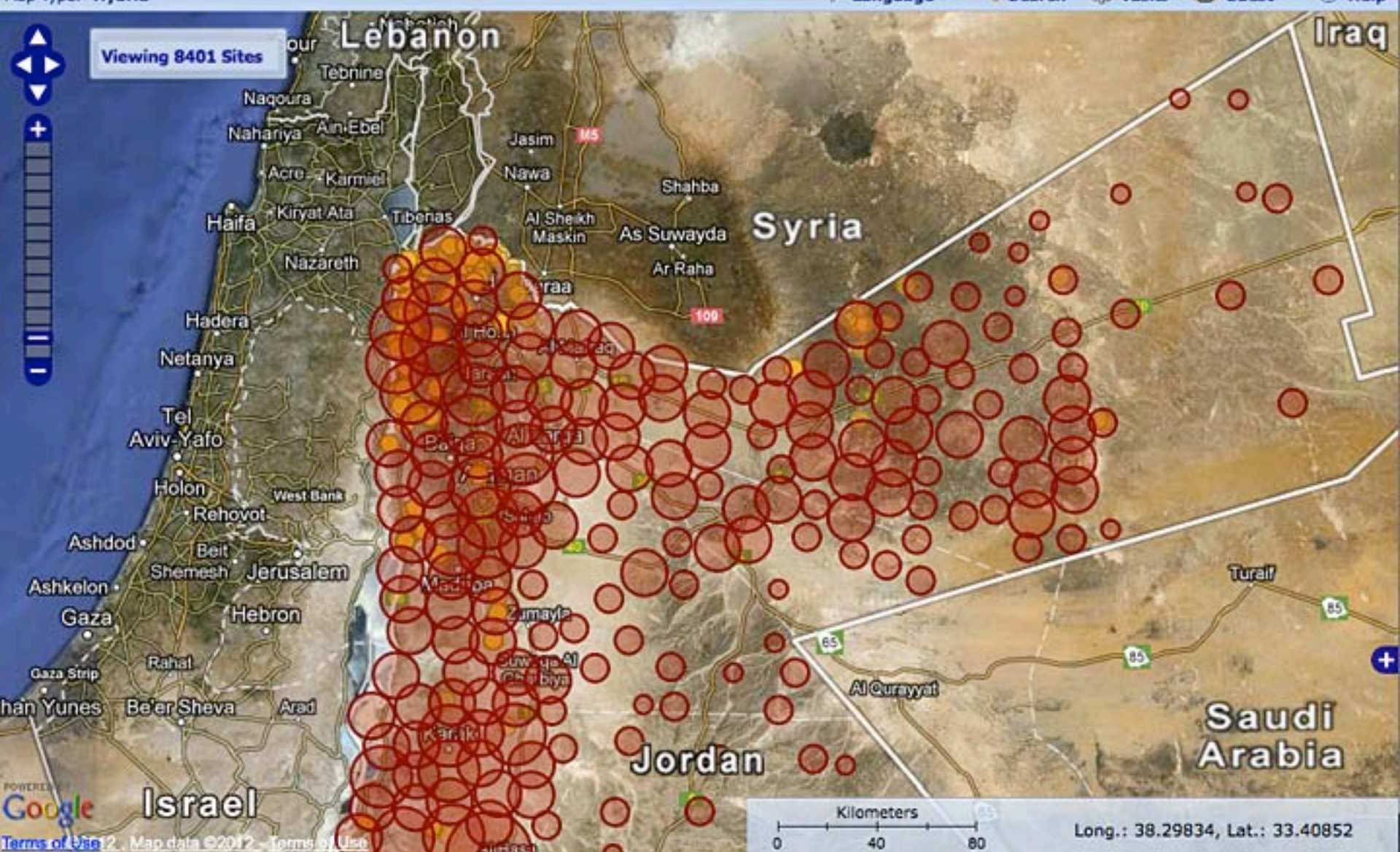
# Iraq Cultural Heritage Conservation Initiative



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Viewing 137 Sites

Search

Enter Site or Site Element Name or MEGA Number



Advanced

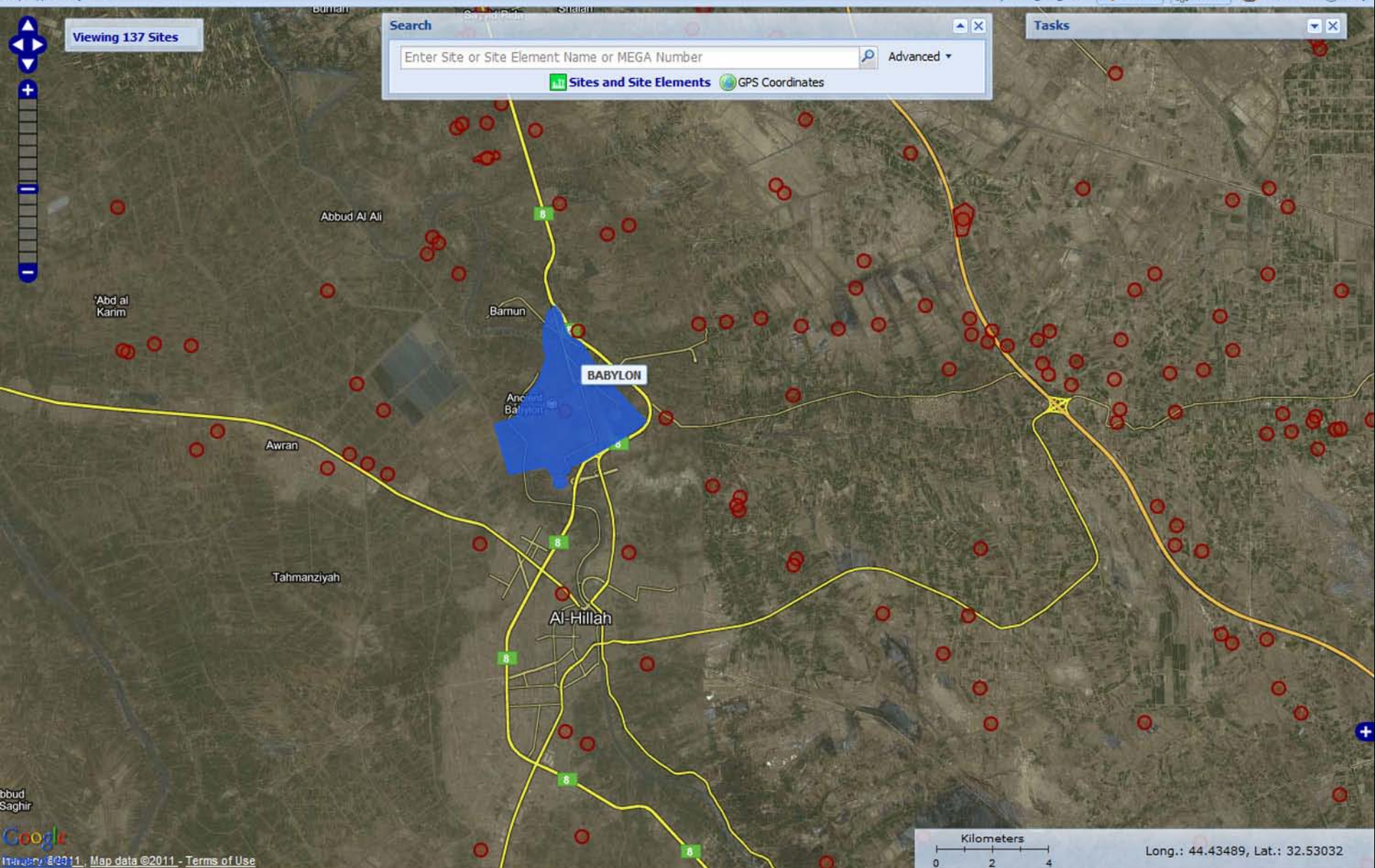


Sites and Site Elements



GPS Coordinates

Tasks



bbud Saghir

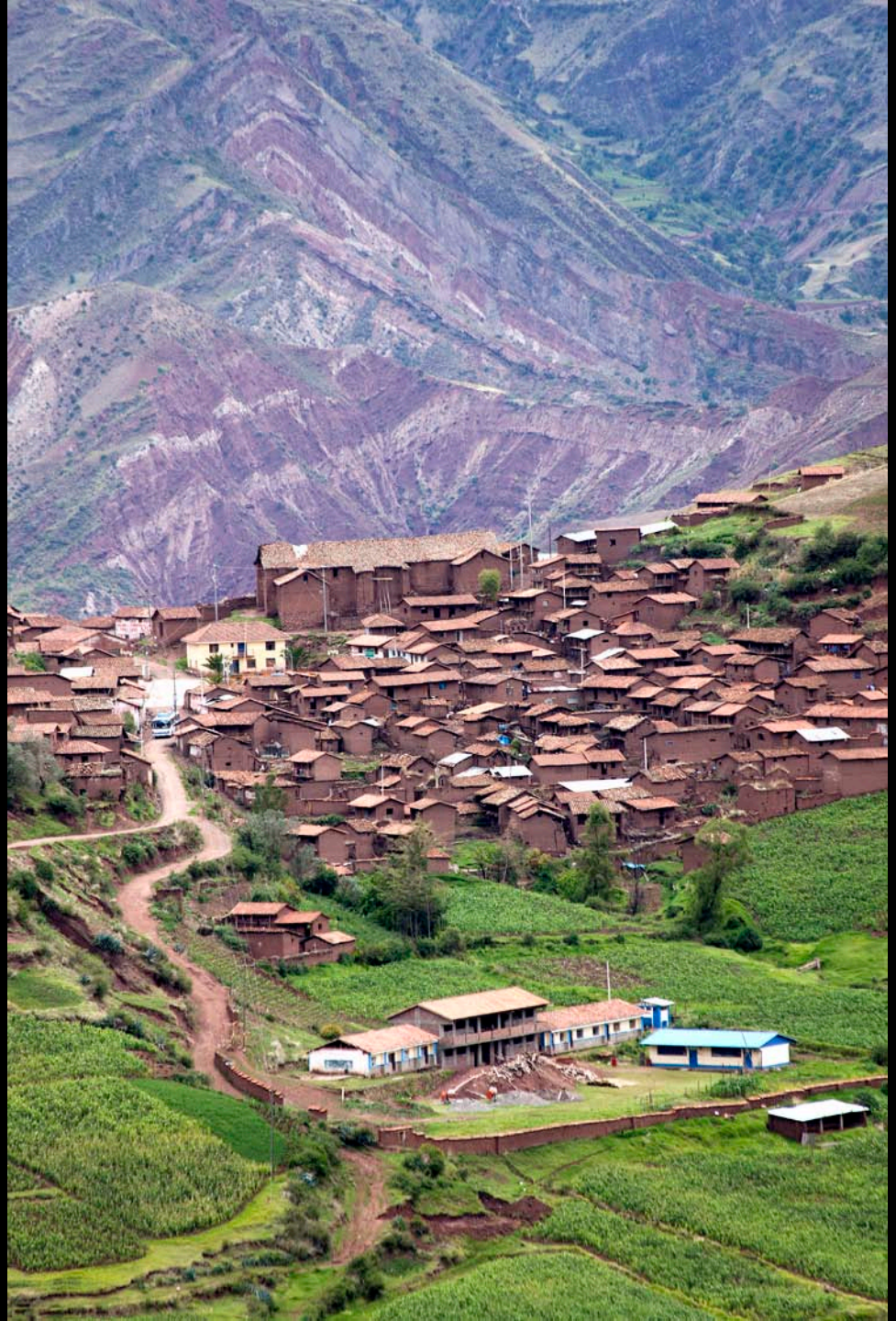
Google

©2011 Map data ©2011 - Terms of Use

Kilometers  
0 2 4

Long.: 44.43489, Lat.: 32.53032







# Challenges





















# Our approach to addressing challenges:

**generic system**

**software available at no cost**

**independently deployable**

**data may be as open or closed as needed**

**data structured to protect it for future**

# **Design principles:**

**economic**

**customizable and flexible**

**accessible and easy to use**

**standards-based**



# CIDOC

Comité international pour la documentation, conseil international des  
musées

International documentation committee, international council of museums

## **INTERNATIONAL CORE DATA STANDARD FOR ARCHAEOLOGICAL AND ARCHITECTURAL HERITAGE**

Sites Working Group

through credit card orders for 10.00 USD  
COM, Maison de Unesco, 1, Rue Miollis,  
ance  
ax: + 33 1 43067862

## Definition of the CIDOC Conceptual Reference Model

Produced by the ICOM/CIDOC  
Documentation Standards Group,  
Continued by the  
CIDOC CRM Special Interest Group

Version 5.0.4  
November 2011

Editors: Nick Crofts, Martin Doerr, Tony Gill, Steph...

Copyright © 2003 ICOM/CIDOC CRM Special I



**modern IT architecture**

**integrated search engine**

# collaborators



ENGLISH HERITAGE



onroerend  
erfgoed





# **System Overview**

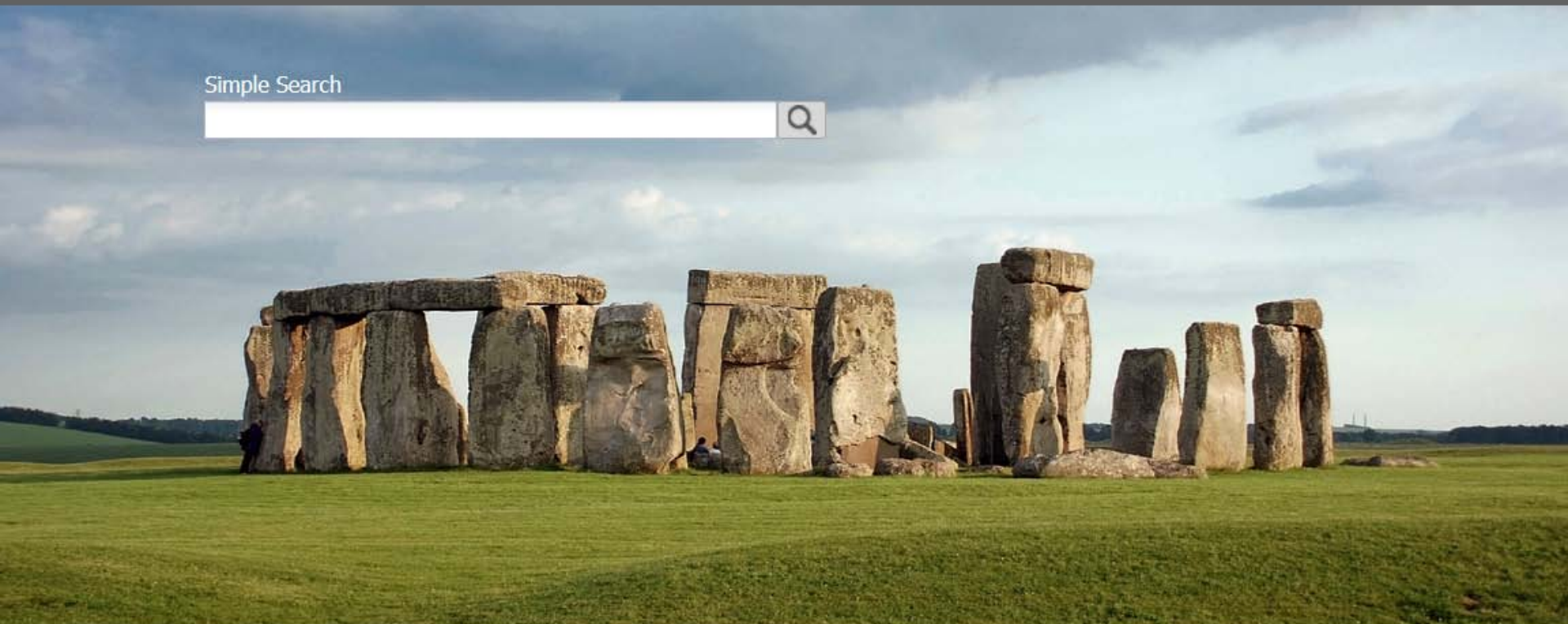


Simple Search

Advanced Search

Map

Simple Search



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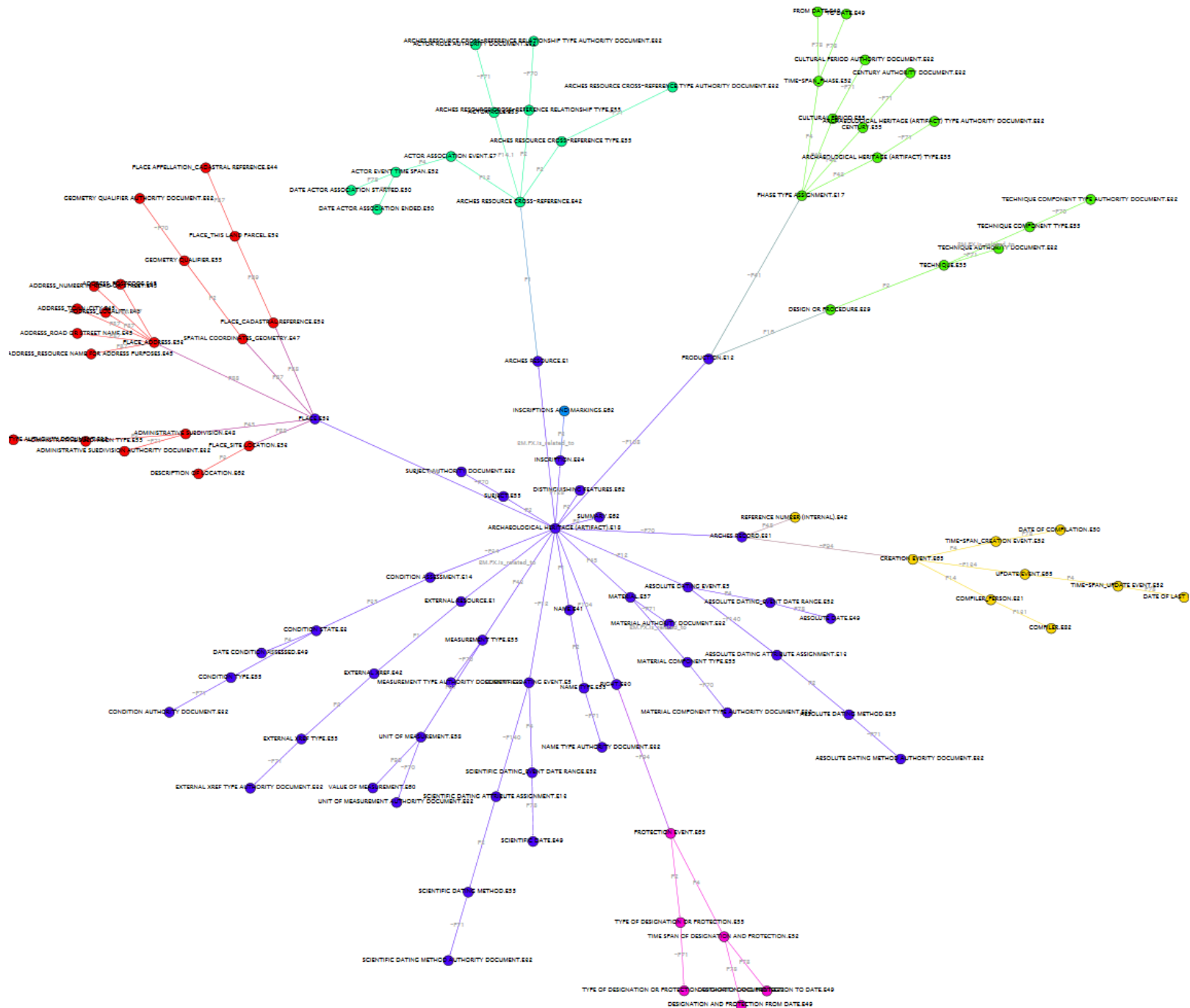
Arches developed by Farallon Geographics, Inc.

Arches is open source. Get Arches at [www.archesproject.org](http://www.archesproject.org)



**This section of the presentation contained a number of slides providing a demo of the Arches system. An online demo can be accessed at:**

**<http://archesproject.org/demo/>**





**NAME TYPE AUTHORITY DOCUMENT**

**E32** Authority Document



-P71 is listed in

**NAME TYPE**

**E55** Type



P2 has type

**NAME**

**E41** Appellation



P1 is identified by

**ARCHITECTURAL  
HERITAGE**

**E18** Physical Thing



**NAME TYPE AUTHORITY DOCUMENT**

**E32** Authority Document



—P71 is listed in

**NAME TYPE**

**E55** Type



P2 has type

**NAME**

**E41** Appellation



*"Bâtiment de l'Aubette"*

P1 is identified by

**ARCHITECTURAL  
HERITAGE**

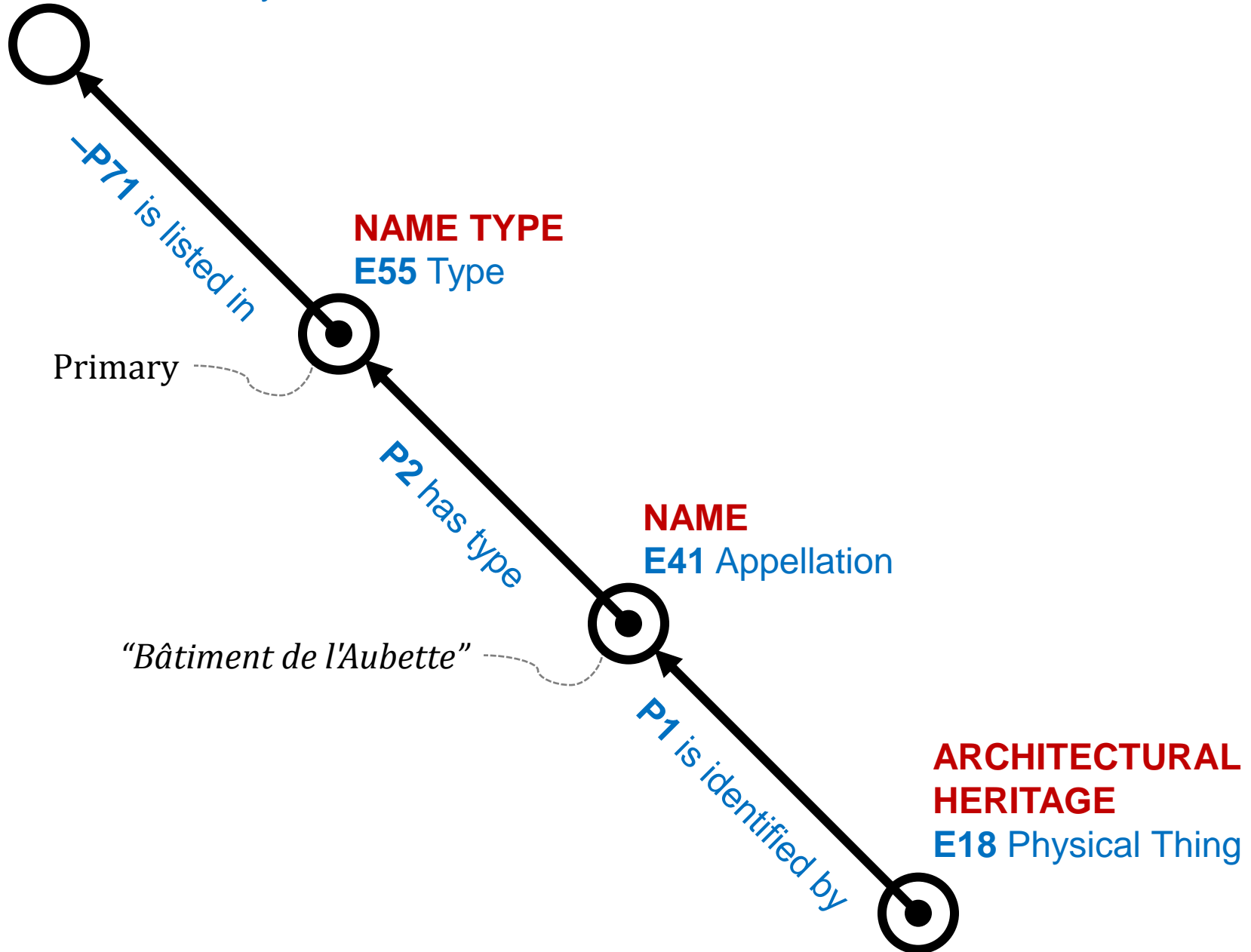
**E18** Physical Thing





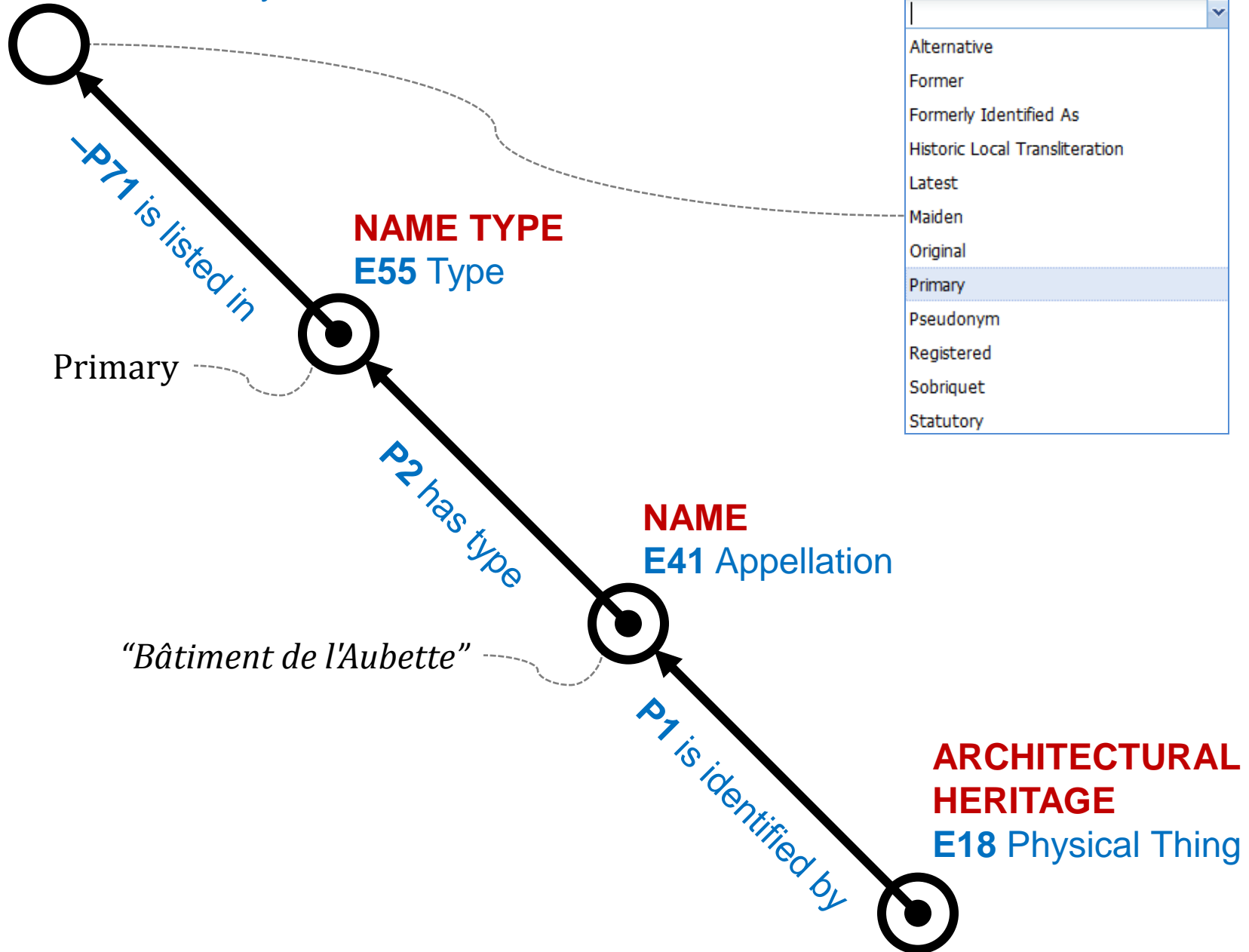
# NAME TYPE AUTHORITY DOCUMENT

E32 Authority Document



# NAME TYPE AUTHORITY DOCUMENT

E32 Authority Document





# **Open Source Community**





Firefox

(2) Arches Project - Google Groups

Arches

Arches Project

arches / arches — Bitb...

Arches Project

ARCHES

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ioannis.avramides@gmail.com

Groups

NEW TOPIC

Mark all as read

Actions

Filters

My groups

Home

Starred

Favorites

Click on a group's star icon to add it to your favorites

Recently viewed

Recently posted to

Arches Project

Arches Project

Shared publicly

29 of 29 topics (3 unread)

Manage

Members

About

This is the community discussion forum for the [Arches project](#), an open-source, web-based, geospatial information system for cultural heritage inventory and management.

You are most welcome to join the group, ask questions about the software, raise issues ('tickets') that need addressing, or discuss documentation associated with installing, running and using Arches. We welcome in particular those managing and running heritage inventories, those who write open source code, and those who set the standards that promote sharing of information between different inventories. In addition to the project website, you will find the open source code for Arches available on [Bitbucket](#).

You can join this group by sending an email to [archesproject+subscribe@googlegroups.com](mailto:archesproject+subscribe@googlegroups.com) or by visiting <http://www.googlegroups.com>, searching for 'Arches Project', and using the 'Join Group' option.

When you have joined, please take a moment to read and reply to the '[Signing in](#)' thread and to introduce yourself to the group.

We hope you will find this growing community a useful source of practical help and inspiration.

[Edit welcome message](#)

[Clear welcome message](#)

<input type="checkbox"/>	★	💬	Signing in	4 posts	47 views	Edmund Lee +2	Mar 13
<input type="checkbox"/>	★	🔊	Welcome to Arches (v. 0.9) and to archesproject.org!	2	46	me +1	Jan 30
<input type="checkbox"/>	★	💬	Email subscription to Arches Project Group (3)	3	8	EDMUND LEE +2	Aug 22
<input type="checkbox"/>	★	🔊	Documenting Arches - update and call for participation	1	16	Edmund Lee	Aug 22
<input type="checkbox"/>	★	💬	Loading test data problem	12	19	Teodor Chirica +2	Jul 30
<input type="checkbox"/>	★	💬	Documenting Arches - what is needed? what works?	9	85	Edmund Lee +3	Mar 14
<input type="checkbox"/>	★	🔊	Arches community workshop, June 5-7	1	71	David Myers	Jul 24

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Windows

Internet Explorer

Word

Excel

PowerPoint

PDF

3:28 PM

8/29/2013



Firefox

arches / arches / issues — Bitbucket

+

Archives

Archives Project

arches / arches — Bitb...

Archives Project

ARCHES

Getty Conservation Ins...

World Monuments Fu...

Farallon Geographics


Bitbucket

Repositories

Create

owner/repository

?



arches

arches

Share

Clone

Fork

Compare

Pull request

Overview

Source

Commits

Pull requests

Issues 87

Wiki

















Downloads









Create issue

Filters: All Open My issues Watching

Advanced search Find issues

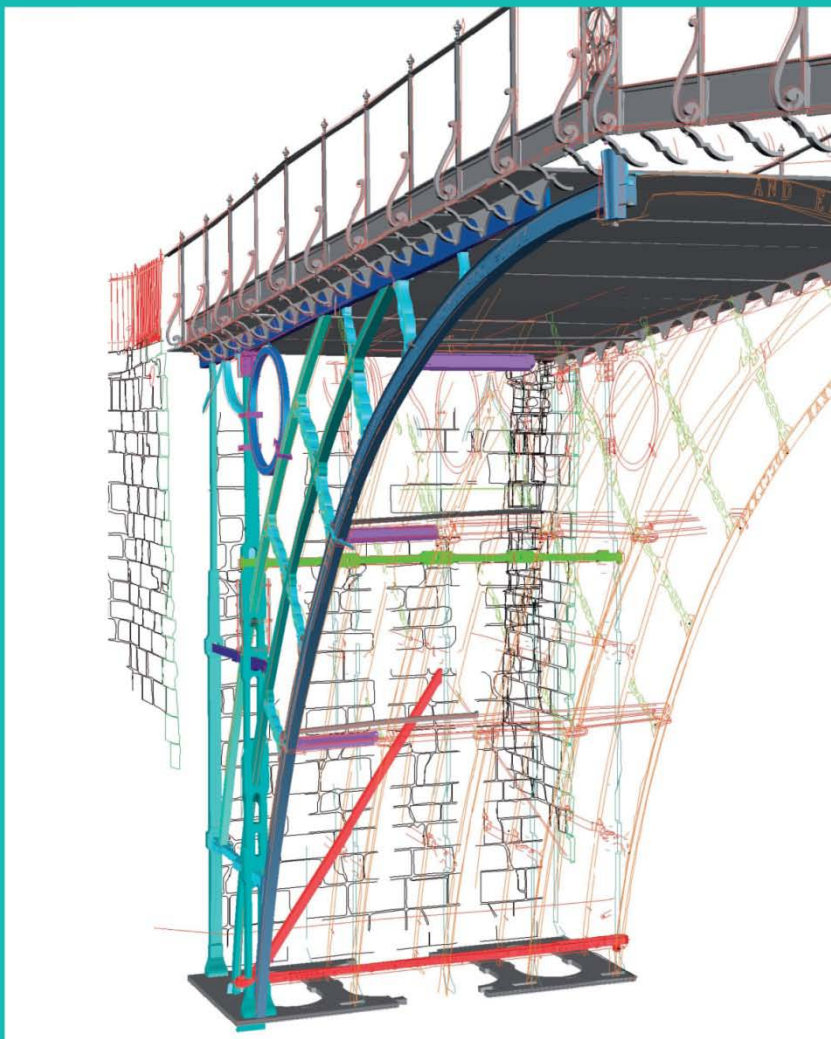
Issues (1–25 of 87)

Title	T	P	Status	Votes	Assignee	Milestone	Created	Updated
#215: Label/text change: "Feature" on Add/Edit Resource s/b "...Resource..." Heritage Mana...			NEW		Alexei Peters	Strasbourg. September 2013	2013-08-21	6 minutes ago
#234: Reports: Use better Date format			NEW		cyrus_hiatt	Strasbourg. September 2013	2013-08-22	13 hours ago
#157: UI: Map UI			NEW		Robert Gaston	Strasbourg. September 2013	2013-08-01	17 hours ago
#258: Report: Material Grid does not show component			NEW		unassigned	Strasbourg. September 2013	17 hours ago	17 hours ago
#176: Person Name Form: Person resource still "unnamed" after adding a Name			NEW		Alexei Peters	Strasbourg. September 2013	2013-08-05	18 hours ago
#256: Auto-populate "Arches Record" branch metadata			NEW		Alexei Peters	Official v1.0 release	yesterday	yesterday
#255: Advanced Search: Change "Refine By:" label to "Filters:"			NEW		unassigned	Strasbourg. September 2013	yesterday	yesterday
#251: Add record created/updated information on Info them			NEW		unassigned	Strasbourg. September 2013	2 days ago	2 days ago



EN ?

3:18 PM  
8/29/2013



# Roadmap

## **v. 0.9 (January 2013)**

- CIDOC CRM ontology implemented
- CIDOC Core Data Standard implemented
- Map-based data display
- Ability to register and visualize GIS map services
- Integrated search engine and automated indexing scripts
- Inclusion of test data
- Simple search function
- Simple reporting function
- Installation scripts and documentation for Windows/Linux

## **v. 1.0 (October 2013)**

- **Data management forms (including creating, editing, retiring, and retrieving data)**
- **Complete mappings between Core Data Standard and CIDOC CRM**
- **Concept schema to manage controlled vocabularies**
- **User roles**

- **Dedicated Simple and Advanced search user interfaces**
- **Styled reports**
- **Basic data export (KML, CSV)**
- **Expanded test data**
- **Simple data import (Excel, CSV, minimum entity types)**
- **System configuration using Django admin interface**
- **AMI (Amazon Machine Image)**


## **v. 1.1**

- Enhanced system configuration
- Advanced Data Import (XML, Shapefile)
- Advanced Data Export (XML, RDF, Shapefile)
- Field data collection (tablet)
- API (Application Programming Interface)


## **v. 2.0**

- Collaboration (saving/sharing maps)
- Metadata (Dublin Core)
- Projects (by jurisdiction/type)



Union List of Artist Names® Online  
Full Record Display[New Search](#)[Previous Page](#)[Help](#)Click the  icon to view the hierarchy.

ID: 500007926

Record Type: [Person](#) **Doesburg, Theo van** (Dutch painter, writer, and author, 1883-1931)

**Note:** Doesburg was born on August 30, 1883 and died on March 7, 1931. His given name was Christian Emil Marie Kupper, but he adopted Theo van Doesburg in memory of his father. "I. K. Bonset" and "Aldo Camini" were pseudonyms. Van Doesburg is best known as the founder and editor of the journal 'De Stijl', which brought together painters and architects in support of Modern art. Among his supporters and collaborators were the artist Piet Mondrian, and the architects J. J. P. Oud and Jan Wils. Van Doesburg's own paintings were abstractions based on nature, dissolving the difference between foreground and background. In the early 1920s, Van Doesburg travelled to Germany, where he lectured at the Bauhaus and was involved in the Dada movement. In 1923 he moved to Paris and experimented with different concepts in architecture. Unlike the other sources, Macmillan indicates that van Doesburg was not an architect, although his works "... have some significance for the history of modern architecture... he was a painter, designer, typographer, critic, writer, and teacher...". Dutch architect, painter and prominent member of De Stijl group.

**Names:****Doesburg, Theo van** ([preferred](#), [V](#), [index](#), [LC](#))**Theo van Doesburg** ([V](#), [display](#))**Christian Emil Marie Kupper** ([V](#))**Küpper, Christian Emil Marie** ([V](#))**Küppers, Christiaan Emil Marie** ([V](#))**Christiaan Emil Maria Kupper** ([V](#))**Christian Emil Marie Küpper** ([V](#))**Kupper, Christian Emil Marie** ([V](#))**Van Doesburg, Theo** ([V](#))**Bonset, I. K.** ([V](#))**Camini, Aldo** ([V](#))**Doesburg, Theo Van** ([V](#))**Theo Van Doesburg** ([V](#))**Doesburg, Christiaan Emil Maria Kupper** ([V](#))**Küpper, C. E. M.** ([U](#))**Nationalities:**Dutch ([preferred](#))**Roles:**artist ([preferred](#))

theorist

editor

architect

painter

author

designer

sculptor

teacher

typographer

writer

**Gender:** male**Birth and Death Places:**Born: [Utrecht](#) ([Utrecht province, Netherlands](#)) ([inhabited place](#))Died: [Davos](#) ([Graubünden, Switzerland](#)) ([inhabited place](#))



## What is Arches?

Arches is a new, open-source, web-based, geospatial information system for cultural heritage inventory and management

### Arches: Heritage Inventory & Management System

Arches is an open-source, web-based, geospatial information system for cultural heritage inventory and management. Purpose-built for the international cultural heritage field, Arches is designed to record all types of immovable heritage, including archaeological sites, buildings and other historic structures, landscapes, and heritage ensembles or districts.

[See Arches!](#)[Get Arches!](#)

#### Why Arches?

Arches is purpose-built for the cultural heritage field. Learn more about its many features, and how you or your organization may benefit from using it.



#### Development

Access development code and other resources for software developers. Arches is open source software distributed under the GNU Affero General Public License, version 3.



#### Roadmap

Learn about current and planned features in the development of Arches, and about the future of the project.

#### Recent blog posts

- ▶ [A workshop to lead us into the homestretch](#) August 14, 2013
- ▶ [Welcome to the new Arches community blog!](#) July 31, 2013
- ▶ [Presentations on Arches from CAA 2013](#) June 22, 2013

Click [here](#) to subscribe to an announcement list to receive news and updates about the Arches project

archesproject.org