

Building Interlinked Prosopographies: A New Approach



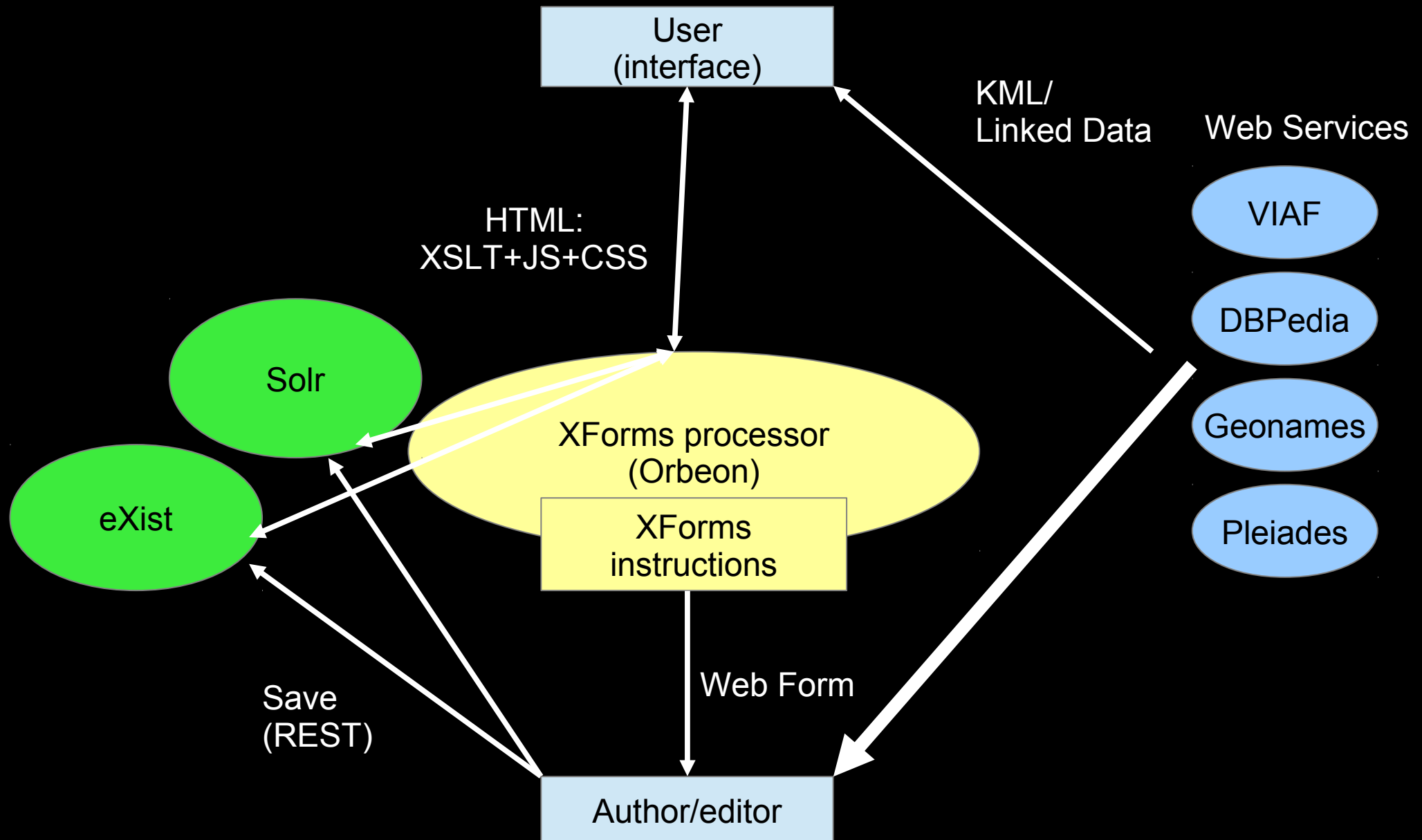
Ethan Gruber
Web Services Developer
American Numismatic Society
gruber@numismatics.org
@ewg118

What is XForms?

- W3C standard web form specification
- MVC architecture
- XPath validation
- Manipulate complex XML models
- Interacts with REST services (APIs)

See <http://en.wikipedia.org/wiki/XForms>

xEAC: XForms applied to EAC-CPF



The Challenge: Maintaining Relationships

Semantic Relationships [+ Import](#)

Controlled Template [+ Add New](#)

Relation	Inverse	Delete
my:childOf	my:parentOf	✗
my:predecessorOf	my:successorOf	✗
my:parentOf	my:childOf	✗
my:successorOf	my:predecessorOf	✗
my:spouseOf	my:spouseOf	✗
my:dynastyOf	my:belongsToDynasty	✗
my:belongsToDynasty	my:dynastyOf	✗

Semantic Local Type Declarations [+ Local Type Declaration](#)

Declaration ✗

Prefix

URI

I: Basic Authorship and Linking



Save



Load

Edit EAC-CPF Record

[+ Import VIAF Data](#)

[+ Import DBpedia Data](#)

Record ID



Publication Status

inProcess



Identity

Description

Relations

Control

XML Preview

Identity

[+ Name Entry](#) [+ Entity Id](#) [+ Descriptive Note](#)

Entity Type

Select...

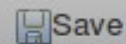


Name Entry

[+ Authorized Form](#) [+ Alternative Form](#) [+ Preferred Form](#) [+ Use Dates](#)

Part





Edit EAC-CPF Record

[+ Import VIAF Data](#)

[+ Import DBpedia Data](#)

Record ID

alexander_the_great



Publication Status

inProcess

Identity

Description

Relations

Control

XML P

Import Data from VIAF



Search

alexander the great

Search

Name

Alexander, the Great, 356 B.C.-323 B.C.
 Home of the Hirsel, Alec Douglas-Home,
 Lettre d'Alexandre à Aristote
 Herrmann, Alexander, 1843-1896

Select

Identity

[+ Name Entry](#) [+ Entity Id](#) [+ Descriptive Note](#)

Entity Type

person

Name Entry

[+ Authorized Form](#) [+ Alternative Form](#) [+ Preferred Form](#) [+ Use Dates](#)

Part



Identity

Description

Relations

Control

XML Preview

Identity

[+ Name Entry](#) [+ Entity Id](#) [+ Descriptive Note](#)

Entity Type

person

Name Entry ✖

[+ Authorized Form](#) [+ Alternative Form](#) [+ Preferred Form](#) [+ Use Dates](#)

Part

Alexander the Great

Name Entry ✖

[+ Authorized Form](#) [+ Alternative Form](#) [+ Use Dates](#)

Part

Alexander Magnus, 356-323 a.C.

Preferred Form

http://viaf.org/authorityScheme/BAV ✖

Name Entry ✖

[+ Authorized Form](#) [+ Preferred Form](#) [+ Use Dates](#)

Part

Alessandro Magno, 356-323 a.C.

Alternative Form

http://viaf.org/authorityScheme/BAV ✖

Add/delete

Bound to
conventionDeclaration

Control

+ [Other Record ID](#)

Agency Name

Maintenance Status

Other Record ID ✘

Maintenance History

+ [Maintenance Event](#)

Maintenance Event

+ [Event Description](#)

Event Type

Event Date/Time 2013-11-06T15:52:51.948-05:00

Agent Type

Agent

Convention Declarations

+ [Convention Declaration](#)

Declaration ✘

+ [Descriptive Note](#)

Abbreviation

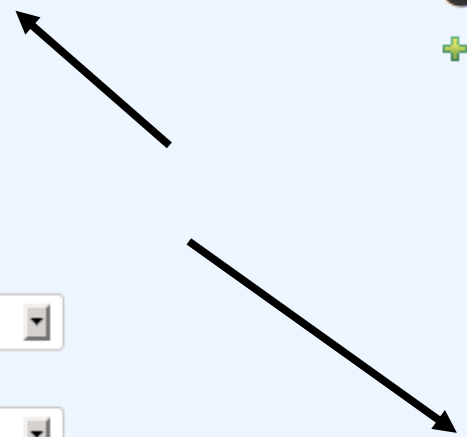
Citation

Declaration ✘

+ [Descriptive Note](#)

Abbreviation

Citation



This is a hack! This isn't what conventionDeclaration means, but EAC lacks the appropriate declaration

Save

Load

Edit EAC-CPF Record [+ Import DBpedia Data](#)

Record ID !

Publication Status

Identity

Description

Relations

Control

XML Preview

Identity

[+ Name Entry](#) [+ Entity Id](#) [+ Descriptive Note](#)

Entity Type

Name Entry ×

[+ Authorized Form](#) [+ Alternative Form](#) [+ Preferred Form](#)

Part

Name Entry ×

[+ Authorized Form](#) [+ Alternative Form](#) [+ Use Label](#)

Part

Import Data from DBpedia

Search

Select data to import:

- Names
- Abstract
- Exist Dates
- CPF Relations
- Resource Relations
- Thumbnail

Import

Cancel

Relations ✖

[+ CPF Relation](#) [+ Resource Relation](#)

CPF Relations

Relation ✖ + [@](#)

Relation Entry Alexander IV of Macedon [↗](#) (external) [Create Record](#)

Relation ✖ + [@](#)

Relation Entry Olympias [↗](#) (external) [Create Record](#)

Relation ✖ + [@](#)

Relation Entry Philip II of Macedon [↗](#) (external) [Create Record](#)

Relation ✖ + [@](#)

Relation Entry Argead dynasty [↗](#) (external) [Create Record](#)

Relation ✖ + [@](#)

Relation Entry Philip II of Macedon [↗](#) (external) [Create Record](#)

Resource Relations

Relation [@](#) + ✖

Relation Entry

Relation [@](#) + ✖

Relation Entry

Relation [@](#) + ✖

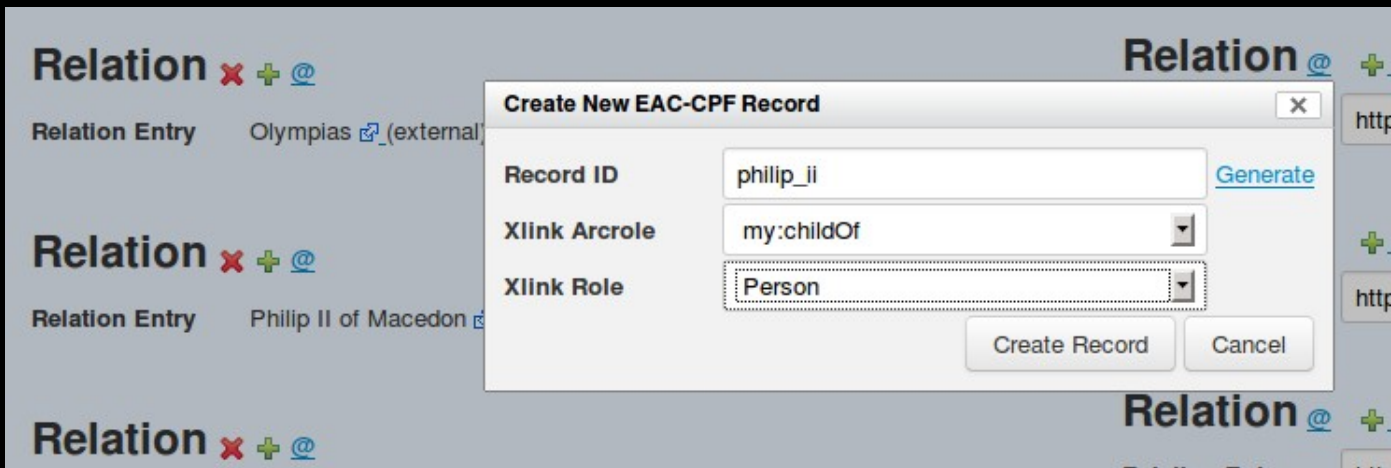
Relation Entry

Relation [@](#) + ✖

Relation Entry

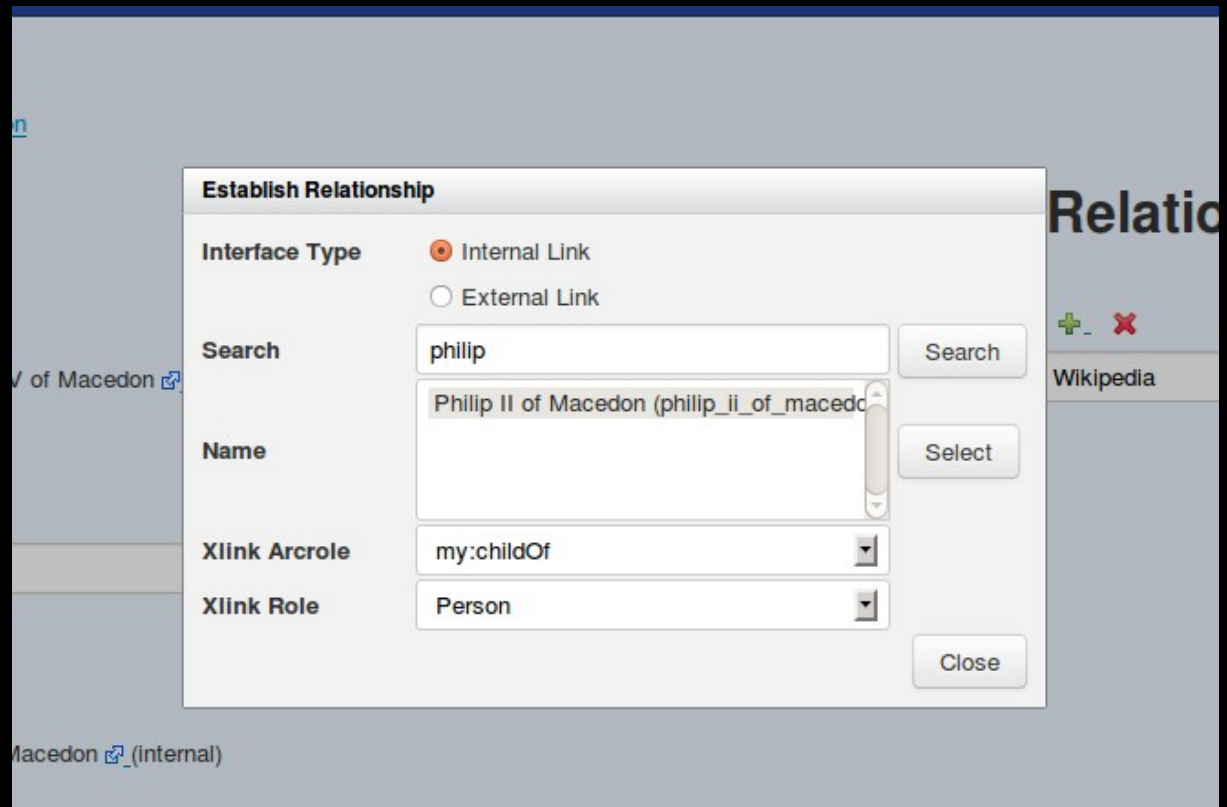
Relation [@](#) + ✖

Relation Entry



Create Stub

Create relationship to existing EAC-CPF record



xEAC Administration

[View Public Interface](#)

Object Management

- [Create New EAC-CPF Record](#)
- [xEAC Settings](#)

Publication

- [Publish All Records](#)
- [Unpublish All Records](#)
- [Generate KML for All Records](#)

Search

Query recordId or nameEntry/part containing the following string (case insensitive):

List of Records

Displaying records 1 to 2 of 2 total results.

«Previous 1 Next»

Title		View	Publish	Delete
Alexander the Great (alexander the great)	Status new	xml html	publish	
Philip II of Macedon (philip ii of macedon)	Status new	xml html	publish	

Edit EAC-CPF Record

[+ Import VIAF Data](#) [+ Import DBpedia Data](#)

[+ Description](#)

Record ID

Publication Status

- Identity
- Relations
- Control
- XML Preview

Identity

[+ Name Entry](#) [+ Entity Id](#) [+ Descriptive Note](#)

Entity Type

Name Entry

[+ Authorized Form](#) [+ Alternative Form](#) [+ Preferred Form](#) [+ Use Dates](#)

Part

alexander_the_great
my:childOf philip_ii_of_macedon

philip_ii_of_macedon
my:parentOf alexander_the_great

- Identity
- Relations
- Control
- XML Preview

Relations

[+ CPF Relation](#) [+ Resource Relation](#)

CPF Relations

Relation **x** **+** **@**

Relation Entry Alexander the Great [\(internal\)](#)

Maintenance Event

Event Type

Event Date/Time 2013-11-06T20:48:31.762-05:00

Agent Type

Agent

Event Description **x**

II: Adding Further Context

Record ID

alexander_the_great

Publication Status

approved

Identity

Description

Relations


Control

XML Preview

Description

Biographical or Historical Note

Abstract

Alexander III of Macedon (20/21 July 356 – 10/11 June 323 BC), commonly known as Alexander the Great (Greek: 



Dates of Existence

Date Range 

From - Standard

-0355-07-20

July 20, 356 B.C.

To - Standard

-0322-06-10


June 10, 323 B.C.

Add Elements



 [Chronological List](#)  [Citation](#)  [List](#)  [Outline](#)  [Paragraph](#)

Abstract

Alexander III of Macedon (20/21 July 356 – 10/11 June 323 BC), commonly known as Alexander the Great (Greek: 



Chronological List


[+ Chronological Item](#)

Chronological Item

Event

Born

Date - Standard

-0355-07-20 

Date - Textual

July 20, 356 B.C.

Place Entry

Interface Type

Geonames

Nomisma

Pleiades

Local Vocabulary

Search

pella

Search

Location

Pella/Apamea

Pella

Pella/Diokletianoupolis

Pella/Berenice/Philippaia

Select

Description

Capital of the Kingdom of Macedonia



Chronological Item   

Event

Founded Alexandropolis

Date - Standard

-0339



Date - Textual

340 B.C.

Location

Alexandropolis  

Chronological Item  

Event

Marched through Thermopylae

Date - Standard



-0337



Date - Textual

338 B.C.

Location

Thermopylae  

Chronological Item  

Event

Battle of Chaeronea

Date - Standard



-0337-08-02



Date - Textual

August 02, 338 B.C.

Location

Chaeronea  

Chronological Item   

Event

Philip assassinated, Alexander declared king

Date - Standard



-0335



Date - Textual

336 B.C.

Location

Aegae  

Alexander the Great

hide/show names

Alexandre, o Grande / Alexandre le Grand / Alexander den store / アレクサンドロス3世 / Aleksander Macedoński / 亚历山大大帝 / Александр Македонский / Alessandro Magno / Alexander de Grote / Alexander der Große / Alejandro Magno



Description

Abstract

Alexander III of Macedon (20/21 July 356 – 10/11 June 323 BC), commonly known as Alexander the Great (Greek: Ἀλέξανδρος ὁ Μέγας, Aléxandros ho Mégas from the Greek ἀλέξω alexo "to defend, help" + ἀνὴρ aner "man"), was a

xEAC: XForms for EAC-CPF

[Home](#) [Browse](#)

Data Options



Refine Results

Quick Search

Search

EntityType ▾

PlaceEntry: ▾

Filter:

Uncheck all

Aegae

Alexandropolis

Amphipolis

Chaeronea

Gaza

Granicus fl.

...

Names

Displaying records **1** to **3** of **3** total results.

«Previous **1** Next»

Alexander the Great

July 20, 356 B.C. - June 10, 323 B.C.



Augustus



Philip II of Macedon

Displaying records **1** to **3** of **3** total results.

«Previous **1** Next»

Description

Abstract

Augustus (Latin: Imperator Caesar Divi F. Augustus, 23 September 63 BC – 19 August 14 AD) was the founder of the Roman Empire and its first Emperor, ruling from 27 BC until his death in 14 AD. Born into an old, wealthy equestrian branch of the plebeian Octavii family, in 44 BC Augustus was adopted posthumously by his maternal great-uncle Gaius Julius Caesar following Caesar's assassination.

Relations

Related Corporate, Personal, and Family Names

- *belongsToDynasty* Julio-Claudian dynasty
- *childOf* Gaius Octavius
- *parentOf* Julia the Elder
- *spouseOf* Scribonia
- *spouseOf* Clodia Pulchra
- *spouseOf* Livia

Related Resources

otherRecordId: <http://nomisma.org/id/augustus>

→
SPARQL: RDF query for related objects



Related objects in Nomisma



Mausoleum of Augustus



<http://www.smb.museum/ikmk/object.php?id=18207648>

<http://example.org/id/augustus>



Res Gestae Divi Augusti

Next Steps

- Finish form: Represent all EAC-CPF elements and attributes
- Test for scalability
- Interface with more APIs
- Improve public interface, especially searching and browsing
- Incorporate social network graph visualization
- Follow evolving best practices in RDF/linked open data
- Employ SPARQL endpoint for more sophisticated query?

More Information

Repository: <https://github.com/ewg118/xEAC>

Demo: <http://admin.numismatics.org/xead/>

Documentation: <http://wiki.numismatics.org/xead:xead>

Blog: <http://eaditor.blogspot.com>