

# Another RDF Encoding Form (aREF)

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# Another RDF Encoding Form?

**aREF** = JSON-LD *light* + Turtle *light*

- ▶ Based on maps, strings, and arrays like JSON
- ▶ Easy literals like Turtle:  
"literal@language-tag"  
"literal^data:type"

# What's wrong with existing serializations?

- ▶ RDF/XML is awful
- ▶ RDF/JSON is too verbose
- ▶ Turtle is one big string (parsing required)
- ▶ JSON-LD is complex (13 keywords *WTF?!)*

None of them are good for writing RDF data right in your code.

# Purpose of aREF

Read and write RDF data in any code or data structures  
(JSON, YAML, INI files, Perl code, Ruby, Python. . .)

aREF

Serialization <--> List-Map-Structures <==> RDF Triples  
(e.g. YAML) (data structure)

## Example 1: Serialization in YAML

```
_id:      http://example.com/people#john
foaf:name: John Smith
foaf:age:  41~xsd:integer
foaf:homepage:
  - _id: http://personal.example.org/
    dct:modified: 2010-05-29~xsd:date
  - http://work.example.com/jsmith/
dct:description: a nice guy@en
foaf:knows:
  foaf:name: Alice
```

## Example 2: Serialization in Perl-Code

```
$rdf = {  
  _id      => 'http://example.com/people#john',  
  foaf_name => 'John Smith',  
  foaf_age  => '41^xsd:integer',  
  foaf_homepage => [  
    {  
      _id => 'http://personal.example.org/',  
      dct_modified => '2010-05-29^xsd:date',  
    },  
    'http://work.example.com/jsmith/',  
  ],  
  dct_description => 'a nice guy@en',  
  foaf_knows => { foaf_name => "Alice" },  
};
```

# Getting started

- ▶ Current specification and issue tracker  
<http://gbv.github.io/aREF/>
- ▶ Preliminary implementation in Perl:  
<https://metacpan.org/release/Catmandu-RDF>

*Feedback welcome!*