

A Practical Guide to Hypermedia APIs

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I just saw a diff where someone converted their app + client (same repo) to a hypermedia api: +900, -5000 LOC

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That was this project

Prepare yourself

 Showing **150 changed files** with **892 additions** and **5,125 deletions**.

**Please note that this has been
heavily stripped down**

Don't want to give everything away

But first

Hypermedia Basics

Resources \neq Models

HTTP is your friend

methods and status codes

**Client knows only one
URL**

"/"

Media types

HAL

Sample HAL Response

```
{
  "status": "Processing",
  "_embedded": {
    "items": [
      {
        "name": "Book",
        "_links": { "self": { "href" => "http://example.com/items/1" } }
      }
    ]
  },
  "_links": {
    "self" => { "href" => "http://example.com/orders/1" }
  }
}
```

Server

Controllers

- Use `respond_to` and `respond_with`

Models

- Doesn't have to be a subclass of `ActiveRecord::Base`

Serializers

- Disable root
- Links
- Embedded resources
- Changing serializer representations

Client

Basics

- Uses Faraday
- Basic auth over SSL

Resources

- Data only
- Convenience methods
- Links

Loaders

- Pull data down from the API
- Only GETs

Services

- Very similar to Loaders
- Push data back up

Integrating with Rails

Problems

- There are no ids
- Speed

Resources

- Creating a Hypermedia Client
 - <http://blog.oestrich.org/2012/12/creating-a-hypermedia-client/>
- ActiveSupport::Serializers
 - https://github.com/rails-api/active_model_serializers
- Abusing ActiveSupport::Serializers for HAL
 - <http://blog.oestrich.org/2012/10/abusing-active-model-serializers-for-hal/>
- <httpstatus.es>

Useful gems for apis

- [rspec_api_documentation](#)
- [raddocs](#)
- [letter](#)
- [json_spec](#)
- [vcr](#)
- [webmock](#)
- [cane](#)

Hobostove

Campfire for the command line

<https://github.com/oestrich/hobostove>