OmniAuth:
From the Ground Up

Michael Bleigh / RailsConf 2011
Michael Bleigh
OmniAuth

github.com/intrideia/omniauth
OmniAuth!
github.com/intridea/omniauth
Login with anything
Assume nothing*

*plus or minus a few small assumptions
Past.
Present.
Future.
Past!
The why of OmniAuth
Why are there so many authentication libraries?
devise
authlogic
clearance
sorcery
restful-authentication,
and so on...
Assumptions.
I only need one User model.
Users will sign up and provide a password.
Only e-mail can validate users.
I only need one authentication method.
I’m only going to use Rails in my app.
I don’t have variable deploy targets.
I don’t want to customize much.
Can we do better?
We need a single, normalized system for authentication.
I Need Auth

MAGIC!

User Info
It takes a while to make easy things.

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 30, 2010</td>
<td>First Commit</td>
</tr>
<tr>
<td>October 1, 2010</td>
<td>0.1.0 (public release)</td>
</tr>
</tbody>
</table>
October 1, 2010

0.1.0

10 providers,
3 contributors
April 21, 2011

0.2.3

36 providers,
52 contributors
Today

master

47 providers,
76 contributors

Wednesday, May 18, 2011
Present!
The now of OmniAuth
Good News!
We’re living in the future*

*or an unreleased git branch beta thereof
gem 'omniauth',
  :git => 'git://github.com/intridea/omniauth.git',
  :branch => '1.0-beta'
“...has commit access to just about every repo on GitHub”

- Josh Kalderimis
oa-identity
Login and Password with OmniAuth Philosophy
Inevitable, but difficult.
Avoiding Assumptions
Do almost nothing.
user model

e-mail verify

fancy

JUST IDENTITY
Identity in action?
Socialspring
Passport
Requirements

- Social *and* traditional auth
- *Strict* e-mail verification
- Multiple e-mails, multiple authentications *per user*
- Flexible enough to work with LDAP etc. for behind-the-firewall installs
- Automatic account creation based on confirmed email domains
Let’s see what happens...
livecoding
OmniAuth as your *only* auth*

*if you like it that way, like I do.*

Wednesday, May 18, 2011
OmniAuth as a Framework
Let’s kill the magic.
The Guts

• OmniAuth is just middleware
• Each provider is a strategy
• Each strategy is a class
• Each strategy has phases:
  • Request Phase
  • Callback Phase
The User Info Hash

{
    "provider" => "friendface",
    "uid" => "123456",
    "user_info" => {
        "nickname" => "mbleigh",
        "name" => "Michael Bleigh",
        "email" => "michael@intridea.com"
    },
    "credentials" => {
        "token" => "120942310491asfas-213-0123"
    }
}
The Bare Minimum

```javascript
{
  "provider" => "minimal",
  "uid" => "123456",
  "user_info" => {
    "name" => "Michael Bleigh"
  }
}
```
Request Phase
/auth/:provider

- Requests information of the user
  - For OAuth, redirects to provider
  - For OpenID, requests URL
  - For LDAP, requests user/pass
Callback Phase
/auth/:provider/callback

- Creates the **user info hash**
- For OAuth, grabs and uses access token to fetch user info
- For OpenID, parses the response
- For LDAP, retrieves directory info
Enough talk. Let’s BUILD!
[ livecoding ]
Future!
The what’s next of OmniAuth
Fostering Contribution
Testing
Y U NO HAVE TESTS?
API Calls with remote site interaction and credential requirements.

To 40+ different sites.
I had to choose: Test it all, or release it ever.
Testing is priority #1 going forward.
SUP DAWG I HEARD YOU LIKE TESTING GEMS

SO I MADE A GEM TO TEST YOUR GEM AND WROTE TESTS FOR IT SO YOU CAN TEST MY GEM FOR TESTING YOUR GEM WHILE YOU TEST YOUR GEM
Help me. Please.
Documentation (for contributors)
Convenience
Massaging Pain Points
Rails Integration
(via a separate gem)
Documentation
(for users)
Moar Strategies
(written by not me)
Moar Suggestions!
Thanks! Questions?

http://spkr8.com/t/7512

@mbleigh    @intridea

github.com/intridea/omniauth