## Introduction to LoopBack

# InterConnect 2017



### Nice to meet you!

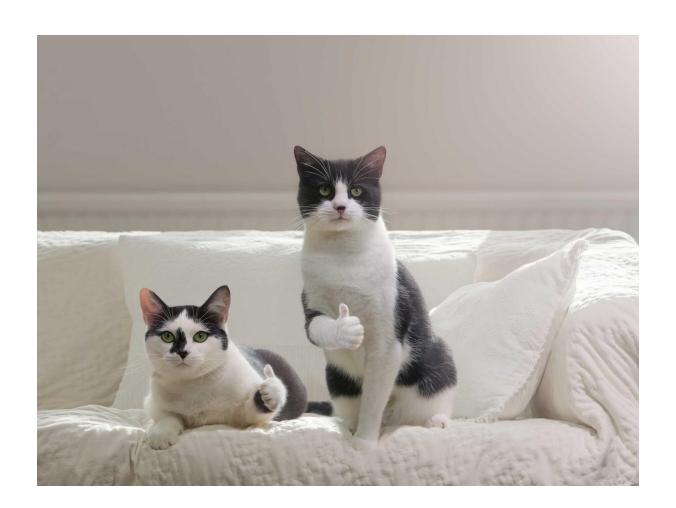
- I'm Raymond Camden!
- Developer Advocate for IBM
- LoopBack, Bluemix, OpenWhisk, Cordova/PhoneGap, Node, and web stuff in general
- Blogging at www.raymondcamden.com
- Tweet at @raymondcamden
- Warning: Star Wars/Cat person



# Why LoopBack?

## Why LoopBack indeed....

- Built on Node
- Easy to Use
- Open Source
- Laser focused on API creation...
- But supports everything else too



# Why Build APIs?

### APIs give you...

- A way to share your data or processes with others
- A way to provide data for your client-side/mobile/hybrid/TV/etc app
- Or both!



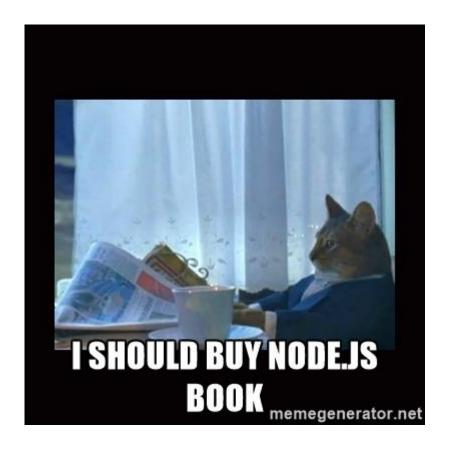
## LoopBack

- Open source framework designed for APIs
- Rapid creation of Models and REST APIs
- Simple ORM system for CRUD
- Built on Express
- Very detailed/configurable security policies
- Web site: loopback.io

# Getting Started

#### Installation

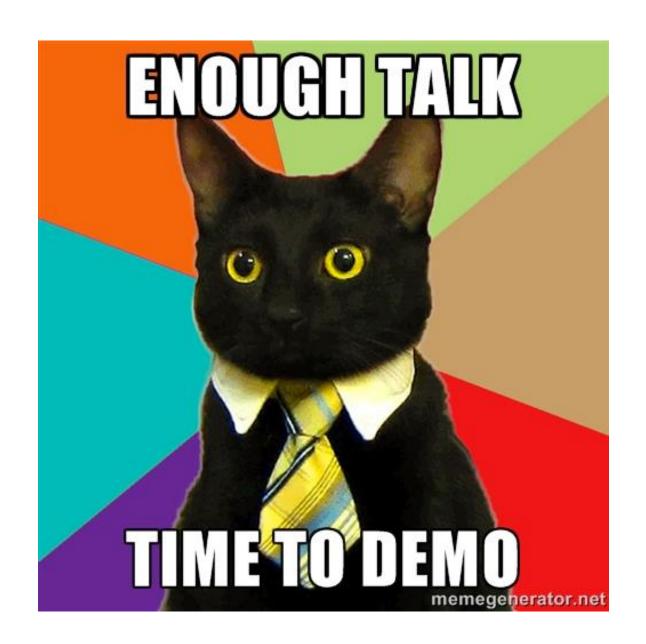
- Requires npm (Node Package Manager)
- Install Node.js (nodejs.org)
- npm install –g loopback-cli
- CLI: lb



```
c:\projects\raymondcamdendotcom (master)
\lambda 1b
                    Let's create a LoopBack
                         application!
 What's the name of your application? (raymondcamdendotcom)
```

## Creating an Application

- lb
- Ib app
- Follow the prompts and run it

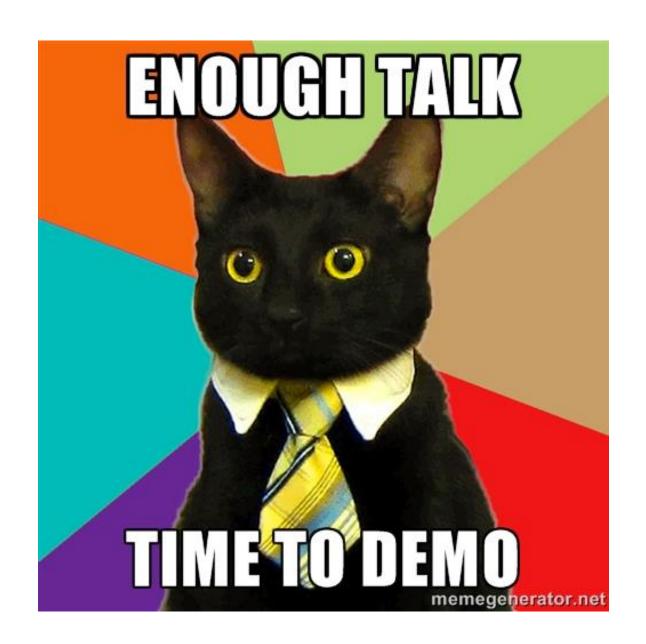


### LoopBack and APIs

- You aren't defining an API
  - I want to support GET /cats
  - I want to handle PUT /cats
- You are defining data
  - I work with Cats (they have names and weights)
- "Ok, let me handle the API for you!"

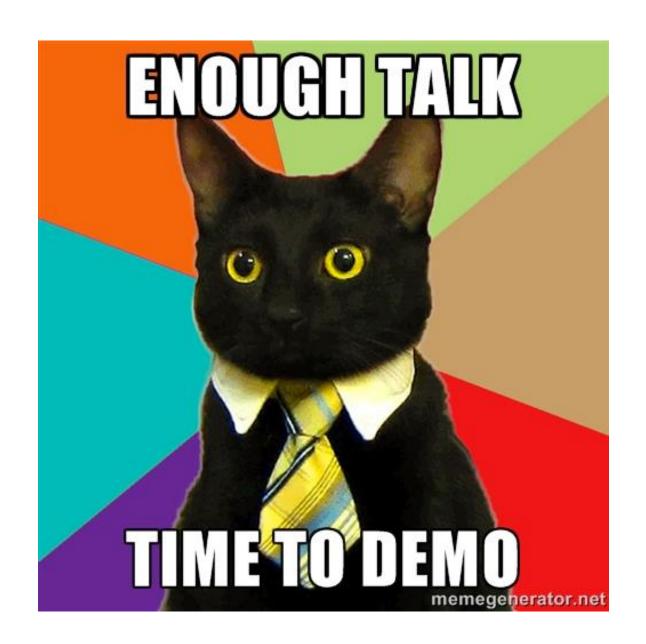
#### Models

- Models define your API
- You describe properties LoopBack does the rest (get it "REST" heh)
- Inheritance and Relationships
- Out of the box full CRUD + search APIs



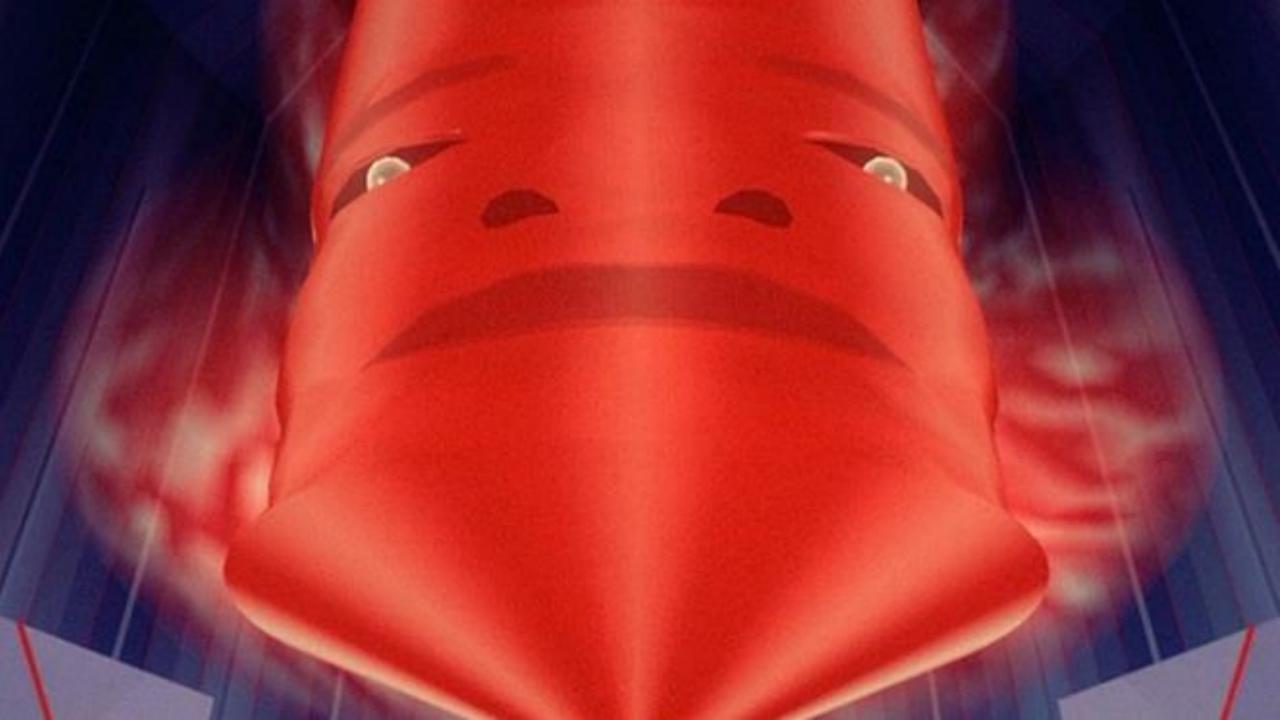
#### **Datasources**

- Where LoopBack stores stuff
- Connectors define the connection (brilliant, I know)
- Cloudant, DB2, Memory, MongoDB, MySQL, Oracle, PostgreSQL, Redis, SQL Server
- npm install loopback-connector-mongodb –save
- Roll your own



# Security





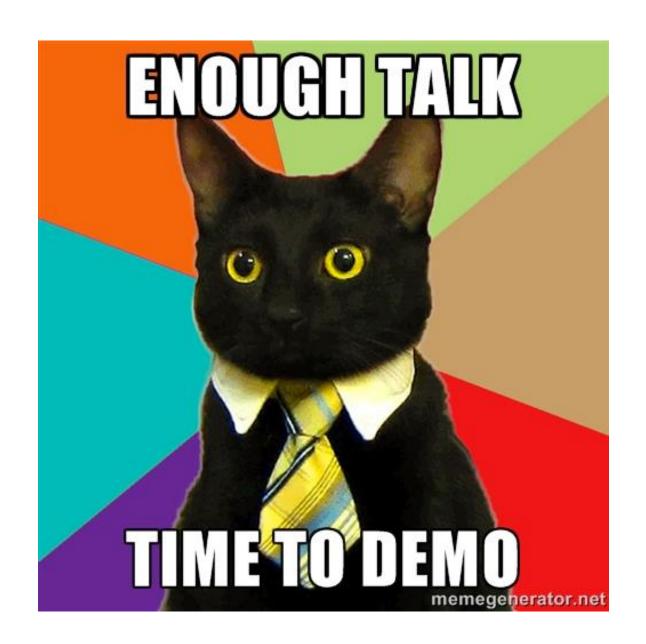
## Security

- Security system models built in
- Access Control List
- What users can do what
- Users can be grouped into Roles
- Methods can be grouped into read/write



#### Customizations

- Remote Hooks
- Operation Hooks
- Remote Methods
- Stuff for Express too

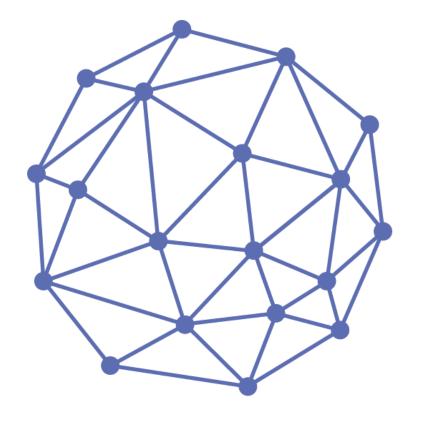


#### **Additional Random Stuff**

- File Attachments
- Models based on APIs (an API for an API)
- And more...

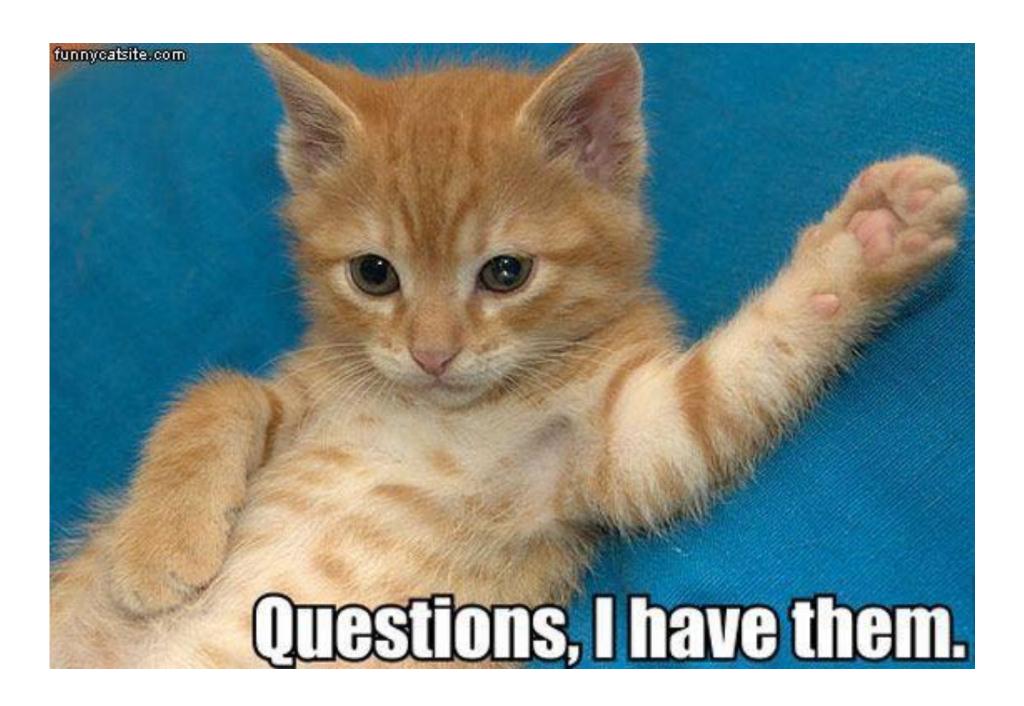
#### Resources

- Main Site http://loopback.io/
- Docs http://loopback.io/doc/
- Random cool blog entries https://strongloop.com/strongblog/category/loopback-2/
- This deck plus demos: https://github.com/StrongLoop-Evangelists/presointro-loopback



# IBM API Connect

https://developer.ibm.com/apiconnect/



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