

# Outline for Building Awesome Web Applications with Drupal + Backbone.js

## DrupalCon Munich Proposal

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Please see slides from the DrupalCon Denver Drupal Backbone BoF presentation for detailed example. This presentation will build on that one, and include the following topics in roughly the following order:

- Demo: the advanced administration interface demo (in progress) using Backbone, jQuery UI and Drupal, and a few example lines showing how it makes once cumbersome JS tasks easy.
- Overview of client-side JavaScript web application frameworks: concept and review of major libraries.
- Examples of web applications built with JS web application frameworks: Document Cloud, LinkedIn Mobile, etc.
- Introduction to Backbone.js:
  - Philosophy: simple and extensible
  - Simplifying browser/server data exchange.
  - Providing models to separate data from behavior in JavaScript (and why that's so important): example of spaghetti code w/o a framework vs. structured code with.
  - Collections to hold multiple data item lists.
  - Rendering: client-side templating and Backbone Views.

- Backbone and Drupal
  - Introduction to the Backbone module for Drupal: provides convenience functions, standards and bug fixes to help you build sites with web application functionality in Drupal.
  - Easy entity loading with Drupal-specific models out of the box. How to load, edit and save nodes, files, tags and more using Backbone w/ less than 5 lines of JS code!
  - Drupal Views and Backbone collections: made for each other? Loading nodes from a view or module listing in Backbone (just 1 line of code!).
  - Backbone views and the Drupal theme layer: standards for handling backbone templates in Drupal, translation in Backbone using Drupal.
  - The Drupal Backbone stack, in 1000 words: diagram of the stack
- A detour back to the server: approaches to REST API development in Drupal
  - Services and the Drupal Backbone Base Install feature.
  - Using the Drupal RESTful Web Services module to create APIs for accessing resources via the Entity API.
  - Other options (JSON-LD, Views Datasource, other modules)
  - How Backbone.js can switch between supported options (Services and RESTws, at the moment).
- Examples
  - The Backbone TODO example web app, in Drupal!
  - How the advanced content administration panel demo is built (in progress).