

Connecting Angular and CFML

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About Nolan

- Owner & Chief Consultant at South of Shasta
 - Software Development, Training
- OpenTable, ZenDesk, Turn It In, AcademyX, HackerLab
- ColdFusion, C++, Java, jQuery, PHP, .NET, HTML5, Android, SQL, etc...
- Manager, SacInteractive User Group
- Reformed Video Game Developer (Grim Fandango, SimPark, StarWars Rogue Squadron, etc)
- Music Junkie





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Slide deck and code samples are here:

[github.com/nolanerck
angularjs-and-cfml-preso](https://github.com/nolanerck/angularjs-and-cfml-preso)

Today's Talk

- A quick intro to AngularJS. 1.x
- Several code demos
- Hooking different types of CFML up to an Angular app

Show of Hands

- Who is brand new to AngularJS?
- Who is *not* using the API Manager?
- Who is *not* using MVC (ColdBox, Framework1, etc)?

You're all in the right place

- You don't *have* to use API Manager.
- You don't *have* to have proper MVC code.
- You don't *have* to have be an Angular guru to start.
- ...but the more you know is obviously helpful.

For today's talk

- We're using Angular 1.x
- Path of least resistance, fewer moving parts than v2 or 4
- ColdFusion 2016
- But nothing in the talk is CF 2016 specific
- Everything is running via CommandBox

What's an API?

- Application Programming Interface
- Quasi-generic way to interact with a system
- Just a bunch of URLs
- The URLs return data to whatever system requested it
- Data comes back (hopefully!) in a standard format: XML, SOAP, JSON, etc

API vs REST API

- All REST APIs are APIs
- But not all APIs are RESTful
- They all *do* the same thing
- Just a different style in how you talk to the API

Non-REST API

- `http://sitename/api/getUser.cfm?ID=123`
- `http://sitename/api/createUser.cfm`
- `http://sitename/api/updateUser.cfm?ID=123`
- `http://sitename/api/deleteUser.cfm?ID=123`
- All HTTP "get" requests
- Can copy/paste all URLs and run them in a browser (for debugging)

REST API

- `http://sitename/api/user/123` (get)
- `http://sitename/api/user/123` (create)
- `http://sitename/api/user/123` (update)
- `http://sitename/api/user/123` (delete)
- The *same* URL for all actions.
- Change the HTTP verb to change the behavior.

API vs REST API

- So which is best?
- REST has a more *consistent* interface out of the box.
- REST is the current "standard".
- But under the hood, your code does the same "thing" either way.

Does this mean....?

- ...I have to install something on my CF server? - No
- ...I *have* to use AngularJS? - No
- ...I have to rewrite my whole CF app? - No
- We'll show several ways to use Angular and CFML

Angular + Basic CFM template

Other info

- Don't have to "configure" Taffy to use Angular. It "just works".
- Don't have to "configure" AngularJS to use Taffy/CFML. It "just works".
- CF just knows something requested a URL.
- AngularJS just knows it got back some JSON from a URL.
- It all "just works".
- The same is true for any other JS framework - Vue, React, NativeScript, jQuery, etc.

Other info

- Taffy works on all versions of CF from 8 thru 2016
- ColdBox REST is another great option for REST APIs.
Talk to the Ortus folks for more details. Or better yet, attend
Into The Box 2018!
- ColdBox REST also "just works" with any JavaScript
framework. No config needed.

So what's the catch?

- A few new conventions to learn, but they're not terribly hard.
- If you have lots of strange server mappings, may take a little time to configure.

Other Resources

- South of Shasta - onsite and remote training
- "Object-Oriented Programming in ColdFusion" by Matt Gifford
- docs.angularjs.org
- docs.taffy.io
- Ortus Solutions
- Talk to people at the conference!

Questions? Comments?

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Thanks!