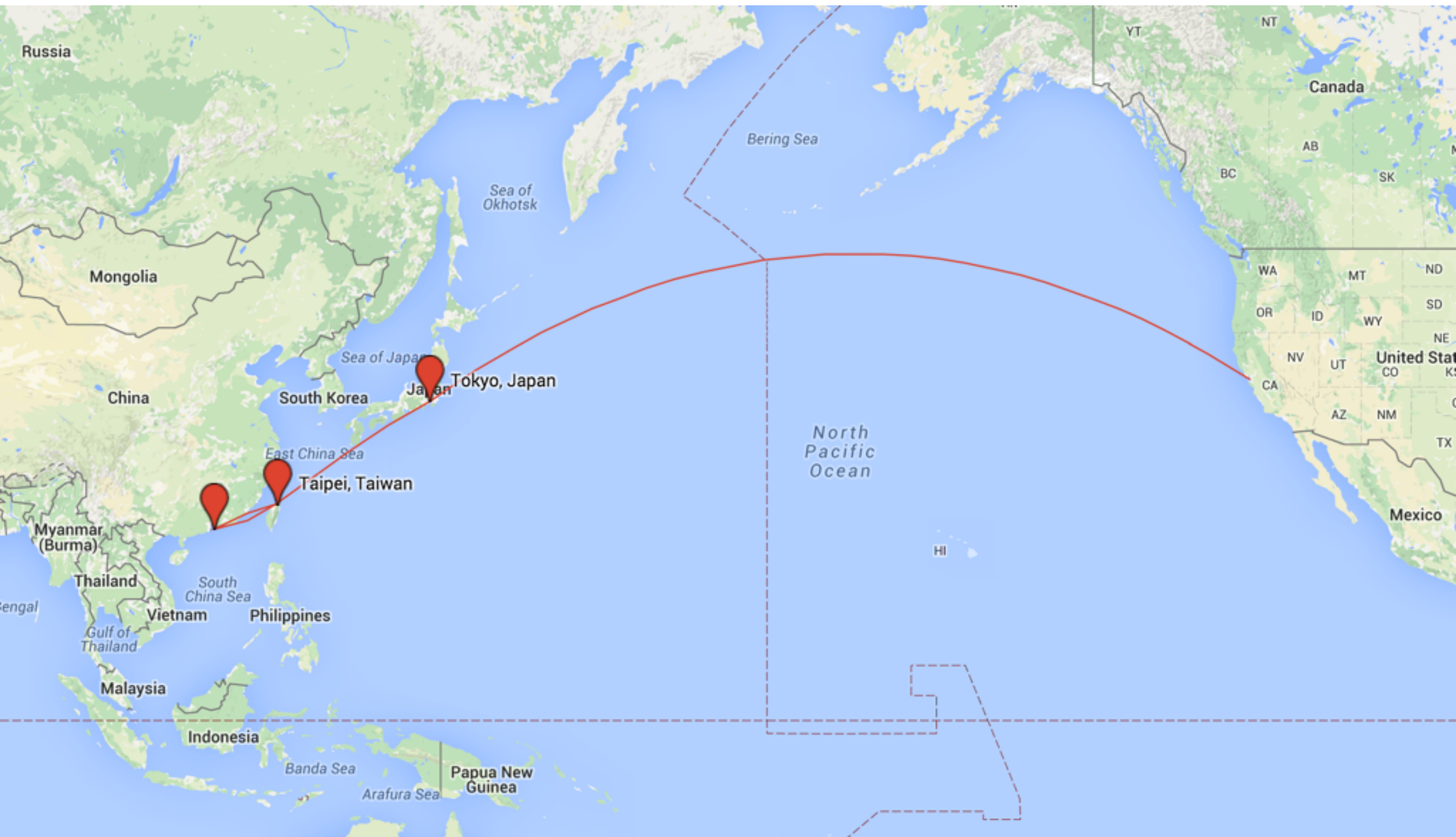


Ember Addons: Served Three Ways

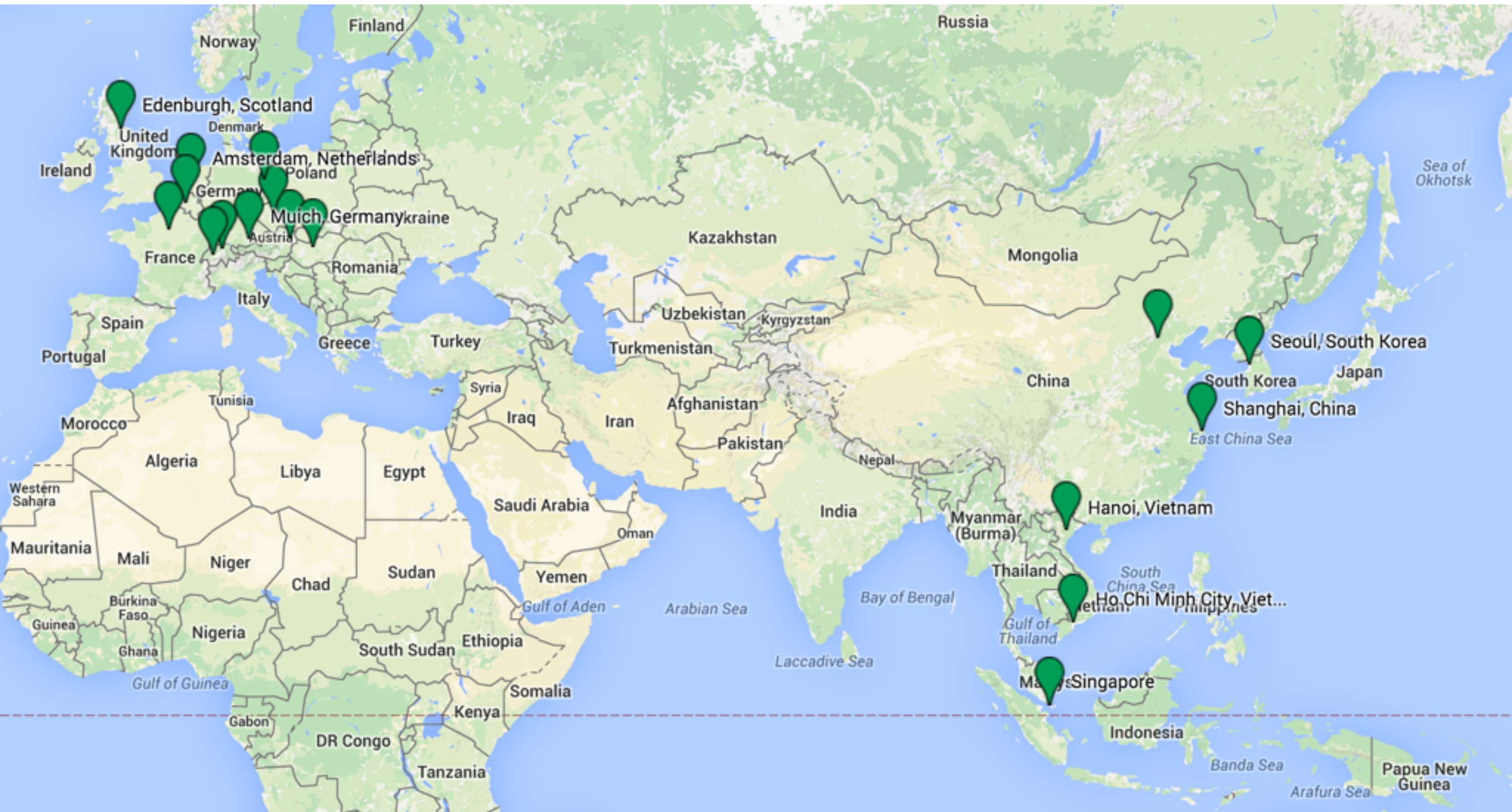
Mike North
Global Ember Meetup - Ember Components Day
12/5/2015



About.me



About.me



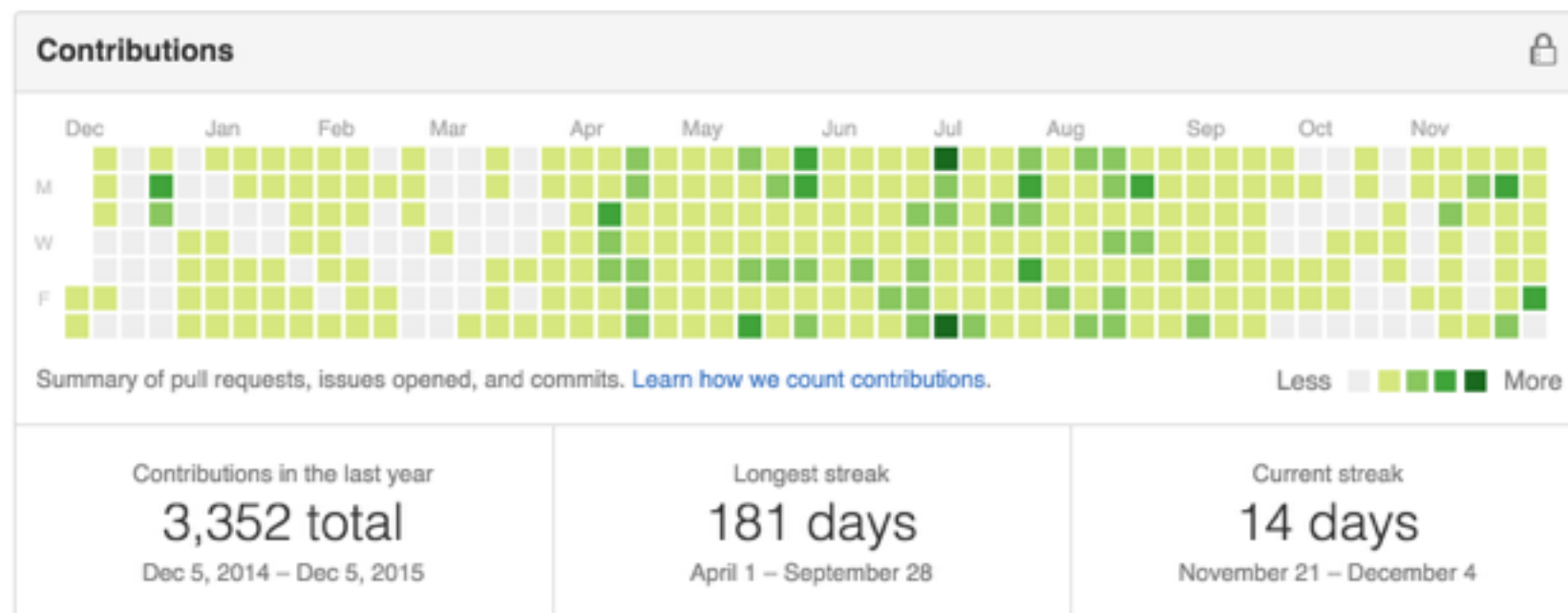
About.me

I'm coming to somewhere near you

- Twitter: @MichaelLNorth
- LinkedIn: Mike North
- Instagram: @OfficeToday
- Github: mike-north
- WhatsApp: 8144412418
- LINE: mike_north

About.me

- Job.old = "UI Architect, Yahoo Ads & Data"
- Job.new = ["CTO Levanto Financial",
"CTO TaskLight",
"JavaScript Consultant & Trainer"]



Ember Addons

- A first-class citizen of the ember ecosystem
- Powerful & flexible abstractions at multiple levels
- Catalyst for adoption and community — WHY?

Served Three Ways



- Encapsulate components & modules



- Modify build pipeline



- Add a new command to ember-cli

Some Disclaimers

- I'm not talking about pods today
- We're still in NPM v0.12 land
- These are tips for getting started with basic use cases, not comprehensive instructions

Common Stuff

- Pattern for addon configuration
- Best practices
- Testing
- Add-on Dependencies

Common Stuff

CONFIGURATION

- `configuration/environment.js` is where parameters belong
 - This is injected into a `<meta>` as part of the build process
- Anything emberly should access config via an `Ember.Service`

Common Stuff

BEST PRACTICES

- Assume no prototype modifications
- JSHint & JSCS (via ember-suave)
- Minimize dependencies, and consider compatibility
- Documentation
- Test against beta and canary!

Common Stuff

TESTING

- Demo app is great for acceptance testing
- Continuous integration (i.e., travis-ci)
 - Test against multiple framework versions w/ ember-try
- Measuring test coverage is possible (sort of!)

Common Stuff

PUBLISHING

- publish to npm

```
npm publish
```

- add a demoURL to your package.json
- Hook up testing and continuous deploy to github pages via travis-ci

```
ember install ember-cli-github-pages
```

- Protect master brach

A simple component

Find me on twitter: [@MichaelLNorth](#)

```
{{x-twitter username="MichaelLNorth"}}
```

```
ember addon ember-twitter
```

addon name

A simple component

**IF your add-on involves templates,
these are compiled at BUILD TIME**

ember-cli-htmlbars

devDependency —> dependency

A simple component

- App vs Addon folder
- Resolver considerations
- `ember-cli-build.js` is just for your demo app!
- Blueprints
 - Default blueprint

Modifying the build pipeline

`./index.js`

- included hook lets you register plugins for filetypes

```
ember addon ember-js-filesize
```

```
dummy/app.js => 650 B (302 B gzipped)
dummy/router.js => 311 B (193 B gzipped)
dummy/templates/application.js => 1.45 kB (556 B gzipped)
dummy/initializers/app-version.js => 433 B (227 B gzipped)
dummy/initializers/export-application-global.js => 1.01 kB (413 B gzipped)
dummy/controllers/array.js => 141 B (124 B gzipped)
dummy/controllers/object.js => 142 B (126 B gzipped)
dummy/components/app-version.js => 468 B (224 B gzipped)
dummy/tests/test-helper.js => 231 B (161 B gzipped)
```

Modifying the build pipeline

Start with a broccoli plugin

★ **broccoli-file-size** public
Broccoli plugin to display file sizes.

npm	v1.2.2	downloads	400/month	build	passing
-----	--------	-----------	-----------	-------	---------

Broccoli plugin to display file sizes. Example output:

```
> broccoli build dist  
  
file1.txt => 446 kB (284 kB gzipped)  
file2.txt => 223 kB (74 kB gzipped)  
file3.txt => 543 kB (324 B gzipped)
```

Modifying the build pipeline

Make a broccoli filter subclass

```
var Filter = require('broccoli-filter');
var fileSize = require('broccoli-file-size');

FileSizePlugin.prototype = Object.create(Filter.prototype);

FileSizePlugin.prototype.constructor = FileSizePlugin;
function FileSizePlugin() {
  Filter.call(this, '', {});
}

FileSizePlugin.prototype.toTree = function(
  tree, inputPath, outputPath, inputOptions
) {
  return fileSize(tree, {
    colors: true
  });
};
```



Modifying the build pipeline

Modify the addon to use the filter for .js files

```
module.exports = {  
  name: 'ember-js-filesize',  
  included: function(app, parentAddon) {  
    (parentAddon || app)  
      .registry  
      .add('js', new FileSizePlugin());  
  }  
};
```


Modifying the build pipeline

Try it

```
ember s
```

```
version: 1.13.12
Livereload server on http://localhost:49152
Serving on http://localhost:4200/
dummy/app.js => 650 B (302 B gzipped)
dummy/router.js => 311 B (193 B gzipped)
dummy/templates/application.js => 1.45 kB (556 B gzipped)
dummy/initializers/app-version.js => 433 B (227 B gzipped)
dummy/initializers/export-application-global.js => 1.01 kB (413 B gzipped)
dummy/controllers/array.js => 141 B (124 B gzipped)
dummy/controllers/object.js => 142 B (126 B gzipped)
dummy/components/app-version.js => 468 B (224 B gzipped)
dummy/tests/test-helper.js => 231 B (161 B gzipped)
dummy/tests/helpers/destroy-app.js => 224 B (162 B gzipped)
dummy/tests/helpers/module-for-acceptance.js => 848 B (350 B gzipped)
dummy/tests/helpers/resolver.js => 421 B (218 B gzipped)
dummy/tests/helpers/start-app.js => 673 B (319 B gzipped)

Build successful - 3726ms.

Slowest Trees | Total
-----+-----
ConcatWithMaps: Concat: Vendor | 2924ms

Slowest Trees (cumulative) | Total (avg)
-----+-----
ConcatWithMaps: Concat: Vendor (1) | 2924ms
```



tester — northm@Mikes-MBP — ../ts-day/tester — -zsh

[X > ~/Development/talks/ember-components-day/tester > master • ember build]

version: 1.13.12

Building..tester/app.js => 656 B (302 B gzipped)

tester/router.js => 315 B (192 B gzipped)

tester/templates/application.js => 1.46 kB (555 B gzipped)

tester/initializers/app-version.js => 438 B (226 B gzipped)

tester/initializers/export-application-global.js => 1.01 kB (413 B gzipped)

tester/controllers/array.js => 142 B (126 B gzipped)

tester/controllers/object.js => 143 B (126 B gzipped)

tester/components/app-version.js => 473 B (223 B gzipped)

Building...tester/tests/test-helper.js => 235 B (159 B gzipped)

tester/tests/helpers/destroy-app.js => 225 B (161 B gzipped)

tester/tests/helpers/module-for-acceptance.js => 855 B (349 B gzipped)

tester/tests/helpers/resolver.js => 426 B (219 B gzipped)

tester/tests/helpers/start-app.js => 680 B (317 B gzipped)

Built project successfully. Stored in "dist/".

~/Development/talks/ember-components-day/tester > master •

a new “ember” command

Installation

```
ember install ember-slack
```

Usage

```
ember slack --channel Product "Deployed new version"
```



#General: Deployed new
version

a new “ember” command

./index.js

```
module.exports = {  
  name: 'ember-slack',  
  includedCommands: function() {  
    return {  
      slack: {  
        name: 'slack',  
        description: 'Send a slack message',  
        works: 'insideProject',  
        anonymousOptions: [],  
        availableOptions: [],  
        run: function(commandOptions, rawArgs) { }  
      }  
    }  
  }  
};
```

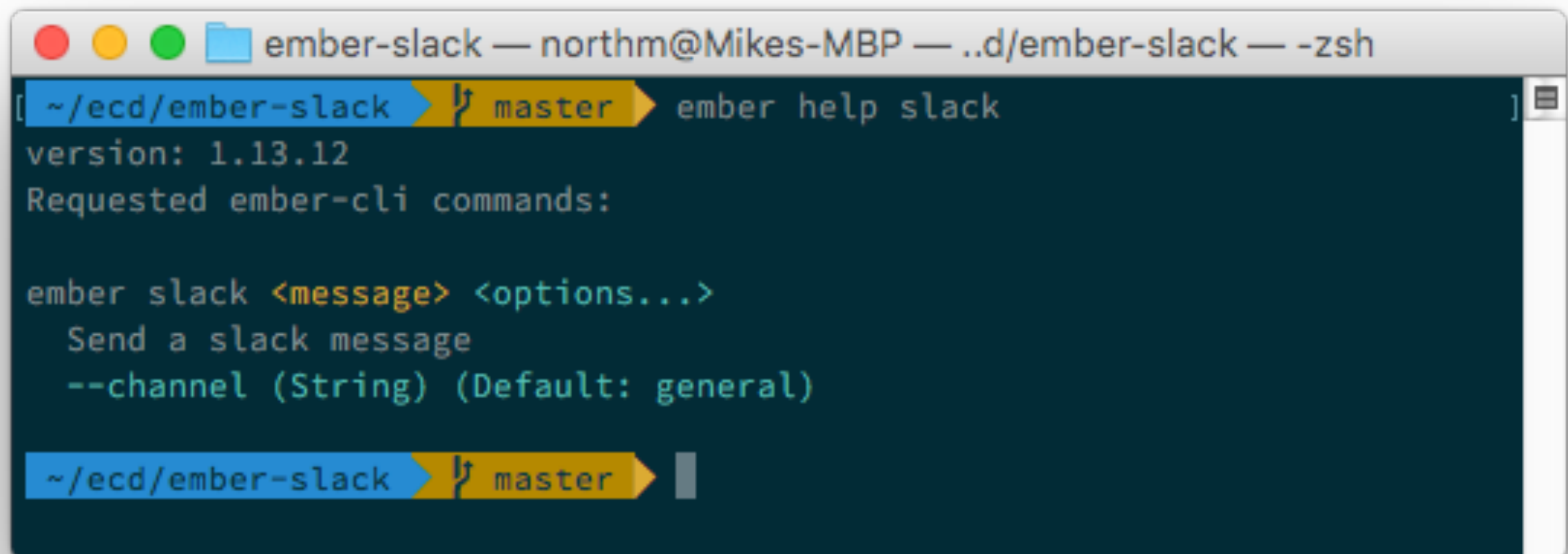
a new “ember” command

OPTIONS

```
// Un-named options
anonymousOptions: [
    '<message>'
],
// Named options
availableOptions: [{
    name: 'channel',
    type: String,
    default: 'general'
}],
```

a new “ember” command

OPTIONS



```
ember-slack — northm@Mikes-MBP — ../ember-slack — -zsh
[ ~/ecd/ember-slack master ember help slack ]
version: 1.13.12
Requested ember-cli commands:

ember slack <message> <options...>
  Send a slack message
  --channel (String) (Default: general)

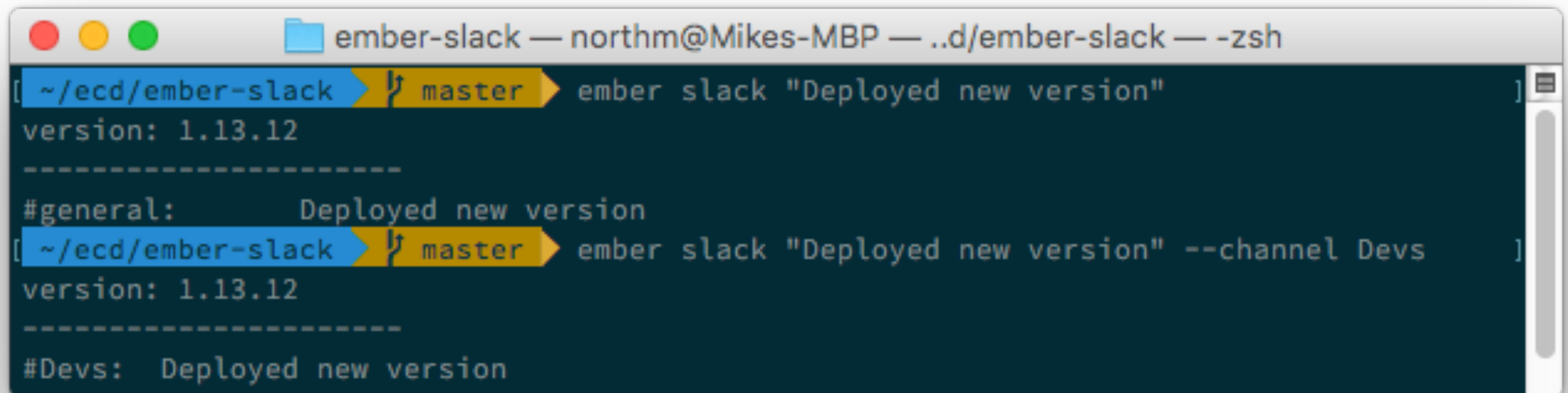
~/ecd/ember-slack master
```

a new “ember” command

```
run: function(commandOptions, rawArgs) {  
  var channel = commandOptions.channel;  
  var message = rawArgs[0];  
  console.log("-----\n" +  
    "#" + channel + ":\t" + message);  
}
```


a new “ember” command

try it!



```
ember-slack — northm@Mikes-MBP — ../ember-slack — -zsh
[ ~/ecd/ember-slack ] master ember slack "Deployed new version"
version: 1.13.12
-----
#general:      Deployed new version
[ ~/ecd/ember-slack ] master ember slack "Deployed new version" --channel Devs
version: 1.13.12
-----
#Devs:  Deployed new version
```



Dessert!

Representative Examples

BY TYPE

Pre-packaged modules

ember-moment, ember-truth-helpers, ember-cpm,
ember-cli-materialize, ember-api-actions

Build pipeline mods

ember-cli-sass, ember-suave

Ember commands

ember-try, ember-cli-deploy, ember-cli-github-
pages

Representative Examples

OTHER IMPORTANT EXAMPLES

ember-cli-flash	customizable configuration, with default value management
ember-perf	support for wide range of framework versions (canary >= ember > 1.6.0)
ember-lodash	shim ES6 node library for ember apps
ember-cpm	complex blueprint
ember-truth-helpers	elegant support for legacy and current helper API

Fin.



`mike-north/ember-addons-three-ways`