

Introduction to Node.js

Doug Toppin

dougtoppin@gmail.com

github.com/dougtoppin/presentations

Agenda

- What is Node.js?
- npm
- Why would I use it?
- Syntax
- Some examples
- Links

What is Node.js?

- From nodejs.org
- Node.js is a platform built on Chrome's JavaScript runtime for easily building fast, scalable network applications. Node.js uses an event-driven, non-blocking I/O model that makes it lightweight and efficient, perfect for data-intensive real-time applications that run across distributed devices.

npm

- Node Package Manager, Node Packaged Modules (NPM)
- Installs packages and dependencies
- Without arguments discovers dependencies in current directory
- git url aware
- Packages can be: files, tarball, url
- npm search

Why would I use it?

- Really quick way to put up a web server
- Quick and easy script editing
- My experience has been that installation is much quicker/easier than Rails (and gem)

Express

- Express is a minimal and flexible node.js web application framework, providing a robust set of features for building single and multi-page, and hybrid web applications.

Syntax

Hello World

```
var http = require('http');

http.createServer(function (request, response) {
  response.writeHead(200, {'Content-Type': 'text/plain'});
  response.end('Hello World\n');
}).listen(8124);

console.log('Server running at http://127.0.0.1:8124/');
```

```
$ node example.js
Server running at http://127.0.0.1:8124/
```

```
$ curl http://127.0.0.1:8124/
Hello World
```

Modules

- Libraries
- Include files
- Facilitates code organization
- Directory walk looking for 'node_modules/' to satisfy requires

Modules

```
fs = require('fs');
```

```
fs.rename(files.upload.path, "/tmp/test.png",  
  function(err) {  
    if (err) {  
      console.log('error');  
    }  
  });
```

Functions

EventEmitters

- on
- once
- removeListener
- once

Debugging

- `console.log`
- `debugger` (`node debug file.js`)

Some examples

Tricks

- Rapid deployment
 - screen
 - node server.js
 - return to the session with 'screen -r'

Node in the EC2

- Excellent step-by-step tutorial on running node in the EC2
- <http://www.bennadel.com/blog/2321-How-I-Got-Node-js-Running-On-A-Linux-Micro-Instance-Using-Amazon-EC2.htm>

Live demo

- http server
- fixed protocol response
- directory list
-

Links

- nodejs.org
- npmjs.org
- github.com/joyent/node
- howtonode.org
- nodebeginner.org
- nodeguide.com
- expressjs.com
- github.com/dougtoppin/node