



# node.js

a guide for the lazy ninja coder

# covering

<quizical>**Ninjas?**</quizical>

**Node.js**

**The Amazing Live Demo**

# ninja coder?

- Assume I'm talking to:
  - agency web teams
  - freelance web types
  - in house web teams
- You are all potential ninjas...

# ninja?

- a ninja works hardest at home
- builds skills in familiar territory
- knocks in his 10,000 hours
- then leaps on command
- and applies those skills judiciously in foreign lands

# web ninja

- what's home?

# web ninja

- what's home?
- what's abroad?

# web ninja

- what's home?
- what's abroad?
- are we stretching this analogy too far?

# web ninja

- what's home?
- what's abroad?
- are we stretching this analogy too far?
- yes

ok

- so why node.js

# why node.js?

- non-blocking
- eventy
- asynchronous
- familiar
- brand spanking new

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# non-blocking

- 2 ways to do the same thing...

# blocking

```
var result = db.query("select * from *");  
echo result;
```

# non-blocking

```
db.query("select * FROM *", function (result)
{
    echo result;
});
```

# non-blocking

callbacks LOOK complicated

actually they are lovely little things

really efficient in scale systems

absolute requirement for I/O in node.js

# why node.js?

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there is no loop...



# inbuilt event loop

we don't 'spin up' a loop  
it just exists

# inbuilt event loop

we don't 'spin up' a loop

it just exists

why teach a monkey to swim when you can get  
a dolphin for the same money

# why node.js?

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# asynchronous

everything is a callback

it's like ajax on your server

# why node.js?

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# familiar

- it's just javascript on the server
- we all know javascript
- (we do don't we?)

# familiar

//Typical jQuery

```
$("#a").click(function(event)
{
    alert("Hello World!");
});
```

# non-blocking

//Typical node.js

```
db.query("select * FROM *", function (result)
{
    echo result;
});
```

# why node.js?

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# brand spanking new

- Standards? - yep - one of the big three
- V8 Javascript engine? - check
- Cloudy? - 100%
- Stuff like WebSockets? - check

# the amazing demo

visit

<http://av.datatoy.net>

type your twitter username

and tap things

# warning

you need a WebSockets capable browser  
which pretty much means Safari on iOS4.2  
or you'll see nothing

<http://av.datatoy.net>

# don't worry

it won't hijack your twitter  
and auto tweet  
on your behalf

<http://av.datatoy.net>

# how this works

- simple html page
- simple 8 line WebSockets server
- bit of client side JS

# the server

- not the script that RUNS on the server
- the server

```
var sys = require("sys"), ws = require("../lib/ws/server");  
var server = ws.createServer({debug: true});  
server.addListener("connection", function(conn){  
    conn.addListener("message", function(message){  
        conn.broadcast(message);  
    });  
});  
server.listen(8000);
```

# the client side

- not the client side
- the script that RUNS on the client side

```
var conn, recvd, connections = 0;
var output_log = document.getElementById("log");
var connect = function() {
    if (window["WebSocket"]) {
        recvd = 0;
        host = "178.79.146.204:8000";
        conn = new WebSocket("ws://" + host + "/test");
        conn.onmessage = function(evt) {
            log(evt.data);
        };
    }
};
```

root@polmuir: /home/mighty/lib/ws/facewall — ssh — 80x24

```
at Stream._readImpl (net.js:137:14)
at Stream._onReadable (net.js:523:22)
at IOWatcher.onReadable [as callback] (net.js:151:10)
```

root@polmuir:/home/mighty/lib/ws/facewall# ls

README facewall.js facewallmin.js

root@polmuir:/home/mighty/lib/ws/facewall# node facewallmin.js

WS: 32427508430, draft76 connection

Manager: Attached: <Connection 32427508430> (1)

WS: 32427508430, recv: stevenmilne

WS: 32427508430, recv: stevenmilne

WS: 32427508611, draft76 connection

Manager: Attached: <Connection 32427508611> (2)

WS: 32427508611, recv: mcaulay

WS: 32427508430, write: mcaulay

WS: 32427508611, recv: mcaulay

WS: 32427508430, write: mcaulay

WS: 32427508611, end

WS: 32427508611, socket closed

Manager: Detached: <Connection 32427508611> (1)

WS: 32427508702, draft76 connection

Manager: Attached: <Connection 32427508702> (2)

WS: 32427508702, recv: zeldman

WS: 32427508430, write: zeldman

█

# if you do nothing else

Follow these guys:

- Ryan Dahl [github.com/ry](https://github.com/ry) & [@ryah](https://twitter.com/ryah) (nodejs)
- TJ Holowaychuk [@tjholowaychuk](https://twitter.com/tjholowaychuk)  
(expressjs)



thank you

I'll tweet the link to my github later