

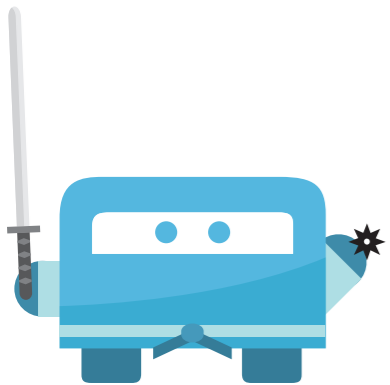
Rocking show-case to get you excited about





pictures of my cats **relaxing** in the only remaining  
piece of furniture yet to be used to name a  
CouchDB project: **bean bag!**

ohai!





```
$ whoami  
@dscape
```







my ambition in school was to hack on CouchDB



nunojob:~ dscape/08\$ echo The Black Sheep

## CouchDB & Um Novo Semestre!

March 7, 2008



Bem todos os semestres faço um plano de acção do que vou fazer para além de o que é espectável de mim – ir as aulas, fazer os trabalhos, passar nos exames e ler pelo menos um livro de informática – de escolha livre – por mês.

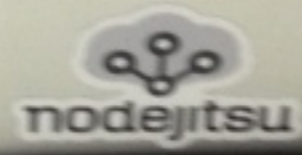
Acredito na valorização pessoal e gosto muito de aprender coisas novas. E acredito que não existe melhor forma de o fazer que com projectos práticos!



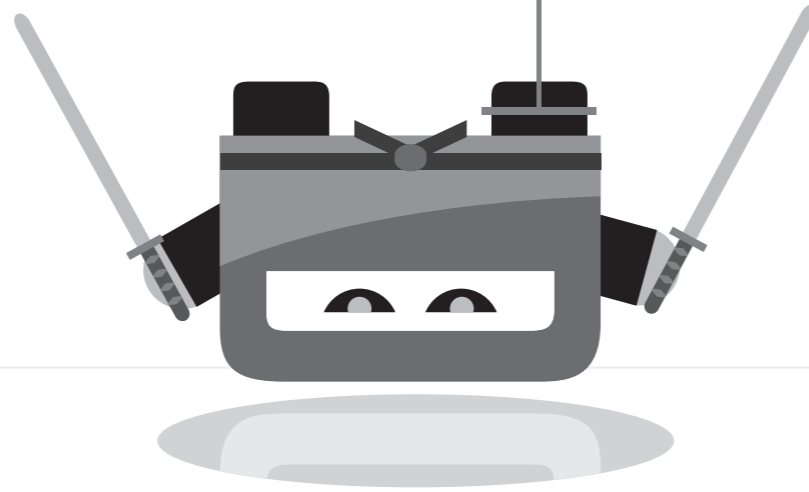


SONY

VAIO



BLE  
RD GAME



Puton

**foobar**

(database name)

**doc\_count:** 1

**update\_seq:** 1

[Run Query](#) [Add document](#)

5A3419AC-B7C0-4631-A85A-498A4F3C79A7 {"nice":"stuff","\_id...

2 foobar: Start Changes Feed: continuous=undefined

1 foobar: Open Database

```
var db_name = 'hackaton_' + (~~(Math.random() * 1e9)).toString(36);

var pouch;

Pouch('idb://' + db_name, function (err, db) {
  pouch=db;
});

pouch.put({_id: '1', bar: 'baz'});

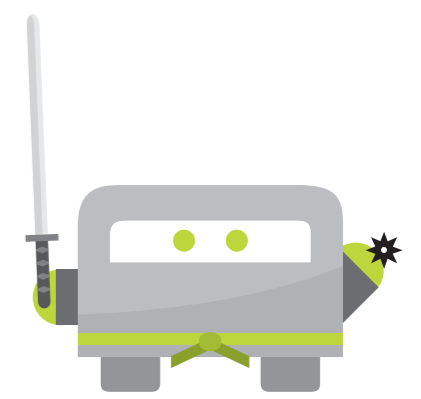
pouch.get('1', function (err, doc) { console.log(doc); });

Pouch.replicate('idb://' + db_name,
'http://localhost:2020/foobar2003', function(err, changes) {
  console.log('omg hi!')
  console.log('got changes', changes);
});
```

!!111!!!1!!one!!1!

```
var db_name = 'hackaton_' + (~~(Math.random() * 1e9)).toString(36);  
  
var pouch;  
  
Pouch('idb://' + db_name, function (err, db) {  
  pouch=db;  
});  
  
pouch.put({_id: '1', bar: 'baz'});  
  
pouch.get('1', function (err, doc) { console.log(doc); });  
  
Pouch.replicate('idb://' + db_name,  
'http://localhost:2020/foobar2003', function(err, changes) {  
  console.log('omg hi!');  
  console.log('got changes', changes);  
});
```

<http://git.io/lxpQRg>



**NODE**  
FIRM



**nodejitsu**



**HELLO**

**YES, THIS IS DOG**





HI, THIS IS YOUR SON'S SCHOOL. WE'RE HAVING SOME COMPUTER TROUBLE.



OH, DEAR - DID HE BREAK SOMETHING?

IN A WAY - )



DID YOU REALLY NAME YOUR SON Robert'); DROP TABLE Students;-- ?



OH, YES. LITTLE BOBBY TABLES, WE CALL HIM.

WELL, WE'VE LOST THIS YEAR'S STUDENT RECORDS. I HOPE YOU'RE HAPPY.



AND I HOPE YOU'VE LEARNED TO SANITIZE YOUR DATABASE INPUTS.

couchdb <3's nodejs  
nodejs <3's couchdb





**max ogden**  
@maxogden



Following

wow the [@npmjs](#) registry [@couchdb](#) hosted by [@iriscouch](#) served 100 million requests in december! [gist.github.com/4425430](http://gist.github.com/4425430)

[Reply](#) [Retweeted](#) [Favorite](#) [More](#)

19  
RETWEETS

4  
FAVORITES



10:35 PM - 7 Jan 13

Reply to [@maxogden](#) [@npmjs](#) [@CouchDB](#) [@iriscouch](#)



**Nuno Job** @dscape 8 Jan  
[@maxogden](#) [sneakhype.com/wp-content/upl...](#) +[@npmjs](#)  
[@couchdb](#) [@iriscouch](#)

Details



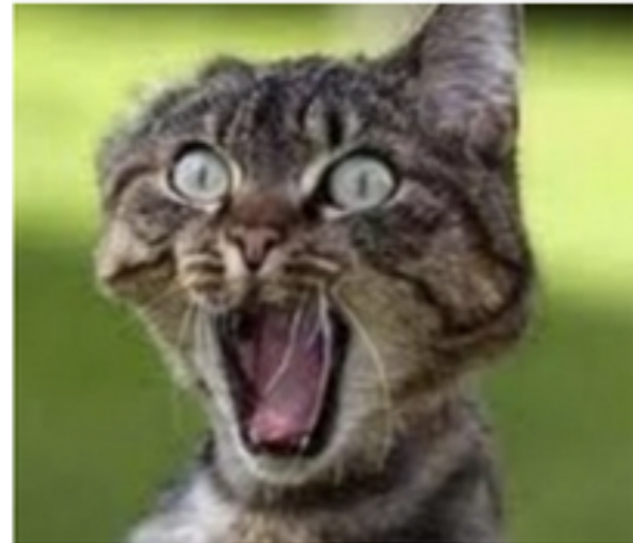
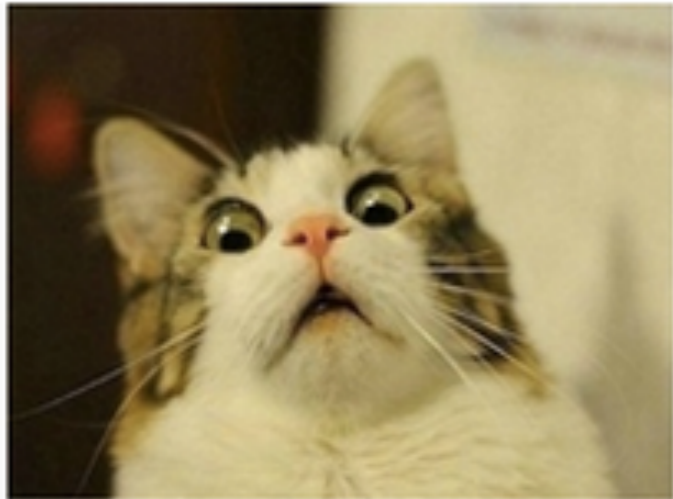
**Tane Piper** @tanepiper 8 Jan  
[@dscape](#) [@maxogden](#) [@npmjs](#) [@CouchDB](#) [@iriscouch](#)  
[upload.wikimedia.org/wikipedia/comm...](#)

Details

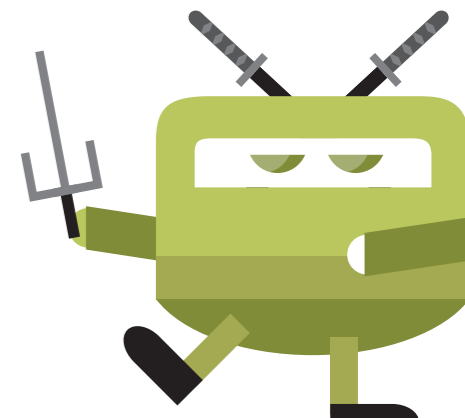


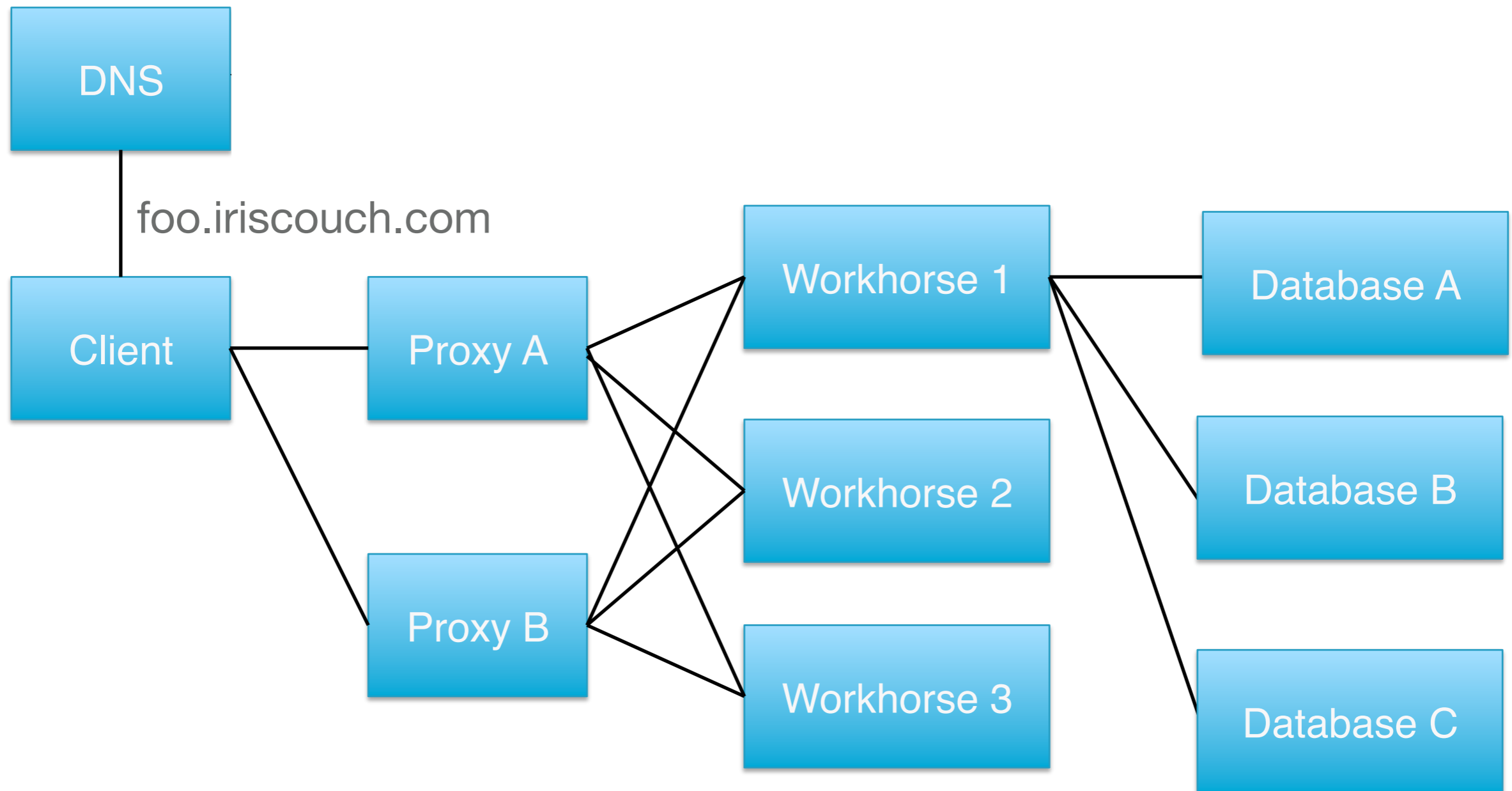


peek: ~1k req/s on a package repository



how does it work?







**FLIGHT  
RECORDER  
DO NOT  
OPEN**

INSTRUMENT FOR ACQUISITION OF FLIGHT  
DATA. DO NOT REMOVE FROM  
FLIGHT RECORDER.  
DO NOT OPEN.  
DO NOT REMOVE FROM  
FLIGHT RECORDER.  
DO NOT OPEN.

```
var named = require('named');
named.createServer(function(req, res) {
  res.end('1.2.3.4');
}).listen(5353, '127.0.0.1');
console.log('Server running')
```

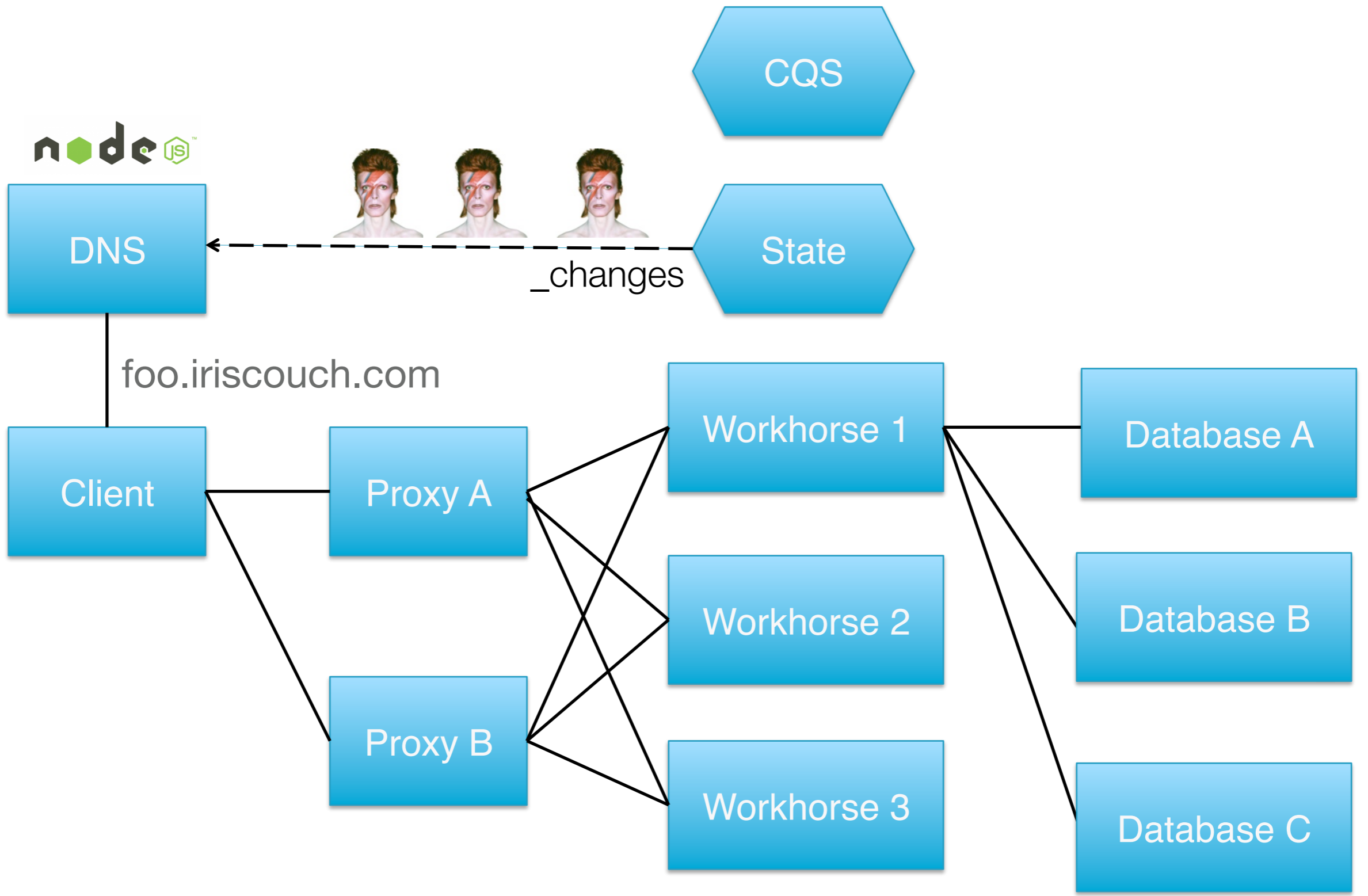
[github.com/iriscouch/named](https://github.com/iriscouch/named)



again!1 1!!!1 1!

```
var named = require('named');
named.createServer(function(req, res) {
  res.end('1.2.3.4');
}).listen(5353, '127.0.0.1');
console.log('Server running');
```

[github.com/iriscouch/named](https://github.com/iriscouch/named)





the **nodejitsu** way

**NODEJS & COUCHDB**



*not optimized for retina displays*

**ALL THE THINGS**

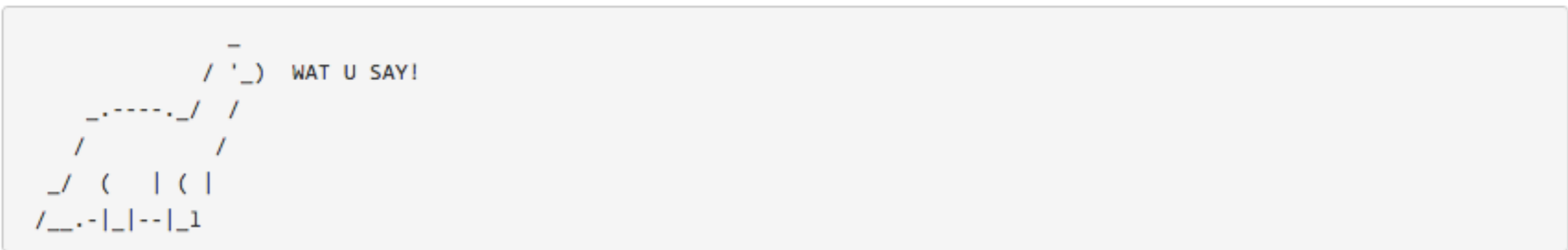
open source **tools** we made/use to help us manage  
our couches

## **nano.relax(opts, [callback])**

alias for `nano.request`

## **nano.dinosaur(opts, [callback])**

alias for `nano.request`



## **nano.config**

an object containing the nano configurations, possible keys are:

- `url` - the couchdb url
- `db` - the database name

```

#!/usr/bin/env node
//
// sample frameless script to delete couchdbs matching a pattern
//
// please run `npm install nano` to run this example
//
// curl localhost:5984/_all_dbs | \
//   ./usage/couchdb-delete-databases \
//   --pattern loggly \
//   --uri http://localhost:5984
//
var frameless = require('../lib/frameless')
    , nano      = require('nano')
    ;

frameless(
  { name: 'uri'      , required: false, 'default': 'http://localhost:5984' }
  , { name: 'pattern' , required: true, 'default': 'testdb', save: false  },
  function (opts) {

    var server = nano(opts.uri)
      , rexp   = new RegExp(opts.pattern)
      , buffer = ''
      ;

    var stdin = process.openStdin();
    stdin.setEncoding('utf8');

    function buffer_it(chunk) {
      buffer += chunk;
    }

    function destroy_dbs() {
      buffer = JSON.parse(buffer);
      buffer.forEach(function (db_name) {
        if(rexp.test(db_name)) {
          frameless.info(db_name, 'destroyed');
          server.db.destroy(db_name, frameless.print);
        }
      });
    }

    stdin.on('data', buffer_it);

    stdin.on('end', destroy_dbs);
  });

```

## synopsis

---

```
var cradle = require('cradle');
var db = new(cradle.Connection()).database('starwars');

db.get('vader', function (err, doc) {
  doc.name; // 'Darth Vader'
  assert.equal(doc.force, 'dark');
});

db.save('skywalker', {
  force: 'light',
  name: 'Luke Skywalker'
}, function (err, res) {
  if (err) {
    // Handle error
  } else {
    // Handle success
  }
});
```



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

var Creature = resourceful.define('creature', function () {
  //
  // Specify a storage engine
  //
  this.use('couchdb');


  //
  // Specify some properties with validation
  //
  this.string('diet');
  this.bool('vertebrate');
  this.array('belly');

  //
  // Specify timestamp properties
  //
  this.timestamps();
});

//
// Now that the `Creature` prototype is defined
// we can add custom logic to be available on all instances
//
Creature.prototype.feed = function (food) {
  this.belly.push(food);
};
```

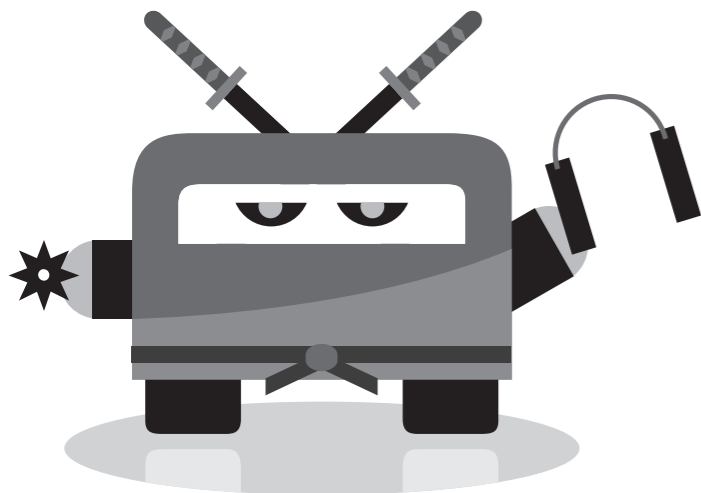
# npm install -g futon

```
$ ./bin/futon
info: Welcome to futon
info: It worked if it ends with futoncli ok
info: Executing command
help:
help:
help:
help:
help:
help:
help:
help:
help: Futon on your command line
help:
help: Usage:
help: futon <resource> <action> <param1> <param2> ...
help:
```

The Futon logo is displayed in the terminal output. It consists of the word "futon" in a white, lowercase, monospace font, enclosed within a white dashed-line rectangular border. To the right of the text is a pixelated illustration of a red futon with white cushions and a white throw pillow.

[github.com/dscape/futoncli](https://github.com/dscape/futoncli)

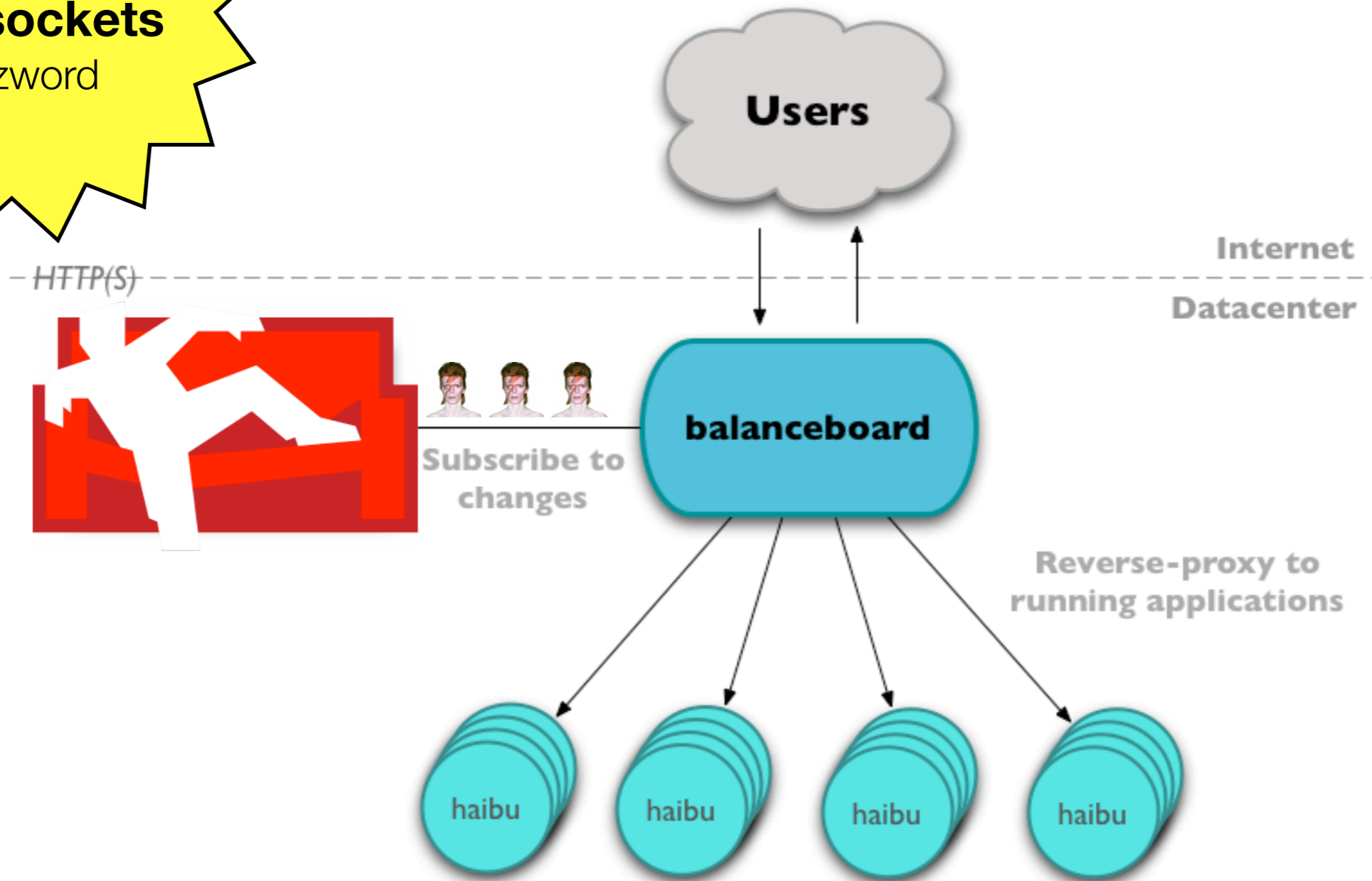
how to use CouchDB  
to build your own  
open source



load balancers

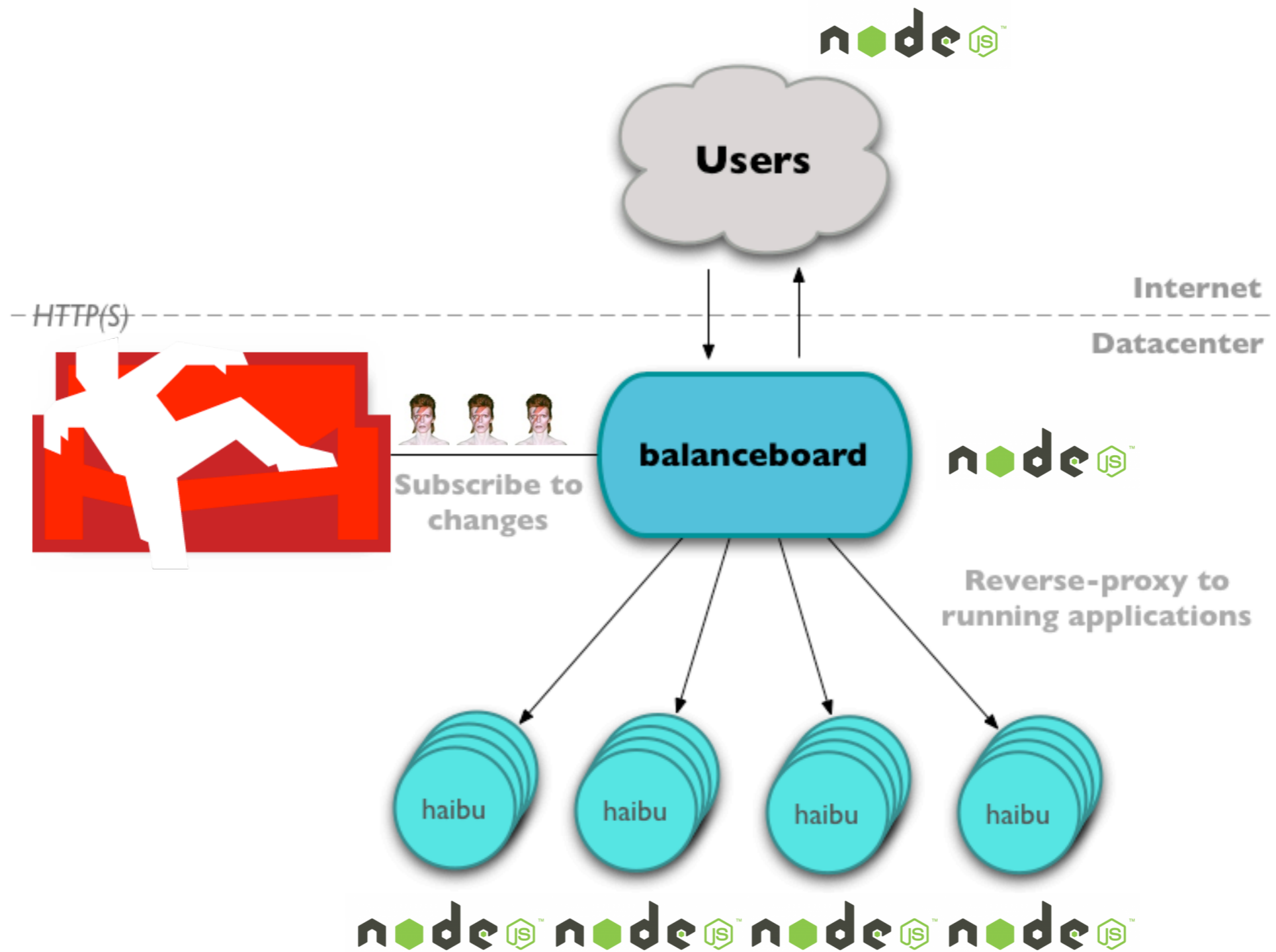
reverse-proxy fully compatible with **web-sockets** buzzword

*yes, sticky sessions too!*



[github.com/nodejitsu/](https://github.com/nodejitsu){**haibu**, **node-http-proxy**}

wondering about the technology stack?



[github.com/nodejitsu/](https://github.com/nodejitsu){[haibu](#), [node-http-proxy](#)}

dogmatic?

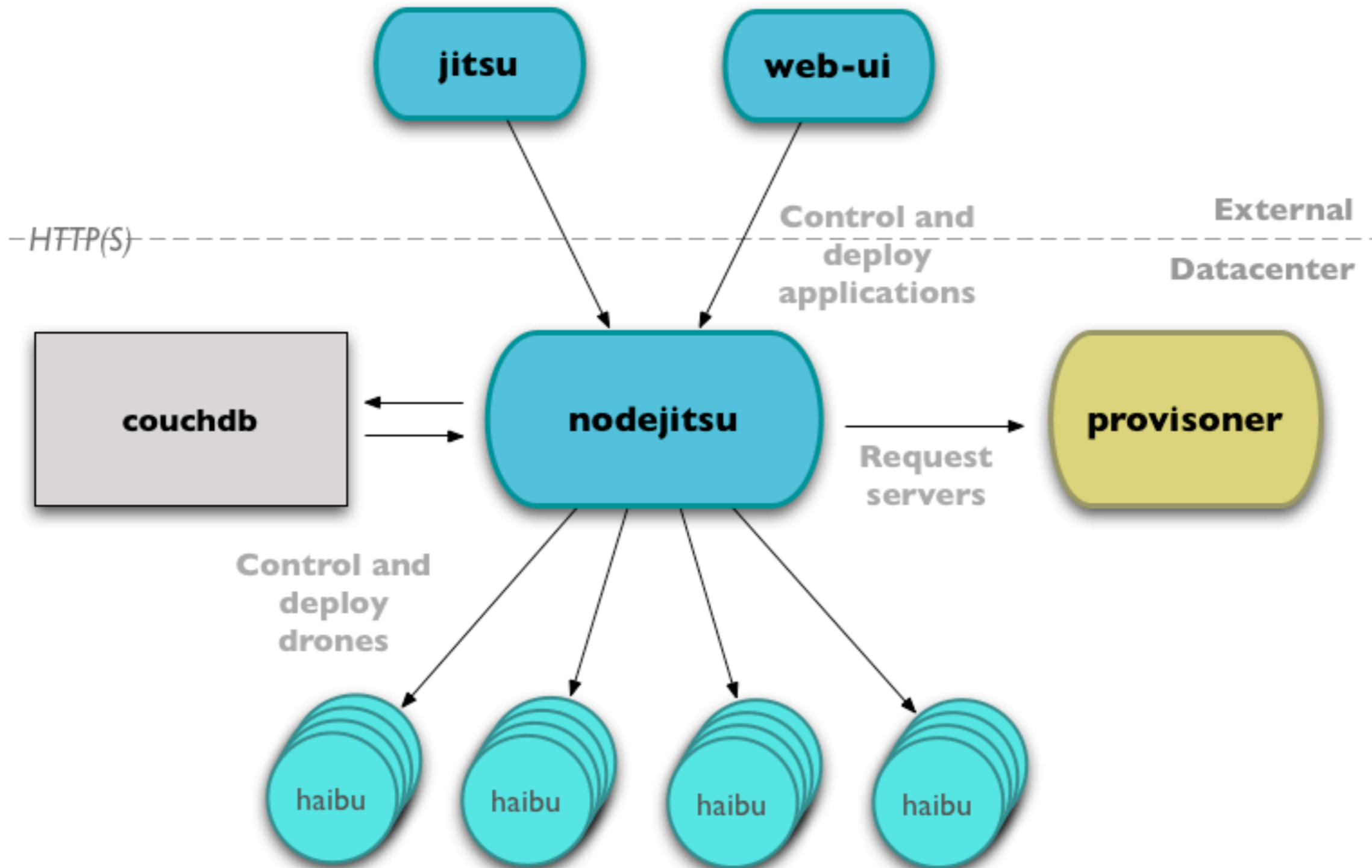
we are fast at prototyping with node and built a  
team around that particular skill

whenever requirements change beyond what node  
can offer we translate our stack to different  
frameworks/languages

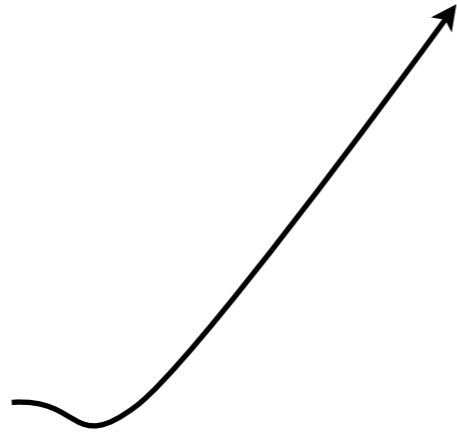


but yes, maybe... a little!

deployment



fun right?



deep dive

migrating to CouchDB 1.2.x next week

*tips are welcome!*

stud for 6984



\_changes feed to provide **realtime deployment status** for our continuous deployments



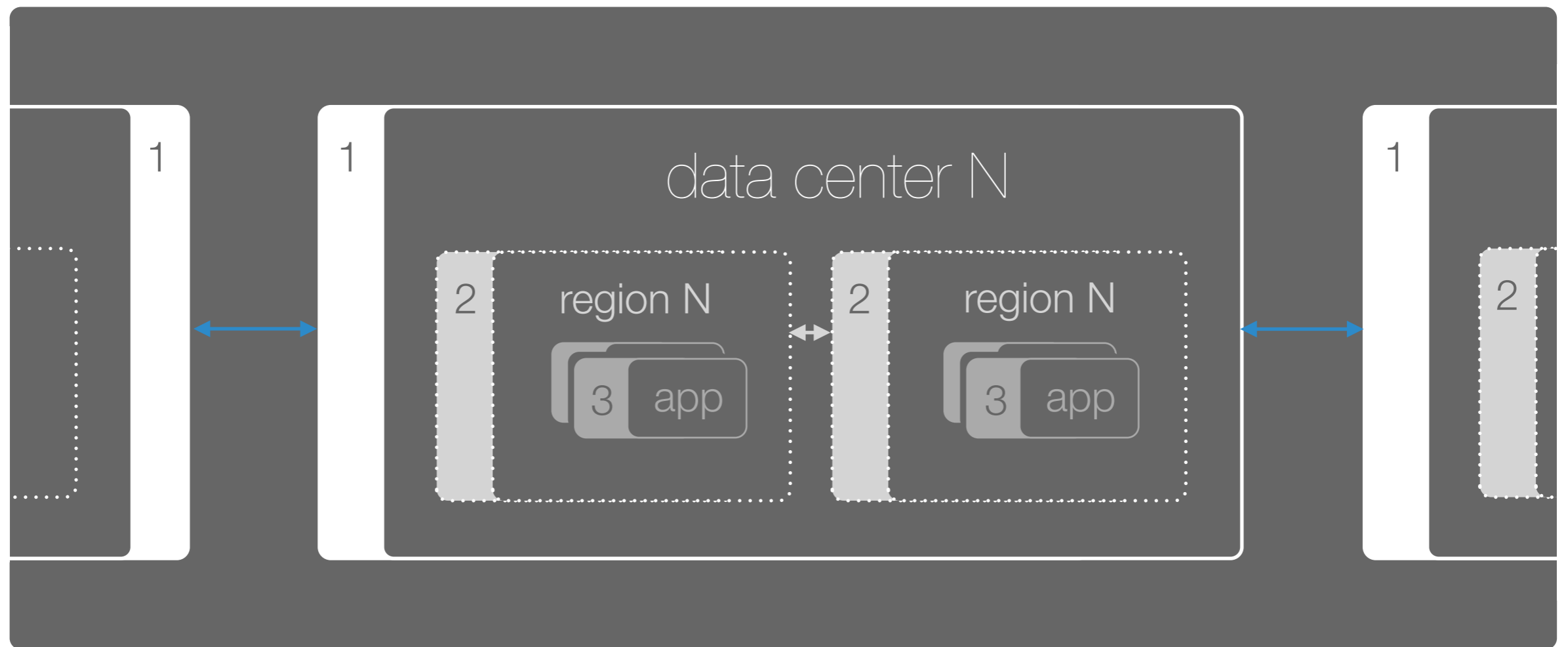
private replica of the public npm registry

provisioner stores server pool in CouchDB

private npm for deploying our systems

*e.g. continuous deployments or our load balancers*

coming soon



[github.com/nodejitsu/pkgcloud](https://github.com/nodejitsu/pkgcloud)

Dankie Shnorhakalutiun Hvala  
Blagodariya Hvala Dekuju Tak  
Kiitos Merci Grazie Grazzi  
Takk **Danke** Thank You  
Dziękuję Obrigado Gracias  
Asante Tack Teshekur Ederim  
Shokriya Cam On Kob Kun  
Kaa Mammun Arigatou