Couchbase

ERLANG + BDD + CUCUMBERL

ERLANG FACTORY SF 2011
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Agenda

BDD and cucumber

Membase

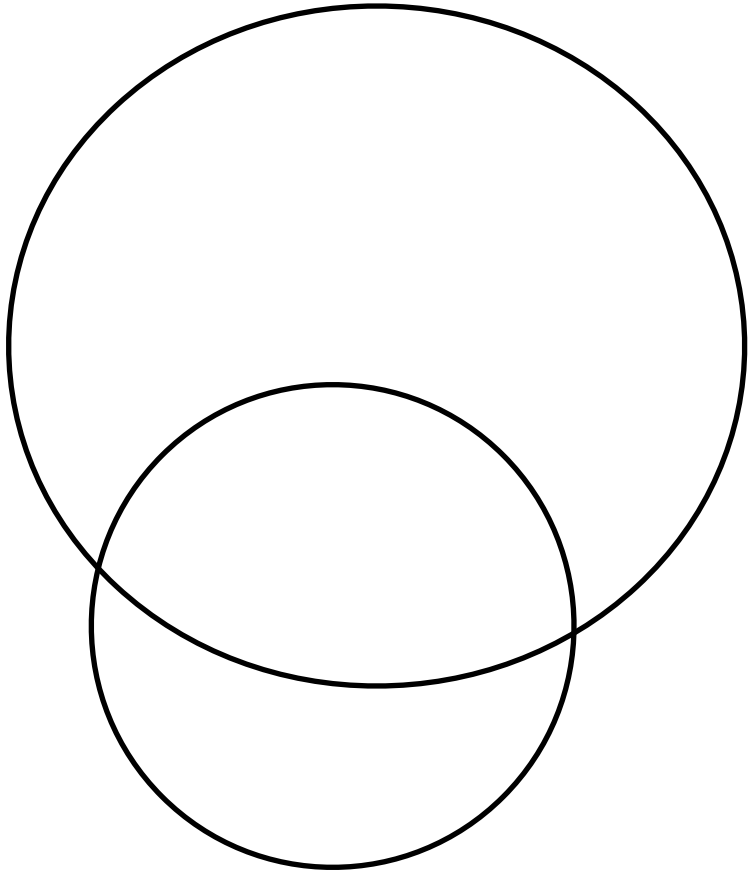
Cluster testing

cucumberl

Demo

BDD
+
CUCUMBER

What is BDD?



cucumber
?

http://cukes.info

Cucumber

behaviour driven developmen
with elegance and joy

cribe behaviour in plain text

```
Addition
r to avoid silly mistakes
th idiot
to be told the sum of two numbers

o: Add two numbers
 I have entered 50 into the calculator
 have entered 70 into the calculator
I press add
the result should be 120 on the screen
```

2: Write a step definition in Ruby

```
Given /I have entered (.*) into the calculator/ do |n|
  calculator = Calculator.new
  calculator.push(n.to_i)
end
```

3: Run and w

```
$ cucumber features/
Feature: Addition
  In order to avoid
  As a math idiot
  I want to be told
  Scenario: Add two
    Given I have ent
      uninitialized
      ./features/ste
      features/addit
    And I have enter
    When I press add
    Then the result
```

e code to make the step pass

```
culator
h(n)
 ||= []
 << n
```

5. Run again and see the step pass

```
$ cucumber features/addition.feature
Feature: Addition  # features/addition.feature
  In order to avoid silly mistakes
  As a math idiot
  I want to be told the sum of two numbers
  Scenario: Add two numbers                    # features/additi
```

6. Repeat 2-

```
$ cucumber features/
Feature: Addition
  In order to avoid
  As a math idiot
  I want to be told
```

why cucumber?

because your friends use ruby

because your friends use ruby

friend == web app dev

because your friends use ruby

friend == web app dev

web app == ruby on rails

(or some RoR clone)

CHICAGO BOSS

(or some RoR clone)

cucumber syntax
is readable
by business guys

why not cucumber?

cucumber syntax

is ~~readable~~

~~by business guys~~

too english-y

```
Scenario: Add two numbers
Given I have entered 5
  And I have entered 7
 When I press add
 Then the result should be 12
```

```
Scenario: Add two numbers
Given I have entered 5
  And I have entered 7
 When I press add
 Then the result should be 12
```

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```
Scenario: Add two numbers
Given I have entered 5
  And I have entered 7
 When I press add
 Then the result should be 12
```

vs: `?assert(add(5, 7) =:= 12).`

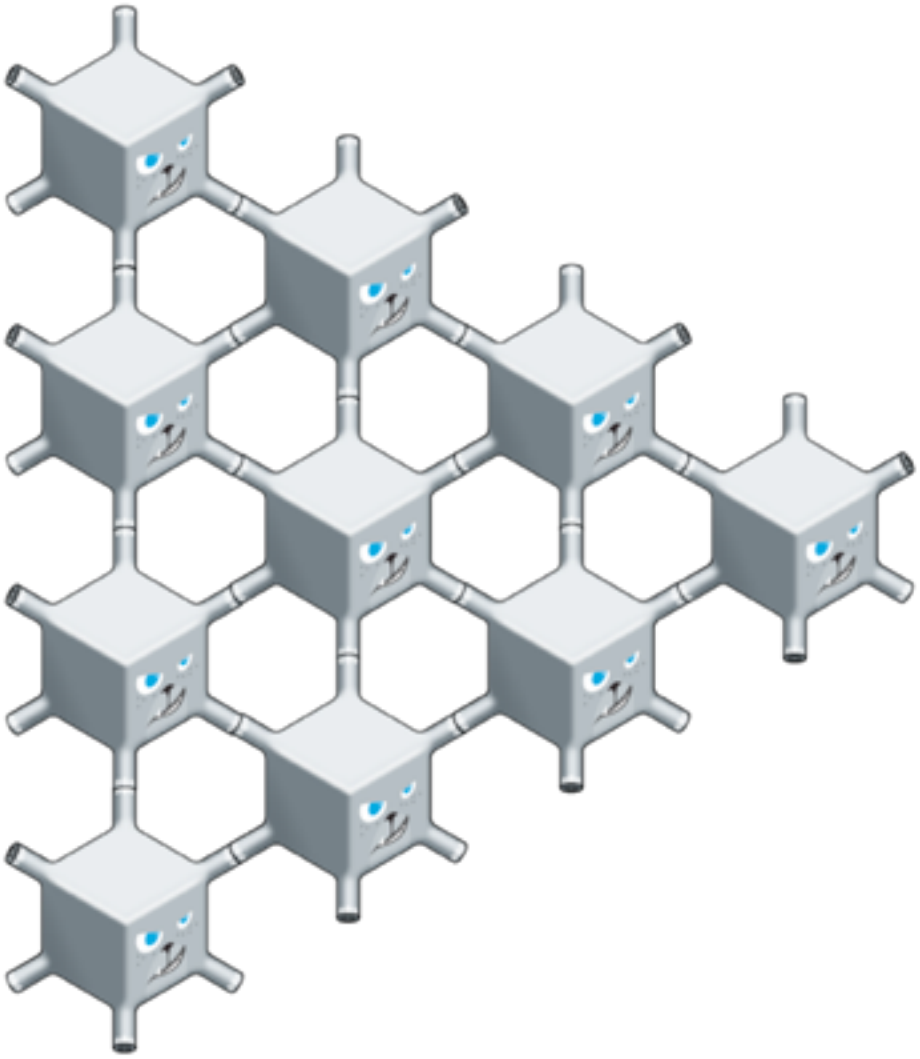
cucumber =/= eunit.

cucumber =/= quickcheck.

cucumber + BDD

MEMBASE

Membase is Clustered by Erlang



In the Data Center

HUMAN DRIVEN SCENARIO

CLUSTER TESTING

Scenario: Node goes down

Given I have configured nodes A and B

And they are already joined

When node A goes down

Then node B sees that node A is down

Scenario: Node goes down

Given I have configured nodes A and B

And they are already joined

When node A goes down

Then node B sees that node A is down

Scenario: Node goes down, in 3 node cluster

Given I have configured nodes A, B and C

And they are already joined

When node A goes down

Then node B sees that node A is down

And node C sees that node A is down

Scenario Outline: Join 3 nodes, A, B, C

Given I have configured nodes A, B and C

And they are not joined

When I join node <joiner1> to <joinee1>

And I join node <joiner2> to <joinee2>

Then all nodes know about each other

Examples:

joiner1	joinee1	joiner2	joinee2
A	B	C	B
A	B	C	A

Scenario Outline: Join 3 nodes, A, B, C

Given I have configured nodes A, B and C

And they are not joined

When I join node <joiner1> to <joinee1>

And I join node <joiner2> to <joinee2>

Then all nodes know about each other

Examples:

joiner1	joinee1	joiner2	joinee2
A	B	C	B
A	B	C	A

Scenario: Join 2 nodes

Given I have configured nodes A and B

And they are not joined

When I join node A to B

Then all nodes know about each other

...lives in "simple_cluster.feature"

step definitions

emacs time...

CUCUMBERL

“I wish I could write my step definitions in erlang”

“I wish I could write my step definitions in erlang”

and, C ...

#lazyweb request:

“C cucumber” anyone?

"I wish I could write
my step definitions in
erlang"

https://github.com/membase/cucumberl

MIT

one file

src/cucumber.erl

samples

CUKE DEMO

Q & A

Couchbase

Data management for interactive web and mobile applications.

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