MongoDB

Document-Oriented Data Store

Collection oriented storage

```
require 'mongo'
include XGen::Mongo::Driver
db = Mongo.new.db('my-db-name')
things = db.collection('things')

things.insert 'name' => "John Smith",
  'age' => 35, 'balance' => 350.95,
  'address' => {
    'street' => "123 East River",
    'city' => "Sandy", 'state' => "UT",
    'zip' => '12345-6789'},
  'music' => [ 'rock', 'jazz', 'new age' ]
```

Native Ruby objects

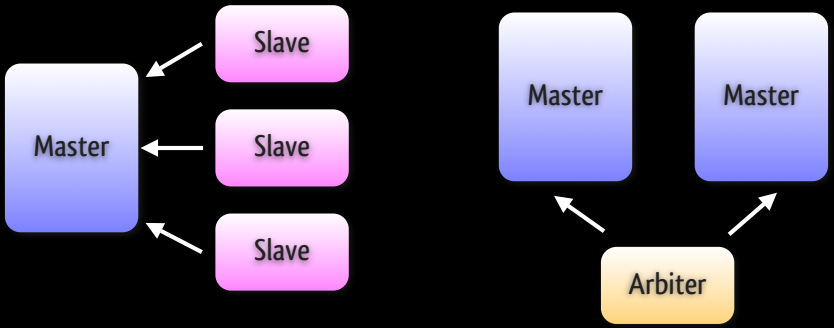
```
things.insert '_id' => ObjectID.new,
  'string' => 'hello',
  'array' => [1, 2, 3],
  'hash' => {'a' => 1, 'b' => 2},
  'date' => Time.now,
  'int' => 42,
  'float' => 33.33333,
  'regex' => /foobar/i,
  'boolean' => true,
  'null' => nil,
  'symbol' => :zildjian
```

Full index support

```
things.create_index [['name',DESCENDING], ['age',ASCENDING]]

things.find 'age' => 35
things.find 'name' => /Smith$/
things.find 'balance' => {'$gt'=>300.0, '$lte'=>400.0}
things.find 'address.state' => { '$in' => ['ID', 'UT'] }
things.find {}, {:offset=>10, :limit=>10, :sort=>'age'}
```

Replication & Failover



Fast & efficient storage

- Memory mapped files == fast
- File storage API

```
require 'mongo/gridfs'
GridStore.open(db, 'foobar', 'w') { |f|
  f.puts "Hello, world!"
}
GridStore.open(db, 'foobar', 'r') { |f|
  puts f.read         # => Hello, world!\n
}

puts "File 'foobar' exists:
#{GridStore.exist?(db, 'foobar')}"
```

Best Use Cases

- Most web apps
- Caching (memcachedb + indexes)
- High scalability needed

Worst Use Cases

- Transactional Systems
- Data Warehouses

Why you should use it

- Fast, really fast
- No migrations ever
- Replaces memcached & tokyo
- Great Ruby support
- It's not MySQL

EAT BRAAAAAAAAAIIIIIIIIINS!

Links

- http://www.mongodb.org
- http://github.com/mongodb/mongo-ruby-driver
- http://github.com/aemadrid/mongodb_pres

Oldest Laptop In The MWRC

Accepting donations