

CouchDB

Relax

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15799 – Adv Topics in DB Systems

Nov.6th 2013

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Couchbase



Bigcouch



CouchDB



The most deployed document store.

What's CouchDB

- NoSQL/Document Store

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Check Server

- `curl http://127.0.0.1:5984/`

```
{
  "couchdb": "Welcome",
  "uuid": "85fb71bf700c17267fef77535820e371",
  "vendor": {
    "name": "The Apache Software Foundation",
    "version": "1.5.0"
  },
  "version": "1.5.0"
}
```

Creating a Database

- `curl -X PUT http://127.0.0.1:5984/albums`
`{ "ok": true }`

Inserting a Document

- `curl -X PUT`
`http://127.0.0.1:5984/albums/<uuid>`
`-d '{"title": "Hello", "artist": "World"}'`

```
{ "ok": true,  
  "id": "<uuid>",  
  "rev": "1-2902191555"  
}
```

CouchDB v.s. MongoDB

- Erlang v.s. C++
- JSON v.s. BSON
- HTTP v.s. Custom Protocol over TCP/IP
- Documents v.s. Collections/Documents

CouchDB v.s. MongoDB

- Ranged Query v.s. Object-based Query
- MR -> View v.s. MR -> Collection
- MVCC v.s. Update in Place
- Master-Master v.s. Master-Slave

What's CouchDB

- Database Server
- Web Server



What's CouchDB

- Database Server
- Web Server
- Application Server



YCSB Benchmark

