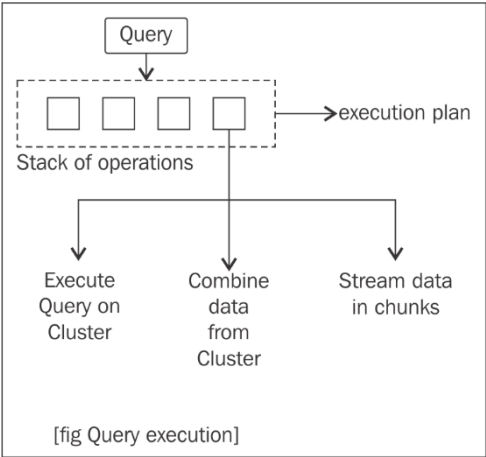
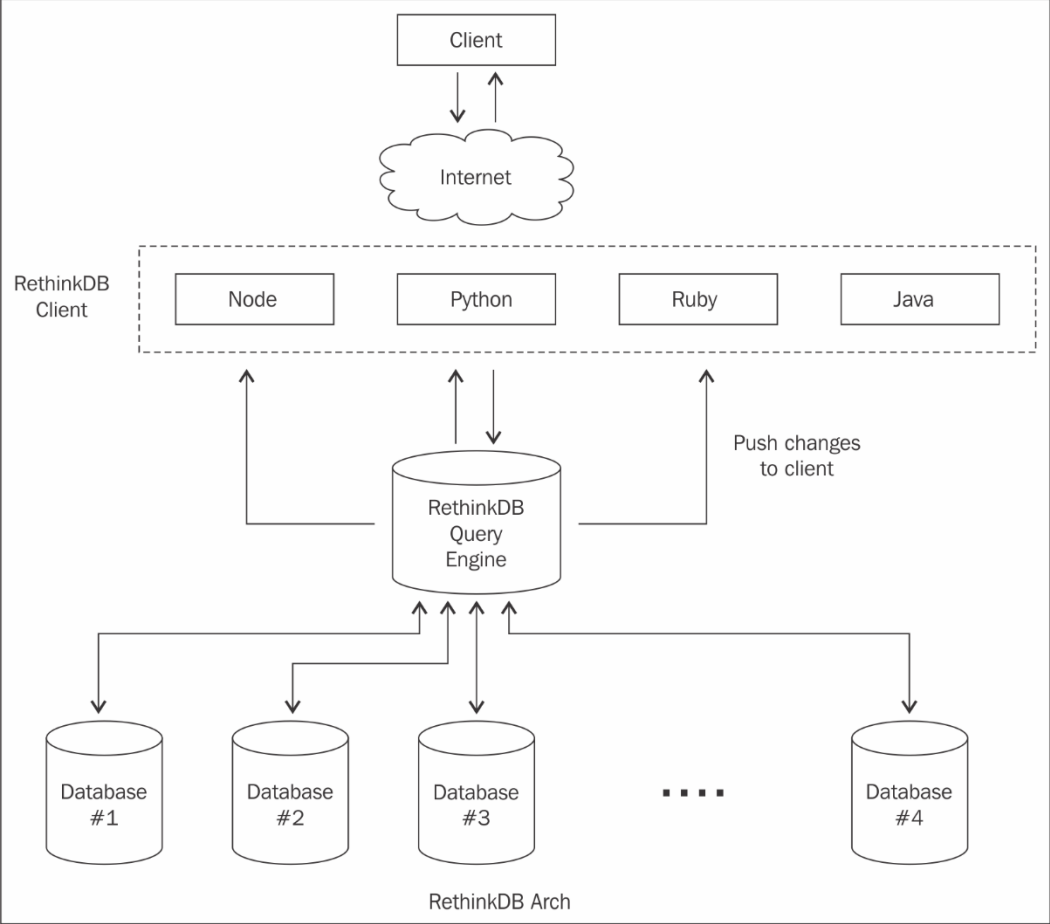
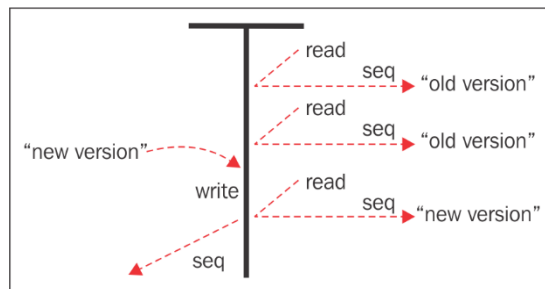
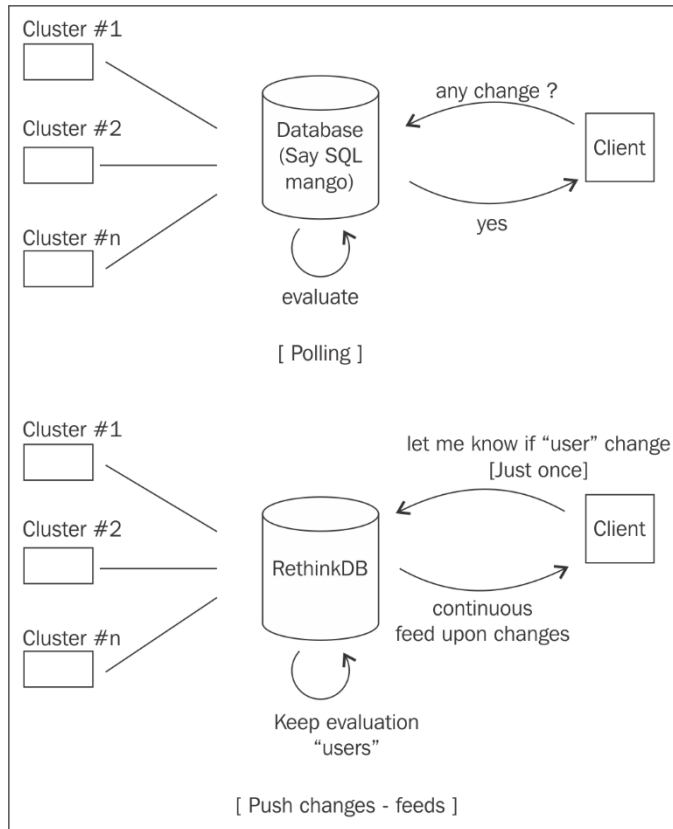
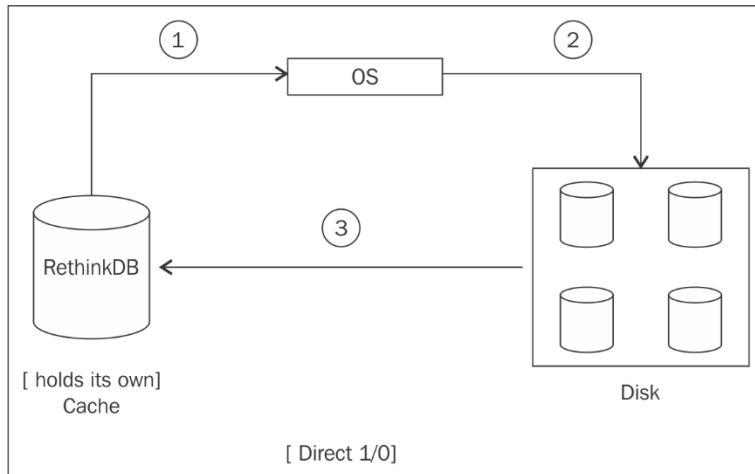


Chapter 1: The RethinkDB Architecture and Data Model







Sharding and replication for test.users



i Applying changes may cause the table to become temporarily unavailable.

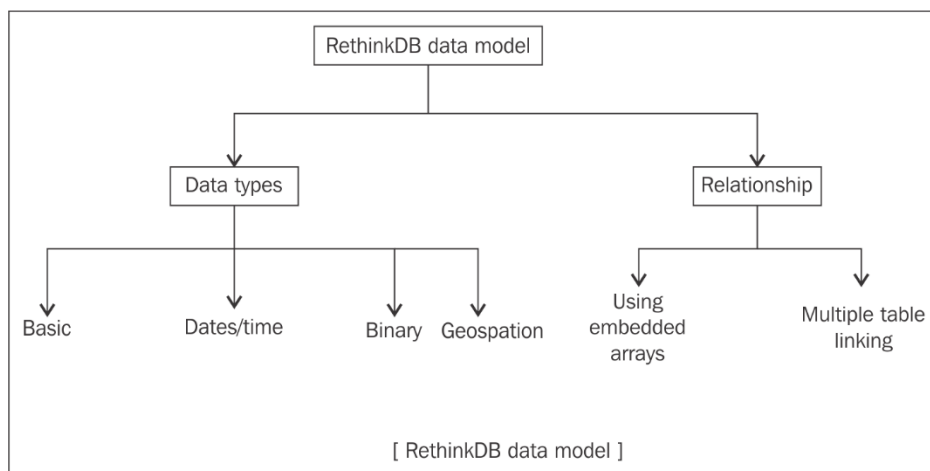
shards
max: 1

replicas per shard
max: 1

► [Where's my data going?](#)




Cancel

Apply configuration






Chapter 2: RethinkDB Query Language

DATABASE test		+ Add Table	Delete Database
<input type="checkbox"/>	 authors	1 shard, 1 replica	Ready 1/1
<input type="checkbox"/>	 geo	1 shard, 1 replica	Ready 1/1
<input type="checkbox"/>	 users	1 shard, 1 replica	Ready 1/1

Data Explorer

History  

```
1 r.db('test').table('users').get('e54671a0-bdcc-44ab-99f3-90a44f0291f8')
```

Clear Run

1 row returned in <1ms. [Tree view](#) [Table view](#) [Raw view](#) [Query profile](#)

```
{
  "createdAt": "Thu Jun 09 2016 08:58:15 GMT+00:00",
  "id": "e54671a0-bdcc-44ab-99f3-90a44f0291f8",
  "password": "password123",
  "userId": "shahidShaikh"
}
```

```
codefile-chapter2 — node findingcode.js — 84x28
[Shahids-MacBook-Air: codefile-chapter2 UnixRoot$ node findingcode.js
116.4194W
```

```
Shahids-MacBook-Air:polling-app-using-nodejs-rethinkDB UnixRoot$ node rethink.js
{ Actors: 'Robert Downey Jr., Chris Hemsworth, Mark Ruffalo, Chris Evans',
  Awards: '2 wins & 37 nominations.',
  Country: 'USA',
  Director: 'Joss Whedon',
  Genre: 'Action, Adventure, Sci-Fi',
  Language: 'English',
  Metascore: '66',
  Plot: 'When Tony Stark and Bruce Banner try to jump-start a dormant peacekeeping p
rogram called Ultron, things go horribly wrong and it\'s up to Earth\'s Mightiest He
roes to stop the villainous Ultron from enacting his terrible plans.',
  Poster: 'http://ia.media-imdb.com/images/M/MV5BMTM4OGJmNWMlOTM4Ni00NTE3LTg3MDItZmQ
xYjc4N2JhNmUxXkEyXkFqcGdeQXVyNTgzMDMzMTg@_V1_SX300.jpg',
  Rated: 'PG-13',
  Released: '01 May 2015',
  Response: 'True',
  Runtime: '141 min',
  Title: 'Avengers: Age of Ultron',
  Type: 'movie',
  Writer: 'Joss Whedon, Stan Lee (Marvel comics), Jack Kirby (Marvel comics)',
  Year: '2015',
  imdbID: 'tt2395427',
  imdbRating: '7.5',
  imdbVotes: '447,454' }
```

Chapter 3: Data Exploration Using RethinkDB

New Schema

Field Name	Type	Options
<input type="text" value="id"/>	<input type="text" value="Row Number"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="first_name"/>	<input type="text" value="First Name"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="last_name"/>	<input type="text" value="Last Name"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="email"/>	<input type="text" value="Email Address"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="gender"/>	<input type="text" value="Gender"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="ip_address"/>	<input type="text" value="IP Address v4"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="country"/>	<input type="text" value="Country"/>	<input type="text" value="restrict countries..."/> blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="city"/>	<input type="text" value="City"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="designation"/>	<input type="text" value="Job Title"/>	blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x
<input type="text" value="ctc"/>	<input type="text" value="Money"/>	between <input type="text" value="40000"/> and <input type="text" value="100000"/> in <input type="text" value="\$"/> <input type="text" value=""/> blank: <input type="text" value="0"/> % <input type="text" value="fx"/> x

Rows: Format: array include null values

Hint: Use "." in column names to generate nested json objects, brackets to generate arrays. [More Information...](#)

|

Append data:

Branch: master

sample-mockup-data / employeeRecordMockup.json

Find file

Copy path

Shahid Shaikh first commit

fdac7da 10 minutes ago

0 contributors

1000 lines (1000 sloc) 220 KB

Raw

Blame

History



```
1 [{"id":1,"first_name":"Karen","last_name":"Reyes","email":"kreyes@thetimes.co.uk","gender":"Female","ip_address":"40.20.161.13
2 {"id":2,"first_name":"Alice","last_name":"Hunt","email":"ahunt1@moonfruit.com","gender":"Female","ip_address":"118.58.206.98","
3 {"id":3,"first_name":"Adam","last_name":"Campbell","email":"acampbell2@craigslist.org","gender":"Male","ip_address":"213.148.6.
4 {"id":4,"first_name":"Aaron","last_name":"Parker","email":"aparker3@constantcontact.com","gender":"Male","ip_address":"174.82.5
5 {"id":5,"first_name":"Arthur","last_name":"Fox","email":"afox4@so-net.ne.jp","gender":"Male","ip_address":"184.77.229.166","cou
6 {"id":6,"first_name":"Kevin","last_name":"Mason","email":"kmason5@com.com","gender":"Male","ip_address":"149.33.146.255","count
7 {"id":7,"first_name":"Brian","last_name":"Willis","email":"bwillis6@imageshack.us","gender":"Male","ip_address":"107.216.118.13
8 {"id":8,"first_name":"Victor","last_name":"Hudson","email":"vhudson7@si.edu","gender":"Male","ip_address":"183.248.35.82","coun
9 {"id":9,"first_name":"Linda","last_name":"Gomez","email":"lgomez8@salon.com","gender":"Female","ip_address":"20.104.252.227","c
10 {"id":10,"first_name":"Michael","last_name":"Patterson","email":"mpatterson9@guardian.co.uk","gender":"Male","ip_address":"228.
11 {"id":11,"first_name":"George","last_name":"Gordon","email":"ggordona@networksolutions.com","gender":"Male","ip_address":"44.13
12 {"id":12,"first_name":"Ashley","last_name":"Ford","email":"afordb@wordpress.com","gender":"Female","ip_address":"240.201.61.93"
13 {"id":13,"first_name":"Irene","last_name":"Gray","email":"igrayc@artisteer.com","gender":"Female","ip_address":"205.11.82.244",
14 {"id":14,"first_name":"Shawn","last_name":"George","email":"sgeorged@blogspot.com","gender":"Male","ip_address":"229.167.77.183
15 {"id":15,"first_name":"Diana","last_name":"Freeman","email":"dfreemane@disqus.com","gender":"Female","ip_address":"120.174.73.2
16 {"id":16,"first_name":"James","last_name":"Lane","email":"jlanef@newyorker.com","gender":"Male","ip_address":"70.211.182.107",
17 {"id":17,"first_name":"Jose","last_name":"Ramirez","email":"jramirezg@networkadvertising.org","gender":"Male","ip_address":"246
18 {"id":18,"first_name":"Johnny","last_name":"Gonzales","email":"jgonzalesh@craigslist.org","gender":"Male","ip_address":"208.116
19 {"id":19,"first_name":"Kathryn","last_name":"Montgomery","email":"kmontgomeryi@twitter.com","gender":"Female","ip_address":"13.
20 {"id":20,"first_name":"Paula","last_name":"Reyes","email":"preyesj@lalala.or.jp","gender":"Female","ip_address":"1.90.125.195",
21 {"id":21,"first_name":"Stephanie","last_name":"Porter","email":"sporterk@yandex.ru","gender":"Female","ip_address":"168.69.159.
22 {"id":22,"first_name":"Alan","last_name":"White","email":"awhite1@ifeng.com","gender":"Male","ip_address":"186.18.239.172","cou
```

Add database



Name

Cancel

Add



Connected to
Shahids_MacBoo...



Issues
No issues



Servers
1 connected



Tables
7/7 ready

Data Explorer

History



```
1 r.db("company").table("employees").insert(r.http('https://raw.githubusercontent.com/codeforgeek/sample-mockup-data/master/employeeRecordMockup.json',{timeout : 220,resultFormat : 'json'}))
```

Clear

Run

1 row returned in 2.32s.

Tree view

Table view

Raw view

Query profile

```
{
  "deleted": 0 ,
  "errors": 0 ,
  "inserted": 1000 ,
  "replaced": 0 ,
  "skipped": 0 ,
  "unchanged": 0
}
```

```
Mastering RethinkDB — -bash — 96x28
Shahids-MacBook-Air: Mastering RethinkDB UnixRoot$ rethinkdb import -f employeeRecordMockup.json --table company.employees_importviafile --force
[=====] 100%
1000 rows imported in 1 table
Done (0 seconds)
Shahids-MacBook-Air: Mastering RethinkDB UnixRoot$
```

RethinkDB Dashboard Tables Servers Data Explorer Logs Search

Connected to **Shahids_MacBoo...** **No issues** **1 connected** **8/8 ready**

Data Explorer

History Settings Full Screen

```
1 r.db("company").table("employees_importviafile").count()
```

Clear Run

1 row returned in 4ms.

Tree view Table view Raw view Query profile

1000

Data Explorer

```
1 r.db("company").table("employees")
```

80 rows returned. Displaying rows 41-80, more available

```
{
  "city": "Yur'yevets" ,
  "country": "Russia" ,
  "ctc": 70882 ,
  "designation": "Community Outreach Specialist" ,
  "email": "tdean19@forbes.com" ,
  "first_name": "Todd" ,
  "gender": "Male" ,
  "id": 46 ,
  "ip_address": "212.216.2.238" ,
  "last_name": "Dean"
}
```

RethinkDB Dashboard Tables Servers Data Explorer Logs

Connected to **Shahids_MacBoo...** Issues **No issues** Servers **1 connected** Tables **8/8 ready**

Data Explorer

History

```
1 r.db("company").table('employees').without('id').distinct().count()
```

Clear Run

1 row returned in 54ms. Tree view Table view Raw view Query profile

1000

Data Explorer

History



```
1 r.db("company").table('employees')("country").distinct()
```

Clear

Run

124 rows returned in 21ms.

Tree view

Table view

Raw view

Query profile

```
[  
  "Afghanistan" ,  
  "Albania" ,  
  "Anguilla" ,  
  "Argentina" ,  
  "Armenia" ,  
  "Bahrain" ,  
  "Bangladesh" ,  
  "Belarus" ,  
  "Benin" ,  
  "Bolivia" ,  
  "Bosnia and Herzegovina" ,  
  "Brazil" ,  
  "Bulgaria" ,  
  "Burkina Faso" ,  
  "Burundi" ,  
  "Cameroon" ,  
  "Canada" ,  
  "Chad" ,  
  "Chile" ,  
  "China" ,  
  "Colombia" ,  
  "Costa Rica" ,
```

Data Explorer



```
1 r.db("company").table("employees").orderBy(r.desc("ctc")).limit(10)
```

Clear

Run

10 rows returned in 79ms.

Tree view

Table view

Raw view

Query profile

```
[
  {
    "city": "Klampis" ,
    "country": "Indonesia" ,
    "ctc": 99985 ,
    "designation": "Teacher" ,
    "email": mcastilloe7@amazon.de ,
    "first_name": "Mary" ,
    "gender": "Female" ,
    "id": 512 ,
    "ip_address": "105.172.203.217" ,
    "last_name": "Castillo"
  } ,
  {
    "city": "Yangzhou" ,
    "country": "China" ,
    "ctc": 99923 ,
    "designation": "Dental Hygienist" ,
    "email": sromero2p@va.gov ,
    "first_name": "Scott" ,
    "gender": "Male" ,
    "id": 98 ,
    "ip_address": "244.127.54.58" ,
    "last_name": "Romero"
  }
]
```

Data Explorer

History  

```
1 r.db("company").table('employees').filter(r.row('ctc').lt(50000).and(r.row('country').eq("Russia")))
```

Clear

Run

9 rows returned. Displaying rows 1-9

Tree view

Table view

Raw view

Query profile

```
{
  "city": "Galyugayevskaya" ,
  "country": "Russia" ,
  "ctc": 42062 ,
  "designation": "Associate Professor" ,
  "email": "bcastillo8u@ted.com" ,
  "first_name": "Betty" ,
  "gender": "Female" ,
  "id": 319 ,
  "ip_address": "22.190.79.49" ,
  "last_name": "Castillo"
}
{
  "city": "Gimry" ,
  "country": "Russia" ,
  "ctc": 45328 ,
  "designation": "Design Engineer" ,
  "email": "jalAlexanderj8@sphinn.com" ,
  "first_name": "Jimmy" ,
  "gender": "Male" ,
  "id": 693 ,
  "ip_address": "143.249.144.207" ,
}
```

Data Explorer

History  

```
1 r.db("company").table('employees')
```

Clear Run

40 rows returned. Displaying rows 1-40, more available

Tree view [Table view](#) [Raw view](#) [Query profile](#)

```
{
  "city": "Selorejo" ,
  "country": "Indonesia" ,
  "ctc": 49304 ,
  "designation": "Dental Hygienist" ,
  "email": "preyesj@plala.or.jp" ,
  "first_name": "Paula" ,
  "gender": "Female" ,
  "id": 20 ,
  "ip_address": "1.90.125.195" ,
  "ip_decimal": 22707651 ,
  "last_name": "Reyes"
}
{
  "city": "Reina Mercedes" ,
  "country": "Philippines" ,
  "ctc": 42504 ,
  "designation": "Assistant Professor" ,
  "email": "aparker3@constantcontact.com" ,
  "first_name": "Aaron" ,
  "gender": "Male" ,
  "id": 4 ,
```


Data Explorer

History



```
1 r.db("company").table('employees').between(3221225729,3758096126,{index : 'ip_decimal'})
```

Clear

Run

40 rows returned. Displaying rows 1-40, more available

Tree view

Table view

Raw view

Query profile

```
{
  "city": "Daykitin" ,
  "country": "Philippines" ,
  "ctc": 58452 ,
  "designation": "Actuary" ,
  "email": "carnoldoh@netvibes.com, »
  "first_name": "Chris" ,
  "gender": "Male" ,
  "id": 882 ,
  "ip_address": "192.18.166.32" ,
  "ip_decimal": 3222447648 ,
  "last_name": "Arnold"
}
{
  "city": "Yongping" ,
  "country": "China" ,
  "ctc": 85740 ,
  "designation": "Assistant Media Planner" ,
  "email": "jcunninghamw@de.vu, »
  "first_name": "Jennifer" ,
  "gender": "Female" ,
  "id": 33 ,
```

```
{
  "city": "Medveditskiy" ,
  "country": "Russia" ,
  "ctc": 63240 ,
  "designation": "Structural Engineer" ,
  "email": "rmurrayv@washington.edu, »
  "first_name": "Randy" ,
  "gender": "Male" ,
  "id": 33 ,
  "ip_address": "223.241.192.206" ,
  "ip_decimal": 3757162762 ,
  "last_name": "Murray"
}
```

2 rows returned. Displaying rows 1-2

Tree view

Table view

Raw view

Query profile

```
{
  "city": "Bollstabruk" ,
  "country": "Sweden" ,
  "ctc": 96262 ,
  "designation": "Junior Executive" ,
  "email": "jwellsqe@ow.ly" ,
  "first_name": "John" ,
  "gender": "Male" ,
  "id": 951 ,
  "ip_address": "40.99.91.205" ,
  "ip_decimal": 677600205 ,
  "last_name": "Wells"
}

{
  "city": "Lysekil" ,
  "country": "Sweden" ,
  "ctc": 67505 ,
  "designation": "Physical Therapy Assistant" ,
  "email": "jolson2r@uiuc.edu" ,
  "first_name": "John" ,
  "gender": "Male" ,
  "id": 100 ,
  "ip_address": "245.195.234.14" ,
  "ip_decimal": 4123257358 ,
  "last_name": "Olson"
}
```

Data Explorer

History



```
1 r.db("company").table('employees').filter(r.row('email').match("constantcontact.com$"))
```

Clear

Run

4 rows returned. Displaying rows 1-4

Tree view

Table view

Raw view

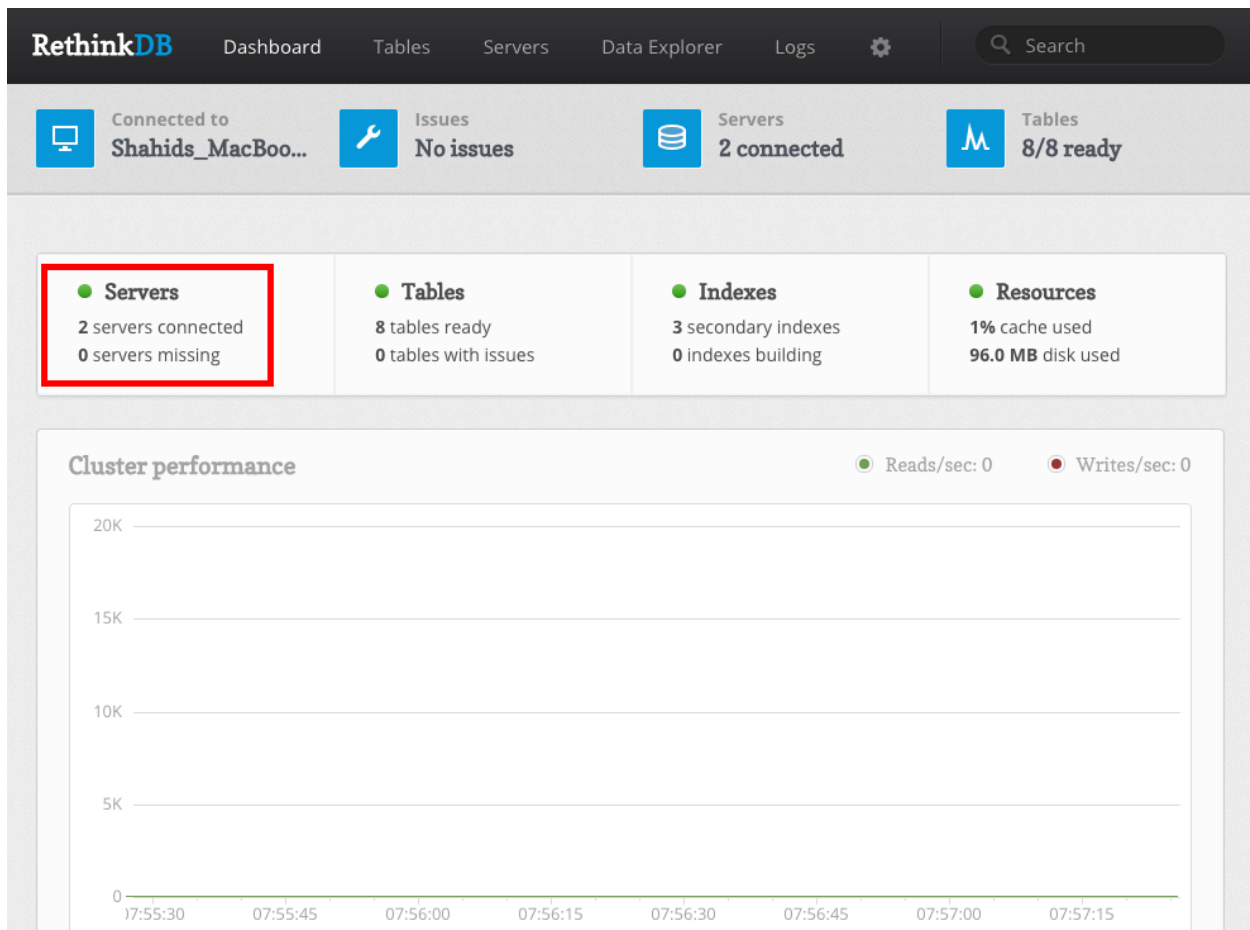
Query profile

entry	ctc	designation	email	first_name	gender	id	ip_address
.lippines	42504	Assistant Professor	aparker3@constantcontact.com	Aaron	Male	4	174.82.58.98
lonesia	67455	Senior Developer	iporterlj@constantcontact.com	Irene	Female	56	254.148.136.17
lonesia	81229	Financial Advisor	dadams8s@constantcontact.com	Doris	Female	317	27.111.85.198
iguay	72743	Junior Executive	smeyerdt@constantcontact.com	Sara	Female	498	194.214.106.10

Chapter 4: Performance Tuning in RethinkDB

```
Shahids-MacBook-Air:~ UnixRoot$ rethinkdb
Running rethinkdb 2.3.1 (CLANG 7.3.0 (clang-703.0.29))...
Running on Darwin 15.4.0 x86_64
Loading data from directory /Users/UnixRoot/rethinkdb_data
Migrating cluster metadata to v2.3
warn: Cache size does not leave much memory for server and query overhead (available memory: 497 MB).
warn: Cache size is very low and may impact performance.
Listening for intracluster connections on port 29015
Listening for client driver connections on port 28015
Listening for administrative HTTP connections on port 8080
Listening on cluster addresses: 127.0.0.1, ::1
Listening on driver addresses: 127.0.0.1, ::1
Listening on http addresses: 127.0.0.1, ::1
To fully expose RethinkDB on the network, bind to all addresses by running rethinkdb with the `--bind all` command line option.
Server ready, "Shahids_MacBook_Air_local_h7u" 37dc230b-16ac-48f1-84f4-535261fa86d7
A newer version of the RethinkDB server is available: 2.3.4. You can read the changelog at <https://github.com/rethinkdb/rethinkdb/releases>.
Connected to server "Shahids_MacBook_Air_local_z5o" eaa803e1-7c6d-4d59-82ae-89c19427fbb3
Connected to server "Shahids_MacBook_Air_local_gqv" e11904bb-7136-4a2d-b106-91f12d55dcc6
```

```
Shahids-MacBook-Air:~ UnixRoot$ rethinkdb --port-offset 1 --directory rethinkdb_data2 --join localhost:29015
Recursively removing directory /Users/UnixRoot/rethinkdb_data2/tmp
Initializing directory /Users/UnixRoot/rethinkdb_data2
Running rethinkdb 2.3.1 (CLANG 7.3.0 (clang-703.0.29))...
Running on Darwin 15.4.0 x86_64
Loading data from directory /Users/UnixRoot/rethinkdb_data2
warn: Cache size does not leave much memory for server and query overhead (available memory: 490 MB).
warn: Cache size is very low and may impact performance.
Listening for intracluster connections on port 29016
Connected to server "Shahids_MacBook_Air_local_h7u" 37dc230b-16ac-48f1-84f4-535261fa86d7
Listening for client driver connections on port 28016
Listening for administrative HTTP connections on port 8081
Listening on cluster addresses: 127.0.0.1, ::1
Listening on driver addresses: 127.0.0.1, ::1
Listening on http addresses: 127.0.0.1, ::1
To fully expose RethinkDB on the network, bind to all addresses by running rethinkdb with the `--bind all` command line option.
Server ready, "Shahids_MacBook_Air_local_z5o" eaa803e1-7c6d-4d59-82ae-89c19427fbb3
A newer version of the RethinkDB server is available: 2.3.4. You can read the changelog at <https://github.com/rethinkdb/rethinkdb/releases>.
Connected to server "Shahids_MacBook_Air_local_gqv" e11904bb-7136-4a2d-b106-91f12d55dcc6
Disconnected from server "Shahids_MacBook_Air_local_gqv" e11904bb-7136-4a2d-b106-91f12d55dcc6
```



```

Shahids-MacBook-Air:Desktop UnixRoot$ rethinkdb --bind all
Running rethinkdb 2.3.1 (CLANG 7.3.0 (clang-703.0.29))...
Running on Darwin 15.4.0 x86_64
Loading data from directory /Users/UnixRoot/Desktop/rethinkdb_data
warn: Cache size does not leave much memory for server and query overhea
ad (available memory: 408 MB).
warn: Cache size is very low and may impact performance.
Listening for intracluster connections on port 29015
Listening for client driver connections on port 28015
Listening for administrative HTTP connections on port 8080
Listening on cluster addresses: 127.0.0.1, 192.168.1.4, ::1, fe80::1%1,
 fe80::ac8a:daff:fe2e:11a%7, fe80::ca69:cdff:feb7:7054%4
Listening on driver addresses: 127.0.0.1, 192.168.1.4, ::1, fe80::1%1,
 fe80::ac8a:daff:fe2e:11a%7, fe80::ca69:cdff:feb7:7054%4
Listening on http addresses: 127.0.0.1, 192.168.1.4, ::1, fe80::1%1, fe
80::ac8a:daff:fe2e:11a%7, fe80::ca69:cdff:feb7:7054%4
Server ready, "Shahids_MacBook_Air_local_pnj" e2fef3ab-eb5c-4f8e-afda-a
73fb0cee8eb
A newer version of the RethinkDB server is available: 2.3.4. You can re
ad the changelog at <https://github.com/rethinkdb/rethinkdb/releases>.
█

```



Connected to
rethink_main



Issues
No issues



Servers
1 connected



Tables
8/8 ready

● **Servers**

1 server connected
0 servers missing

● **Tables**

8 tables ready
0 tables with issues

● **Indexes**

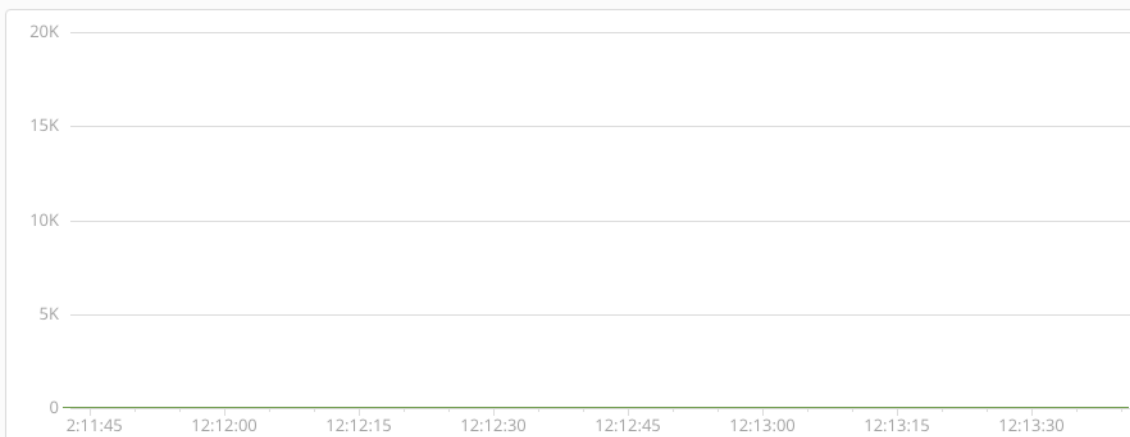
3 secondary indexes
0 indexes building

● **Resources**

1% cache used
96.0 MB disk used

Cluster performance

● Reads/sec: 0 ● Writes/sec: 0



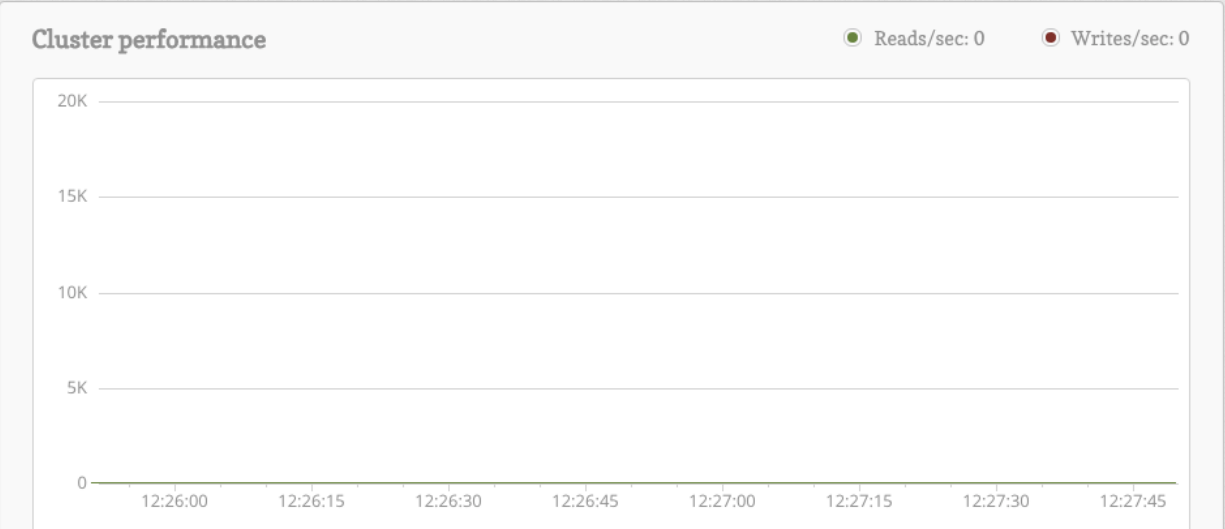
Connected to
rethink_main

Issues
No issues

Servers
2 connected

Tables
8/8 ready

<p>● Servers 2 servers connected 0 servers missing</p>	<p>● Tables 8 tables ready 0 tables with issues</p>	<p>● Indexes 3 secondary indexes 0 indexes building</p>	<p>● Resources 1% cache used 96.0 MB disk used</p>
-----------------------------------------------------------------------	--------------------------------------------------------------------	------------------------------------------------------------------------	-------------------------------------------------------------------



Data Explorer

History



```
1 r.db("test").tableCreate('clusterTest')
```

Clear

Run

1 row returned in 922ms.

Tree view

Table view

Raw view

Query profile

```
{
  "config_changes": [
    {
      "new_val": {
        "db": "test",
        "durability": "hard",
        "id": "678446aa-4223-4c73-9d3c-2c07920cfc73",
        "indexes": [ ],
        "name": "clusterTest",
        "primary key": "id",
        "shards": [
          {
            "nonvoting_replicas": [ ],
            "primary_replica": "Shahids_MacBook_Air_local_y7b",
            "replicas": [
              "Shahids_MacBook_Air_local_y7b"
            ]
          }
        ],
        "write_acks": "majority"
      },
      "old_val": null
    }
  ],
  "tables_created": 1
}
```

Data Explorer

History



```
1 r.db("test").table("clusterTest").insert({name : "Shahid", age : 24})
```

Clear

Run

1 row returned in 44ms.

Tree view

Table view

Raw view

Query profile

```
{
  "deleted": 0 ,
  "errors": 0 ,
  "generated_keys": [
    "619f3dbe-2385-40f5-92fb-9a3266594170"
  ] ,
  "inserted": 1 ,
  "replaced": 0 ,
  "skipped": 0 ,
  "unchanged": 0
}
```

Sharding and replication for company.employees



i Applying changes may cause the table to become temporarily unavailable.

shards
max: 3

replicas per shard
max: 3

► [Where's my data going?](#)

Cancel

Apply configuration

Servers used by this table

Shard 1 ~900 documents

Shahids_MacBook_Air_local_pnj	Primary replica	ready
Shahids_MacBook_Air_local_872	Secondary replica	ready
Shahids_MacBook_Air_local_y7b	Secondary replica	ready

You have been disconnected from the server

The connection to the server has been lost. The server may be under heavy load.

Trying to reconnect

The screenshot shows the RethinkDB web interface. At the top, a dark navigation bar contains the RethinkDB logo and menu items: Dashboard, Tables, Servers, Data Explorer, Logs, and a search bar. Below this, a status bar displays connection information: 'Connected to Shahids_MacBoo...' with a computer icon, 'Issues 8 issues' with a wrench icon, 'Servers 2 connected' with a database icon (highlighted by a red box), and 'Tables 1/9 ready' with a line graph icon. A red banner below the status bar states '8 issues need to be resolved' with a 'Show issues' button. The main content area features a 'Data Explorer' window. It has a query input field containing the command `1 r.db("company").table("employees")`, 'Clear' and 'Run' buttons, and a 'History' button. Below the query, it indicates '40 rows returned. Displaying rows 1-40, more available' and offers view options: 'Tree view', 'Table view', 'Raw view', and 'Query profile'. The 'Raw view' is selected, displaying a JSON object for a single employee record.

```
{
  "city": "Selorejo" ,
  "country": "Indonesia" ,
  "ctc": 49304 ,
  "designation": "Dental Hygienist" ,
  "email": preyesj@plala.or.jp ,
  "first_name": "Paula" ,
  "gender": "Female" ,
  "id": 20 ,
  "ip_address": "1.90.125.195" ,
  "ip_decimal": 22707651 ,
```

Sharding and replication for company.employees



i Applying changes may cause the table to become temporarily unavailable.

shards
max: 3

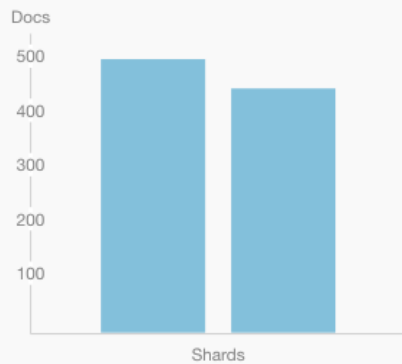
replicas per shard
max: 3

► [Where's my data going?](#)

Cancel

Apply configuration

Data distribution



Sharding and replication

2 shards 3 replicas per shard

Reconfigure

Secondary indexes

ip_decimal — delete
Ready to use

[Create a new secondary index →](#)

Servers used by this table

Shard	Documents	Server	Role	Status
Shard 1	~500 documents	Shahids_MacBook_Air_local_872	Primary replica	ready
		Shahids_MacBook_Air_local_pnj	Secondary replica	ready
		Shahids_MacBook_Air_local_y7b	Secondary replica	ready
Shard 2	~400 documents	Shahids_MacBook_Air_local_y7b	Primary replica	ready
		Shahids_MacBook_Air_local_872	Secondary replica	ready
		Shahids_MacBook_Air_local_pnj	Secondary replica	ready

Data Explorer

History



```
1 r.db("company").table("employees").count()
```

Clear

Run

Error

Server error:

```
e: Cannot perform read: primary replica for shard [{"Nc07f\x3AT\xC2y", +inf) not available in:  
r.db("company").table("employees").count()  
*****
```

The query that returned an error is:

```
r.db("company").table("employees").count()
```

RethinkDB

Dashboard

Tables

Servers

Data Explorer

Logs



Search



Connected to
Shahids_MacBoo...



Issues
3 issues



Servers
2 connected



Tables
6/9 ready

3 issues need to be resolved

Show issues

Data Explorer

History



```
1 r.db("company").table("employees").count()
```

Clear

Run

1 row returned in 4ms.

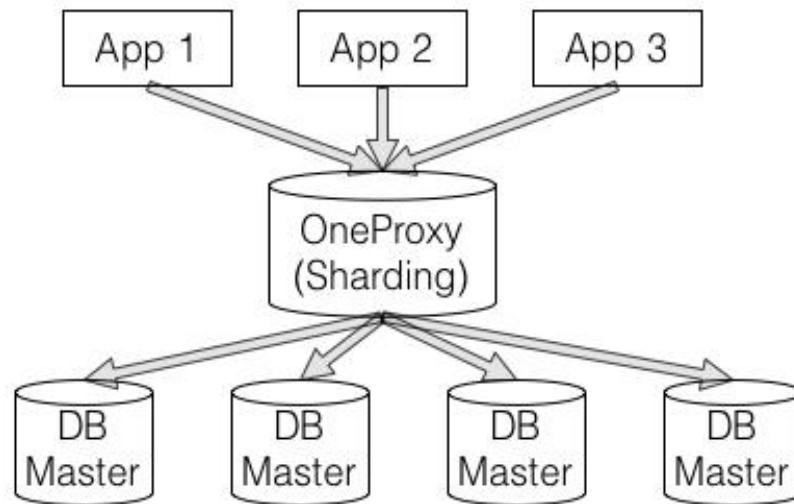
Tree view

Table view

Raw view

Query profile

1000



```
Shahids-MacBook-Air:Desktop UnixRoot$ rethinkdb proxy --join localhost:29015  
Listening for intracluster connections on port 29015  
warn: Attempted to join self, peer ignored  
Listening for client driver connections on port 28015  
Listening for administrative HTTP connections on port 8080  
Listening on cluster addresses: 127.0.0.1, ::1  
Listening on driver addresses: 127.0.0.1, ::1  
Listening on http addresses: 127.0.0.1, ::1  
To fully expose RethinkDB on the network, bind to all addresses by running rethinkdb  
with the '--bind all' command line option.  
Proxy ready, proxy-42db4bac-f1fb-428a-90ea-f44926b5db1d
```



Connected to
<proxy node>



Issues
No issues



Servers
0 connected



Tables
0/0 ready

Servers

0 servers connected
0 servers missing

Tables

0 tables ready
0 tables with issues

Indexes

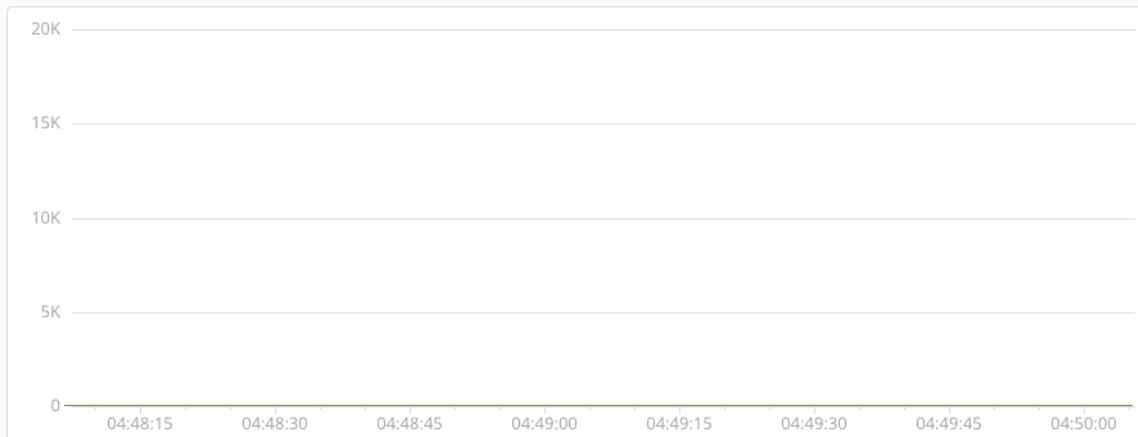
0 secondary indexes
0 indexes building

Resources

NaN% cache used
0 Bytes disk used

Cluster performance

● Reads/sec: 0 ● Writes/sec: 0





Connected to
<proxy node>



Issues
No issues



Servers
4 connected



Tables
10/10 ready

● **Servers**

4 servers connected
0 servers missing

● **Tables**

10 tables ready
0 tables with issues

● **Indexes**

3 secondary indexes
0 indexes building

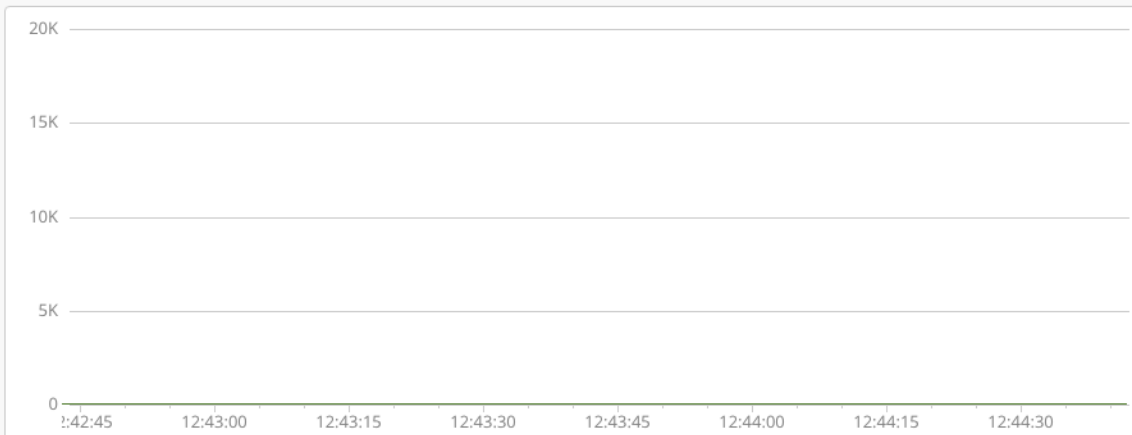
● **Resources**

1% cache used
160.0 MB disk used

Cluster performance

● Reads/sec: 0

● Writes/sec: 0



Data Explorer

History Settings Full Screen

```
1 r.db("users").table("login")
```

Clear Run

2 rows returned. Displaying rows 1-2

Tree view Table view Raw view Query profile

```
{
  "email": "shahid@codeforgeek.com, »
  "id": "136707e9-78d3-488e-912d-fe9247d0d180" ,
  "password": "nothingtohidehere"
}
{
  "email": "shahid@codeforgeek.com, »
  "id": "cde4e290-5ee4-45cf-alc8-c69119e8da07" ,
  "password": "nothingtohidehere"
}
```

2 rows returned. Displaying rows 1-2

Tree view Table view Raw view Query profile

80ms round-trip time 55ms server time 8 shard accesses

```
[
  {
    "description": "Evaluating table." ,
    "duration(ms)": 19.399668 ,
    "sub_tasks": [
      {
        "description": "Evaluating db." ,
        "duration(ms)": 0.016246 ,
        "sub_tasks": [
          {
            "description": "Evaluating datum." ,
            "duration(ms)": 0.001115 ,
            "sub_tasks": [ ]
          }
        ]
      } ,
      {
        "description": "Evaluating datum." ,
        "duration(ms)": 0.000295 ,
        "sub_tasks": [ ]
      }
    ]
  } ,
  {
    "description": "Evaluating table." ,
    "duration(ms)": 19.399668 ,
    "sub_tasks": [
      {
        "description": "Evaluating db." ,
        "duration(ms)": 0.016246 ,
        "sub_tasks": [
          {
            "description": "Evaluating datum." ,
            "duration(ms)": 0.001115 ,
            "sub_tasks": [ ]
          }
        ]
      } ,
      {
        "description": "Evaluating datum." ,
        "duration(ms)": 0.000295 ,
        "sub_tasks": [ ]
      }
    ]
  }
]
```

Copy to clipboard




Data Explorer

 History  

```
1 r.db("company").table("employees")("first_name")
```

40 rows returned. Displaying rows 1-40, more available

[Tree view](#) [Table view](#) [Raw view](#) [Query profile](#)

 108ms round-trip time  19ms server time  16 shard accesses




Data Explorer

 History  

```
1 r.db('company').table('employees').getAll("John", {index: "first_name"})
```

8 rows returned. Displaying rows 1-8

[Tree view](#) [Table view](#) [Raw view](#) [Query profile](#)

 20ms round-trip time  1ms server time  8 shard accesses

Chapter 5: Administration and Troubleshooting Tasks in RethinkDB

Data Explorer History Settings Fullscreen

```
1 r.db("rethinkdb").table("users").insert({id: 'shahid',password: false})
```

Clear Run

1 row returned in 23ms. Tree view Table view Raw view Query profile

```
{
  "deleted": 0 ,
  "errors": 0 ,
  "inserted": 1 ,
  "replaced": 0 ,
  "skipped": 0 ,
  "unchanged": 0
}
```

Data Explorer History Settings Fullscreen

```
1 r.db("rethinkdb").table("users")
```

Clear Run

2 rows returned. Displaying rows 1-2 Tree view Table view Raw view Query profile

```
{
  "id": "admin" ,
  "password": false
}
{
  "id": "shahid" ,
  "password": false
}
```

Data Explorer

History



```
1 r.grant("shahid",{read:true,write:true,config:true});
```

Clear

Run

1 row returned in 3ms.

Tree view

Table view

Raw view

Query profile

```
{
  "granted": 1,
  "permissions_changes": [
    {
      "new_val": {
        "config": true,
        "read": true,
        "write": true
      },
      "old_val": null
    }
  ]
}
```

3 issues need to be resolved

Hide issues

Table availability

test2.clusterTest is not available

Table `test2.clusterTest` is not available.

None of the replicas for this table are reachable (the servers for these replicas may be down or disconnected). No operations can be performed on this table until at least one replica is reachable.

Table availability

test2.movies is not available

Table `test2.movies` is not available.

The following servers are disconnected:

- Shahids_MacBook_Air_local_872
- Shahids_MacBook_Air_local_y7b

Table availability

company.employees is ready for outdated reads only

Table `company.employees` is available for outdated reads, but not up-to-date reads or writes.

The following servers are disconnected:

- Shahids_MacBook_Air_local_872
- Shahids_MacBook_Air_local_y7b

Data Explorer

History



```
1 r.db("company").table("employees").reconfigure({emergencyRepair: "unsafe_rollback"})
```

Clear

Run

1 row returned in 116ms.

Tree view

Table view

Raw view

Query profile

	config_changes	repaired	status_changes
1	<pre>{ "new_val": { ... }, "old_val": { ... } }</pre>	1	[...]

Table availability

company.employees has some replicas that are not ready

Table `company.employees` is available for all operations, but some replicas are not ready.

The following servers are disconnected:

- Shahids_MacBook_Air_local_872
- Shahids_MacBook_Air_local_y7b

Data Explorer

History



```
1 r.db("company").table("employees").limit(5)
```

Clear

Run

5 rows returned. Displaying rows 1-5

Tree view

Table view

Raw view

Query profile

	city	country	ctc	designation	email	first_
1	Selorejo	Indonesia	49304	Dental Hygienist	preyesj@plala.or.jp	Paula
2	Reina Mercedes	Philippines	42504	Assistant Professor	aparker3@constantcontact.com	Aaron
3	Kebonan	Indonesia	40811	Budget/Accounting Analyst III	afox4@so-net.ne.jp	Arthur
4	Sumberbaru	Indonesia	56115	Data Coordinator	acampbell12@craigslist.org	Adam
5	Phú Khương	Vietnam	66751	Mechanical Systems Engineer	ahunt1@moonfruit.com	Alice

Data Explorer

History



```
1 r.db("company").table("employees").count()
```

Clear

Run

1 row returned in 5ms.

[Tree view](#)

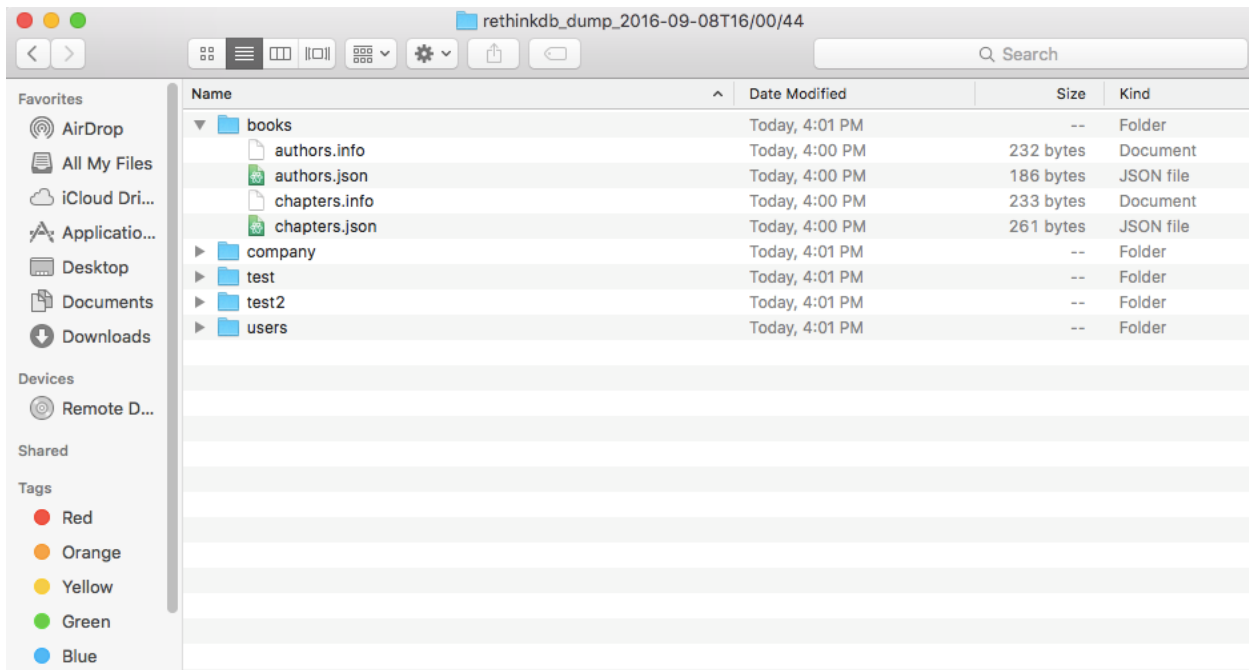
[Table view](#)

[Raw view](#)

[Query profile](#)

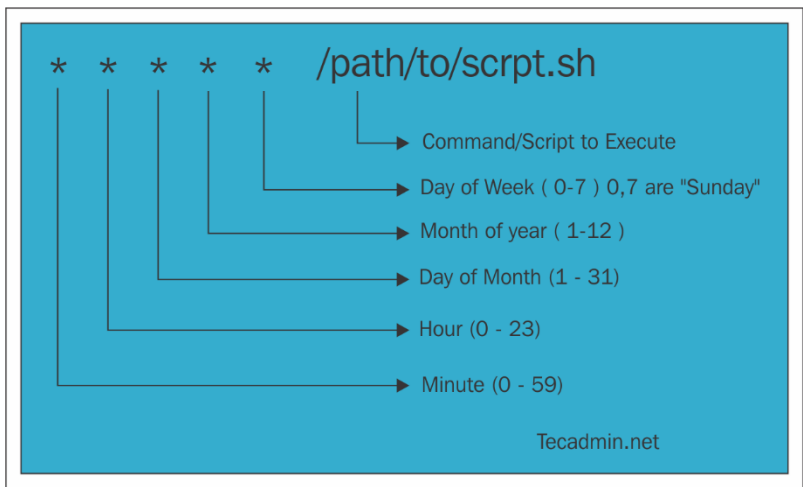
	value
1	1000

```
Shahids-MacBook-Air:Desktop UnixRoot$ rethinkdb dump
NOTE: 'rethinkdb-dump' saves data and secondary indexes, but does *not* save
cluster metadata. You will need to recreate your cluster setup yourself after
you run 'rethinkdb-restore'.
Exporting to directory...
[=====] 100%
2013 rows exported from 8 tables, with 4 secondary indexes
Done (1 seconds)
Zipping export directory...
Done (0 seconds)
Shahids-MacBook-Air:Desktop UnixRoot$
```



```
Shahids-MacBook-Air:Desktop UnixRoot$ rethinkdb dump -c localhost:28016 -f /Users/UnixRoot/Desktop/backup.zip
NOTE: 'rethinkdb-dump' saves data and secondary indexes, but does *not* save cluster metadata. You will need to recreate your cluster setup yourself after you run 'rethinkdb-restore'.
Exporting to directory...
[=====] 100%
2013 rows exported from 8 tables, with 4 secondary indexes
Done (1 seconds)
Zipping export directory...
Done (0 seconds)
Shahids-MacBook-Air:Desktop UnixRoot$
```

```
Desktop -- -bash -- 90x34
Shahids-MacBook-Air: Desktop UnixRoot$ sudo crontab -e
crontab: installing new crontab
Shahids-MacBook-Air: Desktop UnixRoot$ █
```



```
Shahids-MacBook-Air:Desktop UnixRoot$ mongo
MongoDB shell version: 3.2.8
connecting to: test
> show collections;
user
user2
> db.user.find({})
{ "_id" : ObjectId("57a1f0d7bd6a37b71c7a7afb"), "name" : "shahid" }
{ "_id" : ObjectId("57a1f16fac1bc6dfaa8d43cd"), "id" : 10, "name" : "bikram" }
{ "_id" : ObjectId("57a47064fe41dba7220649e8"), "id" : 20, "name" : "shahid" }
{ "_id" : ObjectId("57a4707dfe41dba7220649e9"), "id" : 20, "name" : "shahid", "abc" : "0005344444" }
{ "_id" : ObjectId("57a472b1fe41dba7220649ea"), "id" : 40, "name" : "shahid shaihh" }
{ "_id" : ObjectId("57a472f2fe41dba7220649eb"), "id" : 50, "name" : "shahid", "abc" : "00053 44444" }
{ "_id" : ObjectId("57a47a40c4bfadb16eea9d65"), "id" : 60, "name" : "shahid", "abc" : "1427748" }
>
```

```
Shahids-MacBook-Air:Desktop UnixRoot$ mongoexport --db test --collection user --out user.json
2016-08-23T13:43:59.476+0530 connected to: localhost
2016-08-23T13:43:59.480+0530 exported 7 records
Shahids-MacBook-Air:Desktop UnixRoot$
```

```
Desktop -- bash -- 84x28
[Shahids-MacBook-Air: Desktop UnixRoot$ rethinkdb import -f user.json --table test.users --pkey id
[=====] 100%
0 rows imported in 1 table
Done (1 seconds)
Shahids-MacBook-Air: Desktop UnixRoot$ █
```

Data Explorer

History Settings Full Screen

```
1 r.db("test").table("users")
```

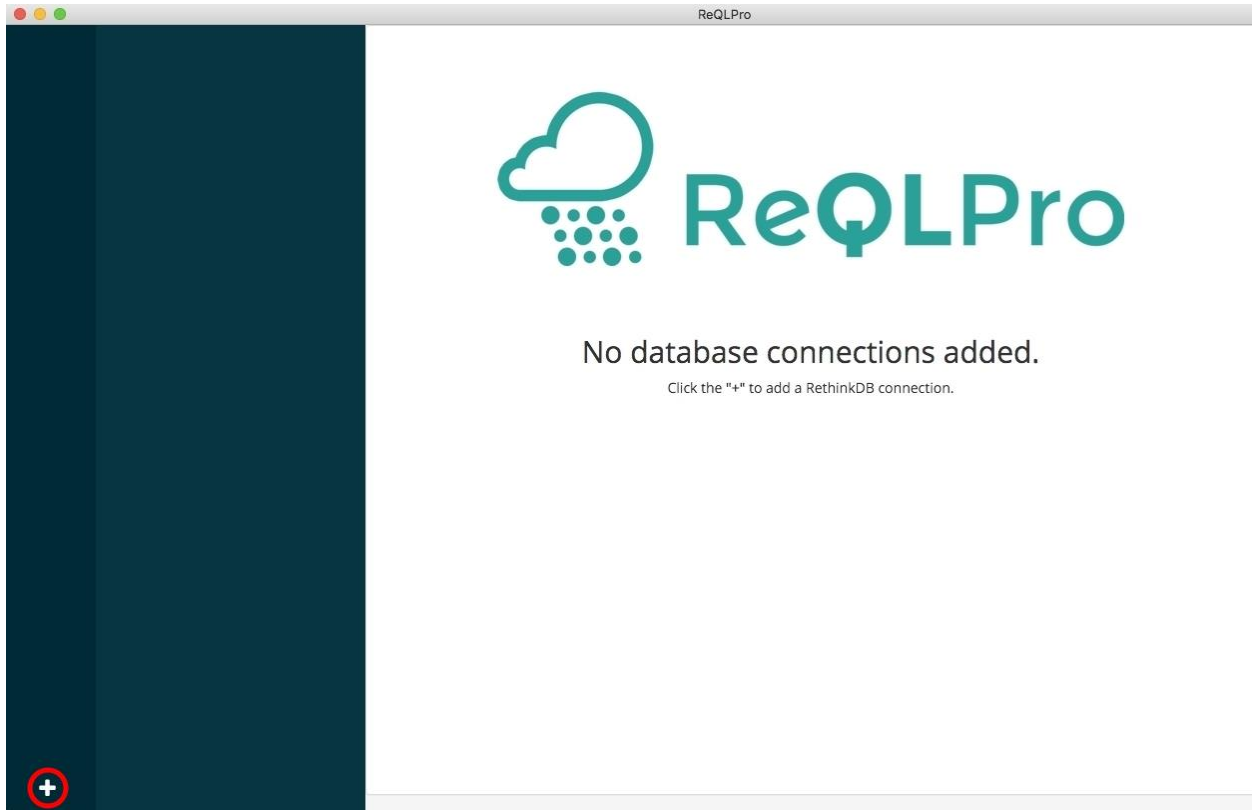
Clear Run

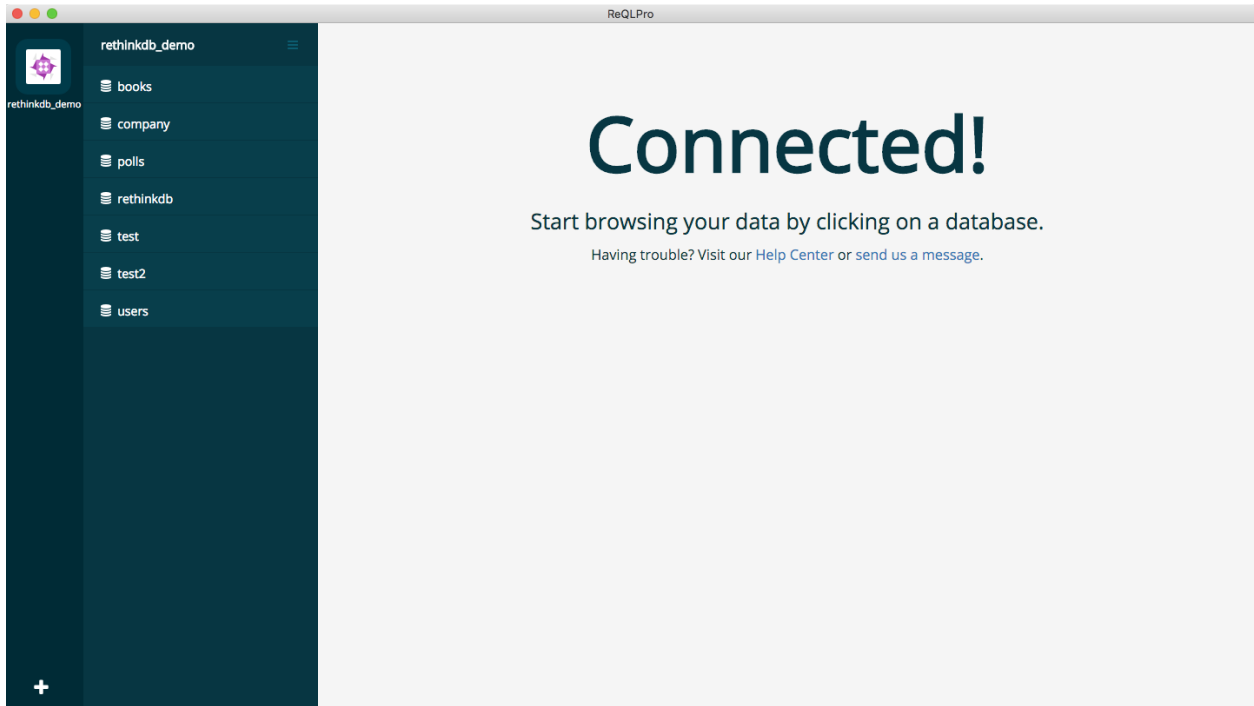
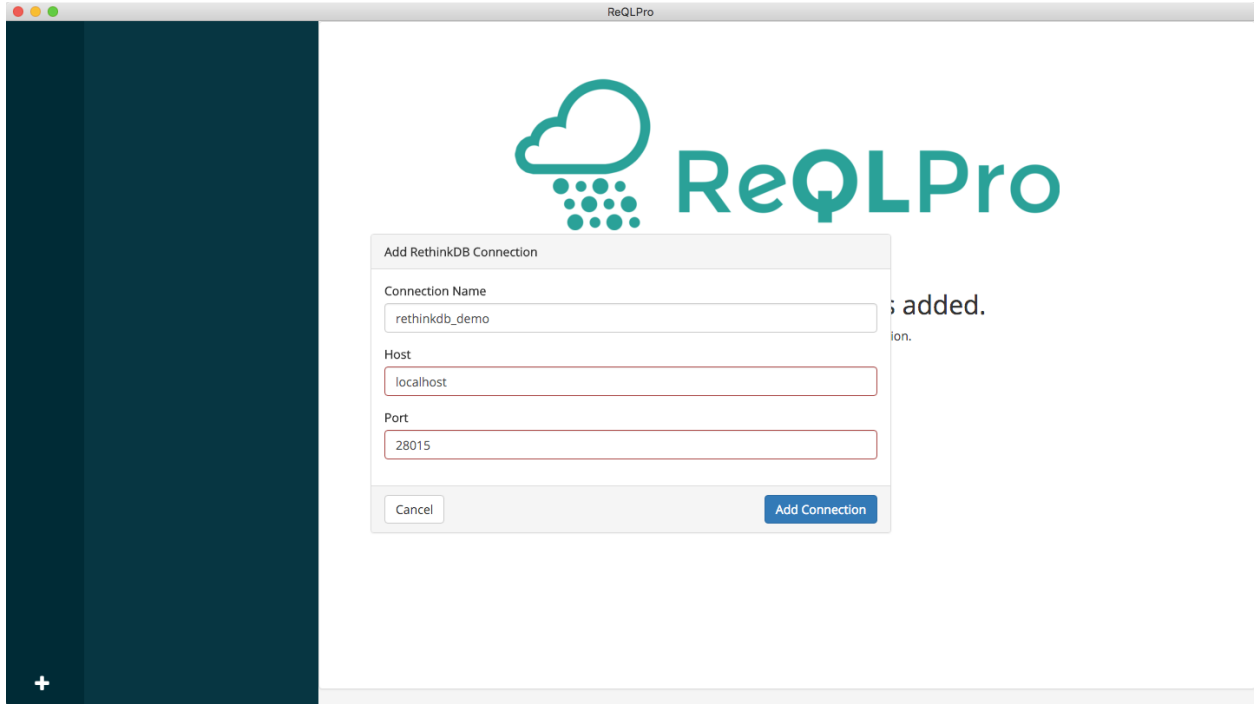
6 rows returned. Displaying rows 1-6

Tree view Table view Raw view Query profile

	_id.\$oid	id	name	abc
1	57a47064fe41dba7220649e8	20	shahid	undefined
2	57a47a40c4bfadb16eea9d65	60	shahid	1427748
3	57a1f16fac1bc6dfaa8d43cd	10	bikram	undefined
4	57a472b1fe41dba7220649ea	40	shahid shaikh	undefined
5	57a1f0d7bd6a37b71c7a7afb	bf5e5410-8667-4409-939f-e75f50000a2f	shahid	undefined
6	57a472f2fe41dba7220649eb	50	shahid	00053 44444












```
rethinkdb_data -- -bash -- 99x27
Shahids-MacBook-Air:rethinkdb_data UnixRoot$ grep "error" log_file
2016-04-30T16:19:52.411169000 0.674950s error: Could not bind to http port: The address at localhos
t: 8080 is reserved or already in use.
2016-04-30T16:21:09.941663000 0.187998s error: Could not bind to http port: The address at localhos
t: 8080 is reserved or already in use.
Shahids-MacBook-Air:rethinkdb_data UnixRoot$
```





ReQLPro

company > employees [Evaluating slice. - 127.18541ms] Rows per page: 5

Action	id	city	country	ctc	designation	email	first_name
 	1	Sapadun	Philippines	44233	Senior Developer	kreyes0@thetimes.co.uk	Karen
 	2	Phú KhưƠng	Vietnam	66751	Mechanical Systems Engineer	ahunt1@moonfruit.com	Alice
 	3	Sumberbaru	Indonesia	56115	Data Coordinator	acampbell2@craigslist.org	Adam
 	4	Reina Mercedes	Philippines	42584	Assistant Professor	aparker3@constantcontact.co	Aaron
 	5	Kebonan	Indonesia	48811	Budget/Accounting Analyst III	afox4@so-net.ne.jp	Arthur

Displaying records 1 - 5 of 1000 (Page 1 of 200)

Chateau - Data explorer for ReQL


localhost:3000

Chateau

Add a database Add a table

books	Delete
authors	Delete
chapters	Delete
company	Delete
employees	Delete
employees_importviafile	Delete
polls	Delete
rethinkdb	Delete
cluster_config	Delete
current_issues	Delete
db_config	Delete
jobs	Delete
logs	Delete
permissions	Delete
server_config	Delete

Chapter 6: RethinkDB Deployment


Amazon Web Services Home

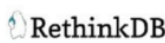
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Shop All Categories ▾

Search AWS Marketplace

GO

Your Software



RethinkDB

Sold by: RethinkDB | [See product video](#)

RethinkDB is the first open-source, scalable JSON database built from the ground up for the realtime web. It inverts the traditional database architecture by exposing an exciting new access model. Instead of polling for changes, the developer can tell RethinkDBs to continuously push updated query results to applications in realtime. RethinkDB realtime push architecture dramatically reduces the time and effort necessary to build scalable realtime apps.

Customer Rating	★★★★★ (2 Customer Reviews)
Latest Version	2.3.5 (Other available versions)
Operating System	Linux/Unix, Ubuntu 14.04
Delivery Method	64-bit Amazon Machine Image (AMI) (Learn more)
Support	See details below
AWS Services Required	Amazon EC2, Amazon EBS
Highlights	<ul style="list-style-type: none"> ▀ flexible query language ▀ intuitive operations and monitoring APIs ▀ easy to setup and learn

Product Description

RethinkDB is the first open-source, scalable JSON database built from the ground up for the realtime web. It inverts the traditional database architecture by exposing an exciting new access model. Instead of polling for changes, the developer can tell RethinkDBs to continuously push updated query results to applications in realtime. RethinkDB realtime push architecture dramatically reduces the time and effort necessary to build scalable realtime apps.

Product Details

Version: 2.3.5
Available on AWS Marketplace Since: 08/11/2015

Continue

You will have an opportunity to review your order before launching or being charged.

Pricing Details

For region: US East (N. Virginia)

Hourly Fees
 Total hourly fees will vary by instance type and EC2 region.

EC2 Instance Type	EC2 Usage	Software	Total
t2.micro	\$0.013/hr	\$0.00/hr	\$0.013/hr
t2.small	\$0.026/hr	\$0.00/hr	\$0.026/hr
t2.medium	\$0.052/hr	\$0.00/hr	\$0.052/hr
m4.large	\$0.12/hr	\$0.00/hr	\$0.12/hr
m4.xlarge	\$0.239/hr	\$0.00/hr	\$0.239/hr
m4.2xlarge	\$0.479/hr	\$0.00/hr	\$0.479/hr
m4.4xlarge	\$0.958/hr	\$0.00/hr	\$0.958/hr
m4.10xlarge	\$2.394/hr	\$0.00/hr	\$2.394/hr
m3.medium	\$0.067/hr	\$0.00/hr	\$0.067/hr
m3.large	\$0.133/hr	\$0.00/hr	\$0.133/hr
m3.xlarge	\$0.266/hr	\$0.00/hr	\$0.266/hr
m3.2xlarge	\$0.532/hr	\$0.00/hr	\$0.532/hr
c4.large	\$0.105/hr	\$0.00/hr	\$0.105/hr
c4.xlarge	\$0.209/hr	\$0.00/hr	\$0.209/hr
c4.2xlarge	\$0.419/hr	\$0.00/hr	\$0.419/hr
c4.4xlarge	\$0.838/hr	\$0.00/hr	\$0.838/hr
c4.8xlarge	\$1.675/hr	\$0.00/hr	\$1.675/hr
r3.large	\$0.105/hr	\$0.00/hr	\$0.105/hr

Launch on EC2:

RethinkDB

1-Click Launch

Review, modify, and launch

Manual Launch

With EC2 Console, APIs or CLI

Click "Accept Software Terms & Launch with 1-Click" to launch this software with the settings below

Once you accept the terms, you will have access to launch any version of this software in any supported region. For future launches, you can return to this page or launch directly from the EC2 console, APIs or CLI.

Version

2.3.5, released 09/06/2016

Region

US East (N. Virginia)

EC2 Instance Type

Updated: Due to a change in other settings, recommended instance type is updated.

- m3.medium
- m3.large
- m3.xlarge
- m3.2xlarge
- c3.large
- c3.xlarge
- c3.2xlarge
- c3.4xlarge
- c3.8xlarge

Memory	3.75 GiB
CPU	3 EC2 Compute Units(1 virtual core)
Storage	1 x 4 GB SSD
Platform	64-bit
Network performance	Moderate
API Name	m3.medium

Note: T2, C4, D2 and M4 instance types are only available in VPCs. To view these instance types, please select a VPC.

VPC Settings

Will launch into EC2 Classic

Price for your selections:

\$0.07 / hour

\$0.07 m3.medium EC2 Instance usage fees + \$0.00 hourly softw are fee

\$0.05 / GB / month

EBS Magnetic Storage

\$0.05 / 1 million I/O requests

EBS Magnetic Storage

Free Tier Eligible

No charges for EC2 Micro instances for up to 750 hours a month if you qualify for the AWS Free Tier. See details.

Accept Software Terms & Launch with 1-

You will be subscribed to this software and agree that your use of this software is subject to the pricing terms and the seller's End User License Agreement (EULA) and your use of AWS services is subject to the AWS Customer Agreement

Cost Estimator

\$48.24 / month

m3.medium EC2 Instance usage fees

Assumes 24 hour use over 30 days

Software Charges

\$0.00 / month

\$0.00 hourly softw are fees for m3.medium

✓ AWS hourly usage fees apply when the instance is running. These fees will appear on your monthly bill.

Thank you! An instance of this software will be deployed on EC2 soon after your subscription completes.

- You will receive an email shortly to confirm your subscription.
- Once you are subscribed, an instance of this software will be deployed on EC2.
- The software will be ready in a few minutes.

Usage Instructions

Read the documentation for RethinkDB on AWS on rethinkdb.com : <http://rethinkdb.com/docs/aws>

Service Catalog

Click [here](#) for instructions to deploy Marketplace products in [AWS Service Catalog](#).

Software Installation Details

Product	RethinkDB
Version	2.3.5, released 09/06/2016
Region	US East (N. Virginia)
EC2 Instance Type	m3.medium
Security Group	RethinkDB-2-3-5-AutogenByAWSMP-
Key Pair	acassandra



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Hello [redacted] (Sign out)

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Your Account >

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[Enable](#) and create billing alerts [for AWS Marketplace charges](#)

Products	Instances	Actions
RethinkDB Contact vendor Write a review Cancel subscription	1 active i-08b43f91 Version 2.3.5 running Manage in AWS Console Starting ...	Usage Instructions Launch more software

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AWS Services Edit

EC2 Dashboard

Launch Instance Connect Actions

search: i-08b43f91 Add filter

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS	Public IP	Key Name
	i-08b43f91	m3.medium	us-east-1a	running	Initializing	None			acassandra

Instance: i-08b43f91 Public DNS: ec2-54-227-70-20.compute-1.amazonaws.com

Description Status Checks Monitoring Tags Usage Instructions

Instance ID	i-08b43f91	Public DNS	ec2-54-227-70-20.compute-1.amazonaws.com
Instance state	running	Public IP	54.227.70.20
Instance type	m3.medium	Elastic IPs	
Private DNS	ip-10-149-132-243.ec2.internal	Availability zone	us-east-1a
Private IPs	10.149.132.243	Security groups	RethinkDB-2-3-5-AutoGenByAWSMP- view rules

RethinkDB

Setting up a RethinkDB AMI

Need more information? Read the [complete documentation](#) for more information on building a RethinkDB AMI.

Setting up a RethinkDB AMI instance is a two step process:

1. Accept the self-signed SSL certificate by your browser.
2. Set a password to secure the instance.

We generated a self-signed certificate to secure this instance. When you press *Continue* the browser will warn you that the certificate could not be verified. Follow the instructions below to add an exception.

Instructions for Chrome

- Click on **Proceed Anyway**

Instructions for Firefox

- Click on **I Understand the Risks**
- Click on **Add Exception...**
- Click on **Confirm Security Exception**

Continue →

- ① Accept the SSL Certificate
- ② Choose a password for the AMI
- ③ Initialize the AMI

Choose an AMI password

Please enter the ID of this EC2 instance to confirm your identity.

Instance ID:

Please choose a password to initialize the AMI. This password will be used to access the web UI and as an authentication key for client drivers.

Choose a password:

Repeat password:

Set up AMI →

Need more information? Read the [complete documentation](#) for more information on building a RethinkDB AMI.

- Create a self-signed certificate
- ② Choose a password for the AMI
- ③ Initialize the AMI

🔄 Initializing instance, please wait...

- Create a self-signed certificate
- Choose a password for the AMI
- Initialize the AMI

Connect To Your Instance



I would like to connect with

- A standalone SSH client
- A Java SSH Client directly from my browser (Java required)

To access your instance:

1. Open an SSH client. (find out how to [connect using PuTTY](#))
2. Locate your private key file (acassandra.pem). The wizard automatically detects the key you used to launch the instance.
3. Your key must not be publicly viewable for SSH to work. Use this command if needed:

```
chmod 400 acassandra.pem
```

4. Connect to your instance using its Public DNS:

```
ec2-54-227-70-20.compute-1.amazonaws.com
```

Example:

```
ssh -i "acassandra.pem" root@ec2-54-227-70-20.compute-1.amazonaws.com
```

Please note that in most cases the username above will be correct, however please ensure that you read your AMI usage instructions to ensure that the AMI owner has not changed the default AMI username.

If you need any assistance connecting to your instance, please see our [connection documentation](#).

Close

Enter Your Information

Full Name

Shahid Shaikh

Company/Account Name

Codeforgeek

Email

shahid@codeforgeek.com

Password

••••••••••

By clicking the button below, you agree to Compose's [terms of service](#).

Choose a Database

MongoDB



Elasticsearch



RethinkDB



- \$22.50/mo for the first 1GB, then \$18/GB
- 3 nodes, high availability
- Nightly backups included
- RAM and IO scale with data size
- Powered by enterprise SSDs

etcd **BETA**



Redis



PostgreSQL



RabbitMQ **BETA**



Preparing your RethinkDB deployment



This may take a couple minutes.

COMPOSE Sign out

codeforgeek-rethink

- Overview
- Backups
- Jobs
- Settings
- Metrics
- Logfiles
- Access **NEW**
- Security
- Add-ons

Getting started with RethinkDB

NEW Manage access to this deployment

Newly created deployments are locked down, only accessible by their creator and the account's owners, by default. If you want other people to have access, you need to [give them permissions explicitly](#).

First steps

Using your [authentication credentials](#), log into the admin user of the [RethinkDB Admin UI](#).
[Add a user](#) to your database using the RethinkDB Admin UI.
Next use your [connection string](#) and connect to your deployment.
For a more thorough user authentication guide, check out [our blog post](#).
For more information, read about [connecting to your RethinkDB deployment](#).

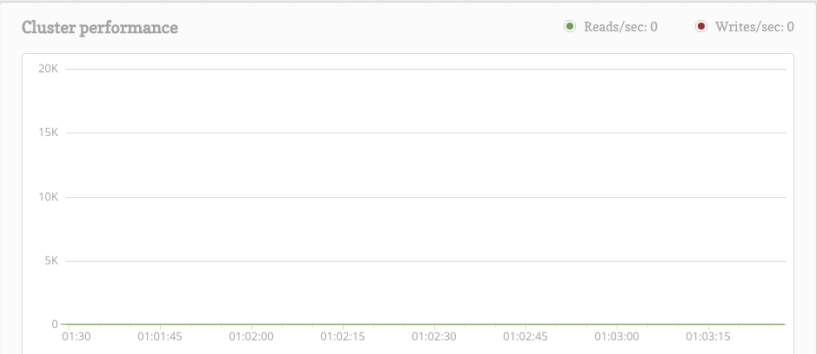
Recommended

- Learn about [RethinkDB authentication](#).
- Browse all of our [RethinkDB articles](#).

[Dismiss](#)

Connected to <proxy node>
No issues
Servers 3 connected
Tables 0/0 ready

<p>Servers</p> <p>3 servers connected 0 servers missing</p>	<p>Tables</p> <p>0 tables ready 0 tables with issues</p>	<p>Indexes</p> <p>0 secondary indexes 0 indexes building</p>	<p>Resources</p> <p>0% cache used 0 Bytes disk used</p>
------------------------------------------------------------------------	---------------------------------------------------------------------	-------------------------------------------------------------------------	--------------------------------------------------------------------



SSL Certificate (Self-Signed)

Show certificate

Deployment Topology

Each deployment runs within its own vlan. Only members with a public hostname/port listed below are accessible from the internet.

Status	Type	Role	Internal IP	Name	Public hostname/port
Healthy	rethink	portal	10.240.40.5	rethink1237	aws-us-east-1-portal13.dblayer.com:15185
Healthy	rethink	member	10.240.40.4	rethink1677	-
Healthy	rethink	member	10.240.40.2	rethink1714	-
Healthy	rethink	member	10.240.40.3	rethink1883	-

COMPOSE Sign out

codeforgeek-rethink

- Overview
- Backups
- Jobs
- Settings
- Metrics
- Logfiles
- Access **NEW**
- Security**
- Add-ons

Security

Portal Management

SSH - proxies the endpoints through ssh encrypted tunnels OFF ON

[Set Active Portals](#)

Whitelist TCP/HTTP IPs

[Add IP](#)

No IPs have been added. [Add an IP](#)

Managing Access

We provide the following access portals to your database:

SSH

A portal that provides an ssh tunnel between your application and the private network where the database is running.

It is easily configured by adding an SSH key and then running a local ssh daemon with port forwarding. Your application can then connect to the forwarded ports, through the tunnel, to the database.


SSH portals are billed at \$4.50/month.

COMPOSE Sign out

codeforgeek-rethink

- Overview
- Backups
- Jobs
- Settings
- Metrics
- Logfiles
- Access **NEW**
- Security
- Add-ons

Grant & Deny Access

Name	Roles
 Shahid Shaikh shahid@codeforgeek.com	Full Control (Account Owner)

[Save Changes](#)

About Access Roles

Roles allow you to control who can access this deployment.

Developer

Developers have access to the data within the deployment, including connection strings, backups, and logfiles.

Manager

Managers can configure the deployment itself, including scaling it, adding and removing portals, and configuring database-specific settings.

Admin

Admins can do everything Developers and Managers can, and in addition, they can configure roles and deprovision the deployment.

Scaling

Current Allocation	1GB Storage
Scale Disk To	1GB Storage
Scale RAM To	102MB RAM
Bill At	\$22.50/mo



Scale Deployment Now

Your deployment will scale up automatically based on hourly samples of disk usage. If you'd like to anticipate your resource needs ahead of our autoscaling algorithm, you can do that [here](#).

Scaling your deployment will affect its allocated Disk, RAM, CPU, and I/O, and may be detrimental to performance if an inappropriate scale is selected.

Please note that billing is pro-rated on an hourly basis, and the new rate will take effect immediately.

If you'd like to provision resources beyond the maximum shown here, please [contact support](#).

A screenshot of a web browser showing the DigitalOcean Droplets management page. The browser's address bar displays 'https://cloud.digitalocean.com/droplets'. The page header includes navigation links for 'Droplets', 'Images', 'Networking', 'API', and 'Support', along with a 'Create Droplet' button and a user profile icon for 'Shaikh'. The main heading is 'Droplets', with a search input field labeled 'Search by Droplet name'. Below the heading are tabs for 'Droplets' and 'Volumes'. A table with columns 'Name', 'IP Address', and 'Created' is visible but empty.

A duplicate screenshot of the DigitalOcean Droplets management page, identical to the one above. It shows the browser interface, navigation menu, search bar, and an empty table with columns for Name, IP Address, and Created.

Create Droplets

Choose an image ?









Distributions **One-click apps**

Cassandra on 14.04	Discourse on 14.04	Django on 14.04
Docker 1.11.2 on 14.04	Dokku 0.6.5 on 14.04	Drone 0.4 on 14.04
Drupal 8.1.3 on 14.04	Elixir on 14.04	ELK Logging Stack on 14.04
Ghost 0.8.0 on 14.04	GitLab 8.9.4 CE on 14.04	Horizon w/ RethinkDB on 14.04
Joomla! 3.6.2 on 14.04	LAMP on 14.04	LEMP on 14.04
Magento 2.0.7 CE on 14.04	MEAN on 14.04	MediaWiki on 14.04
MongoDB 3.2.7 on 14.04	Mumble Server (murmur) on 14.04	Node 4.4.5 on 14.04
ownCloud 9.0.3 on 14.04	PHPMyAdmin on 14.04	Redis 3.2.1 on 14.04
Redmine on 14.04	Ruby on Rails on 14.04 (Postgres...)	WordPress on 14.04

Choose a size

\$5/mo \$0.007/hour	\$10/mo \$0.015/hour	\$20/mo \$0.030/hour	\$40/mo \$0.060/hour	\$80/mo \$0.119/hour	\$160/mo \$0.238/hour
512 MB / 1 CPU 20 GB SSD disk 1000 GB transfer	1 GB / 1 CPU 30 GB SSD disk 2 TB transfer	2 GB / 2 CPUs 40 GB SSD disk 3 TB transfer	4 GB / 2 CPUs 60 GB SSD disk 4 TB transfer	8 GB / 4 CPUs 80 GB SSD disk 5 TB transfer	16 GB / 8 CPUs 160 GB SSD disk 6 TB transfer
\$320/mo \$0.476/hour	\$480/mo \$0.714/hour	\$640/mo \$0.952/hour			
32 GB / 12 CPUs 320 GB SSD disk 7 TB transfer	48 GB / 16 CPUs 480 GB SSD disk 8 TB transfer	64 GB / 20 CPUs 640 GB SSD disk 9 TB transfer			

Choose a datacenter region

 New York 1 2 3	 San Francisco 1 2	 Amsterdam 2 3	 Singapore 1	 London 1	 Frankfurt 1
 Toronto 1	 Bangalore 1				

Select additional options ?

- Private networking Backups IPv6 User data

Add your SSH keys ?

[New SSH Key](#)

Finalize and create

<h3>How many Droplets?</h3> <p>Deploy multiple Droplets with the same configuration.</p> <p>- 1 Droplet +</p>	<h3>Choose a hostname</h3> <p>Give your Droplets an identifying name you will remember them by. Your Droplet name can only contain alphanumeric characters, dashes, and periods.</p> <p>rethinkdb-demo</p>
-------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Create

Droplets

Droplets Volumes




Name	IP Address	Created
 rethinkdb-demo 1 GB / 30 GB Disk / BLR1 - Ubuntu Horizon w/ RethinkDB on 14.04		

DigitalOcean
To: shahid@codeforgeek.com
Your New Droplet: rethinkdb-demo

Today at 6:18 PM



Your new Droplet is all set to go! You can access it using the following credentials:

Droplet Name: rethinkdb-demo
IP Address: 
Username: 
Password: 

For security reasons, you will be required to change this Droplet's root password when you login. You should choose a strong password that will be easy for you to remember, but hard for a computer to guess. You might try creating an alpha-numerical phrase from a memorable sentence (e.g. "I won my first spelling bee at age 7," might become "Iwm#1sbaa7"). Random strings of common words, such as "Mousetrap Sandwich Hospital Anecdote," tend to work well, too.

As an added security measure, we also strongly recommend adding an SSH key to your account. You can do that here: https://cloud.digitalocean.com/ssh_keys

Once added, you can select your SSH key and use it when creating future Droplets. This eliminates the need for root passwords altogether, and makes your Droplets much less vulnerable to attack.

Happy Coding,
Team DigitalOcean

```
UnixRoot — ssh root@139.59.1.21 — 84x28
Shahids-MacBook-Air:~ UnixRoot$ ssh root@139.59.1.21
The authenticity of host '139.59.1.21 (139.59.1.21)' can't be established.
ECDSA key fingerprint is SHA256:xxk4rm3RTntLMtp+uSjMkPubGZOQ2RCjdNtykAmrixQs.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '139.59.1.21' (ECDSA) to the list of known hosts.
root@139.59.1.21's password:
You are required to change your password immediately (root enforced)
-----
Thank you for using DigitalOcean's Horizon/RethinkDB Application.

Your RethinkDB dashboard can be accessed at http://139.59.1.21:8080/

Your RethinkDB login credentials are:
Username: admin
Password: kFwGqBPp8k

Find more information on using this app at: http://do.co/horizon-app
-----
To delete this message of the day: rm -rf /etc/motd.tail
Changing password for root.
(current) UNIX password:
Enter new UNIX password:
Retype new UNIX password: █
```

RethinkDB Administration Console | Shaikh

139.59.1.21:8080/#

RethinkDB | Dashboard | Tables | Servers | Data Explorer | Logs | Search

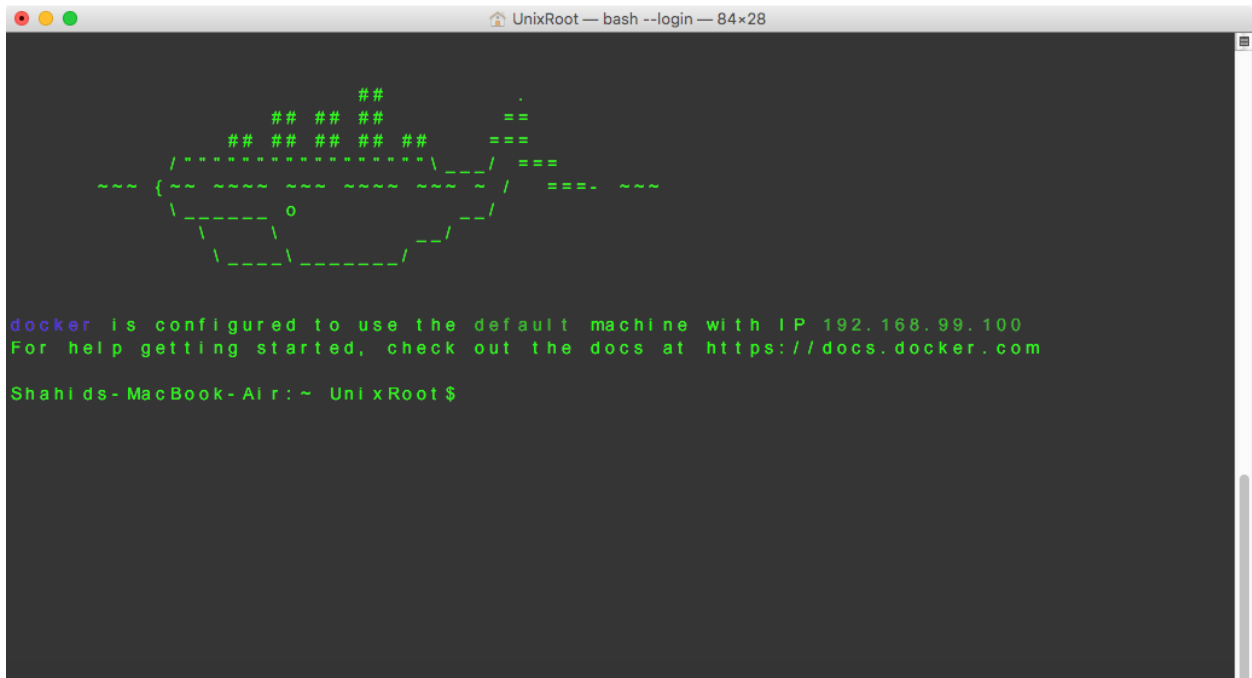
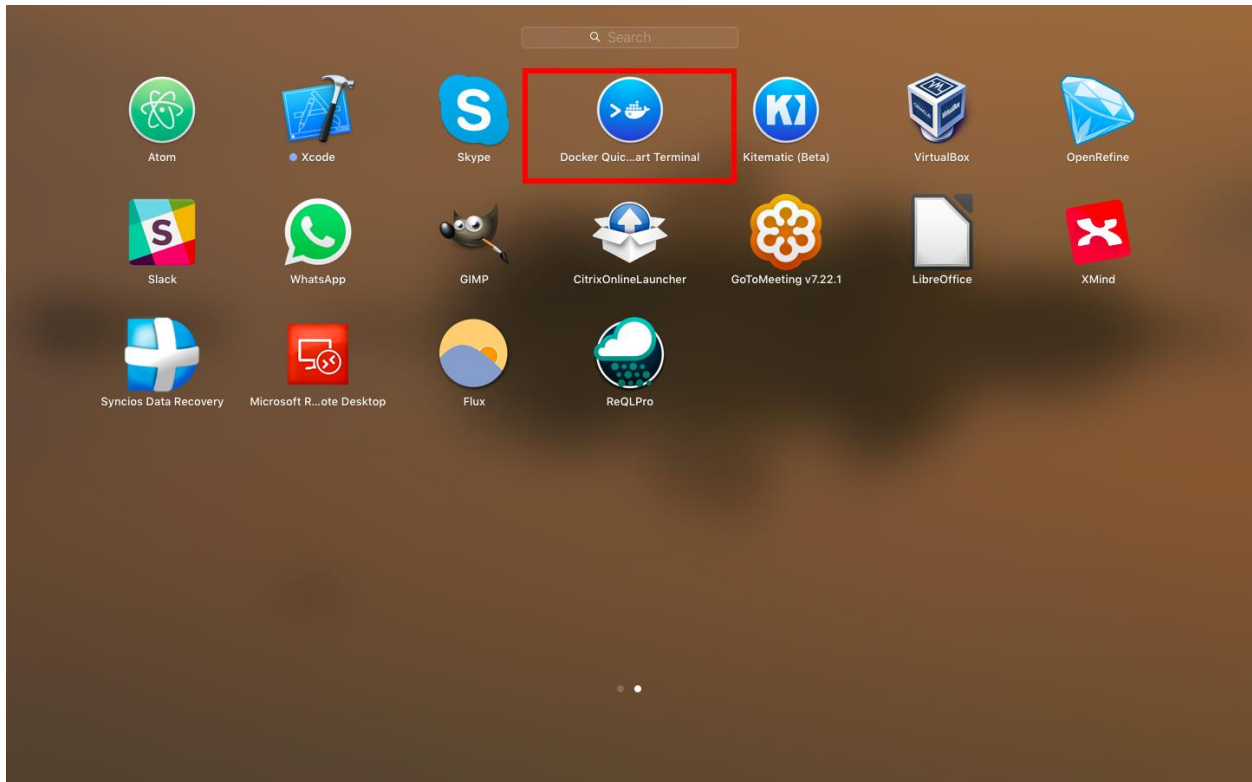
Connected to rethinkdb_demo... | Issues: No issues | Servers: 1 connected | Tables: 0/0 ready

Category	Status
Servers	1 server connected 0 servers missing
Tables	0 tables ready 0 tables with issues
Indexes	0 secondary indexes 0 indexes building
Resources	0% cache used 0 Bytes disk used

Cluster performance | Reads/sec: 0 | Writes/sec: 0

Graph showing performance metrics over time (06:31:00 to 06:32:15).

Recent log entries



```
rethinkdbDocker — docker build -t docker-rethinkdb . — 84x28
Shahids-MacBook-Air:rethinkdbDocker UnixRoot$ docker build -t docker-rethinkdb .
Sending build context to Docker daemon 4.202 MB
Step 1 : FROM ubuntu:latest
----> b549a9959a66
Step 2 : RUN apt-get update && apt-get install wget
----> Running in e116d30c9980
Ign http://archive.ubuntu.com trusty InRelease
Get:1 http://archive.ubuntu.com trusty-updates InRelease [65.9 kB]
Get:2 http://archive.ubuntu.com trusty-security InRelease [65.9 kB]
Hit http://archive.ubuntu.com trusty Release.gpg
Hit http://archive.ubuntu.com trusty Release
Get:3 http://archive.ubuntu.com trusty-updates/main Sources [472 kB]
Get:4 http://archive.ubuntu.com trusty-updates/restricted Sources [5247 B]
Get:5 http://archive.ubuntu.com trusty-updates/universe Sources [206 kB]
Get:6 http://archive.ubuntu.com trusty-updates/main amd64 Packages [1112 kB]
Get:7 http://archive.ubuntu.com trusty-updates/restricted amd64 Packages [23.5 kB]
Get:8 http://archive.ubuntu.com trusty-updates/universe amd64 Packages [481 kB]
Get:9 http://archive.ubuntu.com trusty-security/main Sources [152 kB]
Get:10 http://archive.ubuntu.com trusty-security/restricted Sources [3944 B]
Get:11 http://archive.ubuntu.com trusty-security/universe Sources [48.5 kB]
Get:12 http://archive.ubuntu.com trusty-security/main amd64 Packages [653 kB]
```

```
rethinkdbDocker — bash --login — 84x28
----> 63b3d1dd1a36
Removing intermediate container 90a47ac672c2
Step 4 : VOLUME /data
----> Running in ce8c48366f4b
----> 984a7c10db7d
Removing intermediate container ce8c48366f4b
Step 5 : WORKDIR /data
----> Running in 9e229381f14c
----> 5d9a8ae62e50
Removing intermediate container 9e229381f14c
Step 6 : CMD rethinkdb --bind all
----> Running in f81a7f0910ff
----> 49b4e272b0c3
Removing intermediate container f81a7f0910ff
Step 7 : EXPOSE 8080
----> Running in e005ace9b807
----> 7ed460292ebf
Removing intermediate container e005ace9b807
Step 8 : EXPOSE 28015
----> Running in d9ded08e64da
----> 40dfa7016f18
Removing intermediate container d9ded08e64da
Step 9 : EXPOSE 29015
----> Running in 6a01c8bafde1
----> f1a13e1b3b8f
Removing intermediate container 6a01c8bafde1
Successfully built f1a13e1b3b8f
Shahids-MacBook-Air:rethinkdbDocker UnixRoot$
```

```
rethinkdbDocker -- bash --login -- 102x28
[Shahids-MacBook-Air: rethinkdbDocker UnixRoot$ docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
docker-rethinkdb    latest      f1a13e1b3b8f     30 seconds ago  396.6 MB
rethinkdb           latest      e30940c8232c     9 days ago      183.9 MB
google-captcha      latest      1bb51d6f9158     6 weeks ago     507.2 MB
<none>              <none>     ee66c61db93b     6 weeks ago     507.2 MB
shahid/ubuntu-node-hello latest      506e6a57925b     5 months ago    507.2 MB
<none>              <none>     8c5896acc32      5 months ago    365.2 MB
<none>              <none>     bad9c147fb00     5 months ago    507.2 MB
ubuntu              latest      b549a9959a66     5 months ago    188 MB
node                latest      1de2e178998e     5 months ago    644.2 MB
centos               centos6     fc73b108c5ae     5 months ago    228.9 MB
Shahids-MacBook-Air: rethinkdbDocker UnixRoot$
```

```

rethinkdbDocker -- bash --login -- 113x32
Shahids-MacBook-Air:rethinkdbDocker UnixRoot$ docker ps
CONTAINER ID        IMAGE               COMMAND             CREATED             STATUS              PORTS
dc1447855e4b      docker-rethinkdb   "rethinkdb --bind all"   31 minutes ago     Up 31 minutes      28015/tcp
p, 29015/tcp, 0.0.0.0:3000->8080/tcp
f9b73900f770      rethinkdb          "rethinkdb --bind all"   About an hour ago  Up About an hour   0.0.0.0:
8080->8080/tcp, 0.0.0.0:28015->28015/tcp, 0.0.0.0:29015->29015/tcp
322f00d8cd35      rethinkdb          "rethinkdb --bind all"   About an hour ago  Up About an hour   0.0.0.0:
32773->8080/tcp, 0.0.0.0:32772->28015/tcp, 0.0.0.0:32771->29015/tcp
f85df6d93290      rethinkdb          "rethinkdb --bind all"   About an hour ago  Up About an hour   0.0.0.0:
32770->8080/tcp, 0.0.0.0:32769->28015/tcp, 0.0.0.0:32768->29015/tcp
4b4df27941e3      rethinkdb          "rethinkdb --bind all"   About an hour ago  Up About an hour   8080/tcp
, 28015/tcp, 29015/tcp
Shahids-MacBook-Air:rethinkdbDocker UnixRoot$

```

RethinkDB Administration Console

192.168.99.100:3000

RethinkDB Dashboard Tables Servers Data Explorer Logs Search

Connected to **dc1447855e4b_dj2** Issues **No issues** Servers **1 connected** Tables **0/0 ready**

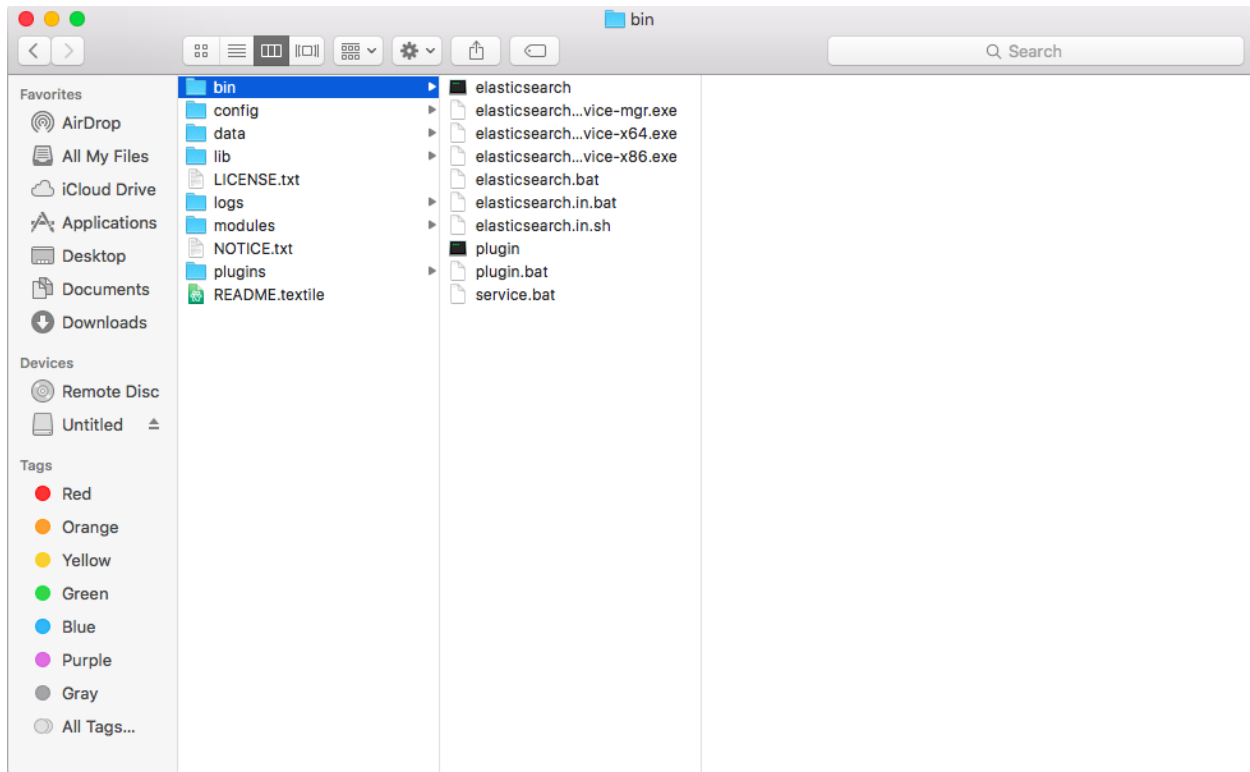
<p>Servers</p> <p>1 server connected 0 servers missing</p>	<p>Tables</p> <p>0 tables ready 0 tables with issues</p>	<p>Indexes</p> <p>0 secondary indexes 0 indexes building</p>	<p>Resources</p> <p>0% cache used 0 Bytes disk used</p>
-----------------------------------------------------------------------	---------------------------------------------------------------------	-------------------------------------------------------------------------	--------------------------------------------------------------------

Cluster performance Reads/sec: 0 Writes/sec: 0

```
rethinkdbDocker — docker exec -i -t 5e283cafb4e4 /bin/bash — 113x32
Shahids-MacBook-Air:rethinkdbDocker UnixRoot$ docker exec -i -t 5e283cafb4e4 /bin/bash
root@5e283cafb4e4:/data# pwd
/data
root@5e283cafb4e4:/data# ls
rethinkdb_data
root@5e283cafb4e4:/data# ls -l
total 4
drwxr-xr-x 3 root root 4096 Sep  9 14:19 rethinkdb_data
root@5e283cafb4e4:/data#
```

```
rethinkdbDocker — docker exec -i -t 5e283cafb4e4 /bin/bash — 113x32
Shahids-MacBook-Air:rethinkdbDocker UnixRoot$ docker exec -i -t 5e283cafb4e4 /bin/bash
root@5e283cafb4e4:/data# pwd
/data
root@5e283cafb4e4:/data# ls
rethinkdb_data
root@5e283cafb4e4:/data# ls -l
total 4
drwxr-xr-x 3 root root 4096 Sep  9 14:19 rethinkdb_data
root@5e283cafb4e4:/data#
```

Chapter 7: Extending RethinkDB



```
UnixRoot -- -bash -- 84x28
Shahids-MacBook-Air: ~ UnixRoot$ curl localhost:9200
{
  "name" : "Kyle Gibney",
  "cluster_name" : "elasticsearch",
  "version" : {
    "number" : "2.3.5",
    "build_hash" : "90f439ff60a3c0f497f91663701e64ccd01edbb4",
    "build_timestamp" : "2016-07-27T10:36:52Z",
    "build_snapshot" : false,
    "lucene_version" : "5.5.0"
  },
  "tagline" : "You Know, for Search"
}
Shahids-MacBook-Air: ~ UnixRoot$
```


POST http://localhost:9200/twitter/tweets Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

form-data x-www-form-urlencoded raw binary JSON (application/json)

```
1 {
2   "tweet": "Hello World!",
3   "user": "John",
4   "userId": 1024
5 }
```

Body Cookies Headers (2) Tests Status: 201 Created Time: 411 ms

Pretty Raw Preview JSON

```
1 {
2   "_index": "twitter",
3   "_type": "tweets",
4   "_id": "AVd19CypQvF9124G826H",
5   "_version": 1,
6   "_shards": {
7     "total": 2,
8     "successful": 1,
9     "failed": 0
10  },
11   "created": true
12 }
```

```
Shahids-MacBook-Air:bin UnixRoot$ ./plugin install logstash-input-rethinkdb
```

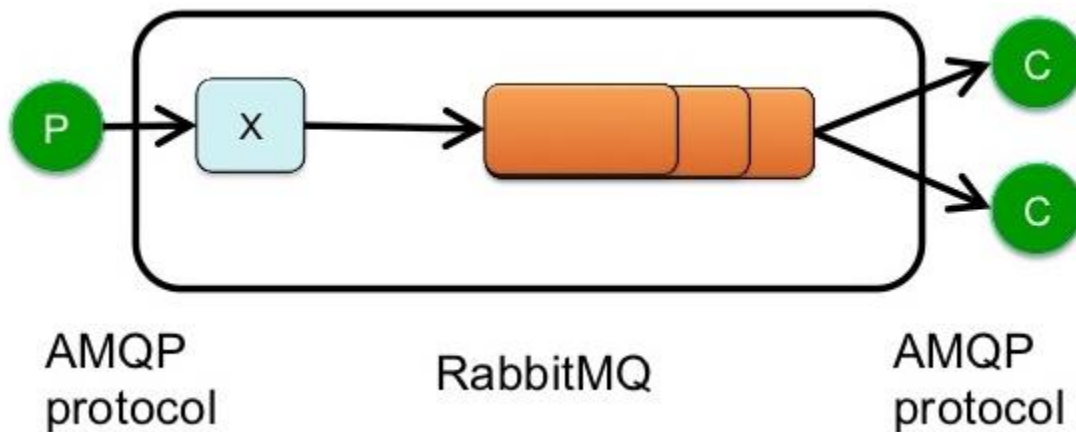
```
Validating logstash-input-rethinkdb
Installing logstash-input-rethinkdb
Installation successful
Shahids-MacBook-Air:bin UnixRoot$ █
```

```

Shahids-MacBook-Air:bin UnixRoot$ ./logstash -e '
> input {rethinkdb
>   {host => "localhost"
>     port => 28015
>     auth_key => ""
>     watch_dbs => ["company"]
>     watch_tables => ["company.employees"]
>     backfill => true
>   }}
> output { elasticsearch {}}'
Settings: Default pipeline workers: 4
Eventmachine loop started
Creating db feed for company
Feed for db 'company' registered
Watching table company.employees []
Pipeline main started

```

health	status	index	pri	rep	docs.count	docs.deleted	store.size	pri.store.size
yellow	open	randomindex	5	1	8	0	35.6kb	35.6kb
yellow	open	testindex	5	1	1	0	4.1kb	4.1kb
yellow	open	twitter	5	1	2	0	7.7kb	7.7kb
yellow	open	usa-cigarettes	5	1	444	0	1.4mb	1.4mb
yellow	open	employee	5	1	0	0	795b	795b
yellow	open	logstash-2016.09.27	5	1	1001	0	718.9kb	718.9kb



```
UnixRoot — beam.smp · sh -e /usr/local/sbin/rabbitmq-server — 84x28
Shahids-MacBook-Air:~ UnixRoot$ rabbitmq-server

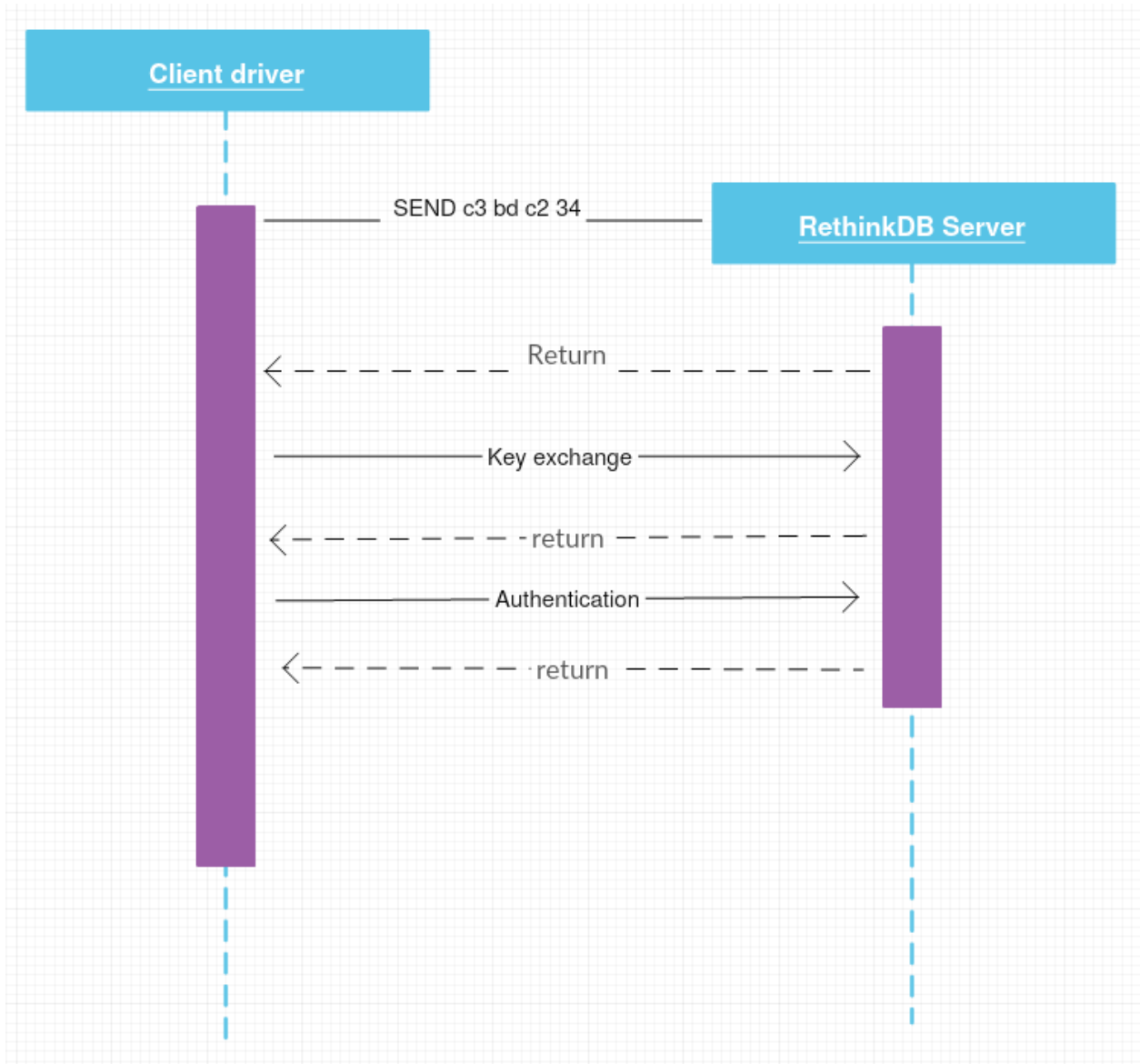
## ##          RabbitMQ 3.6.4. Copyright (C) 2007-2016 Pivotal Software, Inc.
## ##          Licensed under the MPL.  See http://www.rabbitmq.com/
## ##
##### Logs: /usr/local/var/log/rabbitmq/rabbit@ocalhost.log
#####      /usr/local/var/log/rabbitmq/rabbit@ocalhost-sasl.log
#####
Starting broker...
completed with 10 plugins.
```

```
UnixRoot — tmux — 117x30
Shahids-MacBook-Air:rabbitmq UnixRoot$ node producer.js
[x] Sent 'Hello World!'

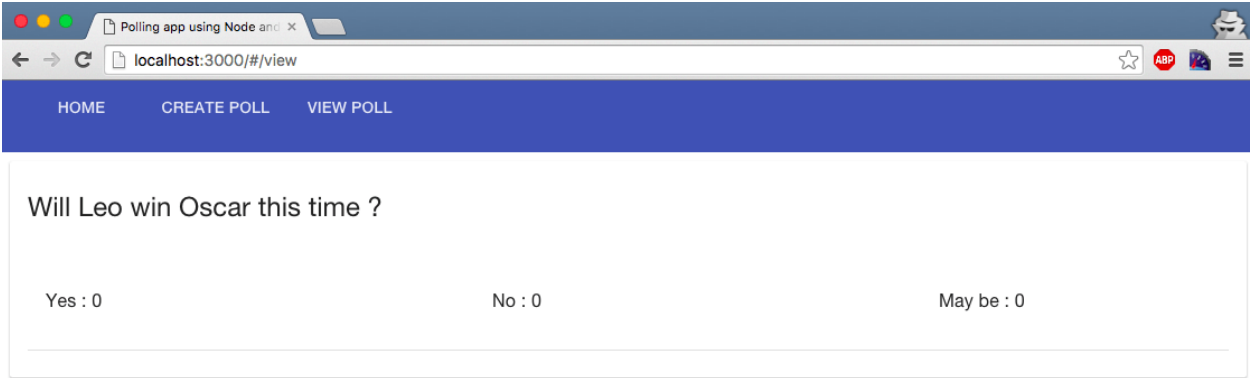
Shahids-MacBook-Air:rabbitmq UnixRoot$ node consumer.js
[*] Waiting for messages in hello. To exit press CTRL+C
[x] Received Hello World!
[x] Received Hello World!

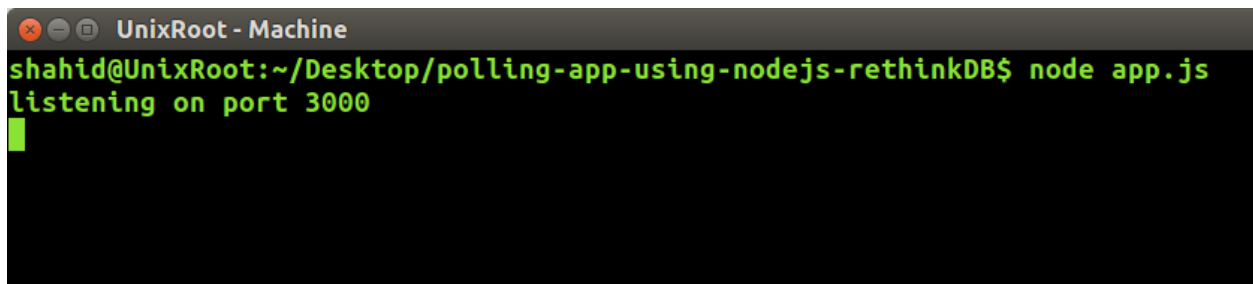
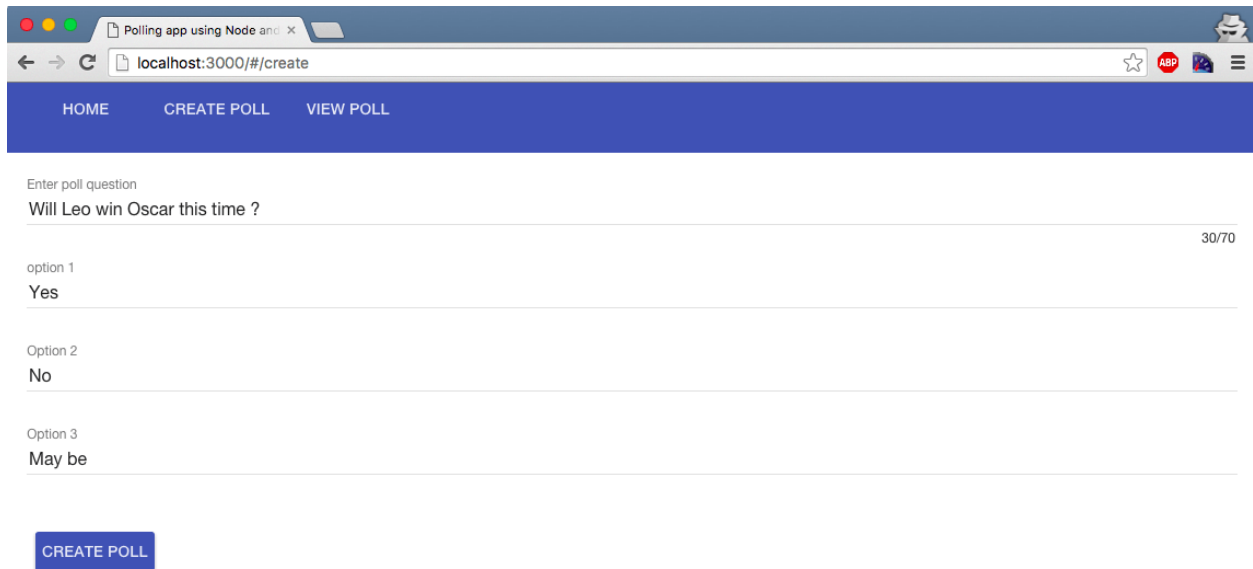
[3] 0: node*                               "Shahids-MacBook-Air.1" 13:45 03-Oct-16
```

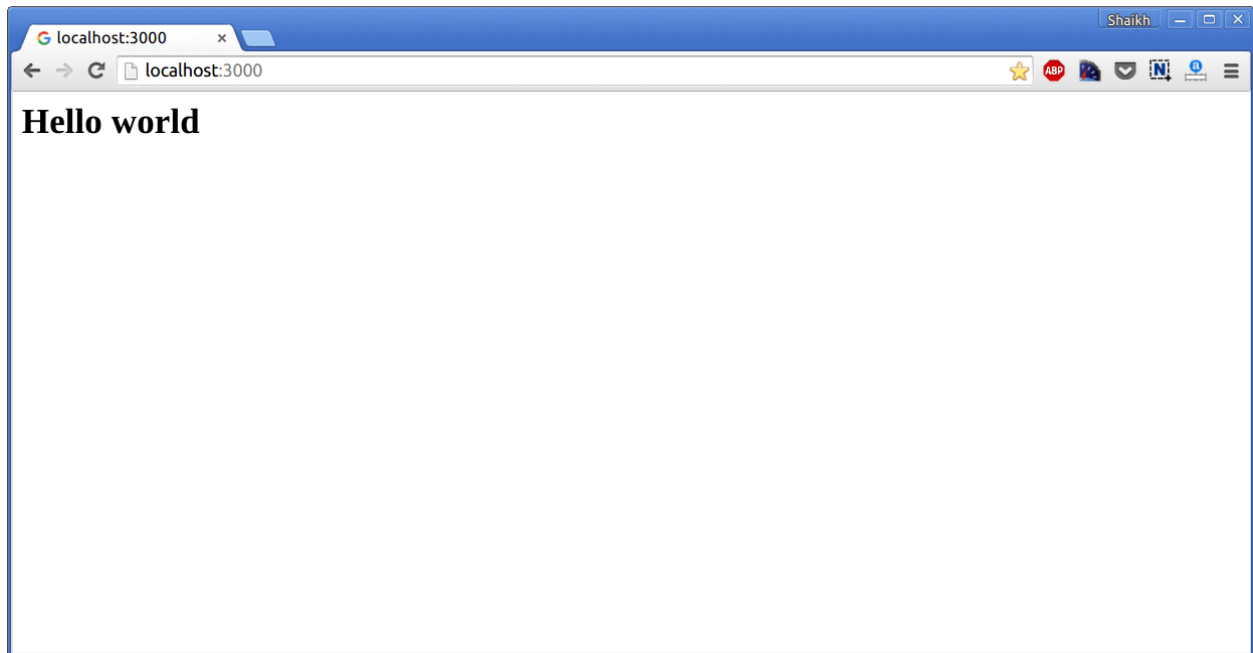
```
javascript -- tmux -- 159x54
-Shahids-MacBook-Air:javascript UnixRoot$ node producer.js [RethinkDB -( mytable.create )-> RabbitMQ
-Shahids-MacBook-Air:javascript UnixRoot$ node listener.js
Started listening...
[ 'mytable', 'create' ] -> RabbitMQ -( ' mytable.create' )-> Listener
{
  "new_val": {
    "id": "4003c38f-3740-44a6-aa30-4030909cc2a6",
    "name": "Shahid"
  },
  "old_val": null
}
-----
=
```



Chapter 8: Full Stack Development with RethinkDB







```
UnixRoot - Machine
shahid@UnixRoot:~/Desktop/polling-app-using-nodejs-rethinkDB$ node app.js
listening on port 3000
Created new database
Created new table
Database is setup successfully
```

Pretty Raw Preview

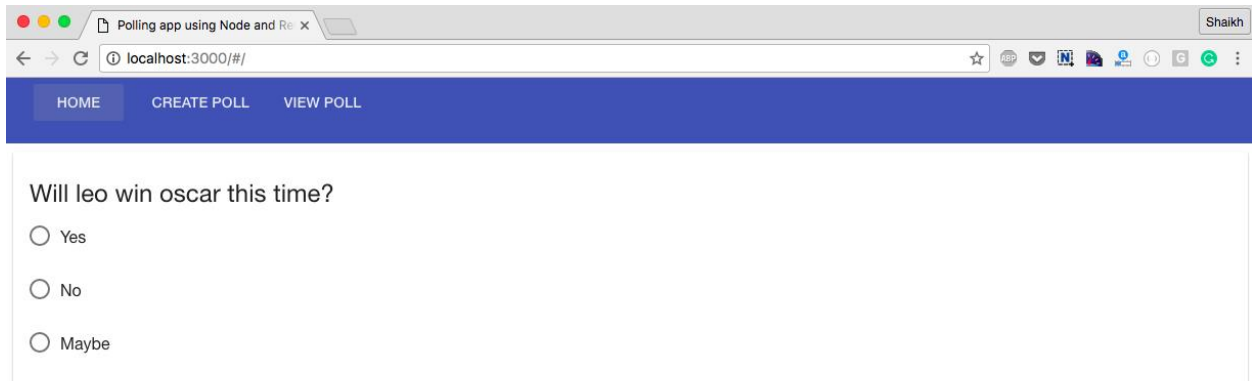
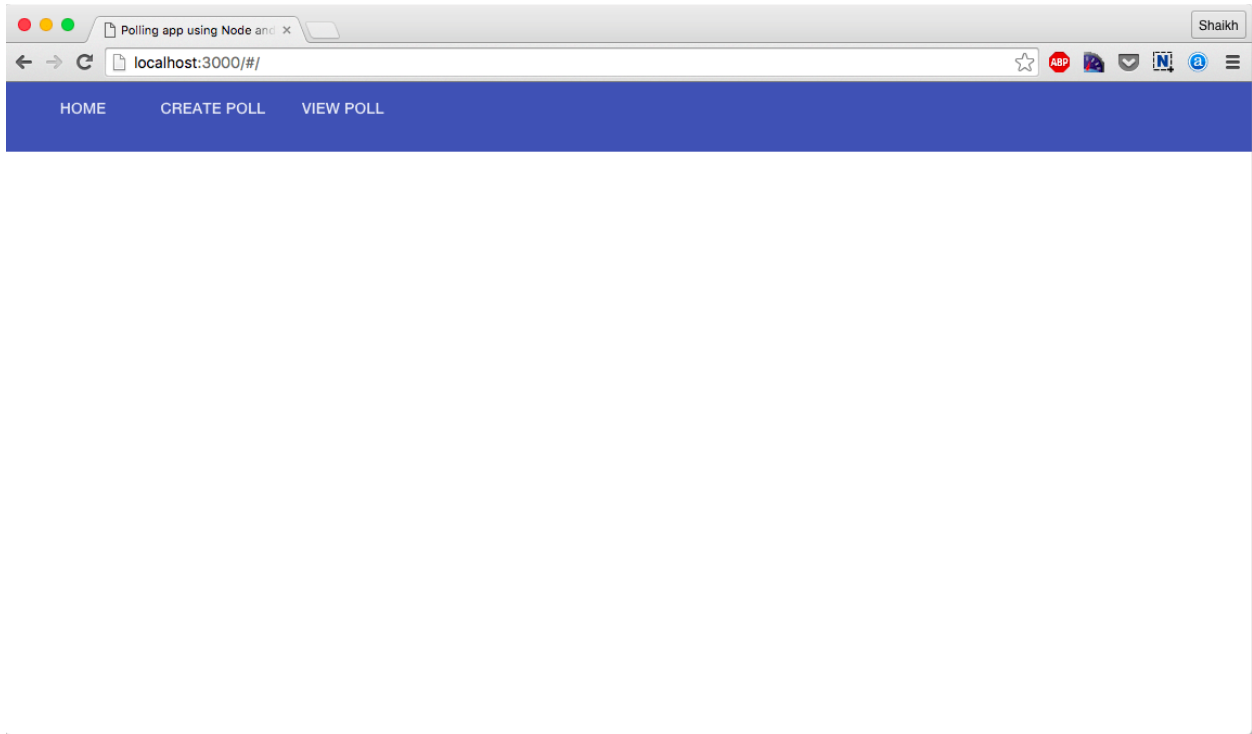
JSON



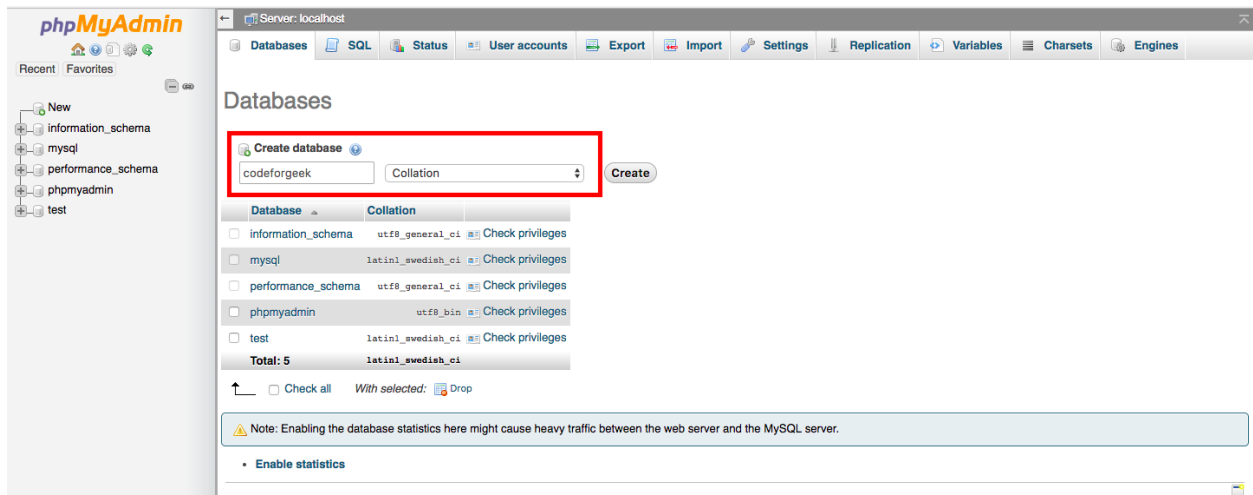
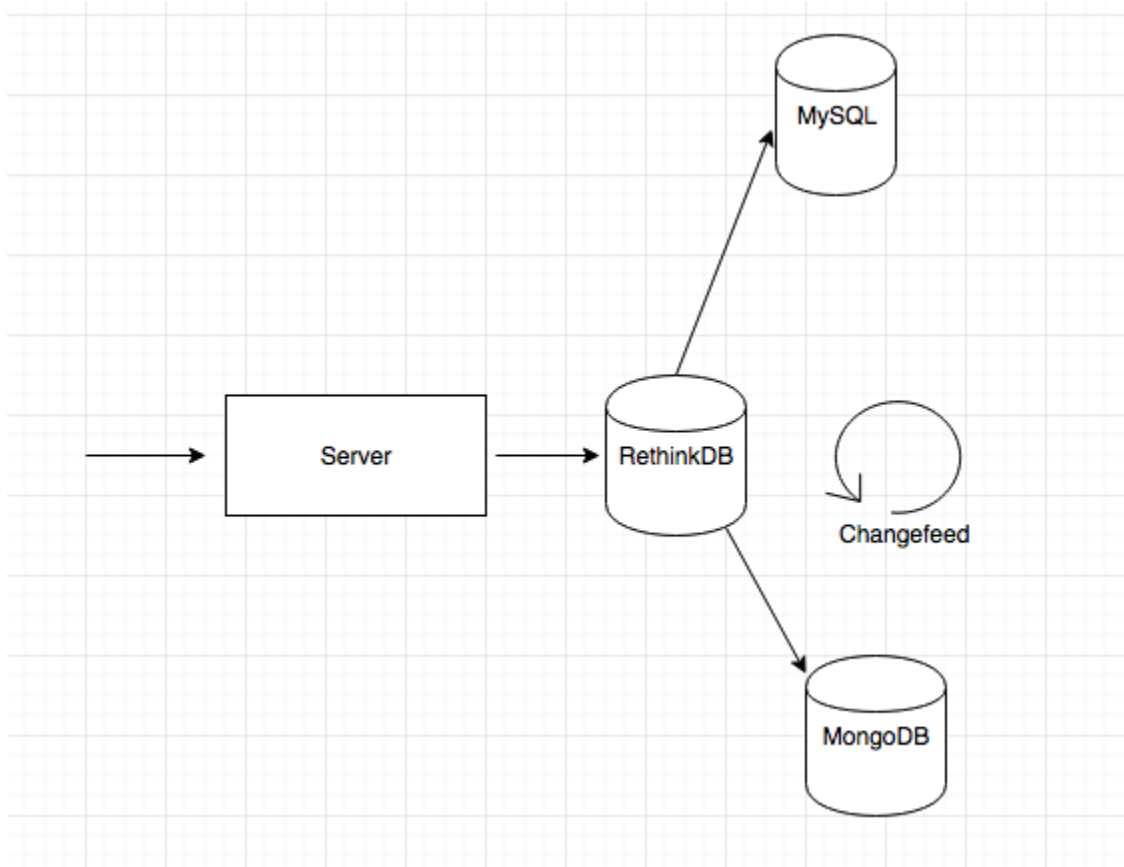
```
1 {
2   "responseCode": 0,
3   "responseDesc": "Success",
4   "data": {
5     "deleted": 0,
6     "errors": 0,
7     "generated_keys": [
8       "f4eba54d-644c-4c27-b8a9-846fded0cef7"
9     ],
10    "inserted": 1,
11    "replaced": 0,
12    "skipped": 0,
13    "unchanged": 0
14  }
15 }
```

```
1 {
2   "responseCode": 0,
3   "responseDesc": "Success",
4   "data": [
5     {
6       "id": "f4eba54d-644c-4c27-b8a9-846fded0cef7",
7       "polls": [
8         {
9           "option": "Android",
10          "vote": 1
11        }
12      ],
13      "question": "Best phone ? "
14    }
15  ]
16 }
```

```
1 {
2   "responseCode": 0,
3   "responseDesc": "Success",
4   "data": {
5     "deleted": 0,
6     "errors": 0,
7     "inserted": 0,
8     "replaced": 1,
9     "skipped": 0,
10    "unchanged": 0
11  }
12 }
```

Chapter 9: Polyglot Persistence Using RethinkDB



#	Name	Type	Collation	Attributes	Null	Default	Extra
1	id 🔑	int(11)			No	None	AUTO_INCREMENT
2	rethinkId	text	latin1_swedish_ci		Yes	NULL	
3	name	text	latin1_swedish_ci		Yes	NULL	
4	dob	date			Yes	NULL	
5	gender	text	latin1_swedish_ci		Yes	NULL	
6	location	varchar(140)	latin1_swedish_ci		Yes	NULL	

```

polyglot-rethinkdb -- -bash -- 117x41
Shahids-MacBook-Air:polyglot-rethinkdb UnixRoot$ npm init -y
Wrote to /Users/UnixRoot/Desktop/polyglot-rethinkdb/package.json:

{
  "name": "polyglot-rethinkdb",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [],
  "author": "",
  "license": "ISC"
}

Shahids-MacBook-Air:polyglot-rethinkdb UnixRoot$ █

```

```
polyglot-rethinkdb — node app.js — 84x28
Shahids-MacBook-Air: polyglot-rethinkdb UnixRoot$ node app.js
Listening to port 4000
Database already created
table already created
Database is setup successfully
```

```
Desktop — -bash — 84x28
Shahids-MacBook-Air: Desktop UnixRoot$ node observable.js
New file added abc.txt
New file added pqr.txt
New file added eee.txt
Received data: "abc.txt"
Received data: "pqr.txt"
Received data: "eee.txt"
Shahids-MacBook-Air: Desktop UnixRoot$
```

```

Shahids-MacBook-Air: polyglot-rethinkdb UnixRoot$ node app.js
Listening to port 4000
Database already created
table already created
Database is setup successfully
{"new_val":{"dob":"03/18/1992","gender":"male","id":"d98b3e23-58a2-44b3-bb40-6c950a33dad5","location":"mumbai","name":"Shahid"},"old_val":null,"type":"add"}
Mysql -- { new_val:
  { dob: '03/18/1992',
    gender: 'male',
    id: 'd98b3e23-58a2-44b3-bb40-6c950a33dad5',
    location: 'mumbai',
    name: 'Shahid' },
  old_val: null,
  type: 'add' }
{"new_val":{"dob":"03/18/1992","gender":"male","id":"d98b3e23-58a2-44b3-bb40-6c950a33dad5","location":"mumbai","name":"Shahid"},"old_val":null,"type":"add"}
(node:14168) DeprecationWarning: Mongoose: mpromise (mongoose's default promise library) is deprecated, plug in your own promise library instead: http://mongoosejs.com/docs/promises.html
{"new_val":{"dob":"03/18/1992","gender":"male","id":"d98b3e23-58a2-44b3-bb40-6c950a33dad5","location":"mumbai","name":"Shahid"},"old_val":null,"type":"add"}
Synced to MySQL
Synced to MongoDB

```

```

UnixRoot — mongo — 84x28
> use codeforgeek;
switched to db codeforgeek
> db.users.find().pretty();
{
  "_id" : ObjectId("581a28a1d44f8b3758d5a2f6"),
  "location" : "mumbai",
  "gender" : "male",
  "dob" : ISODate("1992-03-17T18:30:00Z"),
  "name" : "Shahid",
  "rethinkId" : "d98b3e23-58a2-44b3-bb40-6c950a33dad5",
  "__v" : 0
}
>

```

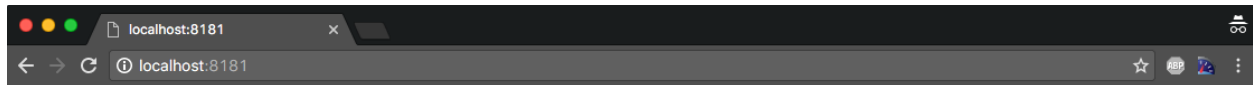
Show all | Number of rows: Filter rows:

+ Options

	id	rethinkId	name	dob	gender	location
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	2	d98b3e23-58a2-44b3-bb40-6c950a33dad5	Shahid	1992-03-17	male	mumbai

Check all | With selected: Edit Copy Delete Export


```
horizonDemo — rethinkdb • horizon MANPATH=/Users/UnixRoot/.nvm/versions/node/v6.0.0/share/man:/usr/local/share/man:/usr/share/man:/Applications/Xc...
Shahids-MacBook-Air:horizonDemo UnixRoot$ hz serve --dev
App available at http://127.0.0.1:8181
error: rethinkdb stderr: warn: Cache size does not leave much memory for server and
query overhead (available memory: 447 MB).
RethinkDB
  |-- Admin interface: http://localhost:60014
  |-- Drivers can connect to port 60013
Starting Horizon...
🚀 Horizon ready for connections
```



horizonDemo works!

Todos

▼ *What needs to be done?*

Learn Horizon

1 item left Active Completed

```
Shahids-MacBook-Air:todoHorizon UnixRoot$ hz serve --dev
App available at http://127.0.0.1:8181
error: rethinkdb stderr: warn: Cache size does not leave much memory for server and
query overhead (available memory: 412 MB).
RethinkDB
  |-- Admin interface: http://localhost:55663
  |-- Drivers can connect to port 55662
Starting Horizon...
☑ Horizon ready for connections
```

