Eventing Data with RabbitMQ and Riak

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Evented Data is a reflection of different aspects of a single application.

What is Data, then?

Data

cono	flno	flda8
1	3877	20110609
1	468	20110822

TORBAY EXPRESS
6024

Data

```
[{
  “company_number”: 1,
  “flight_number”: 3877,
  “flight_date”: 20110609
},
{
  “company_number”: 1,
  “flight_number”: 468,
  “flight_date”: 20110822
}]
```

Data

```
PUT /services/flightinfo
Content-Type: text/plain

1,3877,20110609
1,468,20110822
```

Data

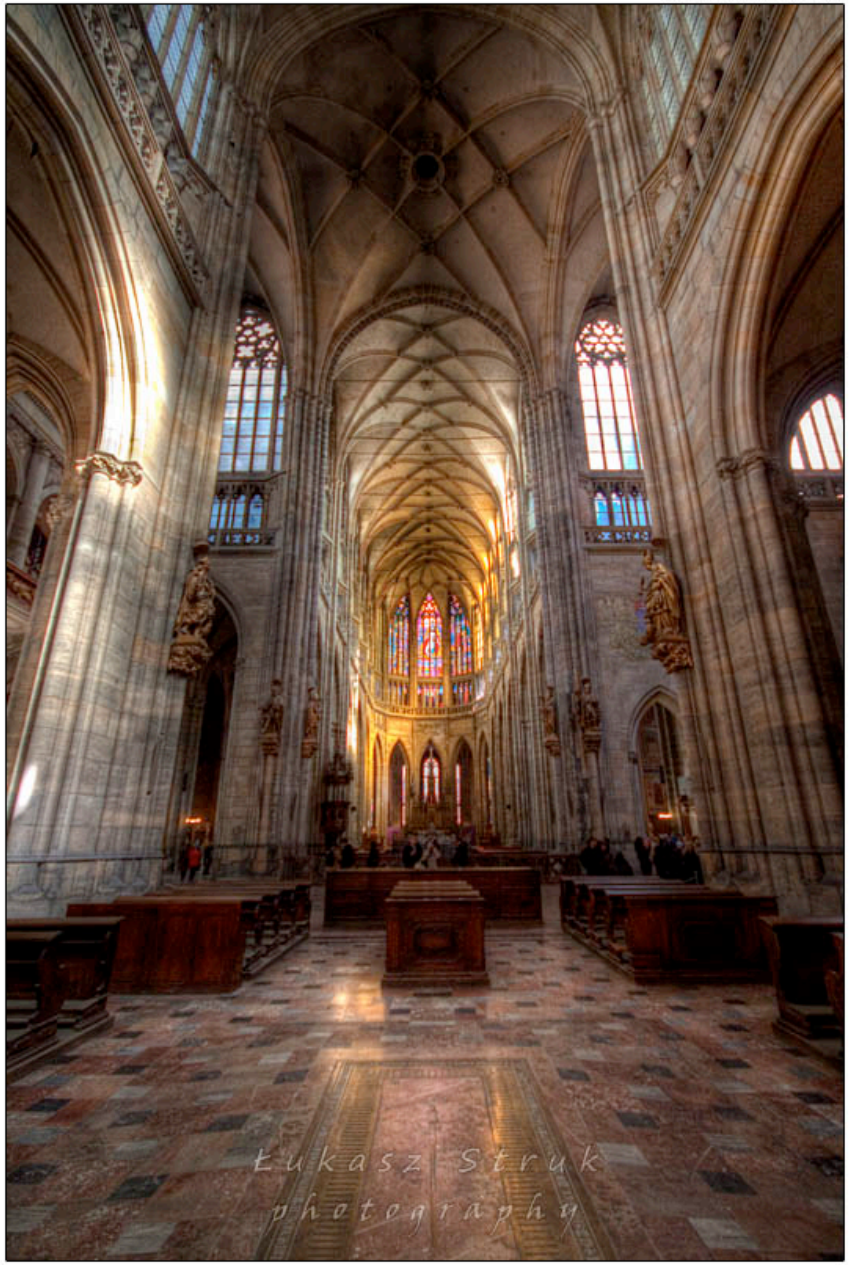
```
Exchange: flight
Routing-Key: info
X-Meta-Company: 1
Content-Type: application/json

[
  [3877,20110609],
  [468,20110822]
]
```

The only important pieces of data are...

```
[
  [3877,20110609],
  [468,20110822]
]
```

iciatko.deviantart.com



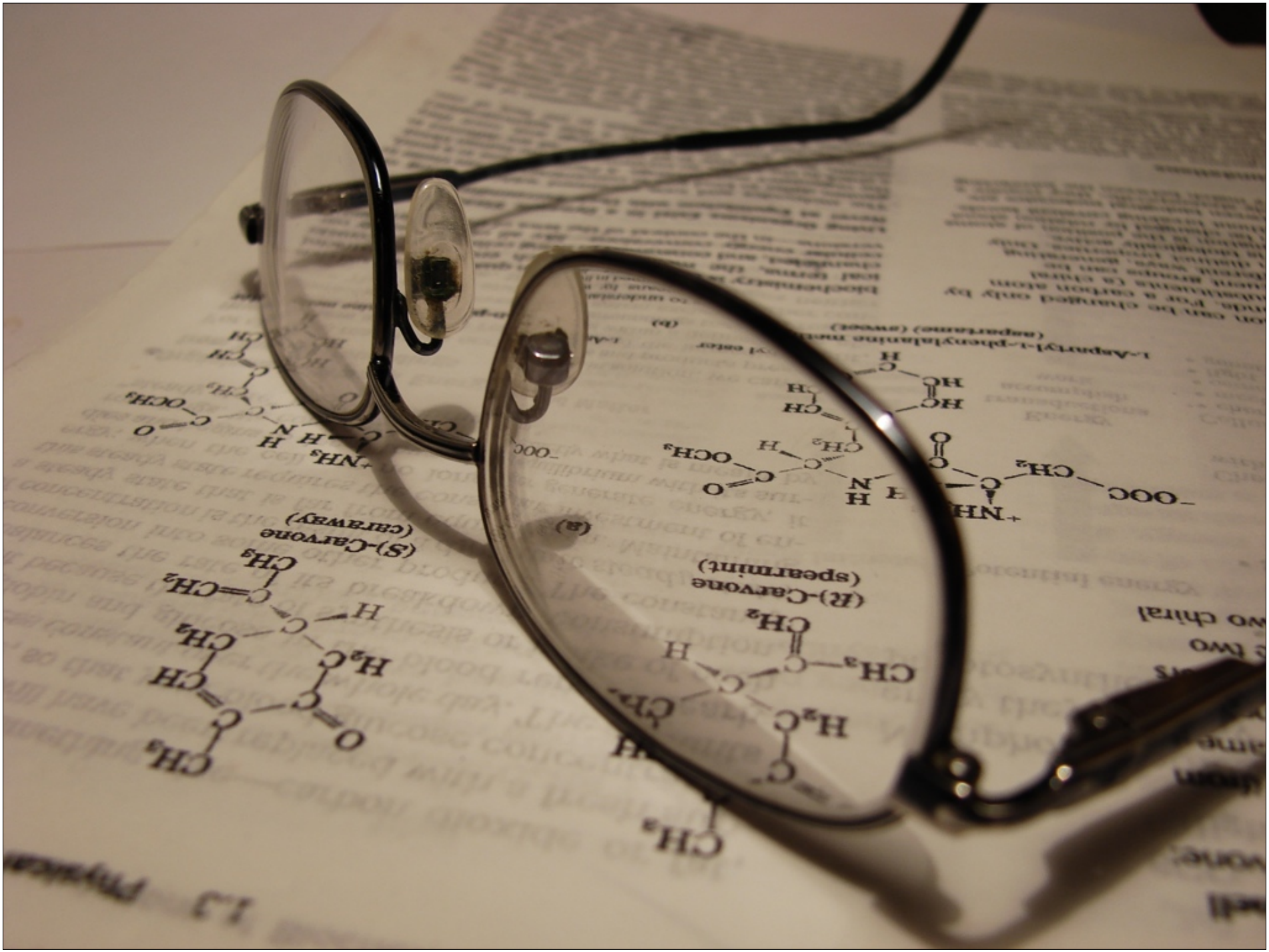
Where the data is stored doesn't really matter...

...nor does the language used to extract it...

...nor does the language of the server in which it is stored.

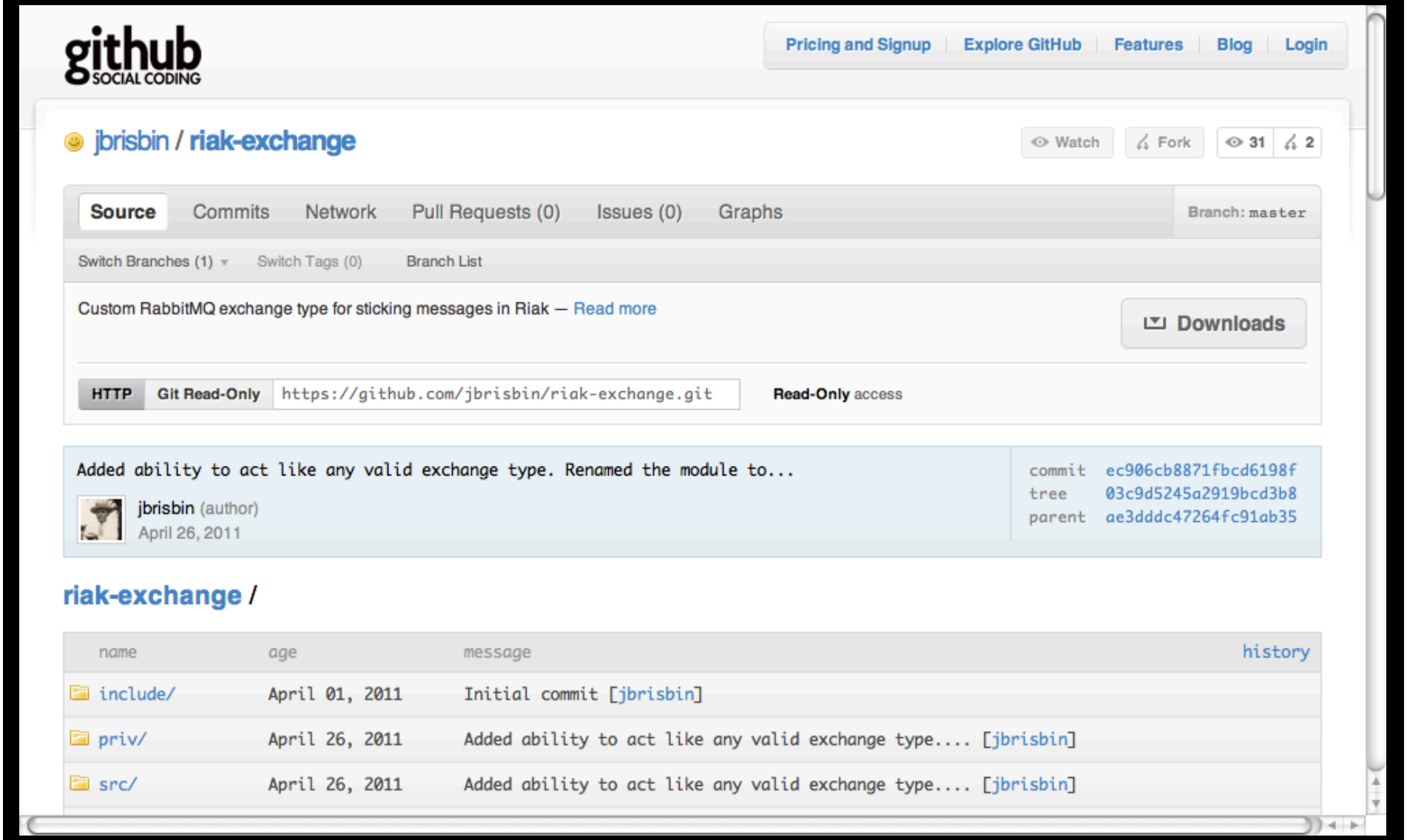
The only thing that matters is THE DATA.

It is the Alpha and the Omega of the project.



The RabbitMQ Side

Custom exchange type "x-riak"



The RabbitMQ Side

Custom exchange type “x-riak”

Arguments:

```
host = “localhost”
port = 8087
type-module = “..._topic”
maxclients = 5
```

The RabbitMQ Side

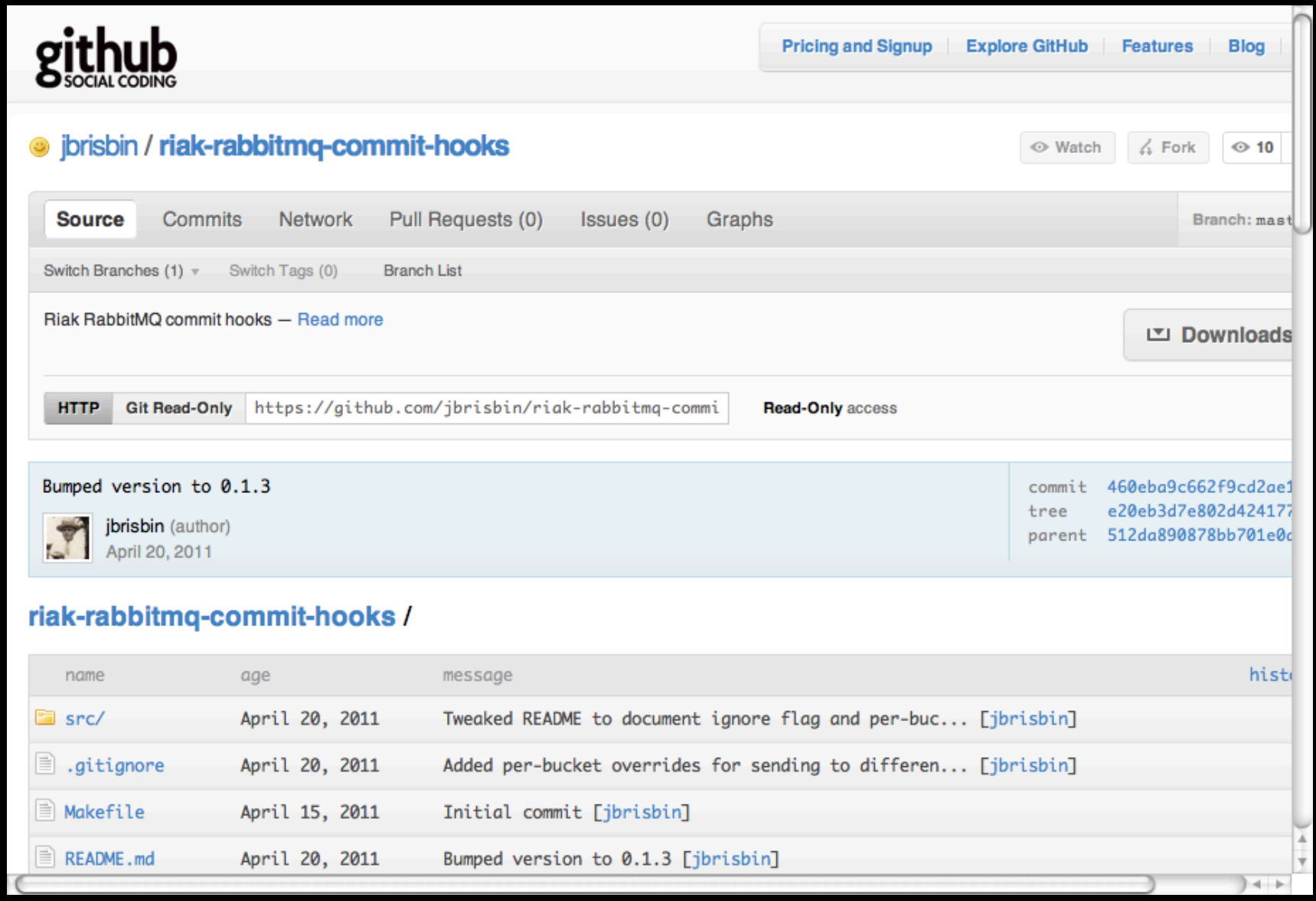
Custom exchange type “x-riak”

Possible type-modules:

```
rabbit_exchange_type_topic
rabbit_exchange_type_direct
rabbit_exchange_type_fanout
rabbit_exchange_type_headers
mymodule_custom_type_foo
```

```
presentation.startDemo();
```

The Riak Side



The Riak Side

```
PUT /riak/bucket
Content-Type: application/json

{
 props: {
  postcommit: [
   { mod: “riak_rabbitmq”,
     fun: “postcommit_send_amqp” }
  ]
 }
}
```

The Riak Side

Metadata:

```
X-Riak-Meta-Amqp-Exchange
X-Riak-Meta-Amqp-Routing-Key
X-Riak-Meta-Amqp-Host
X-Riak-Meta-Amqp-Port
X-Riak-Meta-Amqp-Vhost
X-Riak-Meta-Amqp-User
X-Riak-Meta-Amqp-Password
X-Riak-Meta-Amqp-Ignore
```

Store metadata on a special entry named “AMQP-Meta” in that bucket

```
presentation.startDemo();
```

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