

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



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

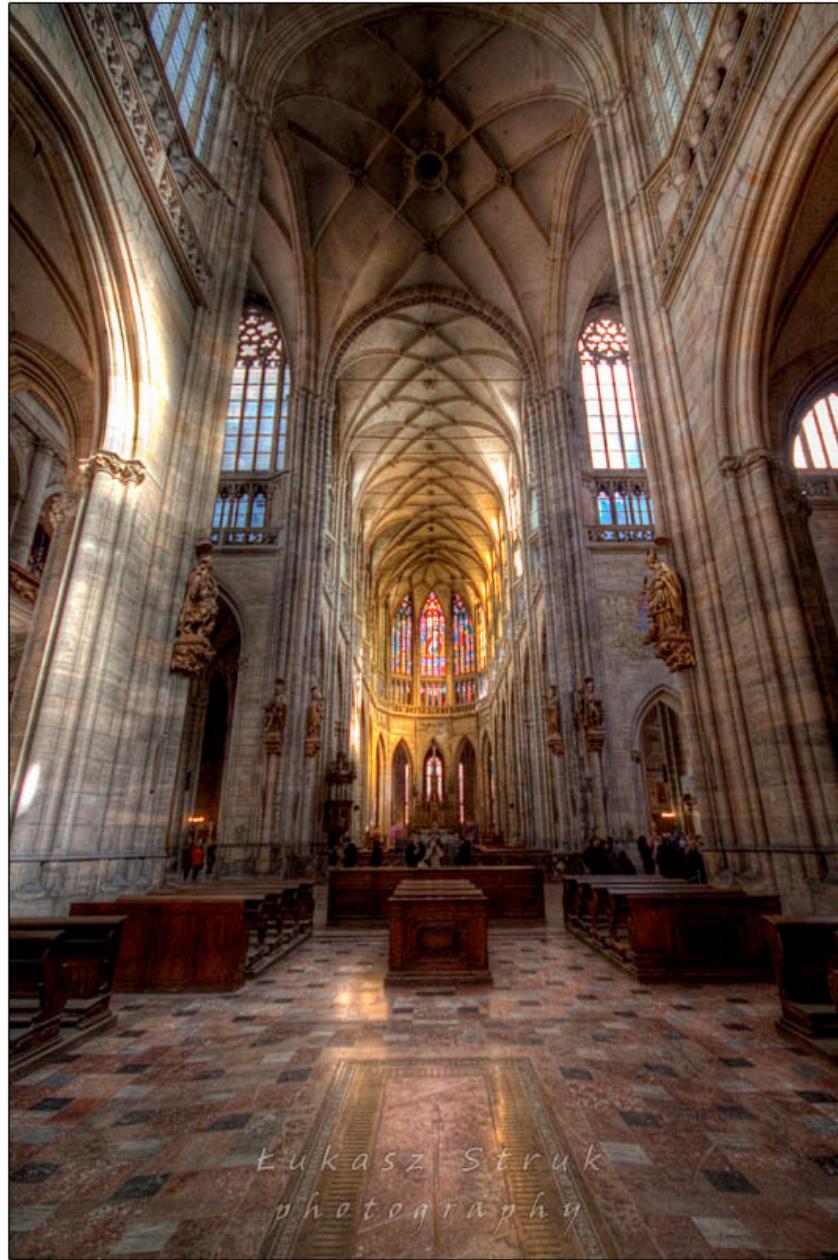
X-Meta-Company: 1

Content-Type: application/json

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

The only important
pieces of data are...

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



Eukasz Struk
photography

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

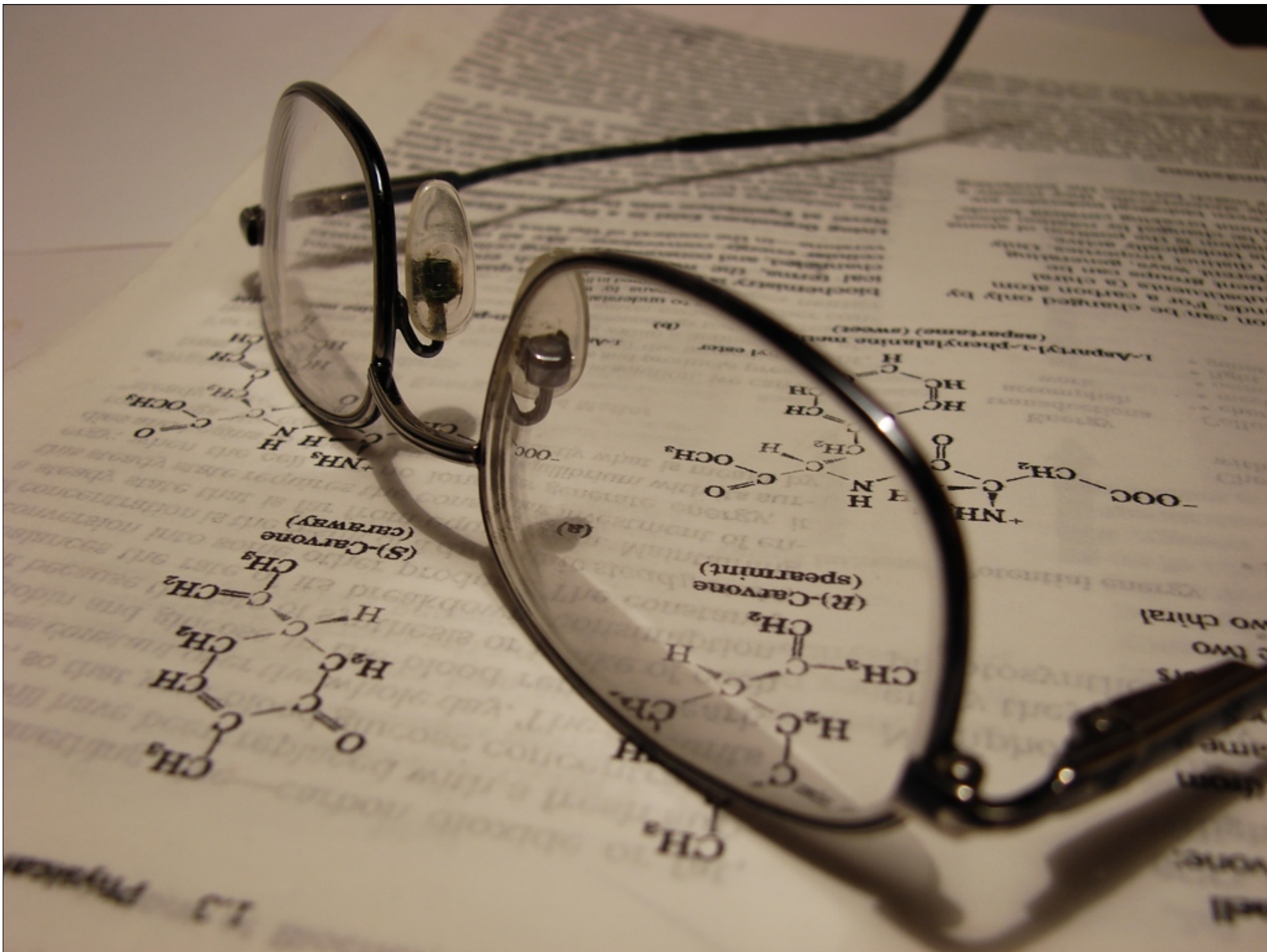
...nor does the language
used to extract it...

...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 screenshot shows the GitHub repository page for 'jbrisbin / riak-exchange'. At the top, the GitHub logo and navigation links are visible. The repository name is 'riak-exchange' and the current branch is 'master'. The page shows the source code, commit history, and a recent commit message: 'Added ability to act like any valid exchange type. Renamed the module to...'. Below the commit message, there is a table listing the commit history.

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jbrisbin / riak-exchange

Watch Fork 31 2

Source Commits Network Pull Requests (0) Issues (0) Graphs Branch: master

Switch Branches (1) Switch Tags (0) Branch List

Custom RabbitMQ exchange type for sticking messages in Riak — [Read more](#) Downloads

HTTP Git Read-Only `https://github.com/jbrisbin/riak-exchange.git` Read-Only access

Added ability to act like any valid exchange type. Renamed the module to...

commit `ec906cb8871fbcd6198f`
tree `03c9d5245a2919bcd3b8`
parent `ae3dddc47264fc91ab35`

jbrisbin (author)
April 26, 2011

riak-exchange /

name	age	message	history
include/	April 01, 2011	Initial commit [jbrisbin]	
priv/	April 26, 2011	Added ability to act like any valid exchange type.... [jbrisbin]	
src/	April 26, 2011	Added ability to act like any valid exchange type.... [jbrisbin]	

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 screenshot shows the GitHub interface for the repository `jbrisbin / riak-rabbitmq-commit-hooks`. At the top, the GitHub logo and navigation links are visible. The repository name is followed by buttons for 'Watch', 'Fork', and '10' followers. Below this, a navigation bar includes 'Source', 'Commits', 'Network', 'Pull Requests (0)', 'Issues (0)', and 'Graphs'. A 'Branch: master' indicator is present on the right. A 'Downloads' button is also visible. The main content area shows a commit message: 'Bumped version to 0.1.3' by 'jbrisbin (author)' on 'April 20, 2011'. To the right of the commit message, the commit hash, tree hash, and parent hash are listed. Below the commit message, the repository name is repeated, followed by a table of files in the current commit.

name	age	message	histo
<code>src/</code>	April 20, 2011	Tweaked README to document ignore flag and per-buc... [jbrisbin]	
<code>.gitignore</code>	April 20, 2011	Added per-bucket overrides for sending to differen... [jbrisbin]	
<code>Makefile</code>	April 15, 2011	Initial commit [jbrisbin]	
<code>README.md</code>	April 20, 2011	Bumped version to 0.1.3 [jbrisbin]	

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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