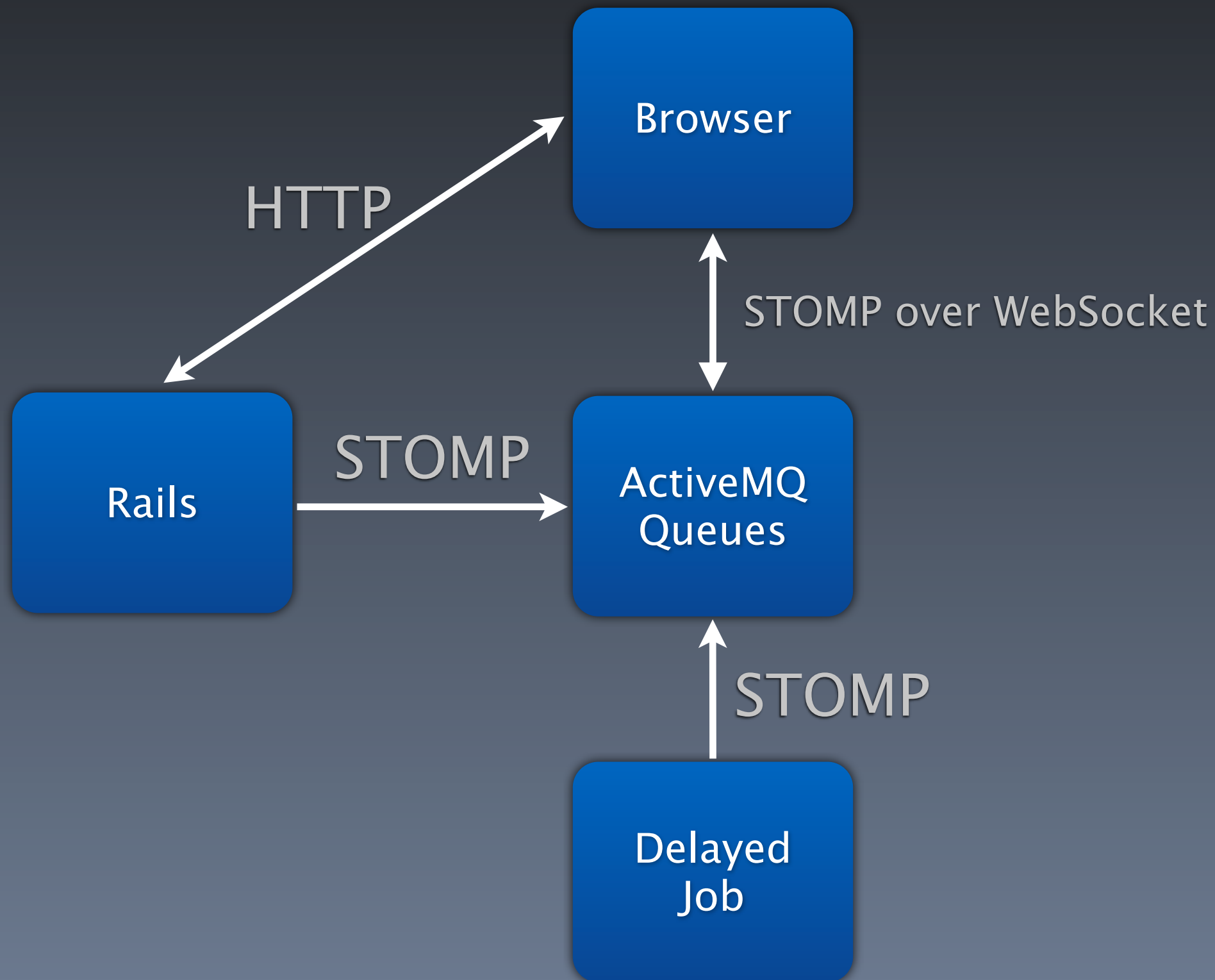


Notifications in Rails

Stomp
WebSockets
ActiveMQ

Architecture



STOMP

SEND

destination:/queue/a

content-type:text/plain

hello queue a

^@

Connecting with Ruby

```
hash = {  
  hosts: [  
    {  
      login: "system",  
      passcode: "manager",  
      host: "localhost",  
      port: 61612, ssl: false},  
    ],  
  }  
  client = Stomp::Client.new(hash)  
  client.publish(user.queue,  
    "Welcome")
```

WebSocket

Looks like HTTP but isn't.

Client and Server (duplex) can send data or text back and forth.

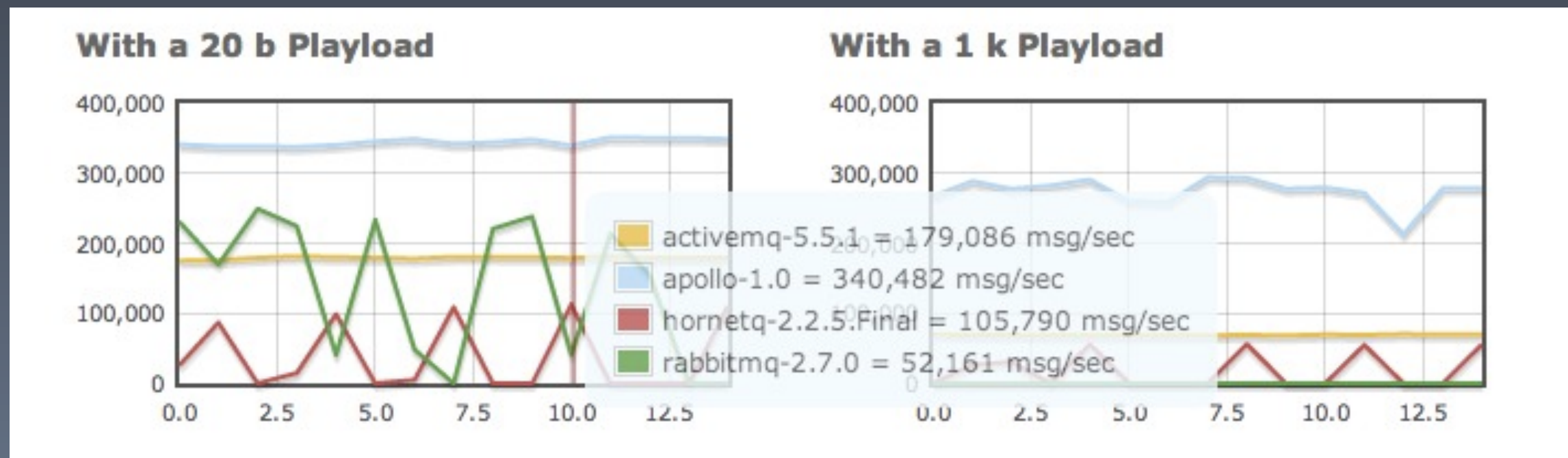
Messages can be split across several frames.

Connecting with JavaScript

```
var url = "ws://localhost:61614/stomp";
var login = "";
var passcode = "";
var destination = "test_...";
var client = Stomp.client(url);
var onconnect = function(frame) {
    client.subscribe(destination, function(message) {
        $("#messages").
            append("<p>" + message.body + "</p>\n");
    });
});
client.connect(login, passcode, onconnect);
```

ApacheMQ

Java based, Messaging Middleware, SSL, Fast
Automatic removal of Queues
10,000s of Queues



<http://hiramchirino.com/stomp-benchmark/ubuntu-2600k/index.html>

WebSockets and STOMP

```
<transportConnectors>  
  <transportConnector  
    name="stomp"  
    uri="stomp://0.0.0.0:61612" />  
  <transportConnector  
    name="websocket"  
    uri="ws://0.0.0.0:61614" />  
</transportConnectors>
```


Queue Setup

```
<plugins>
...
  <authorizationPlugin>
    <map>
      <authorizationMap>
        <authorizationEntries>
          <authorizationEntry queue="">>
            read="admins,users" write="admins,users"
            admin="admins" />
          <authorizationEntry topic="ActiveMQ.Advisory.>"
            read="users" write="users" admin="users" />
          <authorizationEntry topic="*.reply.>"
            read="users" write="users" admin="users" />
        </authorizationEntries>
      ...
    </map>
  </authorizationPlugin>
</plugins>
```

Some Alternatives

Rails 4.0 ActionController::Live

- Server-Sent Events
- Limited to Server Threads and DB Connections

PrivatePub/Faye

- Private by Default
- Node.js and Rails versions
- Limited to Event Driven Servers (Thin, etc)

Pusher

- SaaS solution

But wait...



Makes Rails Solution feasible with SSL, nginx and Thin, Goliath, or Unicorn.

Links

JS Library

—<https://github.com/jmesnil/stomp-websocket>

Ruby Library

—<https://github.com/stompgem/stomp>

ActiveMQ

—<http://activemq.apache.org/>