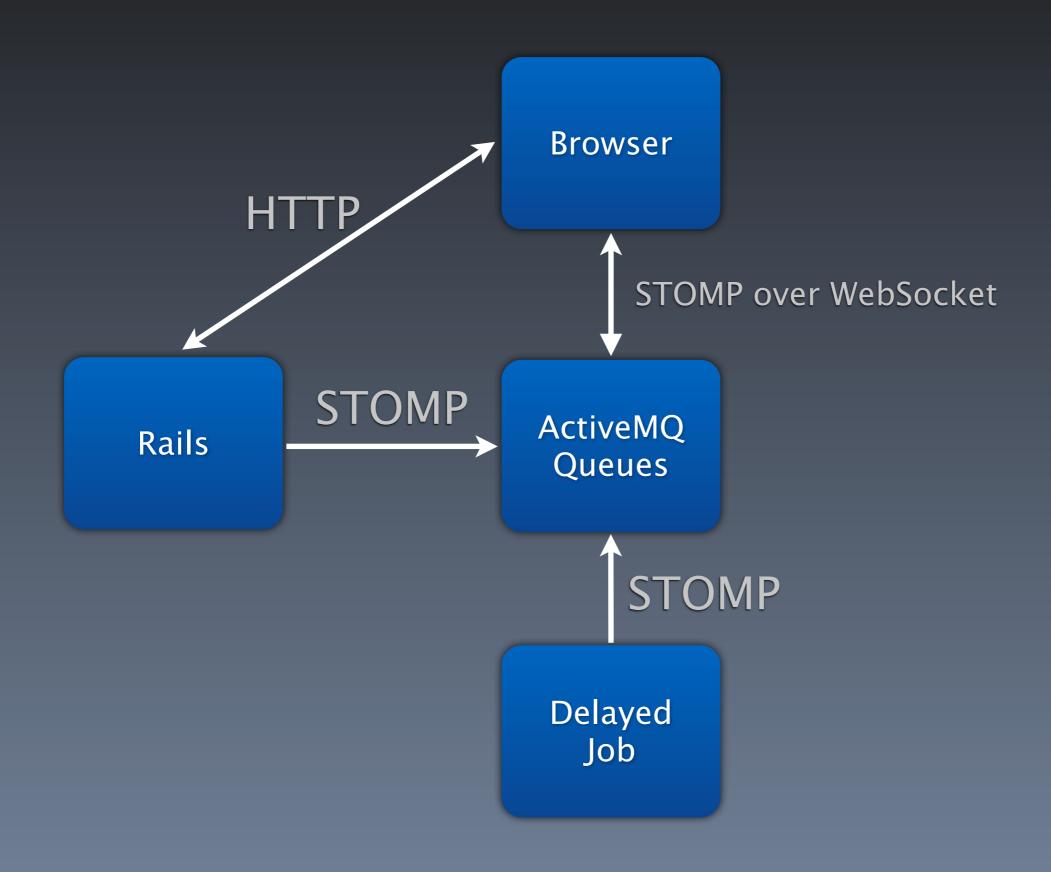
Stomp WebSockets ActiveMQ Rails

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("" + message.body + "\n");
   }
});
client.connect(login, passcode, onconnect);
```

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>
</plugins>
```

Some Alternatives

ActionController::Live

- Live Streaming
- Rails 4.0
- 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

Links

```
JS Library

<a href="https://github.com/jmesnil/stomp-websocket">https://github.com/jmesnil/stomp-websocket</a>
Ruby Library

<a href="https://github.com/stompgem/stomp">https://github.com/stompgem/stomp</a>
ActiveMQ

<a href="http://activemq.apache.org/">http://activemq.apache.org/</a>
```