

libMiimetiQ

# Motivation/Problem statement

- IoT devices are scattered all over, and skynet needs to be able to talk to them
- “Talk to them”?
  - send updates – eg. Fuel level, power etc..
  - perform actions - “powerOff()”, “add(1,2)”, “riseUp()”
- Hence this library. A thin abstraction layer on top of RabbitMQ.

# Concepts

- **MiimetiqService**: An object representing the connection to the central exchange that facilitates the message passing. A rabbit MQ server in this case.
- **MiimetiqFeed**: A way to publish/subscribe to the signals we are interested in.
- **MiimetiqRPCServer/MiimetiqRPCClient**: A way to perform actions on a remote device

# MiimetiqService

Represents a connection to the MiimetiqService

- Needs: ('host', 'model', 'instanceName', 'username', 'password')

eg. ('127.0.0.1', 'TX', '100', 'jamesconnor', 'resistanceIsFutile')

- Provides:

`connect(function(error){});`

`isReady();`

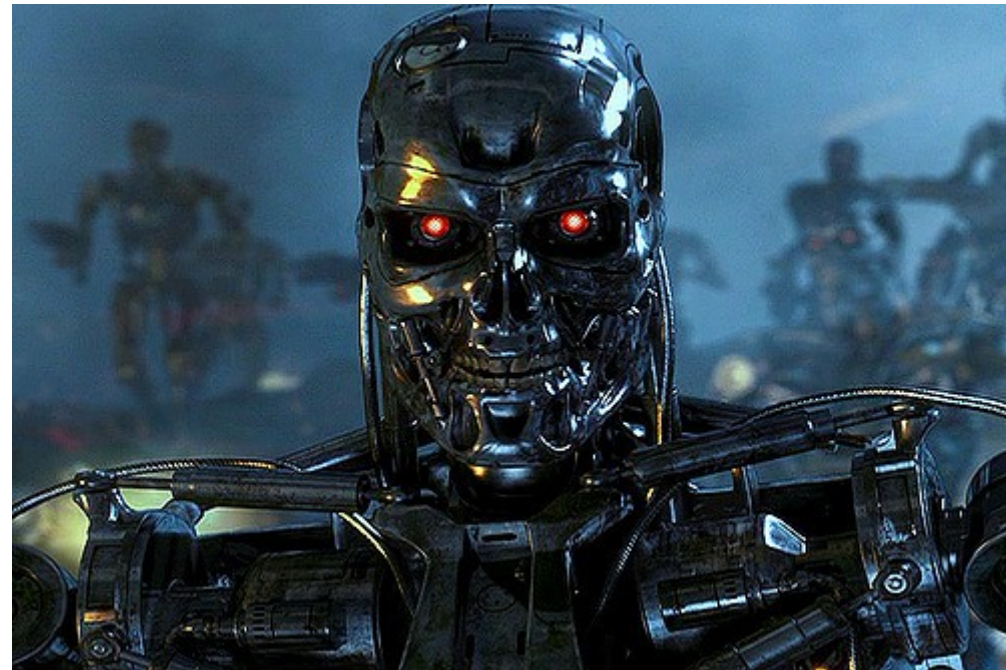
`getFeed(signalParams, function(error, feed){});`

`getRPCEndPoint(mode, rpcParams, function(error, endPoint){ });`

`disconnect()`

# MiimetiQFeed

- Needs / Identified by- (type, model, deviceId, instrument, writer)  
eg. (“number”, “T”, “800”, “terminator”, “ammoLevel”)
- Provides  
`publish(data)`  
`subscribe(function(err, rawMessage, data){})`



(obligatory poster from the future)

# MiimetiQ RPC EndPoint

- Needs/Identified by - (model, deviceId, instrument)  
eg. ("TX", "100", "terminator")
- Takes care of serialization, timeouts etc.. and provides:

## MiimetiQRPCServer:

```
start({ 'sayCheese': function(){ return  
'cheese'; } });  
stop();
```

## MiimetiQRPCClient

```
connect(function(error, remoteMethods){ });  
  
invoke('sayCheese', [], function(err, result)  
{ });  
  
or  
  
remoteMethods.sayCheese([], function(err,  
result){ });  
  
isReady();  
  
disconnect();
```

Thank You