

Building Simple Distributed Systems with ZeroMQ (ØMQ)

@igorgue



Problem

- Building distributed systems is hard
- Sockets in C, not so much fun
- RabbitMQ loves to be babysitted
- It's fun to build complex systems

ZMQ Coolness

- A socket library
- Faster than TCP for clusters and supercomputers
- Good for async IO
- 30+ programming languages supported
- Supports Linux, Windows and OS X
- LGPL

There's An App for that...

- `django-logstream`
- `django-ztask`
- `Amon.cx` supports it

Hello, World! Time

Client

```
import zmq

# Socket to talk to server
context = zmq.Context()
socket = context.socket(zmq.SUB)

socket.connect('tcp://localhost:5556')

socket.setsockopt(zmq.SUBSCRIBE, '')

# Socket recv loop
while True:
    message = socket.recv()

    print message
```

Server

```
import zmq

context = zmq.Context()
socket = context.socket(zmq.PUB)

socket.bind('tcp://*:5556')

# Send 10 messages
for times in range(1, 11):
    socket.send('Message#{0}'.format(times))
```

My Goal

Build a centralized log system

DEMO

Recap

- ZMQ makes it easier to write distributed systems
- It's cheap
- Flexible
- Supports a lot of languages

Thanks!



<http://senzari.com> we're hiring!

Steal this:

<http://igorgue.com/presentations/zmq-so-fucking-awesome.pdf>