IETF Hiroshima Meetup
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Real-world Web Sockets
Introduction

- John Fallows, CTO @ Kaazing

- Kaazing Corporation
  - Founded May 2007
  - Based in Mountain View, California, USA
  - WebSocket vendor – Kaazing Enterprise Gateway
WebSocket Contributions

- Naming JavaScript APIs
  - TCPConnection becomes WebSocket

- Wire Protocol Handshake
  - TCPConnection: Hello / Welcome
  - WebSocket: HTTP with Upgrade
Use-case: Financial Institution

- Java Messaging Service in the browser
  - Full protocol capabilities, e.g. transactions
  - JMS over WebSocket

- Unified programming model
  - Desktop and browser clients

- Scaling out to large user population
  - > 100K connections
Use-case: On-line Gaming

- Advanced Message Queuing Protocol
  - AMQP over WebSocket
  - Full protocol capabilities, e.g. flow control

- Scaling out to large user population
  - > 100K connections
  - Geographically distributed
Use-case: Social Networking

- eXtensible Messaging and Presence Protocol
  - XMPP over WebSocket
  - Full protocol capabilities, e.g. presence

- Scaling out to large user population
  - > 100K connections
  - Geographically distributed
DEMO

“Web Sockets in action”
Summary

- WebSocket wire protocol easily implemented
  - HTTP-friendly TCP for the browser
- Minimizing network traffic reduces overhead
  - Reduced CPU, memory, improved scalability
- Customers value full protocol capabilities
  - Transactions, flow-control, presence
- WebSocket is a foundation for any protocol
  - TCP-based for now, possibly SCTP, others later