KAAZING
QCon
WebGL & Real-Time
Web Communication
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Mar 5, 2014
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About Us

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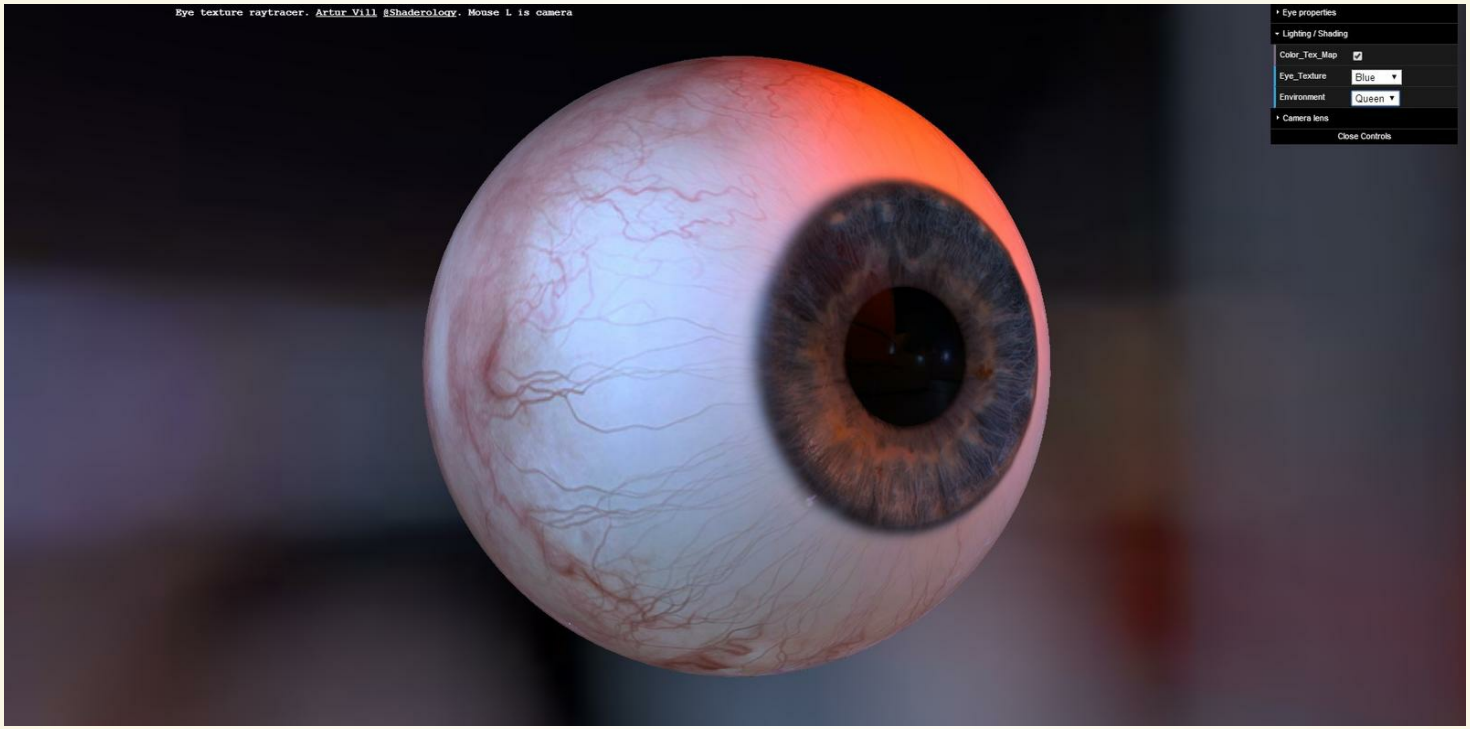
WHAT IS WEBGL?

- JavaScript API for talking to the GPU
- Based on OpenGL ES 2.0
- Been around for a few years

WHAT DOES WEBGL LOOK LIKE?

http://www.vill.ee/eye/



I WANT MORE!

http://www.chromeexperiments.com/
http://www.gootechnologies.com/showcase/

WEBGL FOR MORTALS

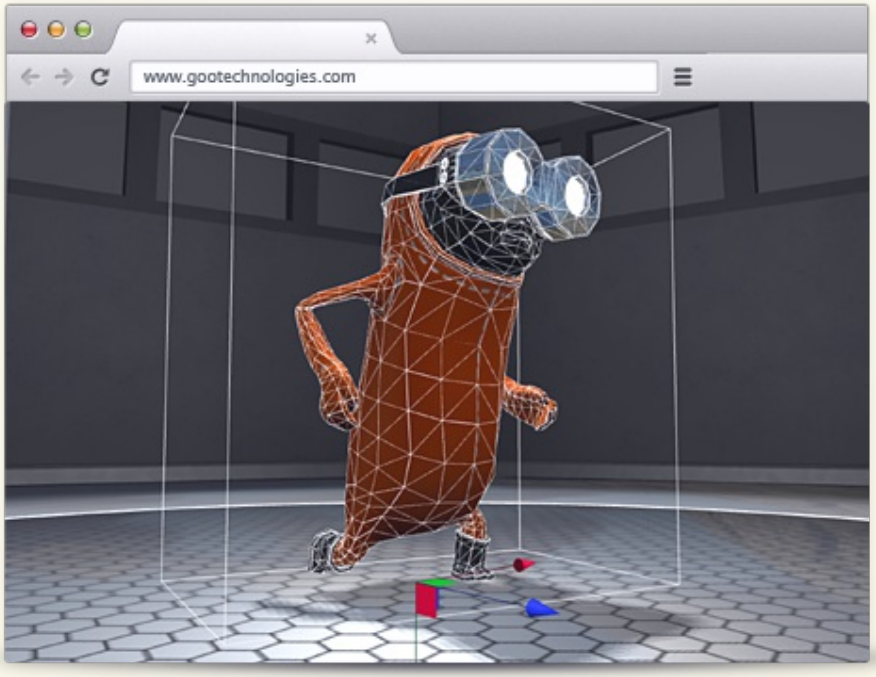
(NOT EVERYONE IS A WIZARD)

- Graphics wizards
- Game developers
- Artists
- Architects
- Teachers
- Advertisers
- Interface designers

PIPELINES AND WORKFLOWS

STEP ONE: A 3D ENGINE

- Goo Engine!
- Open web standards
- No plugins, no downloads



DEMO TIME!

http://labs.gooengine.com/videosphere
http://labs.gooengine.com/goofy/particlefun/
The Tunnan Gameplay Video

STEP TWO: AN IN-BROWSER 3D TOOL

Goo Create

DID YOU FORGET TO OPEN A BROWSER TAB, VICTOR?

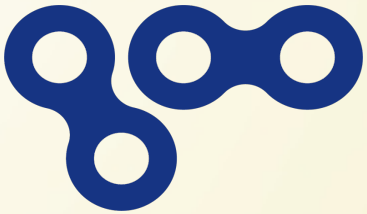
YES YOU DID

http://create.gootechnologies.com

DO YOU WANT TO TRY IT OUT?

(OF COURSE YOU DO)

Sign up for the beta:
http://www.gootechnologies.com



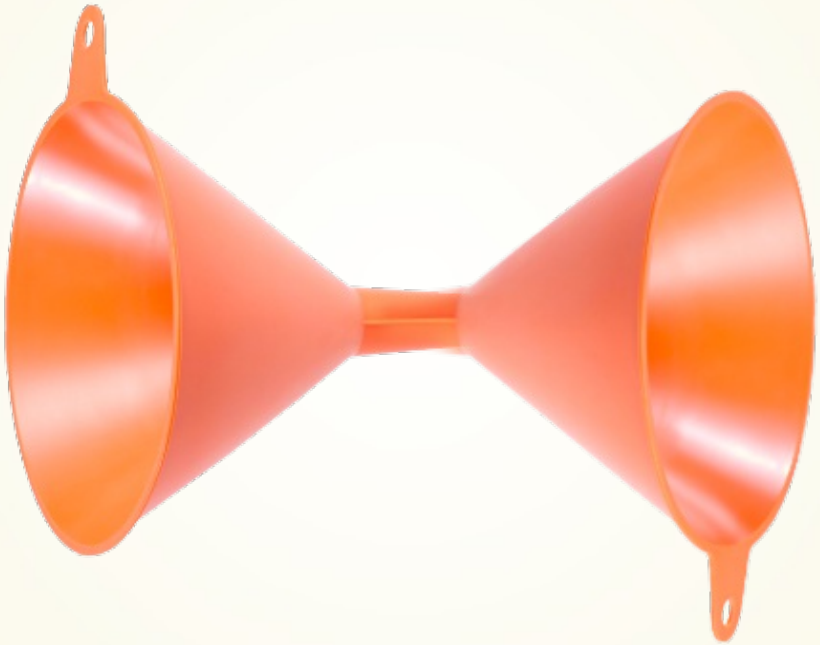
STEP THREE: NOW WHAT?

THE FUNNEL - A PIPELINE

(SORT OF)

LOTS OF INPUTS, LOTS OF OUTPUTS

THE DOUBLE FUNNEL!



DEMO TIME AGAIN!

Here is the link, Victor:
http://www.gootechnologies.com/pearl-boy

Demos

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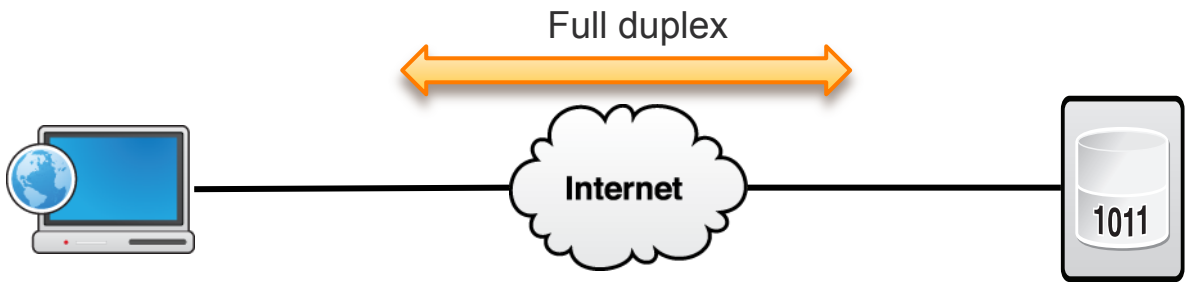
HTML5 WebSocket: TCP for the Web

- Standard Protocol (IETF): RFC-6455
- Standard API:
  - W3C: JavaScript
- Single socket, full-duplex
- Low overhead: <1% of HTTP
- Low latency: low milliseconds
- SSL support



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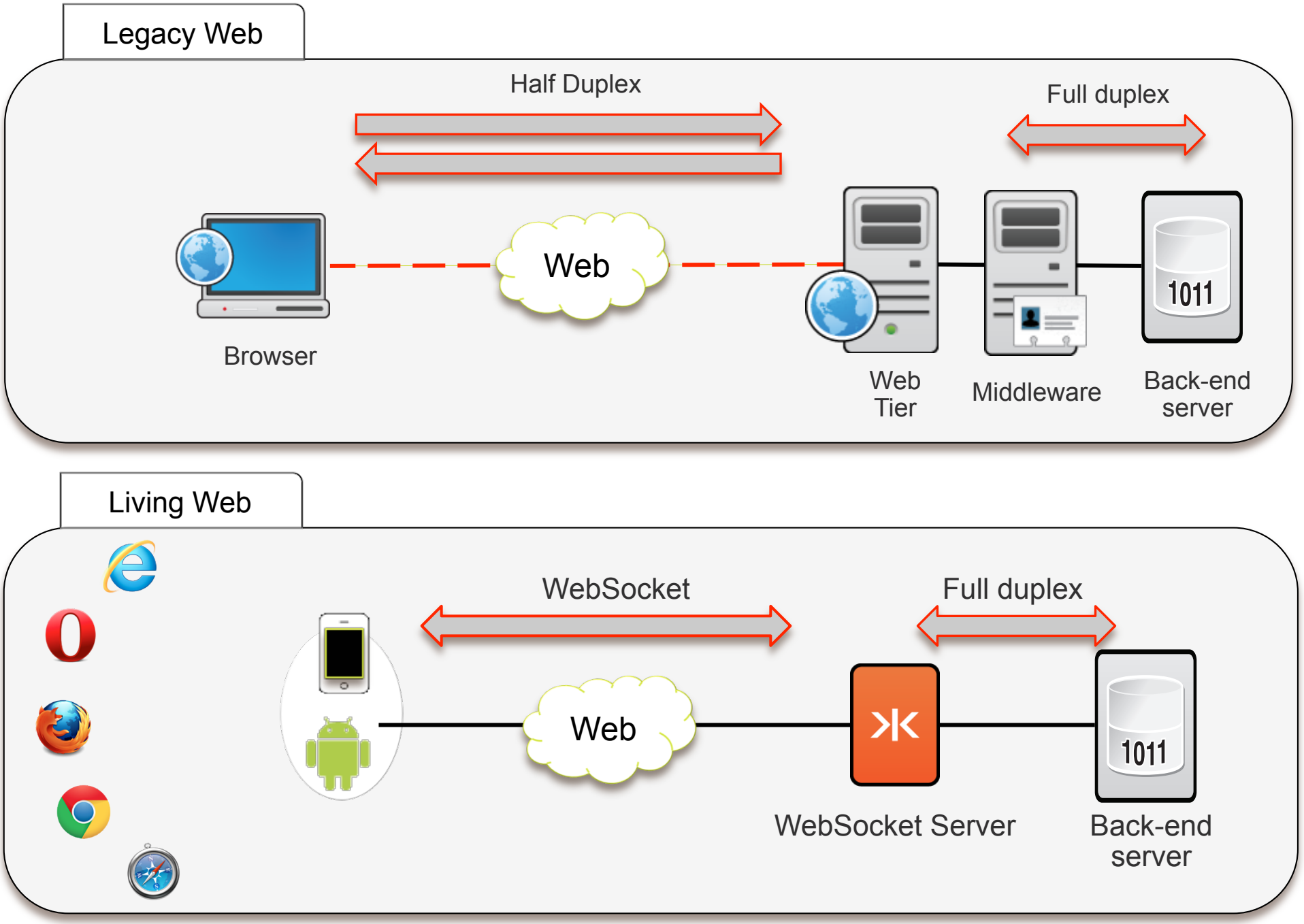
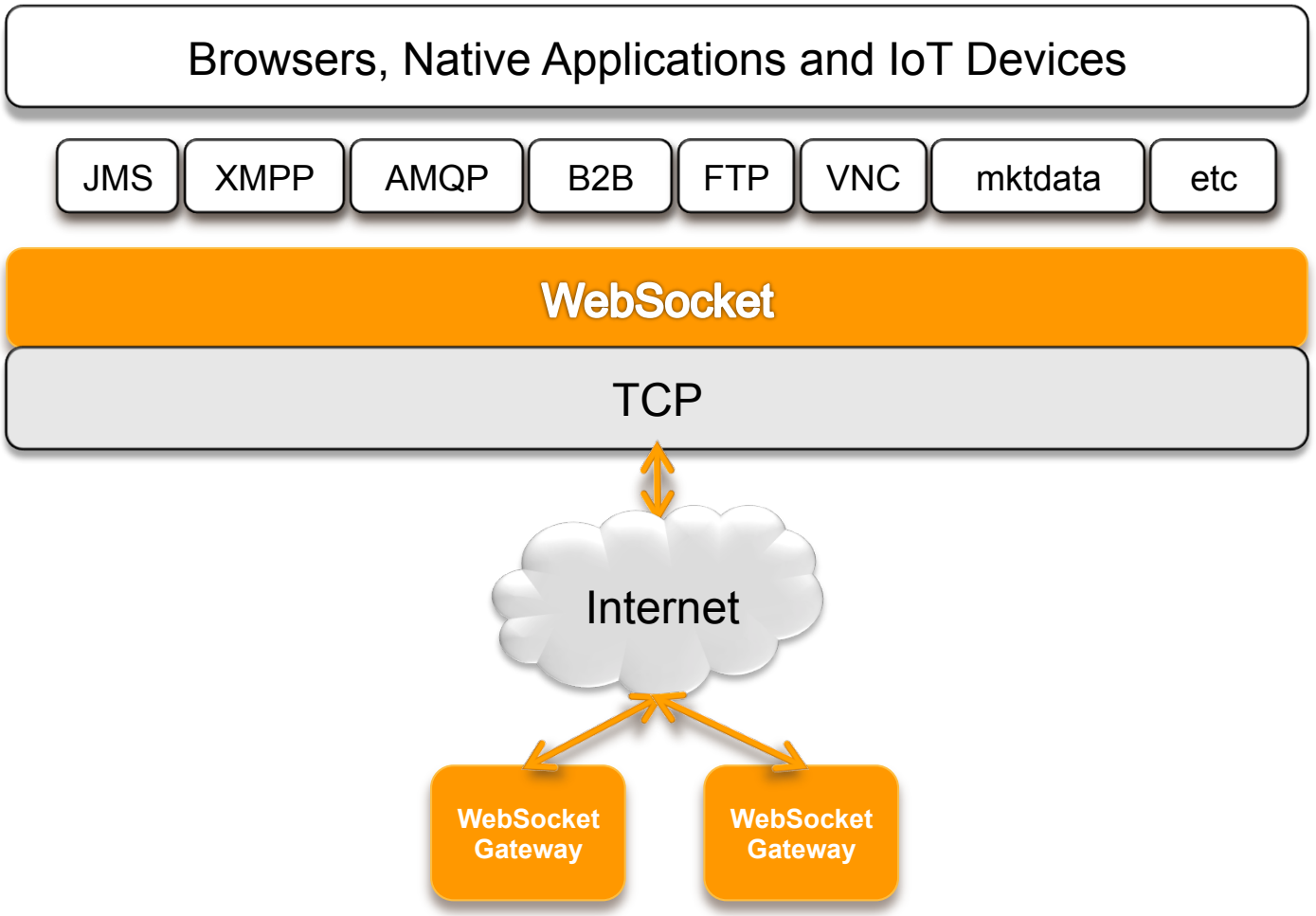

Legacy Web
Half Duplex
Full duplex
Web
1011
Browser
Web Tier
Middleware
Back-end server
Living Web
WebSocket
Full duplex
Web
1011
WebSocket Server
Back-end server

Protocol Layering



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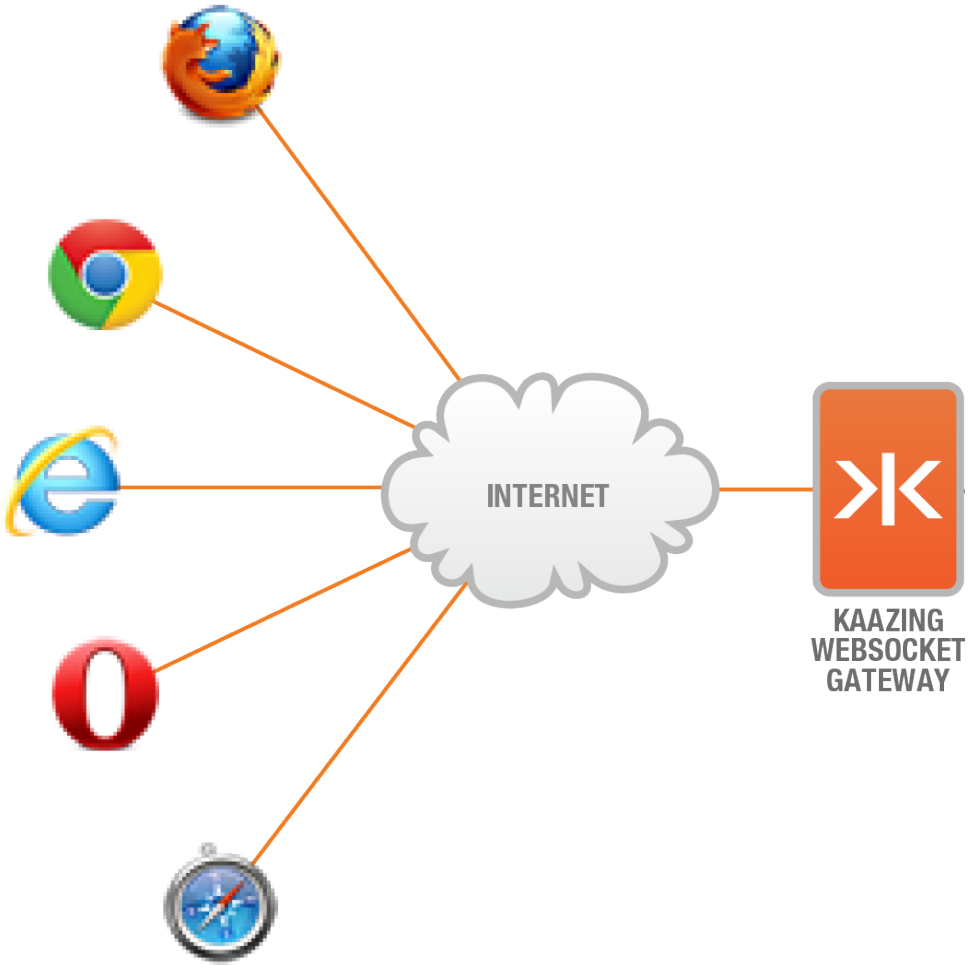
WebSocket Clients and Server



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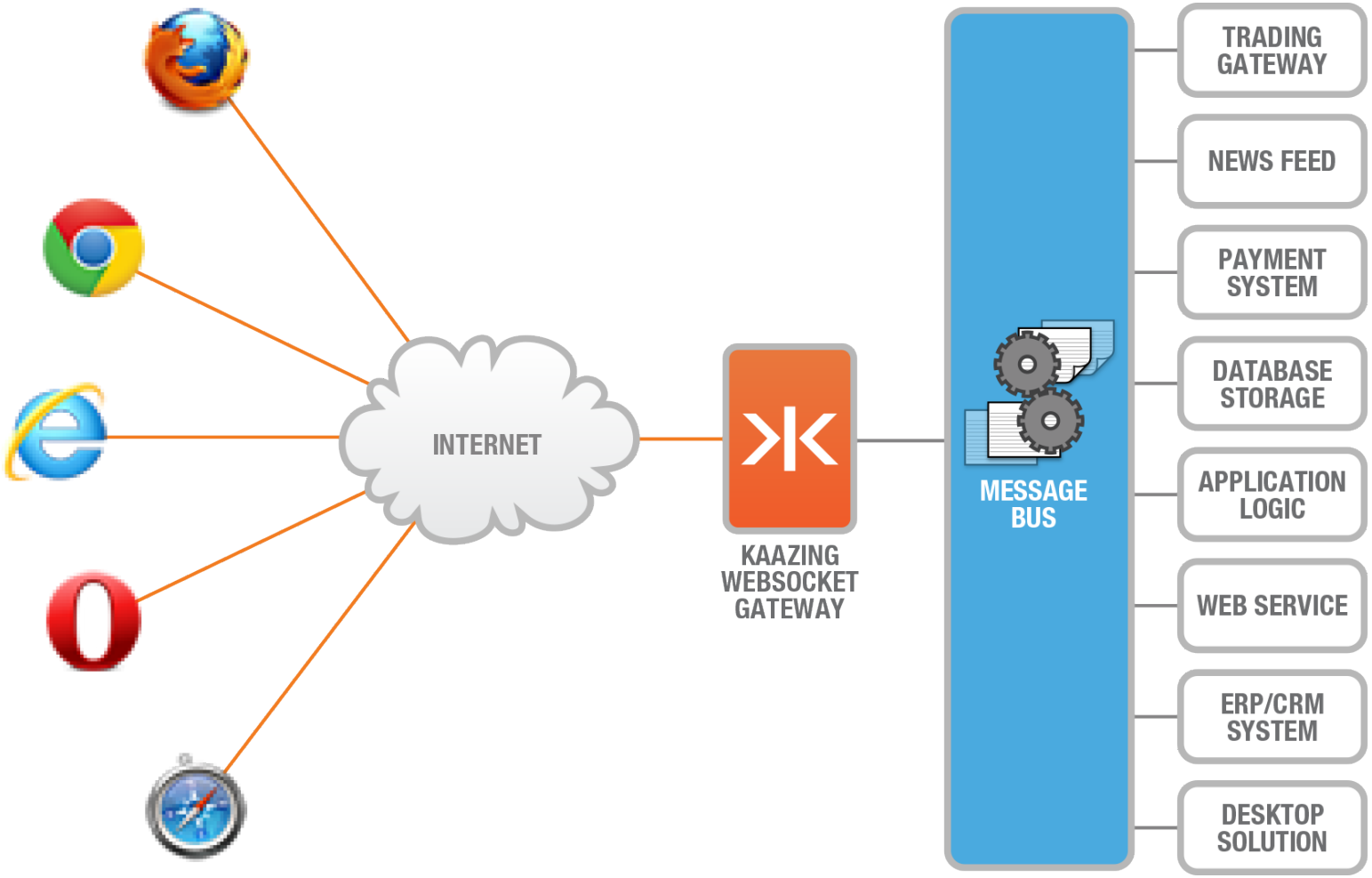
Enterprise Messaging Extended to the Web



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Raspberry Pi

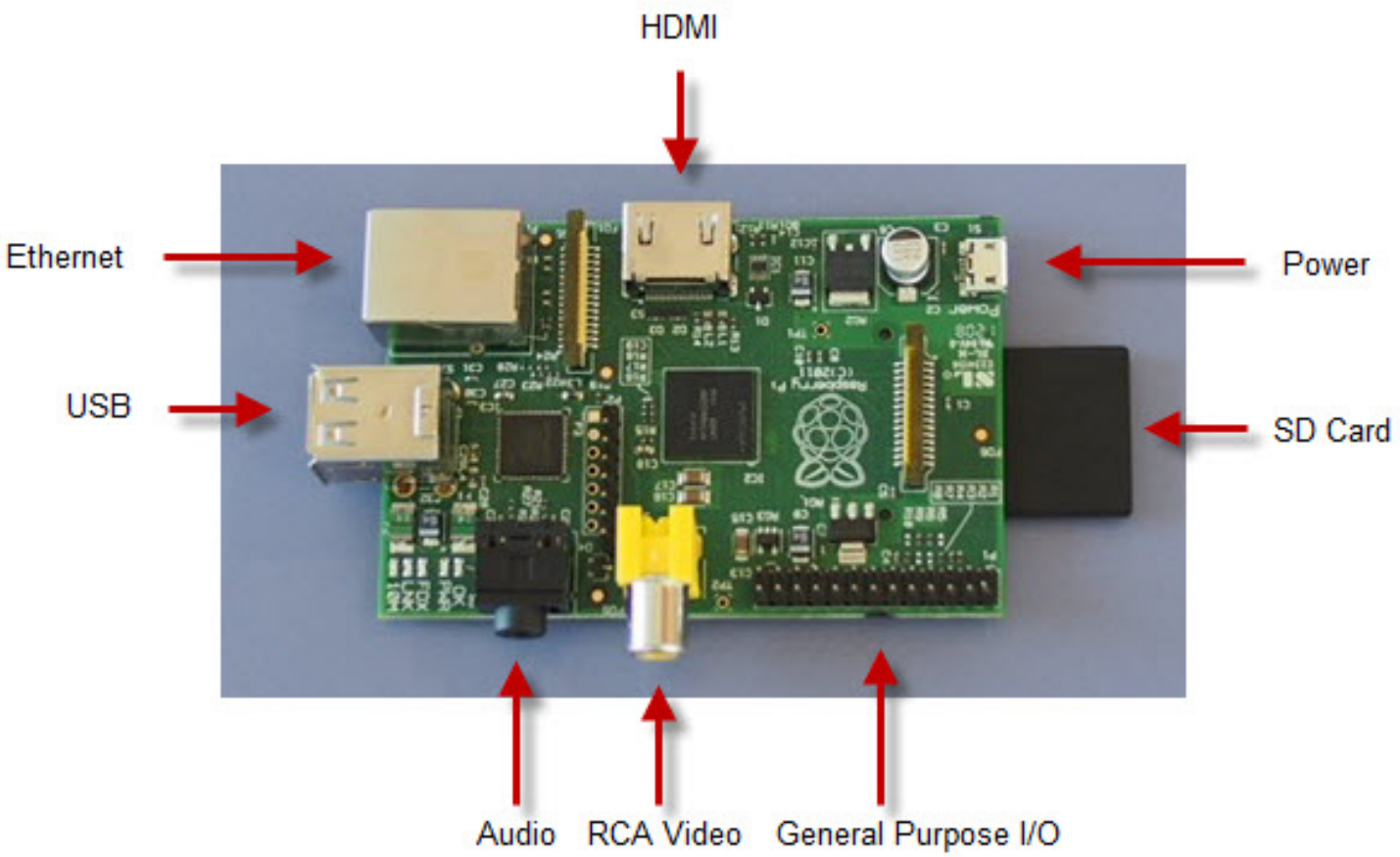

Image source: http://www.oracle.com/technetwork/articles/java/raspberrypi-1704896.html

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Demo Setup

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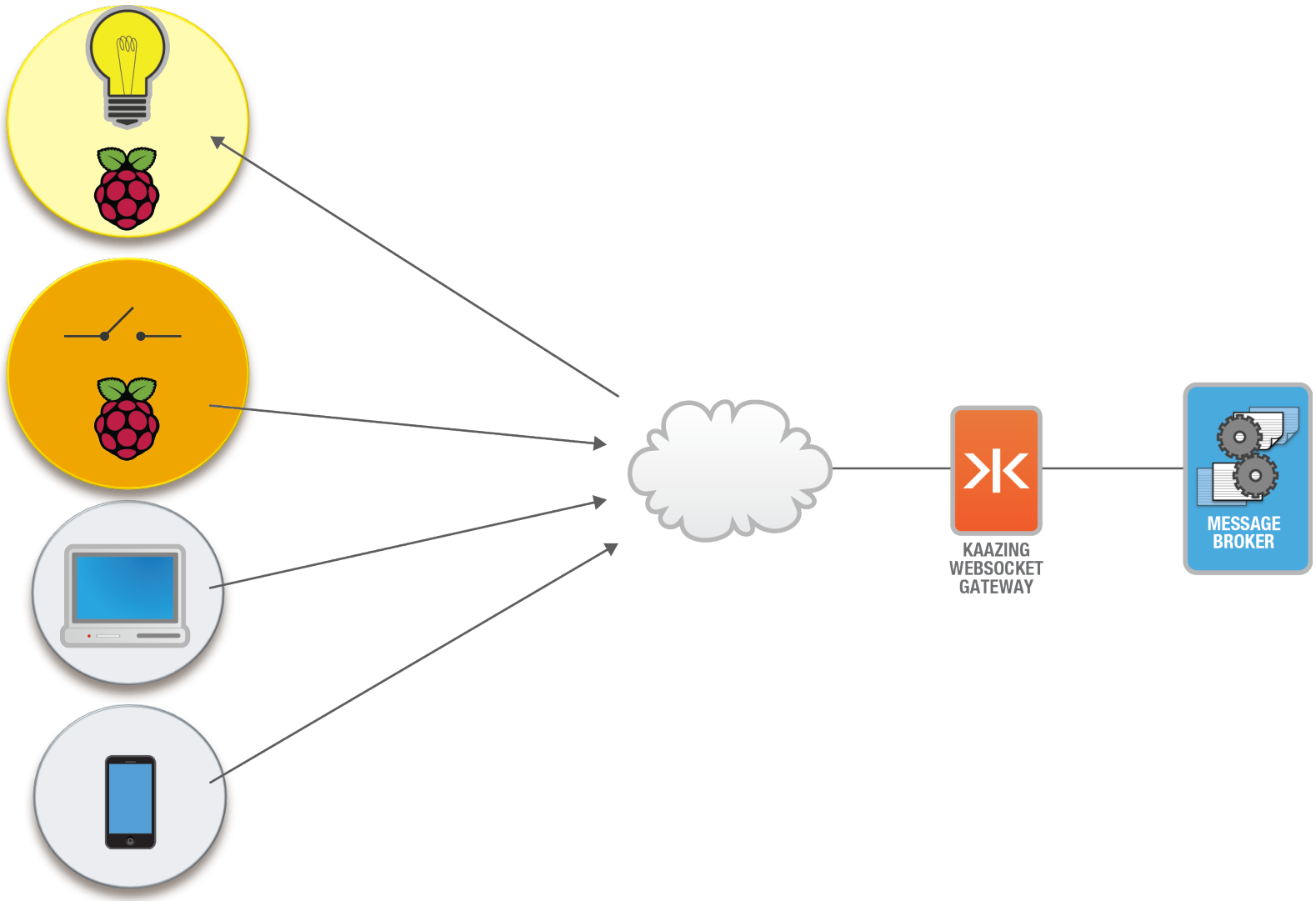
Controlling the Light Remotely Using Pub-Sub Over the Web



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The Web Bridges Continents

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Demo

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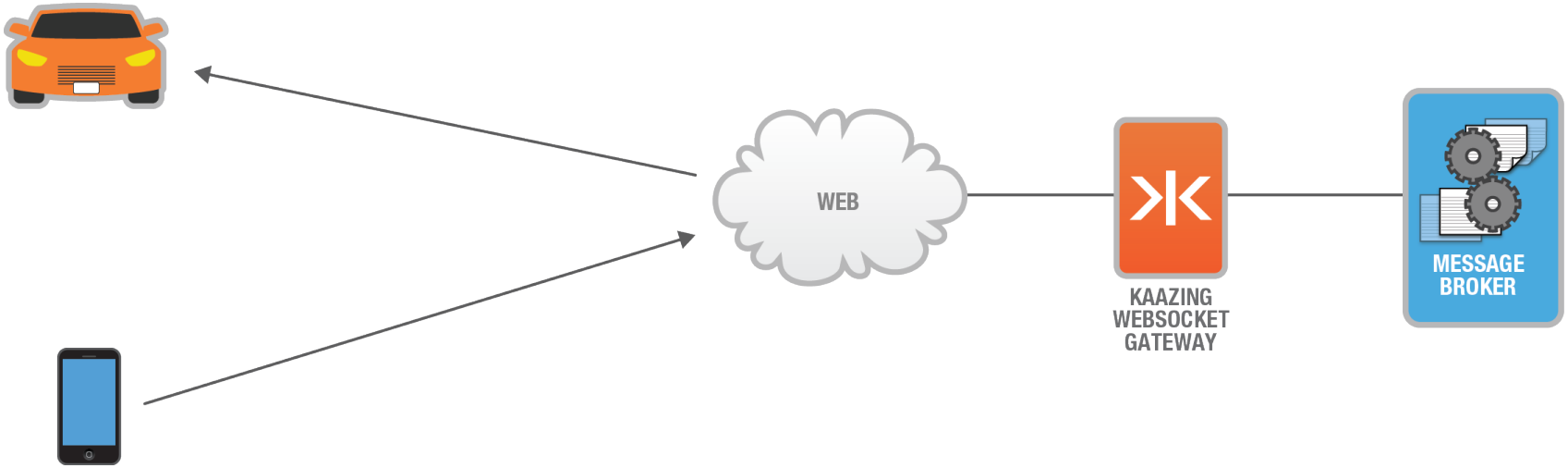
The Architecture



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It’s More than “Just” the Web

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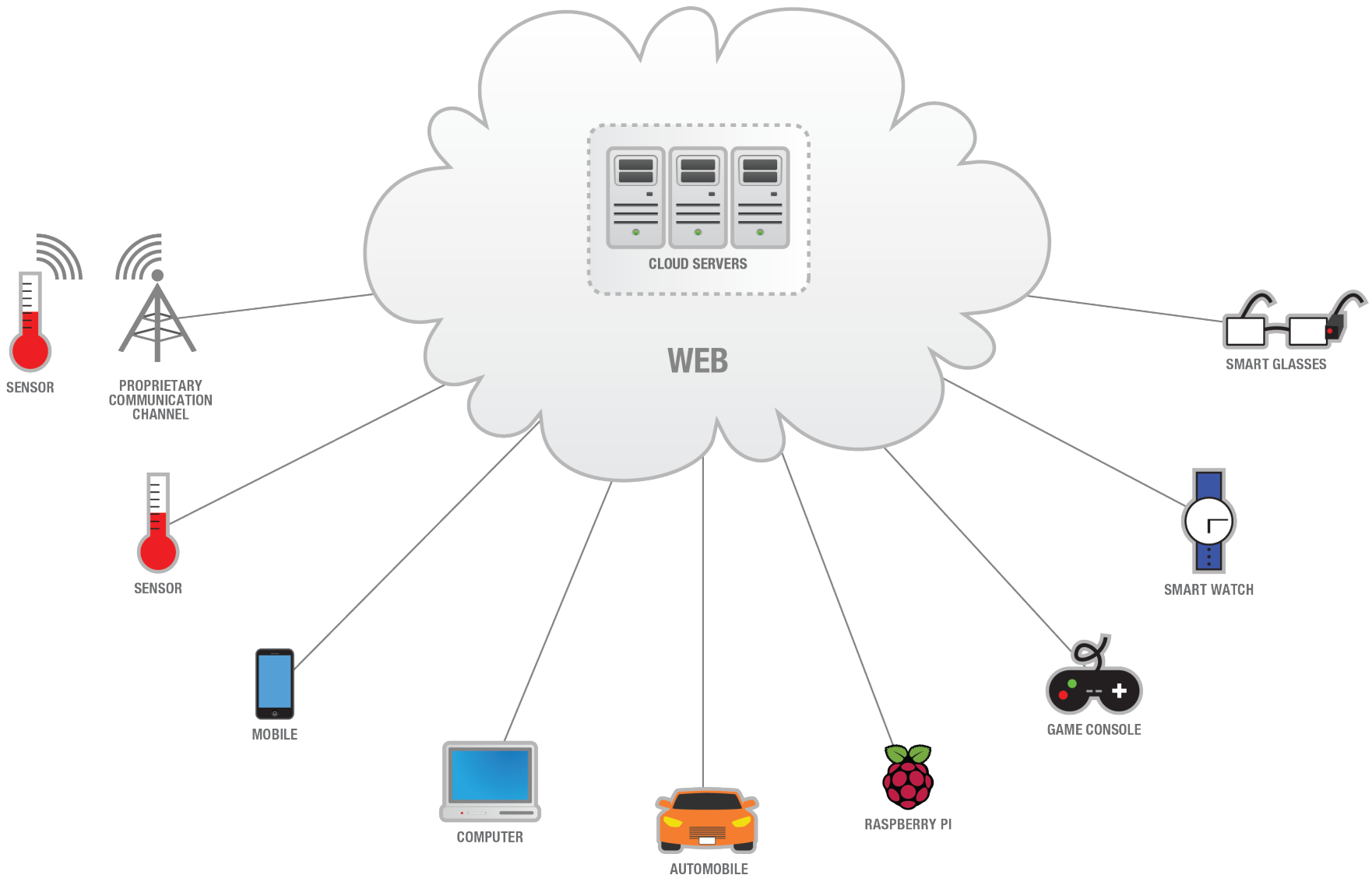
The Web of Things



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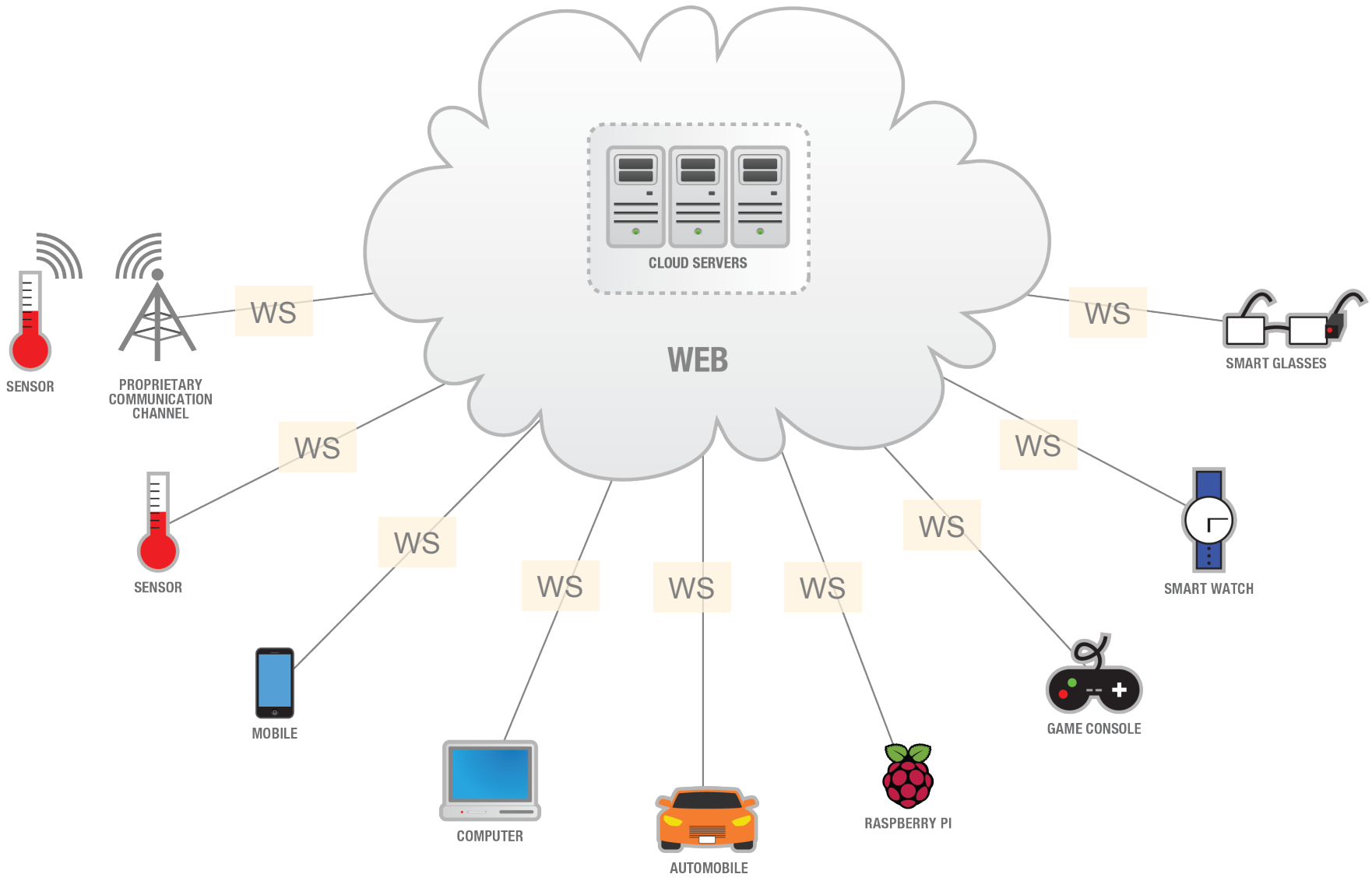
WebSocket Powering the Web of Things



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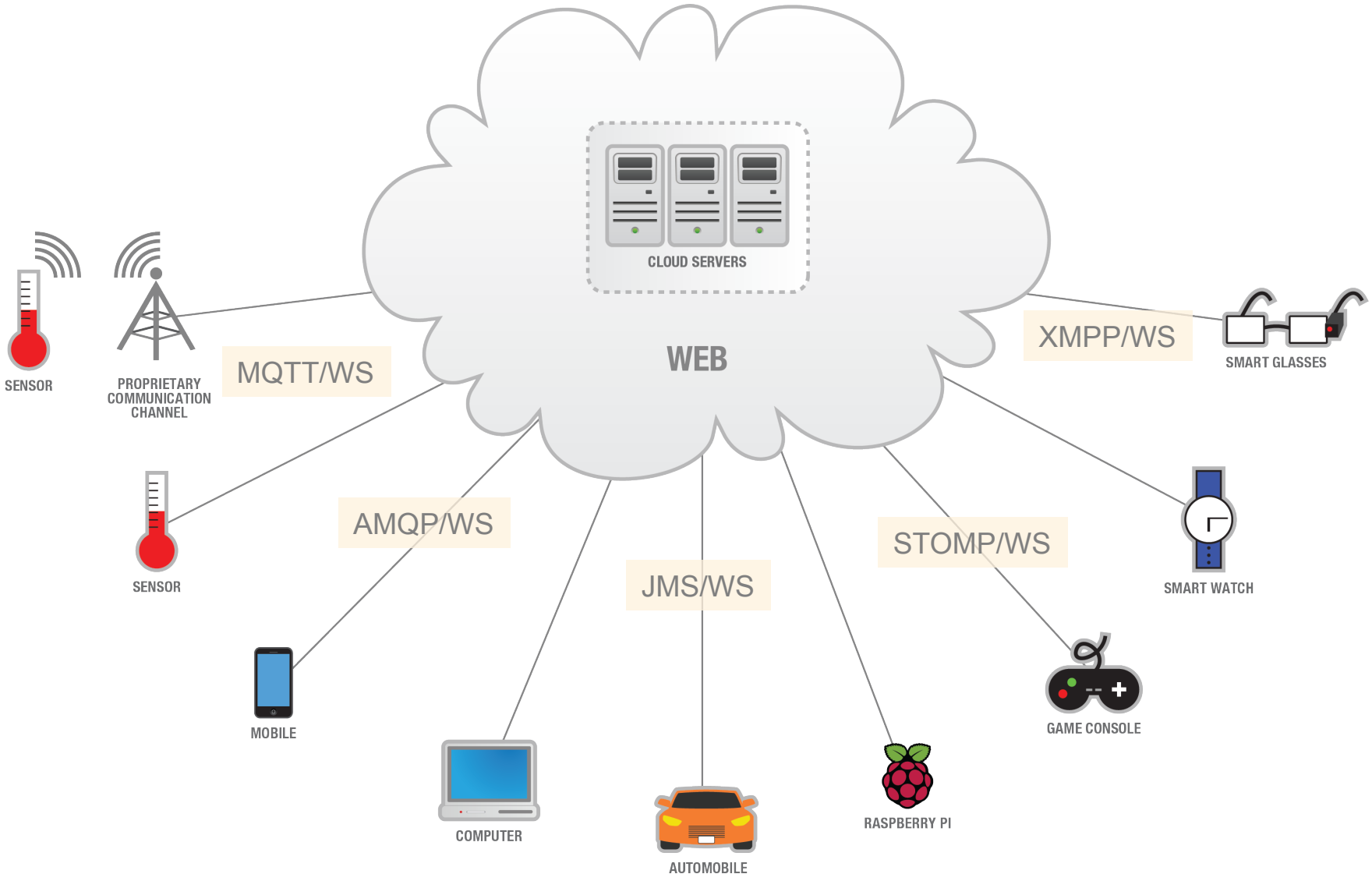
Extending Protocols to the Web of Things



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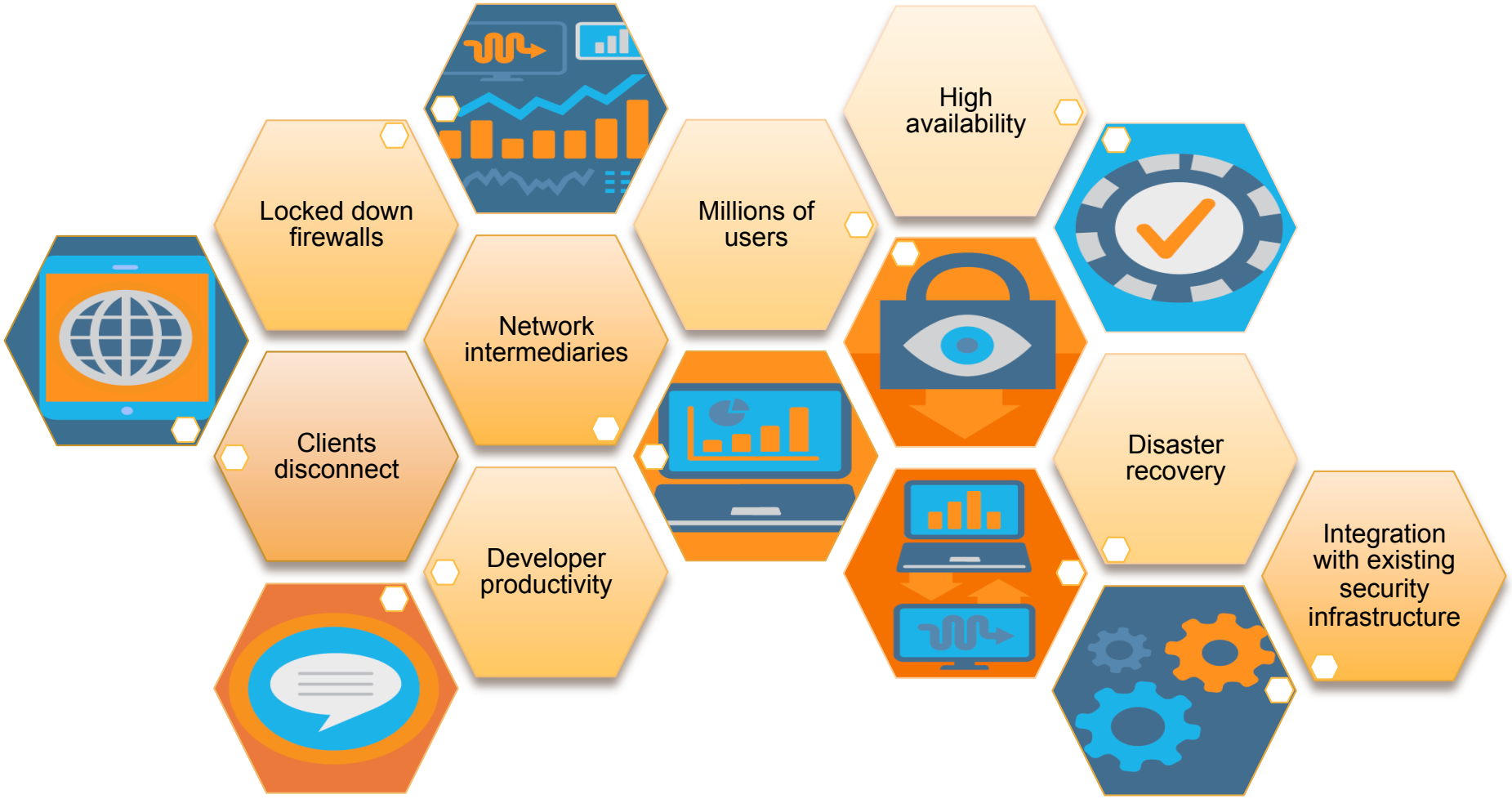
Web Communication Is Challenging



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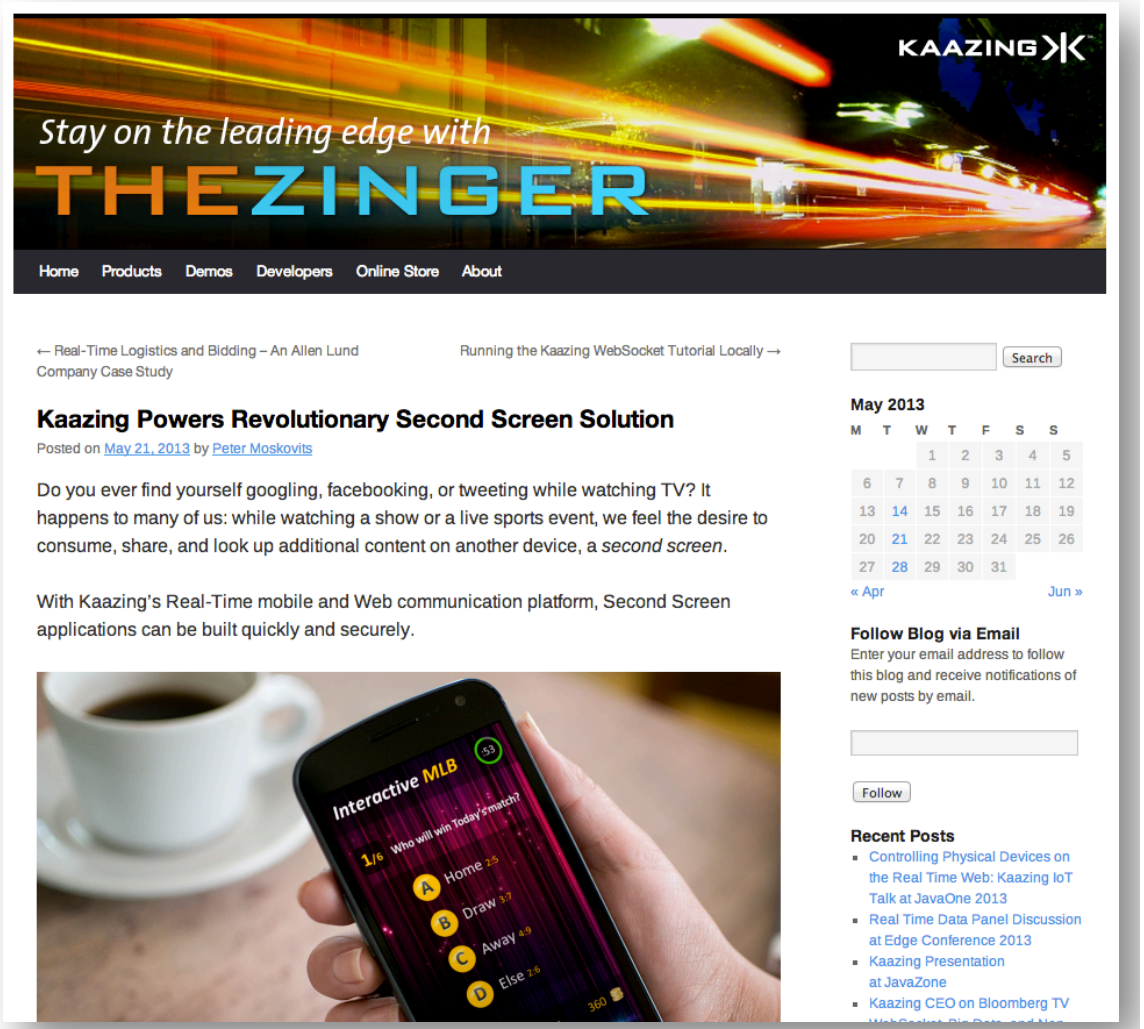
  - http://developer.kaazing.com
- Free product download



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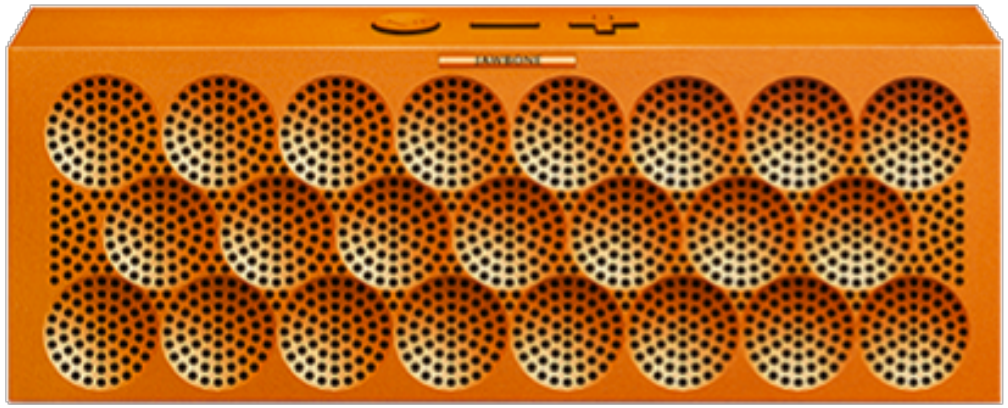
Kaazing at QCon

Visit Kaazing in the Power Lounge
to see all these demos live

Win a mini Jambox



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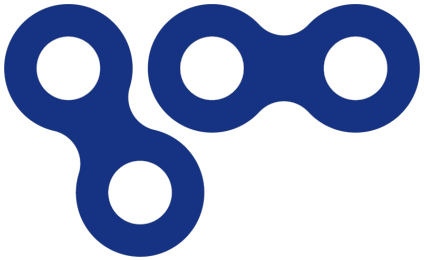
- Goo Create Beta: http://gootechnologies.com
- Live Demos: http://gootechnologies.com/showcase



- http://kaazing.com
- http://tutorial.kaazing.com
- Kaazing Blog: Extreme HTML5 Video Interactivity: Sending WebSocket Messages with Popcorn.js
- The Definitive Guide to HTML5 WebSocket

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How to Get a Hold of Us?

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