



KAAZING >K®

QCon

WebGL & Real-Time Web Communication

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Mar 5, 2014

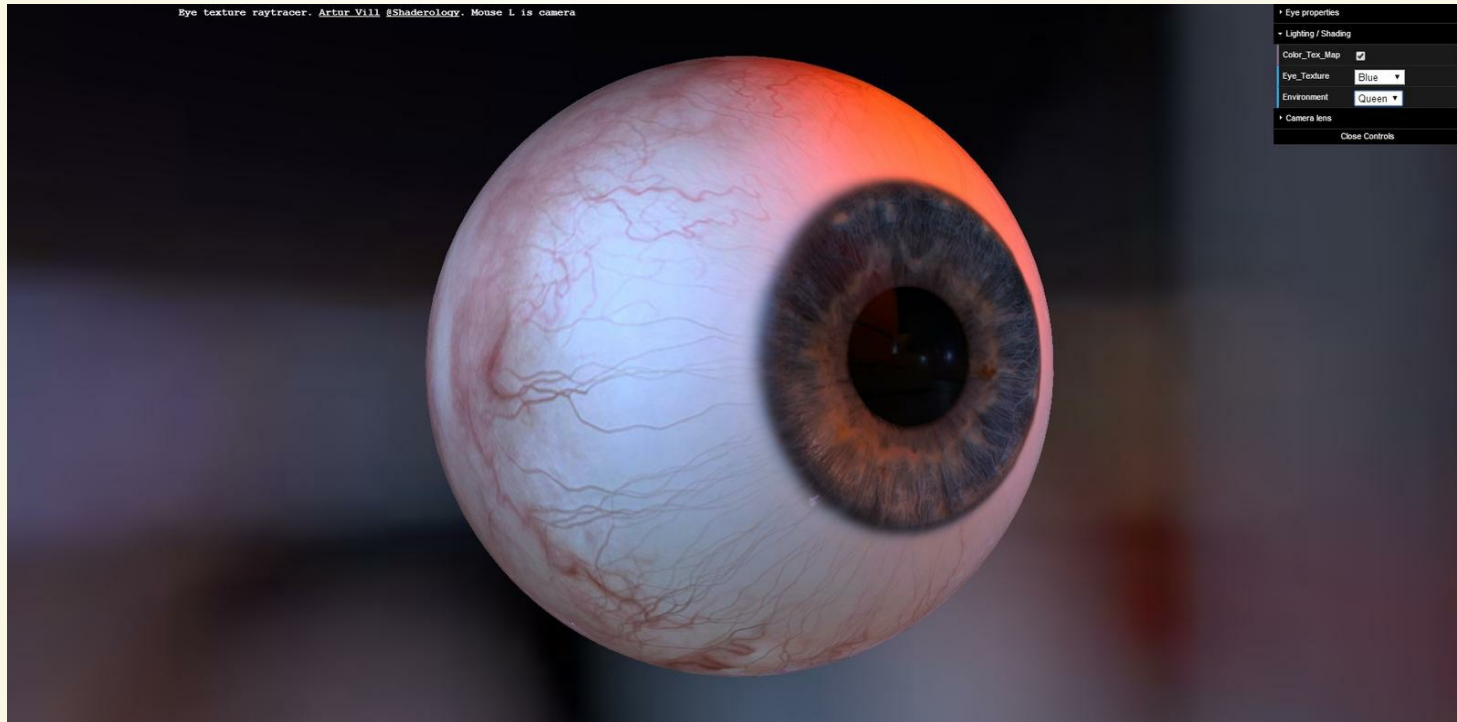
WHAT IS WEBGL?

- 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

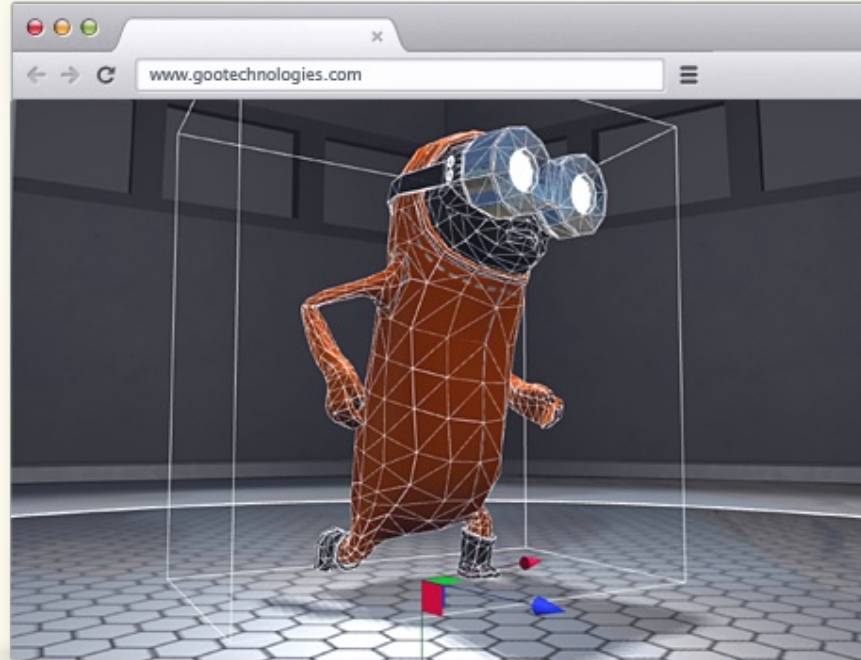
(NOT EVERYONE IS A WIZARD)

- 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

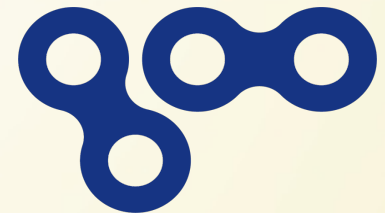
<http://create.gootechnologies.com>

DO YOU WANT TO TRY IT OUT?

(OF COURSE YOU DO)

Sign up for the beta:

<http://www.gootechnologies.com>



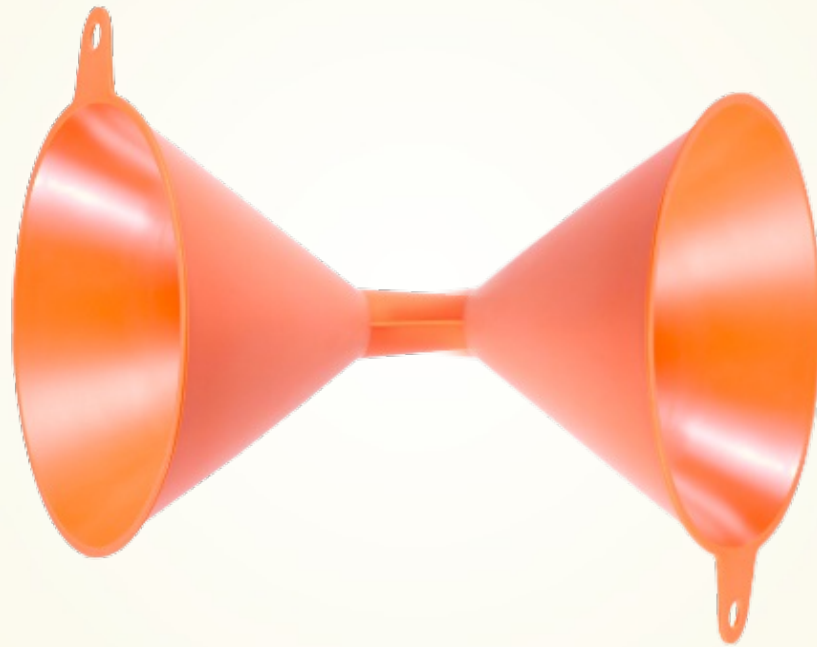
STEP THREE: NOW WHAT?

THE FUNNEL - A PIPELINE

(SORT OF)



LOTS OF INPUTS, LOTS OF OUTPUTS
THE DOUBLE FUNNEL!

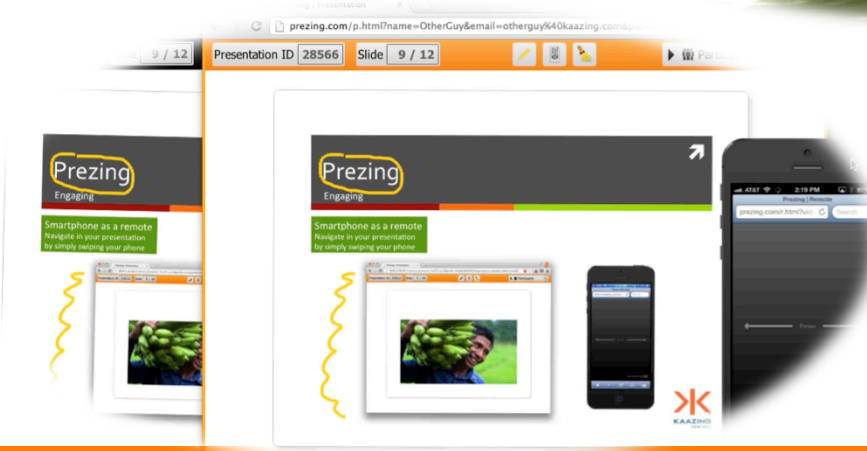


DEMO TIME AGAIN!

Here is the link, Victor:

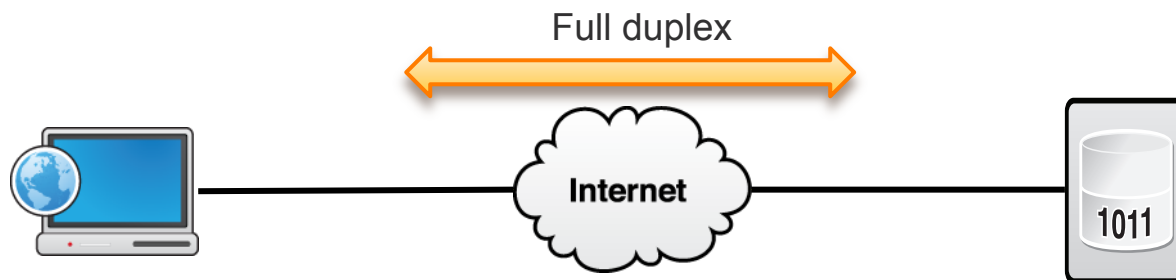
<http://www.gootechnologies.com/pearl-boy>

Demos

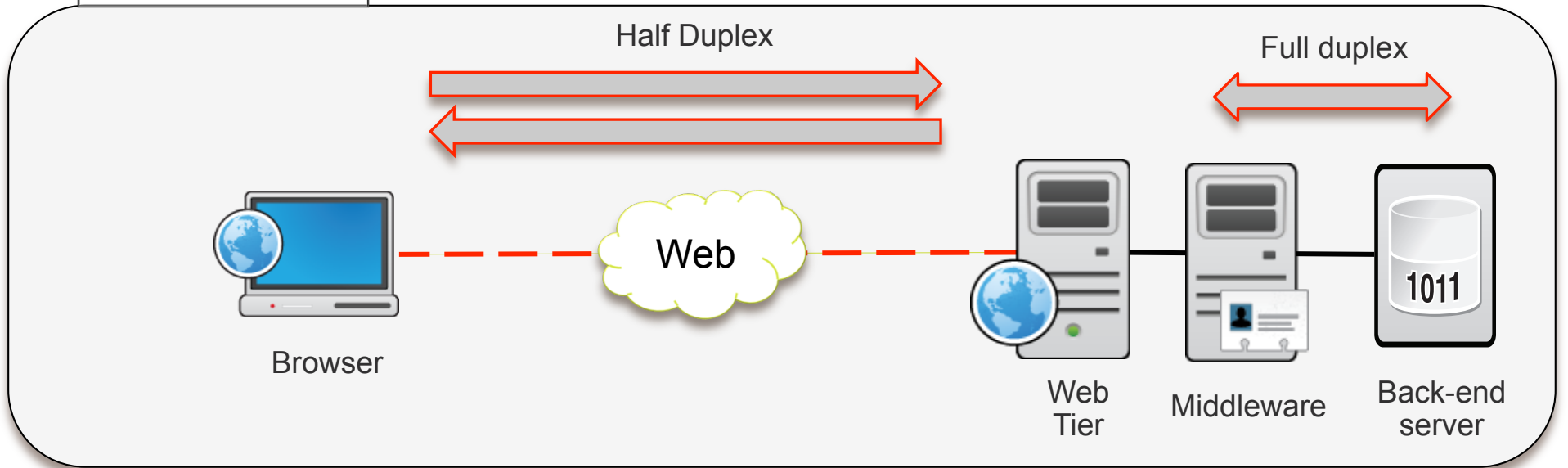


HTML5 WebSocket: TCP for the Web

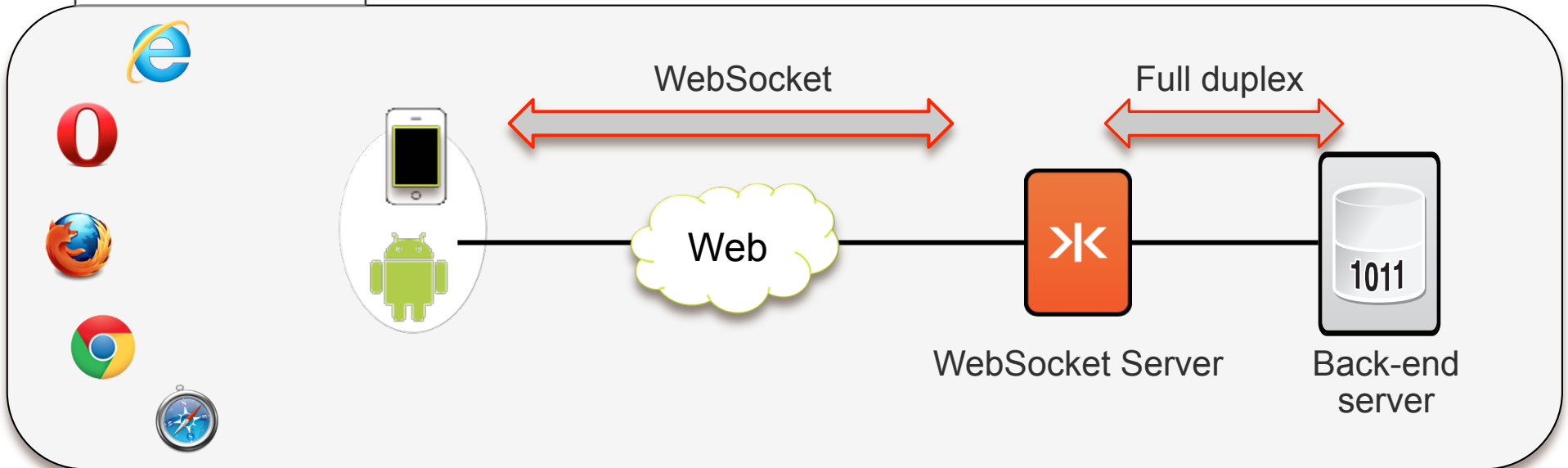
- Standard Protocol (IETF): RFC-6455
- Standard API:
 - W3C: JavaScript
- Single socket, full-duplex
- Low overhead: <1% of HTTP
- Low latency: low milliseconds
- SSL support



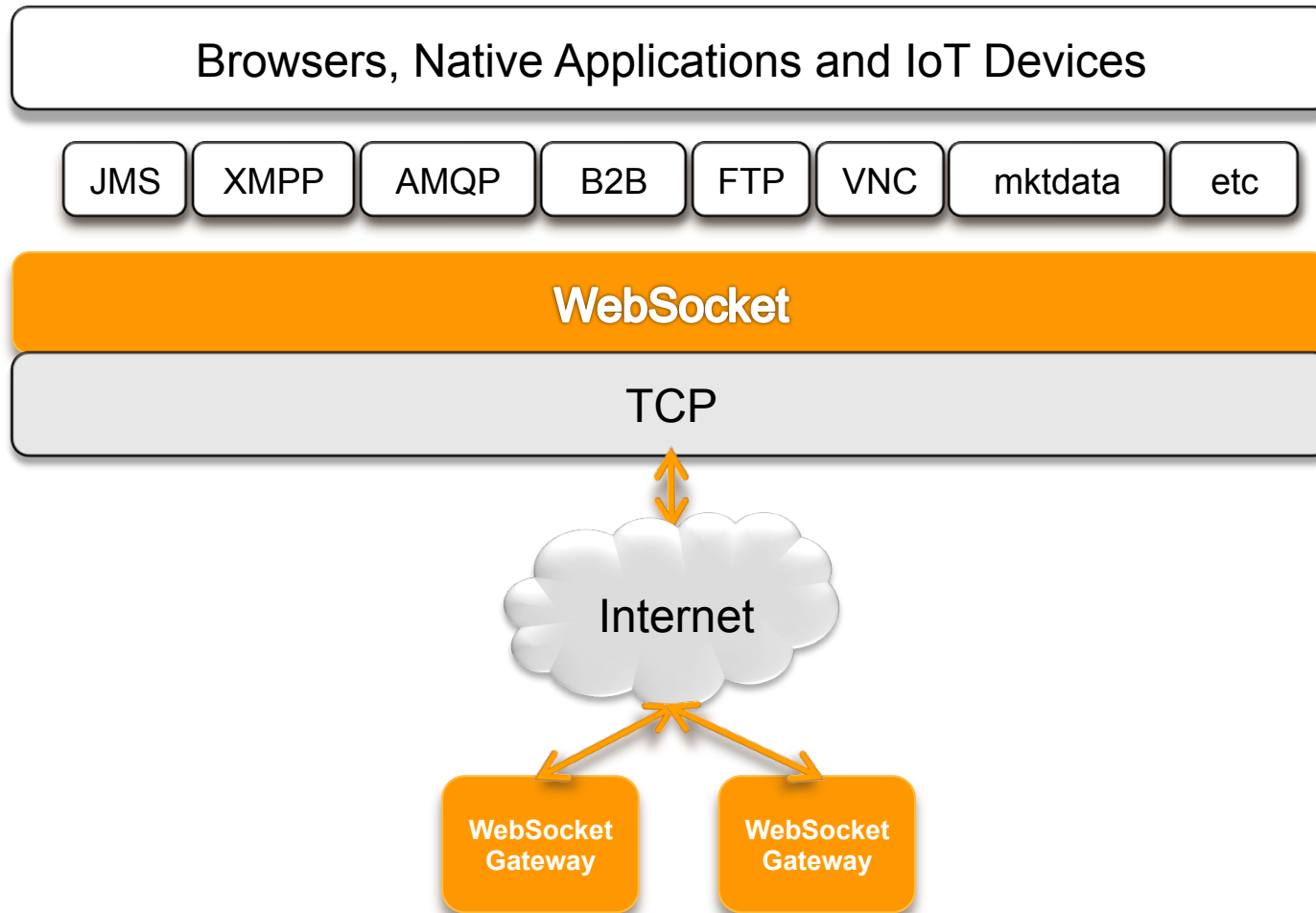
Legacy Web



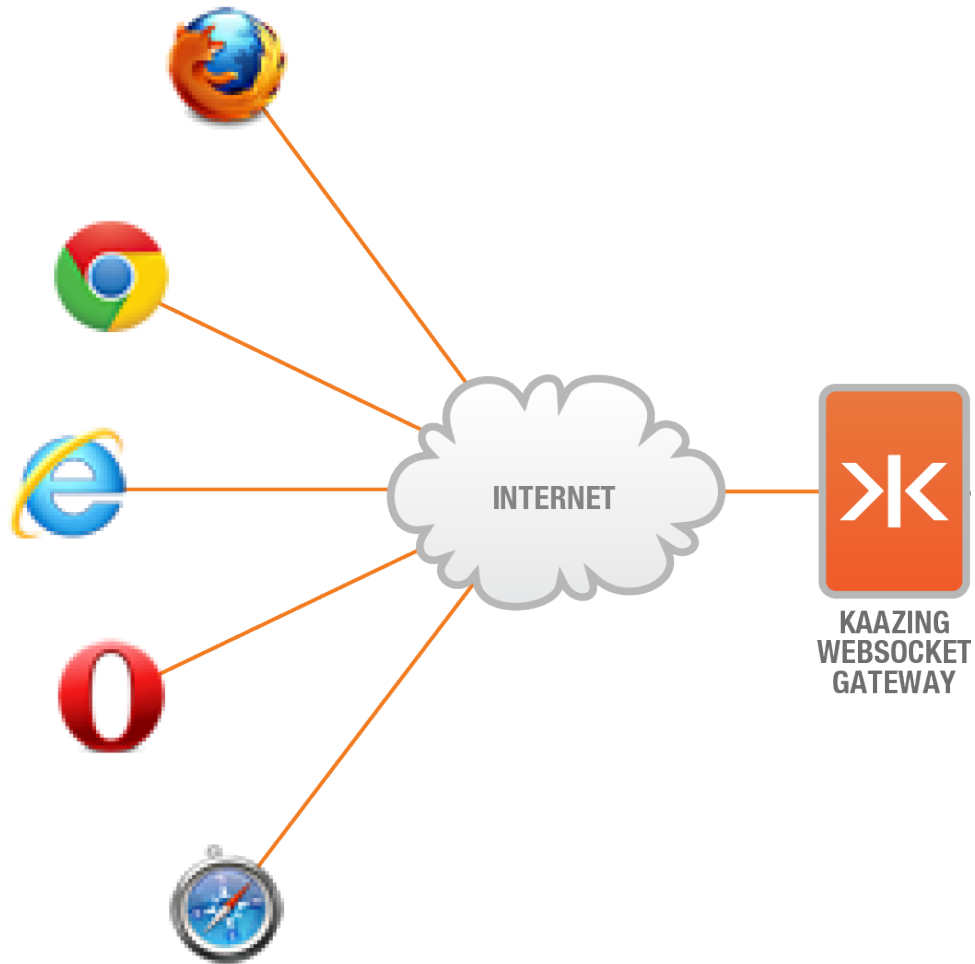
Living Web



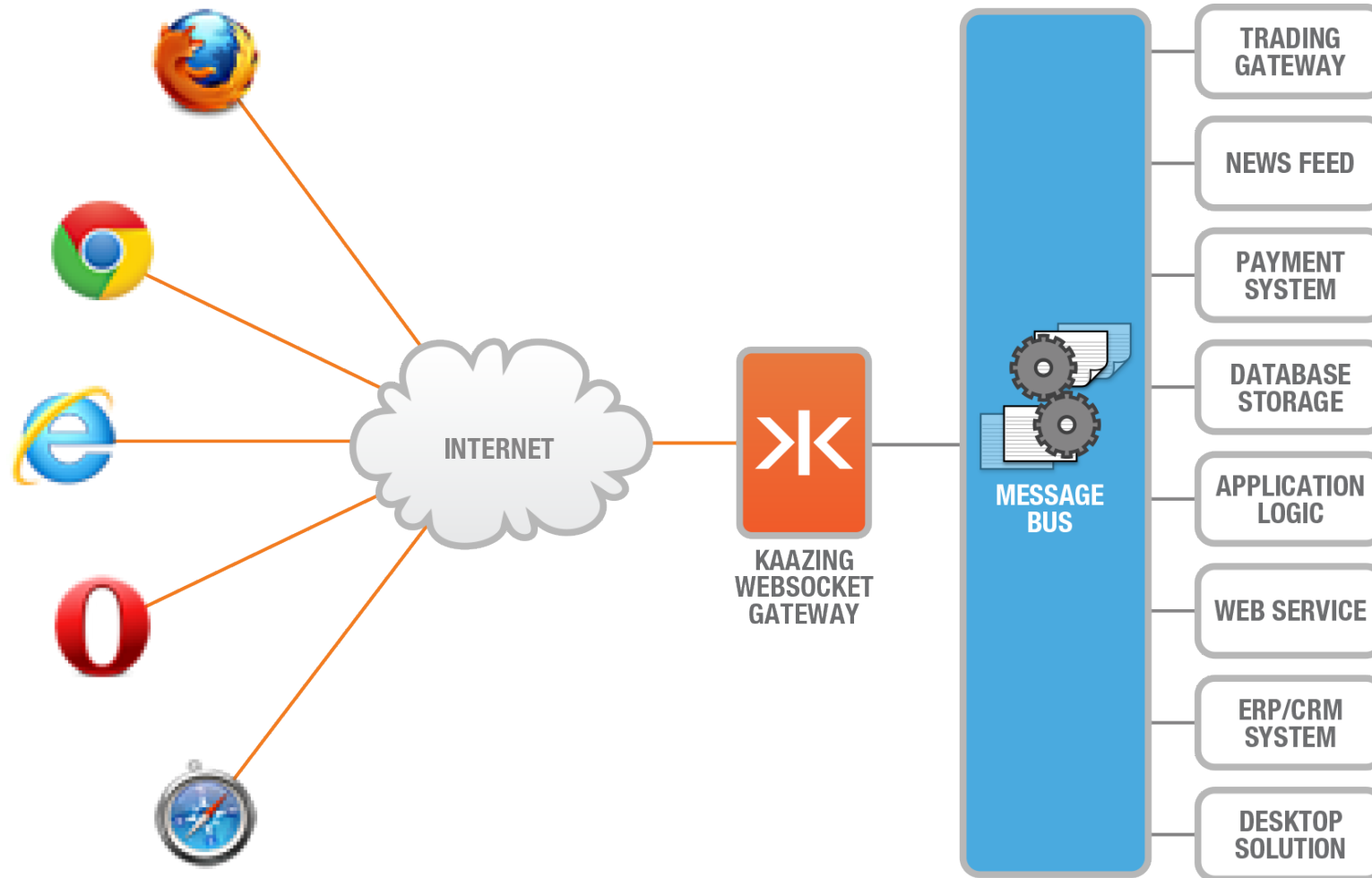
Protocol Layering



WebSocket Clients and Server



Enterprise Messaging Extended to the Web



Raspberry Pi

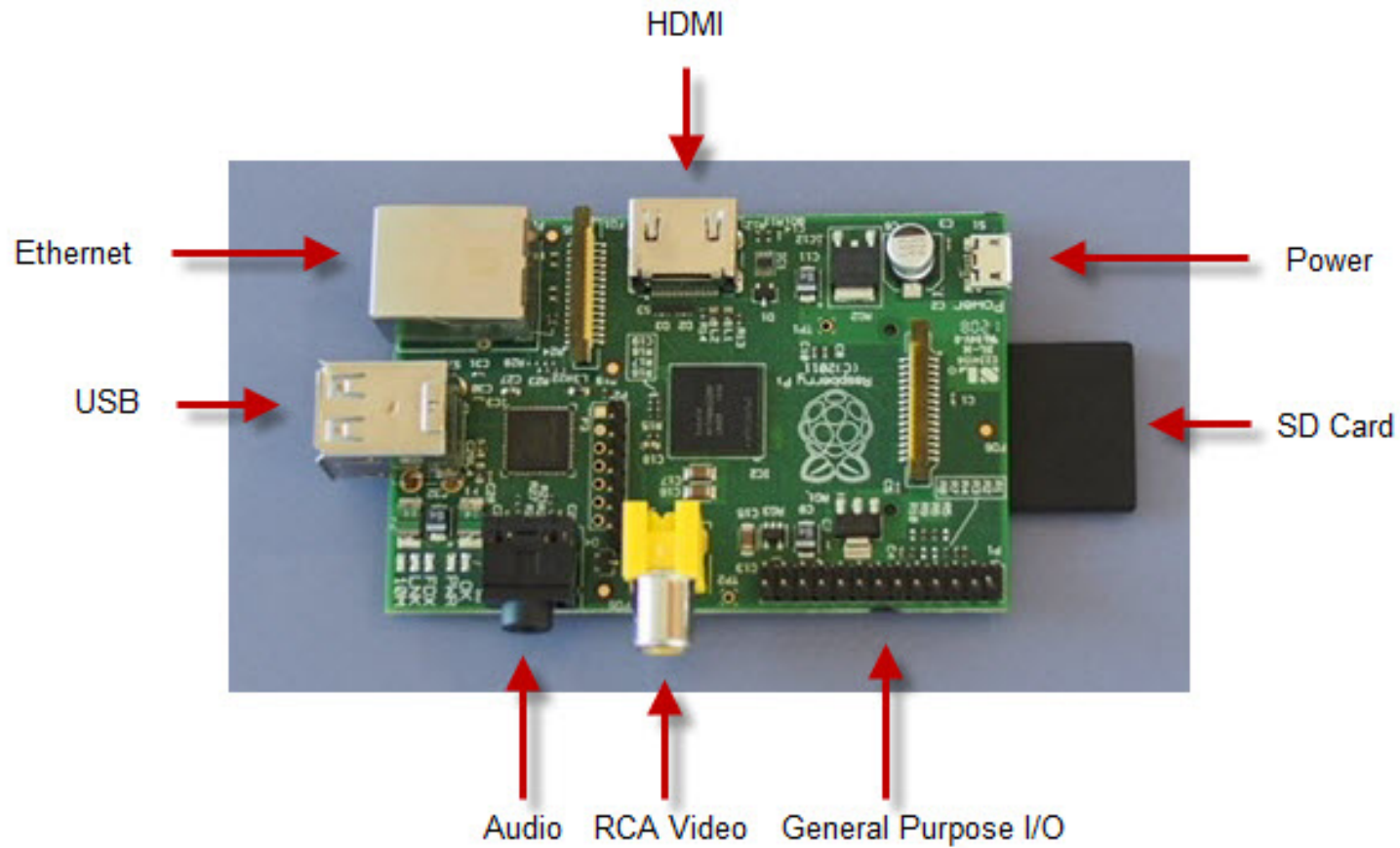
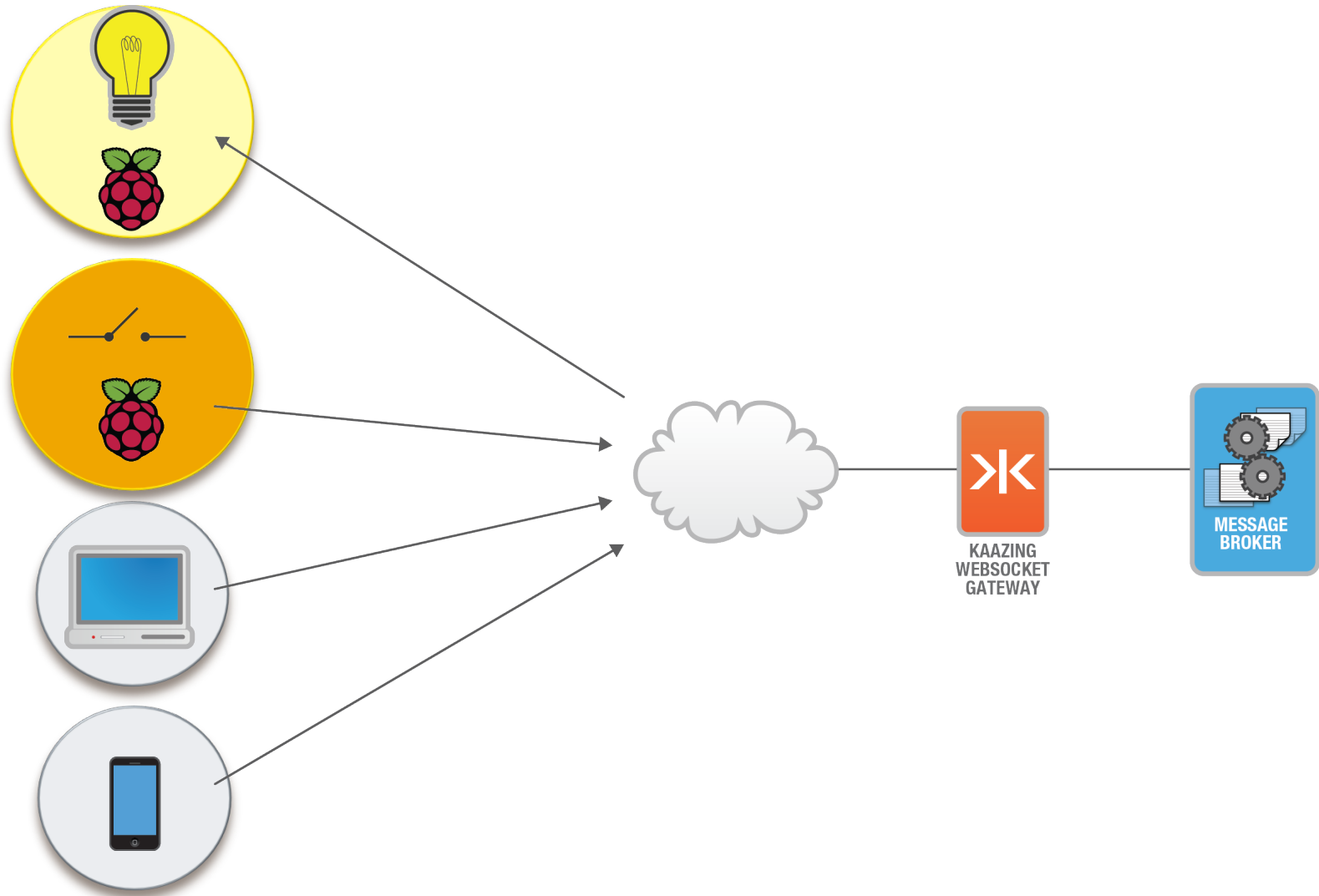


Image source: <http://www.oracle.com/technetwork/articles/java/raspberrypi-1704896.html>

Demo Setup



Controlling the Light Remotely Using Pub-Sub Over the Web



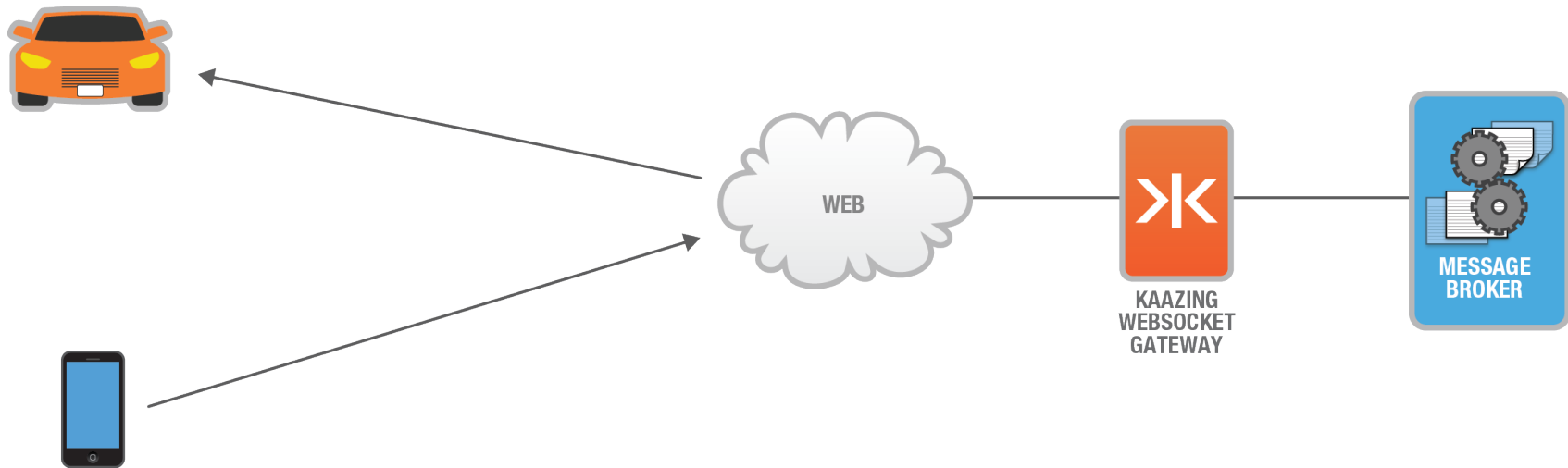
The Web Bridges Continents



Demo



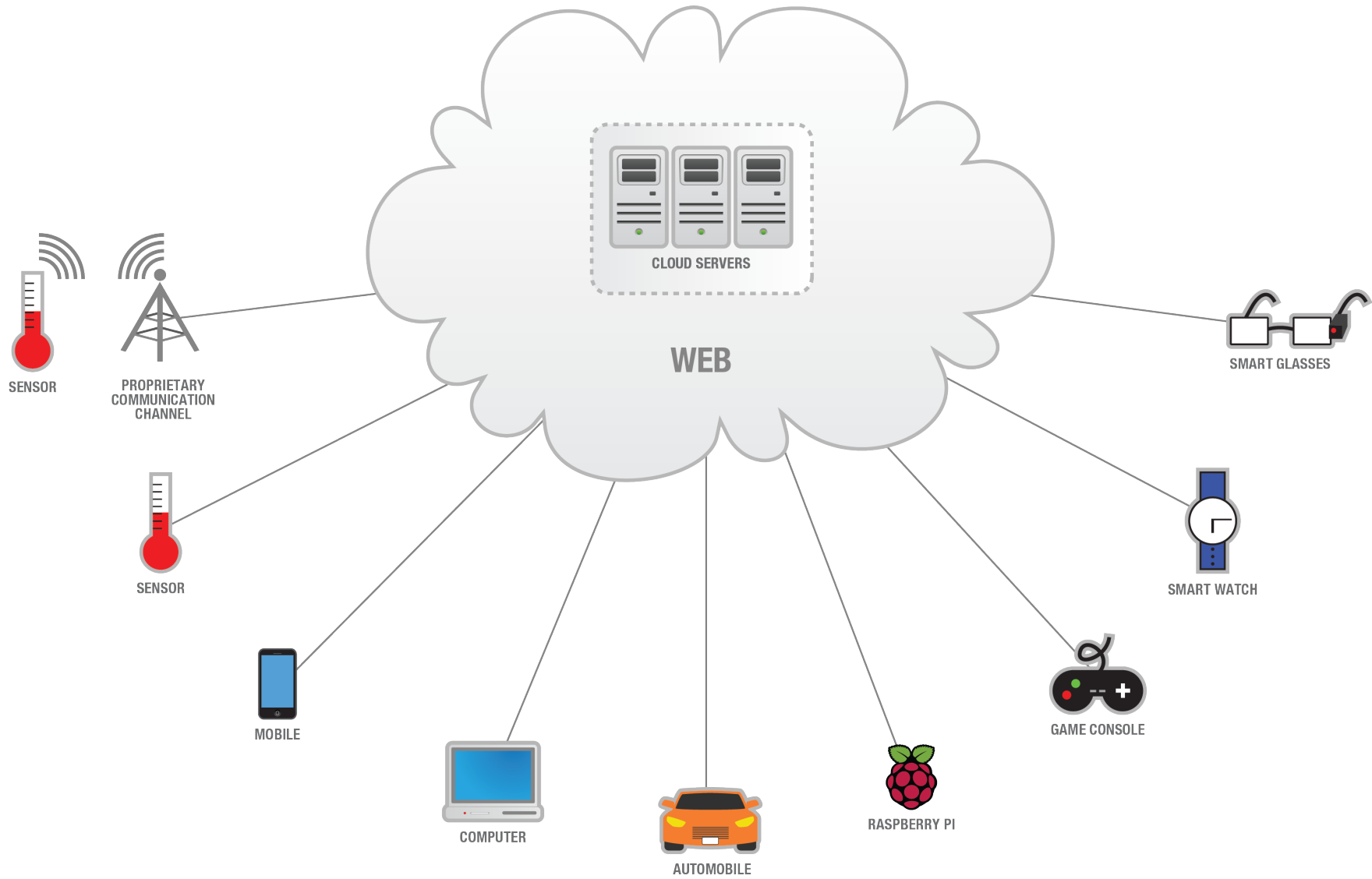
The Architecture



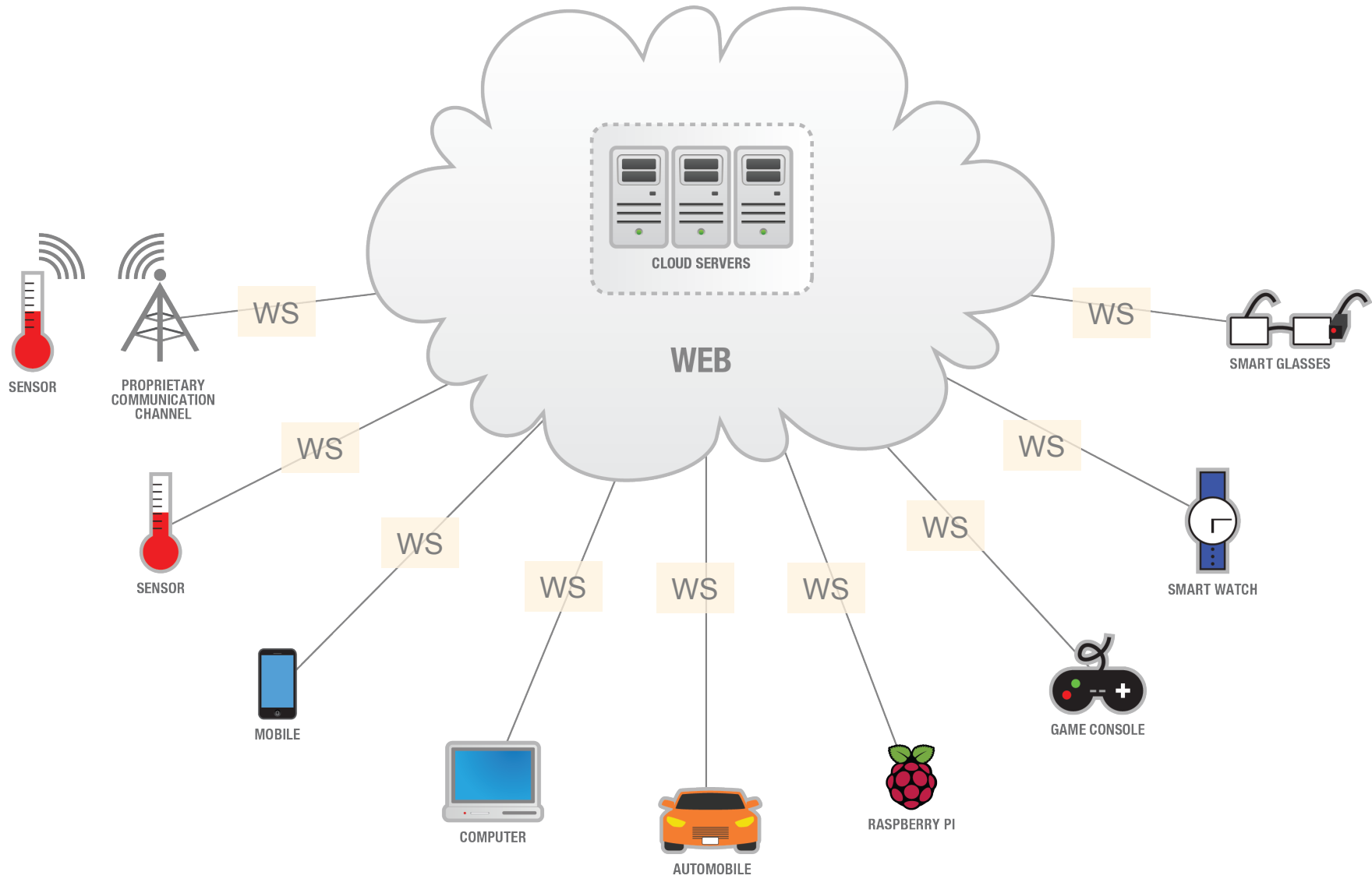
It's More than "Just" the Web



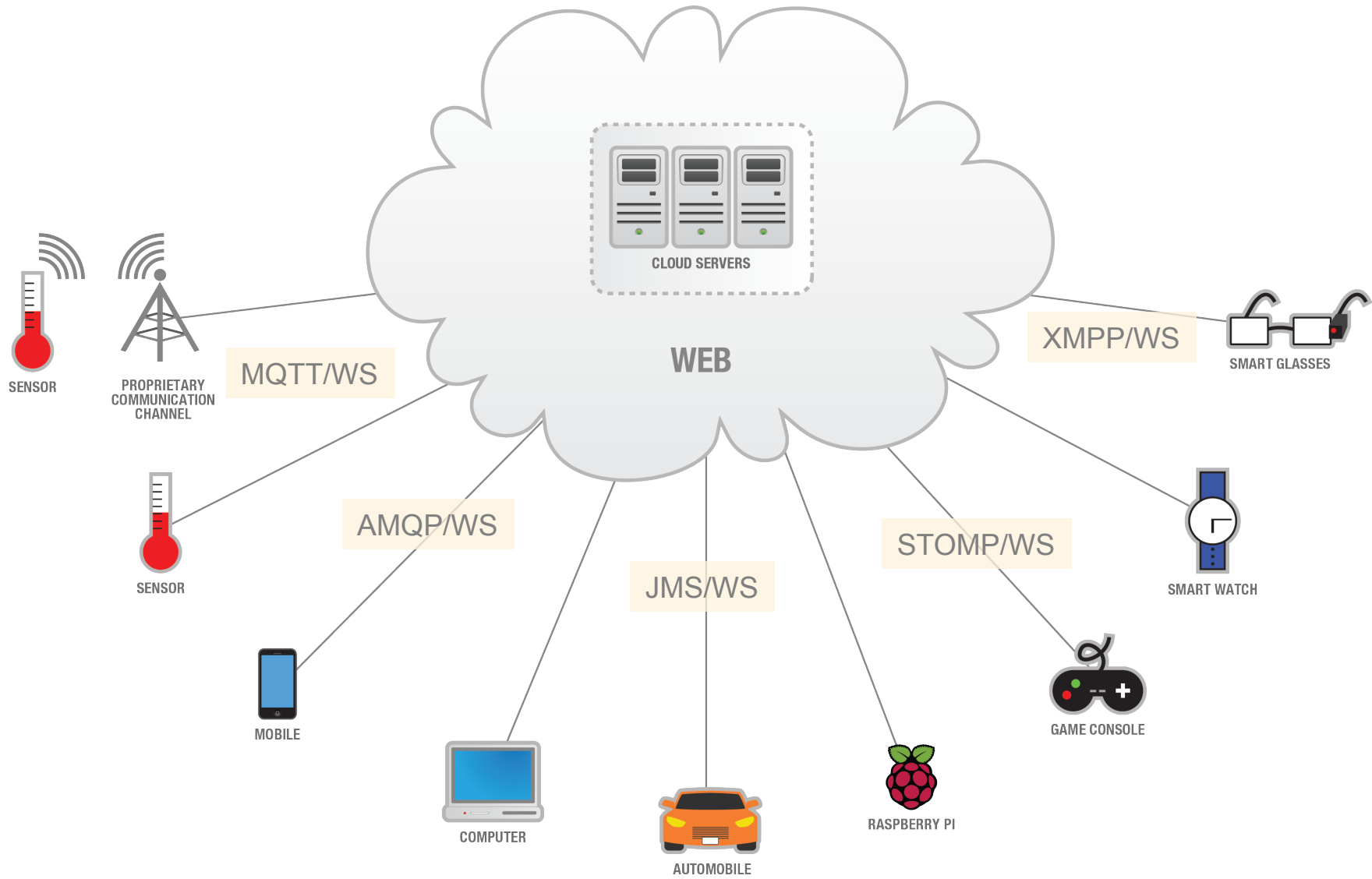
The Web of Things



WebSocket Powering the Web of Things



Extending Protocols to the Web of Things



Web Communication Is Challenging



Demos

The screenshot displays a comprehensive financial trading interface. At the top, there are sections for 'Currency Pairs' and 'Spot Prices'. The 'Currency Pairs' section includes tables for USDGBP, USDCAD, USDCHF, GBPJPY, and GBPSGD, each with 'Buy' and 'Sell' buttons and 'Trade'/'History' links. Below this, 'Spot Prices' shows line graphs for USDXAU and USDXAG. A 'Portfolio Valuations' table lists USDGBP, USDCAD, USDCHF, USDILS, GBPJPY, GBPSGD, and GBPILS with their respective values. At the bottom, there are sections for 'Indices' (listing S&P 500, FTSE 100, DAX, CAC 40) and 'Executions'.

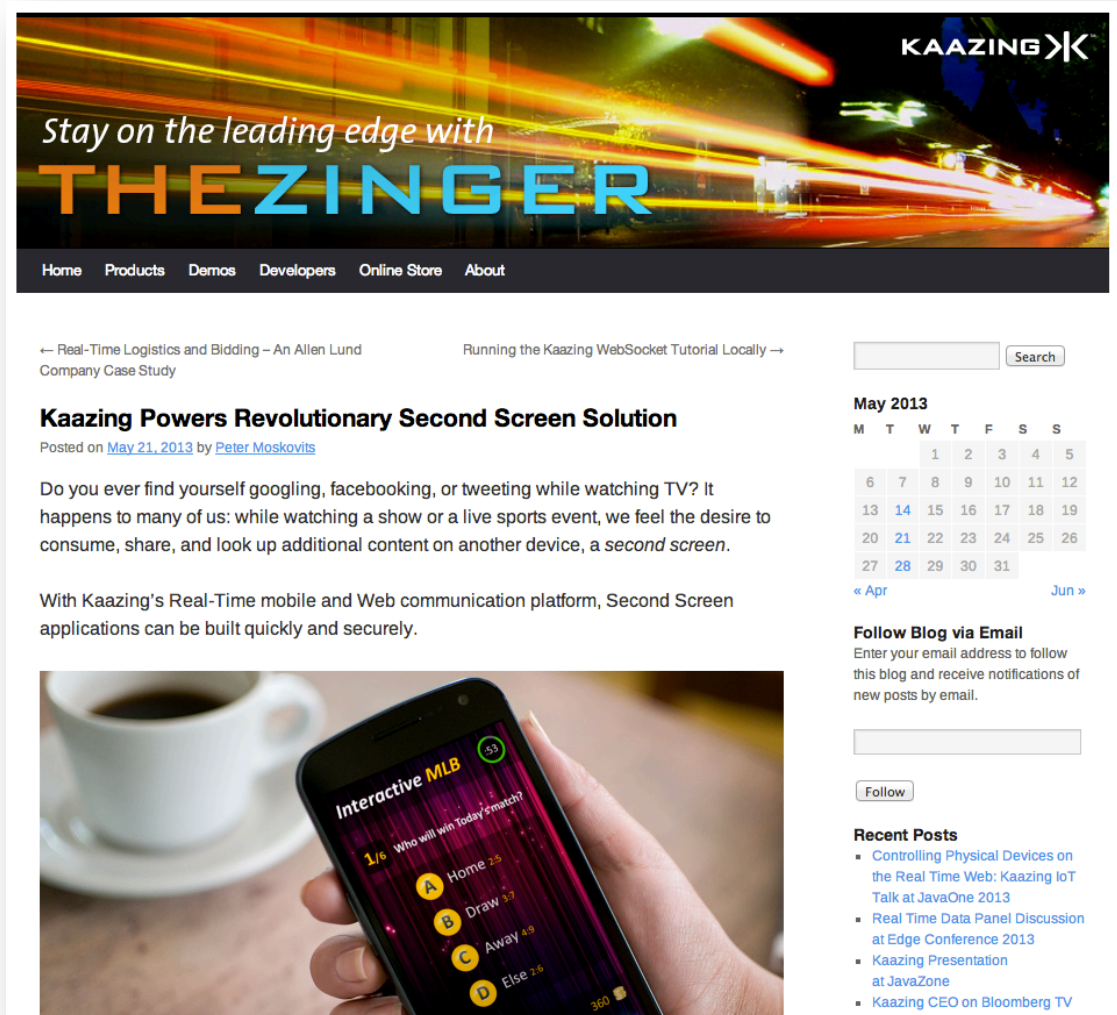


A screenshot of a Prezing presentation slide titled 'Smartphone as a remote'. The slide shows a smartphone and a computer monitor displaying a presentation. The Prezing logo and 'Engaging' text are visible. The URL 'prezing.com/p.html?name=OtherGuy&email=otherguy640kaazing.com' is visible in the browser address bar.



Find Out More

- The Zinger – Blog:
 - <http://blog.kaazing.com>
- JMS WebSocket Tutorial
 - <http://tutorial.kaazing.com>
- More developer content
 - <http://developer.kaazing.com>
- Free product download



The screenshot shows the Kaazing website header with the logo and navigation menu. The main content area features a blog post titled "Kaazing Powers Revolutionary Second Screen Solution" by Peter Moskovits, dated May 21, 2013. The post text discusses the benefits of using a second screen while watching TV. Below the text is an image of a hand holding a smartphone displaying an interactive MLB game interface. The right sidebar includes a search bar, a calendar for May 2013, a "Follow Blog via Email" section, and a "Recent Posts" list.

KAazing

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← Real-Time Logistics and Bidding – An Allen Lund Company Case Study Running the Kaazing WebSocket Tutorial Locally →

Kaazing Powers Revolutionary Second Screen Solution
Posted on [May 21, 2013](#) by [Peter Moskovits](#)

Do you ever find yourself googling, facebooking, or tweeting while watching TV? It happens to many of us: while watching a show or a live sports event, we feel the desire to consume, share, and look up additional content on another device, a *second screen*.

With Kaazing's Real-Time mobile and Web communication platform, Second Screen applications can be built quickly and securely.



Interactive MLB
Who will win Today's match?
1/6
A Home 25
B Draw 37
C Away 49
D Else 16

Search

May 2013

M	T	W	T	F	S	S
		1	2	3	4	5
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13	14	15	16	17	18	19
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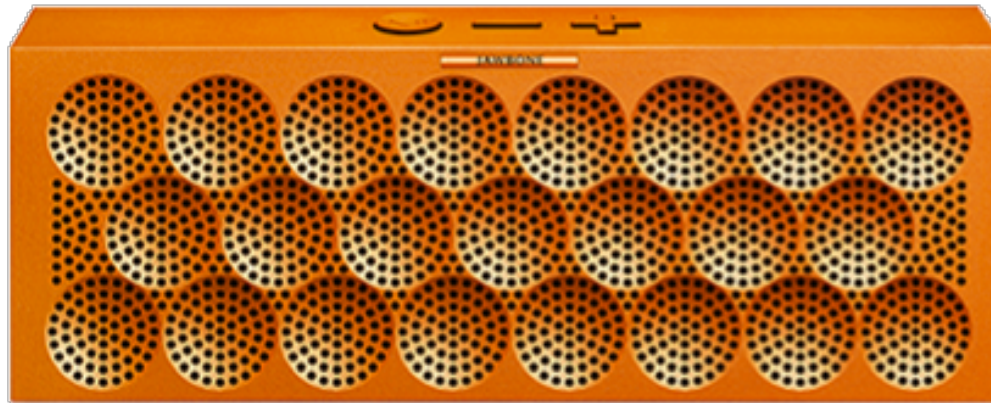
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- [Real Time Data Panel Discussion at Edge Conference 2013](#)
- [Kaazing Presentation at JavaZone](#)
- [Kaazing CEO on Bloomberg TV WebSocket, Big Data, and More](#)

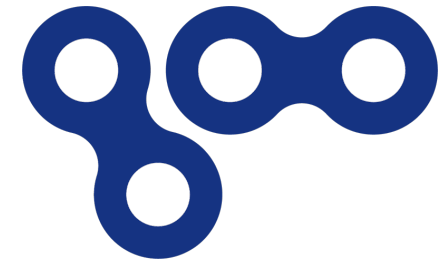
Visit Kaazing in the Power Lounge
to see all these demos live

Win a mini Jambox



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- Goo Create Beta:
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- 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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