Embracing the real-time Web

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What are WebSockets?

Nothing to do with plugs.
Why use WebSockets? They’re pretty cool
Multiplayer Web gaming

Communicating between players
Live streaming content

Live and instant updates
Knowing the difference is important.
Browser support

Pretty decent, but not ideal
Using WebSockets is easy.

You gotta love a simple JavaScript API.
var ws = new WebSocket("ws://127.0.0.1:8080");
var ws = new MozWebSocket("ws://127.0.0.1:8080");
var ws = new WebSocket("ws://127.0.0.1:8080");

ws.onopen = function() {
    console.log("Connected to WebSocket server");
};

ws.onclose = function() {
    console.log("Disconnected");
};

ws.onmessage = function(msg) {
    console.log("Message received: " + msg.data);
};
var ws = new WebSocket("ws://127.0.0.1:8080");

...

ws.send("Hello, world!");
var ws = new WebSocket("ws://127.0.0.1:8080");

...
WebSockets on the server

You need something to connect to
npm install websocket
var WebSocketServer = require("websocket").server;
var http = require("http");

var server = http.createServer(function(request, response) {});

server.listen(8080, function() {
    console.log("Server is listening on port 8080");
});

var ws = new WebSocketServer({
    httpServer: server,
    autoAcceptConnections: true
});
ws.on("connect", function(conn) {
    console.log("Connection accepted");
    conn.on("message", function(message) {
        if (message.type === "utf8") {
            console.log("Received Message: "+message.utf8Data);
            conn.sendUTF(message.utf8Data);
        }
    });
});
conn.on("close", function(conn) {
    console.log("Client "+conn.remoteAddress+" disconnected");
});
NEW! The long-awaited Socket.IO 0.7 has been released. Read the announcement! or the migration guide.

What is Socket.IO?

Socket.IO aims to make realtime apps possible in every browser and mobile device, blurring the differences between the different transport mechanisms. It's care-free realtime 100% in JavaScript.

SERVER

```
var io = require('socket.io').listen(80);

io.sockets.on('connection', function (socket) {
    // Code here...
});
```

CLIENT

```
<script src='socket.io/socket.io.js'></script>

var socket = io.connect('http://localhost');</script>
```
Fallback for old browsers

Now you can support everyone
var io = require("socket.io").listen(8080);

io.sockets.on("connection", function (socket) {
  socket.on("message", function (data) {
    socket.emit(data);
  });
});
Socket.IO is just awesome

It goes beyond the basics
WebSockets gotchas

These tripped me up the first time
Using external services

You don’t always have to roll your own
Supercharge your app with **realtime** events

Pusher is a hosted API for **quickly**, **easily** and **securely** adding **scalable** real-time functionality via WebSockets to web and mobile apps.

- **Sign up now**
  - Free developer account.

- **Test it out**
  - Send yourself a notification.

Pusher is built for everyone.

“Pusher took Word² from zero to real-time in 15 minutes' development time.”

— Grant Goodale, Word²

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[Logos: Groupon, CloudApp, MailChimp]
Welcome to Joyent’s Node.js Cloud Services

Node.js is a new, easy to learn way to write fast, scalable applications in JavaScript on the server. Joyent is pleased to announce access to our Node.js Cloud Services including free Node SmartMachines. With streamlined deployment using Git and all the advantages of Joyent SmartOS we think you’ll find Node SmartMachines to be an unparalleled Node.js experience.

Get access to the free Joyent Node SmartMachine Services

Have a Joyent Account?
Sign in with your account details, request a coupon code, and then provision your Node SmartMachine.

New to Joyent?
Quickly create an account, sign in to request a coupon code, and then provision your Node SmartMachine.

Useful Tools & Valuable Resources

- Review the Node SmartMachine FAQs.
- For users with general purpose Joyent SmartMachines, installing Node is also possible. Follow the instructions here.
- Provide feedback and participate in discussions on the Joyent forums
- View training session videos from Node.js Camp San Francisco
- Watch what is happening with Node at Nodejs.org and the repo on github
- Read up on Node at Joyent
What WebSockets needs

The future is bright-ish
Rawkes.com
Personal website and blog

Recent Projects

Twitter sentiment analysis
Delving into your soul.

Rawkets.com
HTML5 & WebSockets game.

More Cool Stuff

Mozilla Technical Evangelist
My job

ExplicitWeb.co.uk
Web development podcast.
Every month
This month is HTML5 video
Manipulate video with canvas
Win prizes (like an Android)
Next month is all about touch

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THANK YOU
Any questions?
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