

GIANCARLO GOMEZ

ADVENTURES WITH WEBSOCKETS

Who am I?

- ▶ Proud Father of 3
- ▶ Web Developer since 1999
- ▶ Freelance since 2001
- ▶ Owner of Fuse Developments, Inc. and CrossTrackr, Inc.
- ▶ Senior Developer at Duty Free Americas, Inc.
- ▶ South Florida ColdFusion User Group Co-Manager



WebSockets

- ▶ Full-Duplex communication channels over a single TCP connection
- ▶ Allows bi-directional communication between client and server
- ▶ Little Overhead
- ▶ Very Little Latency
- ▶ Event Driven Web Programming, not just user initiated.



Let's Play a Game

<http://game.fusedev.com>



What else can we do?

<https://youtu.be/WNAATDDP5-8>

Show me the code ...

We will return after these important coding examples



Pitfalls & Requirements

▶ Using Built in WebSocket Server

Required if server does not meet minimum criteria or if working with Clusters

- ▶ Open ports for non-secure and **secure** connections (8575 / 8543)
Secure connections only supported on ColdFusion 11 and higher
- ▶ Open ports for supporting older browsers using Flash (1243 - lib/neo-websocket.xml)
- ▶ Add certificates to a Java Keystore or a pcks12 file

▶ Using Proxy

Recommended for ease of use / configuration

- ▶ IIS 8 + with WebSocket Protocol Enabled
 - ▶ Virtual Application must have the same Application Pool assigned
 - ▶ Application Pool must have a .NET Framework assigned (4+)
DO NOT SET IT TO UNMANAGED CODE.

- ▶ Apache 2.2+ compiled with worker module not prefork
(Apache MPM Worker)

▶ Other Things to know

- ▶ If you add a new TOP level channel, you will need to restart ColdFusion
- ▶ If using the Proxy method make sure that none of your cfwebsocket tags have the secure attribute set to true.
- ▶ Wrap wsPublish() in it's own thread .. trust me it's for the best



REAL WORLD ISSUES!!!

- ▶ Network Connections
- ▶ Application Reloads
- ▶ Server Uptime



Hello AdvancedSocket

- ▶ Easily integrates with cfwebsocket
- ▶ Callbacks for connection drops that easily lets you add notifications for users
 - ▶ Application Reinit
 - ▶ Server Downtime
 - ▶ Network Connection
- ▶ Automatically reconnect to subscribed channels



The Repos

- ▶ <https://github.com/GiancarloGomez/ColdFusion-Adventures-With-WebSockets>
- ▶ <https://github.com/CFUG-SFL/CFUG-2014-06-WS-RAFFLEAPP>
- ▶ <https://github.com/GiancarloGomez/ColdFusion-Realtime-With-WebSockets>
- ▶ <https://github.com/GiancarloGomez/ColdFusion-Realtime-With-WebSockets-Demo-Code>
- ▶ <https://github.com/GiancarloGomez/ColdFusion-WebSockets-Console>
- ▶ <https://github.com/GiancarloGomez/AdvancedSocket>



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Q & A