



**KAAZING**

# How to build an enterprise trading solution using HTML 5's WebSockets

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# Agenda

- WebSockets recap
- WebSocket API
- Stock Ticker Application
- STOMP Protocol API
- Building Stock Ticker Application

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# WebSockets

- Gives full-duplex communication channel in JavaScript
- Traverses firewalls and routers seamlessly
- Allows authorized cross-domain communication
- Integrates with:
  - Cookie-based authentication
  - Existing HTTP load balancers

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# WebSockets

- Detects presence of proxy servers
- A tunnel is established by issuing an HTTP CONNECT statement
- Secure Web sockets over SSL can leverage the same HTTP CONNECT technique

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# Web Sockets API

```
interface WebSocket {  
    readonly attribute DOMString URL;  
    // ready state  
    const unsigned short CONNECTING = 0;  
    const unsigned short OPEN = 1;  
    const unsigned short CLOSED = 2;  
    readonly attribute int readyState;  
    // networking  
    attribute EventListener onopen;  
    attribute EventListener onmessage;  
    attribute EventListener onclosed;  
    void postMessage(in DOMString data);  
    void disconnect();  
};
```

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# WebSockets

- Creating a WebSocket instance:

```
var myWebSocket = new WebSocket  
("ws://www.websocket.org");
```

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# WebSockets

- Associating listeners:

```
myWebSocket.onopen = function(evt)
{ alert("Connection open ..."); };
```

```
myWebSocket.onmessage = function(evt) { alert(
"Received Message: " + evt.data); };
```

```
myWebSocket.onclose = function(evt)
{ alert("Connection closed."); };
```

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# WebSockets

- Sending messages:

```
myWebSocket.postMessage("Hello Web  
Socket! Goodbye Comet!");
```

```
myWebSocket.disconnect();
```

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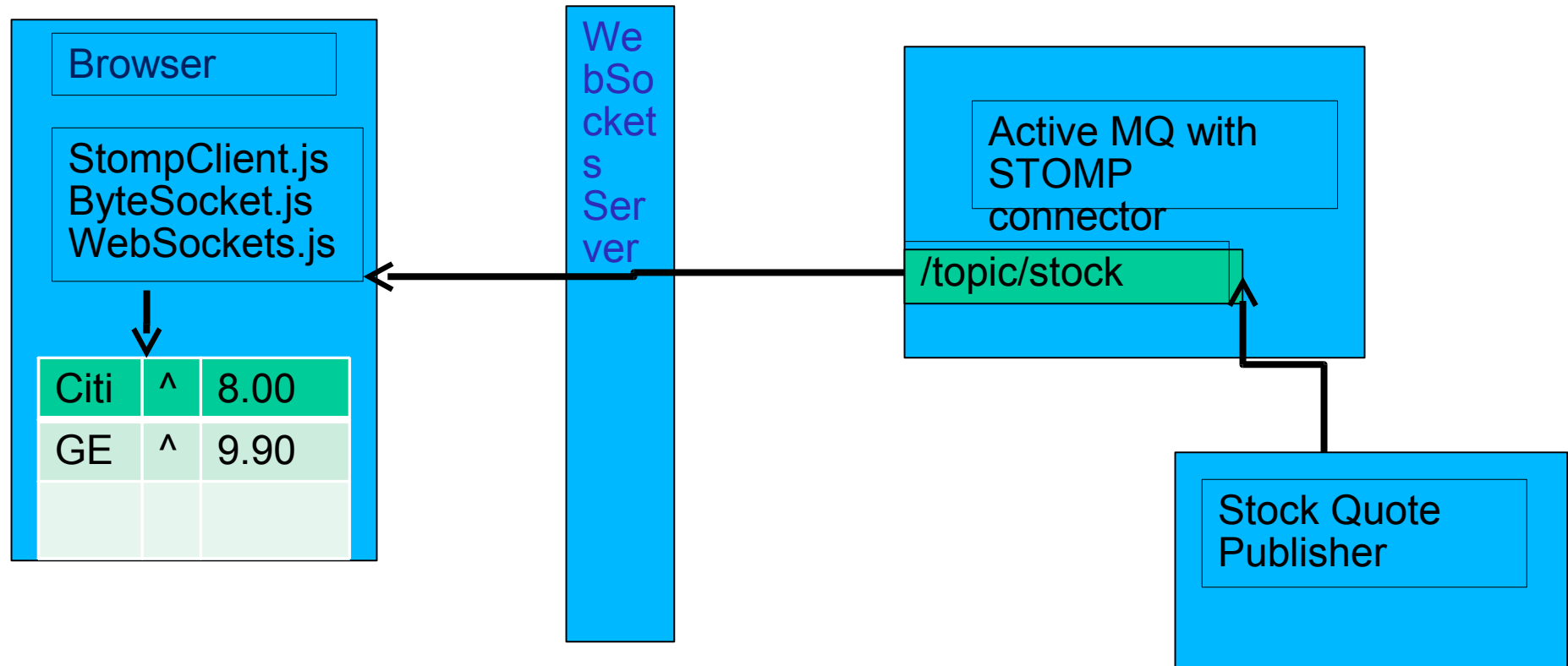
# Stock Ticker Application

- DEMO

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# Stock Ticker Design



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# Java doc

- WebSocket
- ByteSocket
- ByteBuffer

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# Thank you

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