

# Survey paper: Websocket

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**Abstract**—The most common way to get some information and communicate through the internet is via the Hypertext Transfer Protocol (HTTP). Over time, the shared media sent through this communication system have evolved. It started from text to images and videos. And interactions between clients and servers have evolved too. We went from passive customers who receives informations to active clients that wants to communicate in real-time. The original HTTP was never designed to achieve those needs. The market found some tricks to bypass these limitations as AJAX (Asynchronous JavaScript and XML), AJAX long polling, Iframe, etc. But the HTML5 initiative introduced a real solution to this problem : WebSocket JavaScript. This solution brings socket to the web, so a full-duplex communication can be established between clients to the server. This paper tries to find out how this alternative is viable and efficient compared to older techniques used. [1] First, the alternative solutions that have been used are presented. Then, a comparison with the WebSocket is performed, and the advantages of the WebSocket protocol are shown. Finally, a point is dedicated to the WebSocket security.

## 1 HISTORICAL ANALYSIS

**B**EFORE analysing Websocket, let see what has been used before to acheive a full-duplex communication.

### 1.1 Specification of HTTP

### 1.2 Specification of AJAX

#### 1.2.1 AJAX Long-Polling

### 1.3 WebSocket

#### 1.3.1 Principles

#### 1.3.2 Comparison with alternatives

#### 1.3.3 Advantages

#### 1.3.4 Security

## 2 CONCLUSION

From a network point of view, WebSocket

## REFERENCES

- [1] R. Fielding, J. Gettys, J. Mogul, H. Frystyk, L. Masinter, P. Leach, and T. Berners-Lee, "Rfc 2616, hypertext transfer protocol – http/1.1," 1999. [Online]. Available: <http://www.rfc.net/rfc2616.html>