

WebSocket

goframe websocket tech go frame websocket HTML5

HTML5

H5

```
<!DOCTYPE html>
<html lang="zh">
<head>
    <title>gf websocket echo server</title>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
    <link rel="stylesheet" href="//cdn.bootcss.com/bootstrap/3.3.5/css/bootstrap.min.css">
    <script src="//cdn.bootcss.com/jquery/1.11.3/jquery.min.js"></script>
</head>
<body>
<div class="container">
    <div class="list-group" id="divShow"></div>
    <div>
        <div><input class="form-control" id="txtContent" autofocus placeholder=""></div>
        <div><button class="btn btn-default" id="btnSend" style="margin-top:15px"> </button></div>
    </div>
</div>
</body>
</html>

<script type="application/javascript">
    //
    function showInfo(content) {
        $("<div class=\\"list-group-item list-group-item-info\\">" + content + "</div>").appendTo("#divShow")
    }
    //
    function showWaring(content) {
        $("<div class=\\"list-group-item list-group-item-warning\\">" + content + "</div>").appendTo("#divShow")
    }
    //
    function showSuccess(content) {
        $("<div class=\\"list-group-item list-group-item-success\\">" + content + "</div>").appendTo("#divShow")
    }
    //
    function showError(content) {
        $("<div class=\\"list-group-item list-group-item-danger\\">" + content + "</div>").appendTo("#divShow")
    }

    $(function () {
        const url = "ws://127.0.0.1:8199/ws";
        let ws = new WebSocket(url);
        try {
            // ws
            ws.onopen = function () {
                showInfo("WebSocket Server [" + url +"] ")
            };
            // ws
            ws.onclose = function () {
                if (ws) {
                    ws.close();
                    ws = null;
                }
                showError("WebSocket Server [" + url +"] ");
            }
        }
    })
</script>
```

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```

    };
    // ws
    ws.onerror = function () {
        if (ws) {
            ws.close();
            ws = null;
        }
        showError("WebSocket Server [" + url + "] ");
    };
    // ws
    ws.onmessage = function (result) {
        showWaring(" > " + result.data);
    };
} catch (e) {
    alert(e.message);
}

// "#btnSend").on("click", function () {
if (ws == null) {
    showError("WebSocket Server [" + url + "] F5!");
    return;
}
const content = $.trim($("#txtContent").val()).replace("/[\n]/g", " ");
if (content.length <= 0) {
    alert("!");
    return;
}
$("#txtContent").val("");
showSuccess(content);
ws.send(content);
});

// $("#txtContent").on("keydown", function (event) {
if (event.keyCode === 13) {
    $("#btnSend").trigger("click");
}
});
})

</script>

```

ws://127.0.0.1:8199/ws

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WebSocket

```

package main

import (
    "github.com/gogf/gf/v2/frame/g"
    "github.com/gogf/gf/v2/net/ghttp"
    "github.com/gogf/gf/v2/os/gctx"
    "github.com/gogf/gf/v2/os/gfile"
    "github.com/gogf/gf/v2/os/glog"
)

var ctx = gctx.New()

func main() {
    s := g.Server()
    s.BindHandler("/ws", func(r *ghttp.Request) {
        ws, err := r.WebSocket()
        if err != nil {
            glog.Error(ctx, err)
            r.Exit()
        }
        for {
            msgType, msg, err := ws.ReadMessage()
            if err != nil {
                return
            }
            if err = ws.WriteMessage(msgType, msg); err != nil
{
                return
}
        }
    })
    s.SetServerRoot(gfile.MainPkgPath())
    s.SetPort(8199)
    s.Run()
}

```

1. WebSocket

```

websockethttp.Request.WebSocketr.WebSocket()websocketWebSocketsocketwebsocketerror

```

1. ReadMessage & WriteMessage

```

websocket(ReadMessage & WriteMessage)msgType msgType msgType

```

HTTPSWebSocket

```

HTTPSSocketWebServerHTTPSSocket wss:// HTML5Socketwss://127.0.0.1:8199
/wss

```

```

package main

import (
    "github.com/gogf/gf/v2/frame/g"
    "github.com/gogf/gf/v2/net/ghttp"
    "github.com/gogf/gf/v2/os/gctx"
    "github.com/gogf/gf/v2/os/gfile"
    "github.com/gogf/gf/v2/os/glog"
)

var ctx = gctx.New()

func main() {
    s := g.Server()
    s.BindHandler("/wss", func(r *ghttp.Request) {
        ws, err := r.WebSocket()
        if err != nil {
            glog.Error(ctx, err)
            r.Exit()
        }
        for {
            msgType, msg, err := ws.ReadMessage()
            if err != nil {
                return
            }
            if err = ws.WriteMessage(msgType, msg); err != nil
        {
            return
        }
    })
    s.SetServerRoot(gfile.MainPkgPath())
    s.EnableHTTPS("../https/server.crt", "../https/server.key")
    s.SetPort(8199)
    s.Run()
}

```

main.go <http://127.0.0.1:8199/websocket>

```

$ go run main.go
2018-06-03 00:00:10.120 4747: http server started listening on (:8199)
2018-06-03 00:00:10.120 4747: all servers shutdown
2018-06-03 00:00:00.120 4747: all servers shutdown
Process finished with exit code 0

```

Websocket

GoFramewebsocket(origin)websocket

1. origin: r.WebSocket() origin() r.Exit()
2. websocket:

WebSocket Client

```
package main

import (
    "crypto/tls"
    "fmt"
    "net/http"
    "time"

    "github.com/gogf/gf/v2/net/gclient"
    "github.com/gorilla/websocket"
)

func main() {
    client := gclient.NewWebSocket()
    client.HandshakeTimeout = time.Second // 
    client.Proxy = http.ProxyFromEnvironment //
    client.TLSClientConfig = &tls.Config{} // tls

    conn, _, err := client.Dial("ws://127.0.0.1:8199/ws", nil)
    if err != nil {
        panic(err)
    }
    defer conn.Close()

    err = conn.WriteMessage(websocket.TextMessage, []byte("hello
word"))
    if err != nil {
        panic(err)
    }
    mt, data, err := conn.ReadMessage()
    if err != nil {
        panic(err)
    }
    fmt.Println(mt, string(data))
}
```