

WebSocketServer

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Kind: Function

Source: `packages/websockets/decorators/gateway-server.decorator.ts`

Part of: [Websockets](#)

Attaches native Web Socket Server to a given property.

`WebSocketServer()` is a property decorator that attaches the underlying native WebSocket server instance to a gateway class property. Nest initializes the property after the gateway is created, allowing gateway methods to emit events, broadcast messages, or access adapter-specific server APIs.

Signature

```
function WebSocketServer(): PropertyDecorator
```

Returns: `PropertyDecorator`

Diagram

```
graph LR
  A[WebSocketGateway] --> B[WebSocketServer Decorator]
  B --> C[Gateway Server Property]
  D[Nest WebSockets Runtime] --> E[Create Native Server]
  E --> C
  C --> F[Emit or Broadcast Events]
```

Usage

```
import {
  SubscribeMessage,
  WebSocketGateway,
```

```

    WebSocketServer,
  } from '@nestjs/websockets';
  import { Server, Socket } from 'socket.io';

  @WebSocketGateway()
  export class EventsGateway {
    @WebSocketServer()
    server: Server;

    @SubscribeMessage('message')
    handleMessage(client: Socket, payload: { text: string }) {
      this.server.emit('message', {
        from: client.id,
        text: payload.text,
      });
    }
  }
}

```

AI Coding Instructions

- Use `@WebSocketServer()` only on gateway class properties decorated with `@WebSocketGateway()`.
- Type the decorated property with the native server implementation used by the configured adapter, such as Socket.IO's `Server`.
- Do not manually instantiate or assign the server property; Nest populates it during gateway initialization.
- Use the injected server for server-wide operations such as `emit`, room broadcasting, and adapter-specific APIs.
- Ensure event handlers account for the selected WebSocket adapter, since native server APIs differ between Socket.IO and `ws`.

Used by

2 references from 2 files. Each is a place in this repository where the symbol is actually used — go read one rather than trusting an example.

Imported by (2)

- `EventsGateway` — `sample/02-gateways/src/events/events.gateway.ts :12`
- `EventsGateway` — `sample/16-gateways-ws/src/events/events.gateway.ts :11`