

JsonSocket

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Kind: Class**Source:** `packages/microservices/helpers/json-socket.ts`**Part of:** [Microservices](#)

`JsonSocket` wraps a TCP socket with length-prefixed JSON message framing for the microservices transport layer. It serializes outgoing payloads in `handleSend()` and incrementally buffers, reconstructs, and parses incoming TCP chunks in `handleData()` before delivering complete messages to registered listeners.

Extends: `TcpSocket`

Methods

Method	Signature	Returns
<code>handleSend</code>	<code>handleSend(message: any, callback: (err?: any) => void)</code>	<code>void</code>
<code>handleData</code>	<code>`handleData(dataRaw: Buffer</code>	<code>string)`</code>

Diagram

```
graph LR
  A[Application message] --> B[JsonSocket.handleSend]
  B --> C[Serialize JSON and add length prefix]
  C --> D[TCP socket]

  D --> E[Incoming TCP chunks]
  E --> F[JsonSocket.handleData]
  F --> G[Buffer and resolve frame length]
  G --> H[Parse complete JSON message]
  H --> I[Message listener]
```

AI Coding Instructions

- Preserve the length-prefixed framing format when changing `handleSend()` or `handleData()` ; TCP data may arrive split across multiple chunks or contain multiple messages in one chunk.
- Use `handleSend()` for outgoing serialization rather than writing raw JSON directly to the underlying socket.
- Keep buffering logic resilient to partial payloads and reset parser state only after a complete frame has been processed.
- Treat malformed frame lengths and invalid JSON as transport-level errors; avoid silently emitting incomplete or corrupted messages.
- Prefer the inherited `send()` , `onMessage()` , `connect()` , and `close()` APIs at integration points instead of calling the internal handlers directly.