

# IncomingResponseDeserializer

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## IncomingResponseDeserializer

**Kind:** Class

**Source:** `packages/microservices/deserializers/incoming-response.deserializer.ts`

**Part of:** `Microservices`

`IncomingResponseDeserializer` normalizes responses received by microservice transports into the internal `IncomingResponse` schema. It detects whether a value is already in the expected envelope format and wraps external/raw responses when necessary, allowing downstream response handling to use a consistent structure.

**Implements:** `ProducerDeserializer`

## Methods

| Method                   | Signature                                                                | Returns                       |
|--------------------------|--------------------------------------------------------------------------|-------------------------------|
| <code>deserialize</code> | <code>deserialize(value: any, options: Record&lt;string, any&gt;)</code> | <code>IncomingResponse</code> |
| <code>isExternal</code>  | <code>isExternal(value: any)</code>                                      | <code>boolean</code>          |
| <code>mapToSchema</code> | <code>mapToSchema(value: any)</code>                                     | <code>IncomingResponse</code> |

## Where it refuses work

- `IncomingResponseDeserializer` stops the work with an early return when `!value` .
- `IncomingResponseDeserializer` stops the work with an early return when `!isUndefined((value as IncomingResponse).err) || !isUndefined((value as IncomingResponse)...` .

## Diagram

```

graph LR
  A[Raw transport response] --> B[deserialize]
  B --> C{isExternal?}
  C -- No --> D[Return existing IncomingResponse]
  C -- Yes --> E[mapToSchema]
  E --> F[Normalized IncomingResponse]

```

## Usage

```

import { IncomingResponseDeserializer } from '@nestjs/microservices';

const deserializer = new IncomingResponseDeserializer();

const rawResponse = {
  id: 'request-42',
  data: { status: 'ok' },
};

const response = deserializer.deserialize(rawResponse);

console.log(response.id); // "request-42"
console.log(response.response); // original raw response payload
console.log(response.isDisposed); // true

```

## AI Coding Instructions

- Use `deserialize()` as the public entry point; do not call `mapToSchema()` directly unless extending the deserialization behavior.
- Preserve already-normalized `IncomingResponse` objects instead of wrapping them again.
- Keep `isExternal()` aligned with the response envelope contract used by the active microservice transport.
- When changing the mapped schema, verify compatibility with downstream client response handling and request correlation via `id`.

## Relationships

- IMPORTS → `isUndefined`