

# BaseRpcContext

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## BaseRpcContext

**Kind:** Class

**Source:** `packages/microservices/ctx-host/base-rpc.context.ts`

**Part of:** [Microservices](#)

`BaseRpcContext` is a base context holder for RPC-style microservice handlers. It stores the arguments supplied to a request and provides access to the complete argument collection or an individual argument by index. Transport-specific context implementations can extend this class to expose consistent handler metadata.

## Methods

| Method                     | Signature                                 | Returns           |
|----------------------------|-------------------------------------------|-------------------|
| <code>getArgs</code>       | <code>getArgs()</code>                    | <code>T</code>    |
| <code>getArgByIndex</code> | <code>getArgByIndex(index: number)</code> | <code>void</code> |

## Diagram

```
graph LR
    Request[Incoming RPC request] --> Context[BaseRpcContext]
    Context --> Args[getArgs(): T]
    Context --> ArgIndex[getArgByIndex(index)]
    Args --> Handler[Microservice handler]
    ArgIndex --> Handler
```

## Usage

```
import { BaseRpcContext } from '@nestjs/microservices';

class CustomRpcContext extends BaseRpcContext<[string, number]> {}
```

```
const context = new CustomRpcContext(['user-123', 42]);

const args = context.getArgs();
// ['user-123', 42]

const userId = context.getArgByIndex(0);
// 'user-123'

const retryCount = context.getArgByIndex(1);
// 42
```

## AI Coding Instructions

- Extend `BaseRpcContext` when implementing a transport-specific RPC context that needs to expose request arguments.
- Use `getArgs()` when consumers need the complete, typed argument tuple or array.
- Use `getArgByIndex(index)` only when the argument position is stable and documented by the transport contract.
- Preserve argument ordering when constructing or forwarding contexts; index-based access depends on it.
- Prefer strongly typed tuple generics for `T` so handler code receives accurate argument types.