Response Helpers

The <u>Server Response object</u>, (often abbreviated as res) includes a set of Express.js-like helper methods to improve the developer experience and increase the speed of creating new API endpoints.

The included helpers are:

- res.status (code) A function to set the status code. code must be a valid HTTP status code
- res.json(body) Sends a JSON response. body must be a serializable object
- res.send(body) Sends the HTTP response. body can be a string, an object or a Buffer
- res.redirect([status,] path) Redirects to a specified path or URL. status must be a valid HTTP status code. If not specified, status defaults to "307" "Temporary redirect".
- res.unstable_revalidate(urlPath) <u>Revalidate a page on demand</u> using getStaticProps.

 urlPath must be a string.

Setting the status code of a response

When sending a response back to the client, you can set the status code of the response.

The following example sets the status code of the response to 200 (OK) and returns a message property with the value of Hello from Next.js! as a JSON response:

```
export default function handler(req, res) {
  res.status(200).json({ message: 'Hello from Next.js!' })
}
```

Sending a JSON response

When sending a response back to the client you can send a JSON response, this must be a <u>serializable object</u>. In a real world application you might want to let the client know the status of the request depending on the result of the requested endpoint.

The following example sends a JSON response with the status code 200 (OK) and the result of the async operation. It's contained in a try catch block to handle any errors that may occur, with the appropriate status code and error message caught and sent back to the client:

```
export default async function handler(req, res) {
   try {
     const result = await someAsyncOperation()
     res.status(200).json({ result })
   } catch (err) {
     res.status(500).json({ error: 'failed to load data' })
   }
}
```

Sending a HTTP response

Sending an HTTP response works the same way as when sending a JSON response. The only difference is that the response body can be a string, an object or a Buffer.

The following example sends a HTTP response with the status code 200 (OK) and the result of the async operation.

```
export default async function handler(req, res) {
   try {
     const result = await someAsyncOperation()
     res.status(200).send({ result })
   } catch (err) {
     res.status(500).send({ error: 'failed to fetch data' })
   }
}
```

Redirects to a specified path or URL

Taking a form as an example, you may want to redirect your client to a specified path or URL once they have submitted the form.

The following example redirects the client to the / path if the form is successfully submitted:

```
export default async function handler(req, res) {
  const { name, message } = req.body
  try {
    await handleFormInputAsync({ name, message })
    res.redirect(307, '/')
  } catch (err) {
    res.status(500).send({ error: 'failed to fetch data' })
  }
}
```

Adding TypeScript types

You can make your response handlers more type-safe by importing the <code>NextApiRequest</code> and <code>NextApiResponse</code> types from <code>next</code> , in addition to those, you can also type your response data:

```
import type { NextApiRequest, NextApiResponse } from 'next'

type ResponseData = {
  message: string
}

export default function handler(
  req: NextApiRequest,
  res: NextApiResponse<ResponseData>
) {
  res.status(200).json({ message: 'Hello from Next.js!' })
}
```

To view more examples using types, check out the TypeScript documentation.

If you prefer to view your examples within a real projects structure you can checkout our examples repository:

- Basic API Routes
- API Routes with REST