

FastifyAdapter

August 17, 2026

FastifyAdapter

Kind: Class

Source: `packages/platform-fastify/adapters/fastify-adapter.ts`

Part of: Platform Fastify

`FastifyAdapter` bridges the framework's HTTP abstractions to a Fastify server instance. It initializes the Fastify application, registers request/response lifecycle hooks, exposes common HTTP route methods, and starts the server through overloaded `listen()` methods.

Extends: `AbstractHttpAdapter`

Methods

Method	Signature	Returns
<code>setOnRequestHook</code>	<code>`setOnRequestHook(hook: (request: TRequest, reply: TReply, done: (err?: Error) => void,) => void</code>	<code>Promise)`</code>
<code>setOnResponseHook</code>	<code>`setOnResponseHook(hook: (request: TRequest, reply: TReply, done: (err?: Error) => void,) => void</code>	<code>Promise)`</code>
<code>init</code>	<code>init()</code>	<code>void</code>
<code>listen</code>	<code>`listen(port: string</code>	<code>number, callback: () => void)`</code>
<code>listen</code>	<code>`listen(port: string</code>	<code>number, hostname: string, callback: () => void)`</code>
<code>listen</code>	<code>`listen(listenOptions: string</code>	<code>number</code>
<code>get</code>	<code>get(args: any[])</code>	<code>void</code>
<code>post</code>	<code>post(args: any[])</code>	<code>void</code>

Method	Signature	Returns
head	head(args: any[])	void
delete	delete(args: any[])	void
put	put(args: any[])	void
patch	patch(args: any[])	void
options	options(args: any[])	void
search	search(args: any[])	void
propfind	propfind(args: any[])	void
proppatch	proppatch(args: any[])	void
mkcol	mkcol(args: any[])	void
copy	copy(args: any[])	void
move	move(args: any[])	void
lock	lock(args: any[])	void
unlock	unlock(args: any[])	void
applyVersionFilter	applyVersionFilter(handler: Function, version: VersionValue, versioningOptions: VersioningOptions)	VersionedRoute<TRequest, TReply>
reply	`reply(response: TRawResponse	TReply, body: any, statusCode: number)`
status	`status(response: TRawResponse	TReply, statusCode: number)`
end	end(response: TReply, message: string)	void
render	render(response: TReply & { view: Function }, view: string, options: any)	void
redirect	redirect(response: TReply, statusCode: number, url: string)	void
setErrorHandler	setErrorHandler(handler: Parameters<TInstance['setErrorHandler']>[0])	void
setNotFoundHandler	setNotFoundHandler(handler: Function)	void
getHttpServer	getHttpServer()	T
getInstance	getInstance()	T

Method	Signature	Returns
register	register(plugin: TRegister['0'], opts: TRegister['1'])	void
inject	inject()	LightMyRequestChain
inject	`inject(opts: InjectOptions	string)`
inject	`inject(opts: InjectOptions	string)`
close	close()	void
initHttpServer	initHttpServer()	void
useStaticAssets	useStaticAssets(options: FastifyStaticOptions)	void
setViewEngine	`setViewEngine(options: FastifyViewOptions	string)`
isHeadersSent	isHeadersSent(response: TReply)	boolean
getHeader	getHeader(response: any, name: string)	void
setHeader	setHeader(response: TReply, name: string, value: string)	void
appendHeader	appendHeader(response: any, name: string, value: string)	void
getRequestHostname	getRequestHostname(request: TRequest)	string
getRequestMethod	getRequestMethod(request: TRequest)	string
getRequestUrl	getRequestUrl(request: TRequest)	string
getRequestUrl	getRequestUrl(request: TRawRequest)	string
getRequestUrl	getRequestUrl(request: TRequest & TRawRequest)	string
enableCors	enableCors(options: FastifyCorsOptions)	void
registerParserMiddleware	registerParserMiddleware(prefix: string, rawBody: boolean)	void

Properties

Property	Type
logger	any
instance	TInstance

Property	Type
<code>_pathPrefix</code>	<code>string</code>

Where it refuses work

- `FastifyAdapter` stops the work with `Error` when `!isString(value) && !Array.isArray(value)` — “Version constraint should be a string or an array of strings.”.
- `FastifyAdapter` stops the work with an early return when `Array.isArray(version)` .
- `FastifyAdapter` stops the work with an early return when `this.versioningOptions?.type === VersioningType.CUSTOM` .
- `FastifyAdapter` stops the work with an early return when `this.isMiddieRegistered` .
- `FastifyAdapter` stops the work with an early return when `err.code !== 'ERR_SERVER_NOT_RUNNING'` .
- `FastifyAdapter` stops the work with an early return when `this._isParserRegistered` .

When something fails

- `FastifyAdapter` handles failure in 2 places: it lets it reach the caller in all 2.

Diagram

```
graph LR
  App[Application] --> Adapter[FastifyAdapter]
  Adapter --> Hooks[Request / Response Hooks]
  Adapter --> Routes[GET / POST / HEAD / DELETE Routes]
  Adapter --> Fastify[Fastify Server]
  Fastify --> Client[HTTP Clients]
```

Usage

```
import { FastifyAdapter } from '@platform-fastify/adapters/fastify-adapter';

const adapter = new FastifyAdapter();

adapter.setOnRequestHook(async (request, reply) => {
  request.log.info({ url: request.url }, 'Incoming request');

  // Example authentication guard
  if (request.headers['x-api-key'] !== process.env.API_KEY) {
    return reply.code(401).send({ message: 'Unauthorized' });
  }
});
```

```

    }
  });

  adapter.setOnResponseHook(async (request, reply) => {
    request.log.info(
      { url: request.url, statusCode: reply.statusCode },
      'Response sent',
    );
  });

  adapter.get('/health', async () => {
    return { status: 'ok' };
  });

  adapter.post('/users', async (request, reply) => {
    const user = request.body;

    reply.code(201);
    return { user };
  });

  await adapter.init();
  adapter.listen(3000);

```

AI Coding Instructions

- Register lifecycle hooks with `setOnRequestHook()` and `setOnResponseHook()` before calling `init()` or `listen()`.
- Use the adapter's route helpers (`get` , `post` , `head` , and `delete`) instead of registering routes directly on the underlying Fastify instance when working within the abstraction.
- Ensure handlers return serializable response values or explicitly send a response through Fastify's reply object.
- Call `init()` before starting the server when initialization is not handled automatically by the surrounding application bootstrap.
- Preserve Fastify request/reply semantics in hooks and route handlers, including returning early after sending an error response.

Relationships

- IMPORTS → `HttpStatus`
- IMPORTS → `Logger`
- IMPORTS → `RawBodyRequest`
- IMPORTS → `RequestMethod`

- IMPORTS → StreamableFile
- IMPORTS → VERSION_NEUTRAL
- IMPORTS → VersioningOptions
- IMPORTS → VersioningType
- IMPORTS → VersionValue
- IMPORTS → loadPackage
- IMPORTS → isString
- IMPORTS → isUndefined
- IMPORTS → AbstractHttpAdapter
- IMPORTS → LegacyRouteConverter