Running Next.JS and React /inside/ of ActionHero

This server will render dynamic next.js/react pages on some routes, and normal ActionHero API requests on others. This configuration works with both Next and ActionHero hot reloading of code.

A more detailed example showcasing how to use fetch and web sockets to interact with your API can be found here: https://github.com/actionhero/next-in-actionhero

How to use

Execute <u>create-next-app</u> with <u>npm</u> or <u>Yarn</u> to bootstrap the example:

```
npx create-next-app --example custom-server-actionhero custom-server-actionhero-app
# or
yarn create next-app --example custom-server-actionhero custom-server-actionhero-app
# or
pnpm create next-app -- --example custom-server-actionhero custom-server-actionhero-app
app
```

How does this work?

1. Create an initializer to load next.js and create a handler that can extract the normal node req and res from the connection

```
// initializers/next.js
const { Initializer, api } = require('actionhero')
const next = require('next')
module.exports = class NextInitializer extends Initializer {
 constructor() {
   super()
   this.name = 'next'
  async initialize() {
    api.next = {
     render: async (connection) => {
       if (connection.type !== 'web') {
         throw new Error ('Connections for NEXT apps must be of type "web"')
       }
       const req = connection.rawConnection.req
       const res = connection.rawConnection.res
        return api.next.handle(req, res)
      },
    }
    api.next.dev = api.env === 'development'
    if (api.next.dev) {
      api.log('Running next in development mode...')
```

```
api.next.app = next({ dev: api.next.dev })
api.next.handle = api.next.app.getRequestHandler()
await api.next.app.prepare()
}

async stop() {
   await api.next.app.close()
}
```

2. Create an action which will run the above api.next.render(connection). Note that we will not be relying on ActionHero to respond to the client's request in this case, and leave that up to next (via: data.toRender = false)

```
// actions/next.js

const { Action, api } = require('actionhero')

module.exports = class CreateChatRoom extends Action {
  constructor() {
    super()
    this.name = 'render'
    this.description = 'I render the next.js react website'
  }

async run(data) {
  data.toRender = false
    return api.next.render(data.connection)
  }
}
```

3. Tell ActionHero to use the api rather than the file server as the top-level route in api.config.servers.web.rootEndpointType = 'api' . This will allows "/" to listen to API requests. Also update api.config.general.paths.public = [path.join(__dirname, '/../static')] . In this configuration, the next 'static' renderer will take priority over the ActionHero 'public file' api. Note that any static assets (CSS, fonts, etc.) will need to be in "./static" rather than "./public".

Note that this is where the websocket server, if you enable it, will place the ActionheroWebsocketClient library.

4. Configure a wild-card route at the lowest priority of your GET handler to catch all web requests that aren't caught by other actions:

```
// config/routes.js

exports['default'] = {
  routes: (api) => {
    return {
```