

callModuleInitHook

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Kind: Function

Source: `packages/core/hooks/on-module-init.hook.ts`

Part of: Core

Calls the `onModuleInit` function on the module and its children (providers / controllers).

`callModuleInitHook` runs the `onModuleInit()` lifecycle hook for a Nest module's initialized controllers, providers, injectables, and middleware. It processes non-transient and transient instances before invoking the module class's own hook when its dependency tree is static.

Signature

```
async function callModuleInitHook(module: Module): Promise<void>
```

Parameters

Name	Type
<code>module</code>	<code>Module</code>

Returns: `Promise<void>`

Diagram

```
graph LR
  A[Module] --> B[Controllers]
  A --> C[Providers]
  A --> D[Injectables]
  A --> E[Middleware]
```

```
B --> F[Invoke onModuleInit]
C --> F
D --> F
E --> F

F --> G[Non-transient instances]
G --> H[Transient instances]
H --> I[Module class onModuleInit]
```

Usage

```
import { callModuleInitHook } from '@nestjs/core/hooks/on-module-init.hook';
import { Module } from '@nestjs/core/injector/module';

// Typically called internally by Nest during application initialization.
async function initializeModule(moduleRef: Module) {
  await callModuleInitHook(moduleRef);

  console.log('Module lifecycle hooks have completed.');
```

AI Coding Instructions

- Treat this as an internal lifecycle utility; application code should usually implement `OnModuleInit` rather than call this function directly.
- Ensure providers, controllers, injectables, and middleware are fully instantiated before invoking module initialization hooks.
- Preserve the ordering: execute child instance hooks before the module class's own `onModuleInit()` hook.
- Keep transient and non-transient instance handling separate so each lifecycle hook is invoked for the correct resolved instances.
- Only invoke the module class hook when its dependency tree is static and the class implements `onModuleInit()`.

Relationships

- IMPORTS → `OnModuleInit`
- IMPORTS → `isFunction`
- IMPORTS → `isNil`