

# ExceptionsZone

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## ExceptionsZone

**Kind:** Class

**Source:** `packages/core/errors/exceptions-zone.ts`

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

`ExceptionsZone` executes synchronous or asynchronous bootstrap work within a centralized exception boundary. It delegates caught errors to Nest's exception handling and logging infrastructure, then runs a teardown callback—by default terminating the process.

## Methods

| Method                | Signature                                                                                                              | Returns           |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|-------------------|
| <code>run</code>      | <code>run(callback: () =&gt; void, teardown: (err: any) =&gt; void, autoFlushLogs: boolean)</code>                     | <code>void</code> |
| <code>asyncRun</code> | <code>asyncRun(callback: () =&gt; Promise&lt;void&gt;, teardown: (err: any) =&gt; void, autoFlushLogs: boolean)</code> | <code>void</code> |

## When something fails

- `ExceptionsZone` handles failure in 2 places: it logs it and continues in all 2.

## Diagram

```
graph LR
  A[Application bootstrap callback] --> B{ExceptionsZone.run / asyncRun}
  B -->|Success| C[Continue execution]
  B -->|Throws or rejects| D[ExceptionHandler]
  D --> E[Flush logs]
  E --> F[Teardown callback]
  F --> G[Exit process by default]
```

## Usage

```
import { ExceptionsZone } from '@nestjs/core/errors/exceptions-zone';

async function bootstrap() {
  // Create and start the application here.
  console.log('Application started');
}

ExceptionsZone.asyncRun(
  bootstrap,
  error => {
    console.error('Bootstrap failed:', error);
    process.exitCode = 1;
  },
);
```

## AI Coding Instructions

- Use `run()` for synchronous callbacks and `asyncRun()` for callbacks that return a `Promise`.
- Provide a custom teardown callback when callers need cleanup, test-friendly behavior, or custom process-exit handling.
- Do not catch and silently ignore errors inside the callback; allow unrecoverable bootstrap errors to reach `ExceptionsZone`.
- Preserve the exception handler and log-flushing flow when modifying this class, as it ensures startup failures are reported consistently.
- Treat this as core bootstrap infrastructure; application-level request exceptions should use Nest exception filters instead.

## Relationships

- IMPORTS → `Logger`