

Updated 07/26/2023

Sign up

# Hapi.JS training

2 days (14 hours)

## Presentation

[hapi.js](#) (also known as hapi) is an easy-to-use, configuration-centric framework with built-in support for input validation, caching, authentication and other features essential for building Web applications and services. hapi lets developers focus on writing reusable application logic in a highly modular, standards-based approach.

Version 17.x only supports nodes v8.9.0 and higher. For older node versions, please use version 16.x.

Like all our programs, our training is based on the latest stable version of this platform ([hapi v20](#) at the time of writing).

## Objectives

- Building secure API servers
- Use hapi.js plugins to better structure your codebase
- Simplify your security workflows with hapi.js' integrated authentication and authorization functionality
- Ensure application reliability through testing and code coverage
- Reduce code complexity by using reusable validation logic with joi

## Target audience

- Developer
- Architect
- Project managers

## Prerequisites

Knowledge of Node.JS is a plus.

## hapi.js training program

### Introducing hapi.js

- Node.js, a prerequisite for learning hapi.js
- Comparison with other frameworks
  - Separating business logic from the transport layer
  - The ecosystem
  - Small modules
- Creating our first hapi.js server
  - Install hapi
  - Our first hapi server
  - hapi plugins
  - Hapi configuration
  - The hapi style guide

### Add functionality through routing requests

- Server routing
  - Route configuration
    - Method
    - Path
    - Description
    - Validate
    - Pre
    - Handler
    - Cover
  - hapi routing algorithm
- Lifecycle
  - Extending the request lifecycle
- hapi query object
- The response interface
  - Customized managers
- Serving static files with inert
- Service models with vision
  - Vision configuration
    - The engines
    - The paths
    - compileMode

### Structuring your codebase with plugins

- Structural applications
- hapi plugins
  - Plugin encapsulation functionality
  - Plugin options

- Exposing and consuming plugins
  - Plugin dependency management
  - Sandbox features
  - Combining plugins
- The hapi plugin ecosystem
  - Authentication
  - Documentation generation
  - Recording
  - Utilities
- Composing applications from plugins

## Adding tests and ensuring 100% code coverage

- Why is the importance of testing overlooked?
- The benefits and importance of test code
- Overview of hapi test utilities
  - Lab and code installation
    - Local versus global modules
  - Our first test script
  - Test approaches
- Testing hapi applications with lab
  - Code coverage
  - Linting

## Application security with authentication and authorization

- Authentication
  - Authentication configuration
  - Cookie authentication
  - Third-party authentication
- Authorization

## The joy of reusable validation

- An introduction to validation
- Introduction to joi
- Validation of hapi routes with joi
  - Validation of answers Route
- Documentation generation

## Make your application ready for use

- Persistent data
  - MongoDB
  - The 'M' in MVC
- Introduction to caching
  - Server methods
  - Caching with server methods

- Introduction to logs
  - Debugging applications
  - The console
  - The node debugger
  - Debug mode in hapi
  - Profiling heapdumps
  - TV
- General Production Council
- Continue learning
  - Getting started with hapi.js repo GitHub
  - Hapijs.com
  - Makemehapi
  - The hapi community

## Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

## Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

## Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

## Sanction

A certificate will be issued to each trainee who completes the course.