

Serverless Framework

Training

COURSE CONTENT

GET IN TOUCH



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About Multisoft

Train yourself with the best and develop valuable in-demand skills with Multisoft Systems. A leading certification training provider, Multisoft collaborates with top technologies to bring world-class one-on-one and certification trainings. With the goal to empower professionals and business across the globe, we offer more than 1500 training courses, which are delivered by Multisoft's global subject matter experts. We offer tailored corporate training; project Based Training, comprehensive learning solution with lifetime e-learning access, after training support and globally recognized training certificates.

About Course

Serverless architecture is rapidly transforming the way modern applications are built, deployed, and scaled. The Serverless Framework Training by Multisoft Systems is designed to help developers, cloud engineers, and IT professionals master this powerful approach to cloud-native development. This training introduces you to the fundamentals of serverless computing, covering key concepts such as event-driven workflows, cloud functions, API creation, microservices, and automated deployments across major cloud platforms.

Module 1: Introduction to Serverless Computing

- ✓ Understanding serverless architecture
- ✓ Key benefits and limitations
- ✓ Event-driven programming model
- ✓ Serverless vs traditional cloud-based applications
- ✓ Overview of major cloud providers (AWS, Azure, GCP)

Module 2: Getting Started with the Serverless Framework

- ✓ What is the Serverless Framework?
- ✓ Installing and configuring the Serverless CLI
- ✓ Understanding serverless project structure
- ✓ Writing your first serverless function
- ✓ serverless.yml – configuration basics

Module 3: AWS Lambda with Serverless Framework

- ✓ Introduction to AWS Lambda
- ✓ Creating and deploying Lambda functions
- ✓ Integrating API Gateway
- ✓ Working with S3, DynamoDB, and CloudWatch
- ✓ Using IAM roles and permissions
- ✓ Environment variables and resource policies

Module 4: Azure Functions with Serverless Framework

- ✓ Overview of Azure Functions
- ✓ Deployment process through Serverless Framework
- ✓ Working with triggers and bindings
- ✓ Monitoring and debugging Azure Functions
- ✓ Integrating Azure Storage, Event Hub, and API Management

Module 5: Google Cloud Functions with Serverless Framework

- ✓ Introduction to Google Cloud Functions
- ✓ Setting up GCP credentials
- ✓ Deploying functions with Serverless
- ✓ Integrating Pub/Sub, Cloud Storage, and HTTP triggers
- ✓ Logs, debugging, and monitoring using Google Cloud Console

Module 6: Building Serverless APIs & Microservices

- ✓ Designing RESTful APIs
- ✓ Multi-function serverless applications
- ✓ Using API Gateway and routing
- ✓ Handling requests, responses, and middleware
- ✓ Authentication and authorization patterns

Module 7: Advanced Serverless Framework Configuration

- ✓ Variables, stages, and environments
- ✓ Using plugins to extend functionalities
- ✓ Packaging and deployment customization
- ✓ Working with VPC, layers, and shared libraries
- ✓ Versioning and rollbacks

Module 8: Deployment & CI/CD Automation

- ✓ Automating deployments with Serverless Framework
- ✓ CI/CD using GitHub Actions, Jenkins, or GitLab
- ✓ Managing deployment pipelines
- ✓ Integration with cloud-native DevOps tools
- ✓ Zero-downtime deployments & blue-green strategies

Module 9: Monitoring, Logging & Debugging

- ✓ CloudWatch, Azure Monitor, and GCP Logs
- ✓ Error tracing and debugging techniques
- ✓ Metrics, alerting, and performance dashboards
- ✓ Handling cold starts and optimizing execution time

Module 10: Serverless Security Essentials

- ✓ IAM roles and access control
- ✓ Handling secrets and environment variables
- ✓ API authentication and authorization
- ✓ Compliance and security best practices
- ✓ Secure deployment strategies

Module 11: Cost Optimization & Scalability

- ✓ Understanding pay-per-use pricing
- ✓ Reducing cold start latency
- ✓ Optimizing memory, timeouts, and concurrency
- ✓ Cost monitoring tools and reports
- ✓ Scaling best practices across platforms