Gatling

2025

DATASHEET

Gatling Enterprise Edition performance testing tech stack

Supported use cases, initiatives, technologies and integrations

Built to test any use case or protocol, at scale

Gatling Enterprise Edition is a developer-first load testing platform for modern, high-scale systems. It supports APIs, microservices, real-time protocols, and legacy tech across HTTP, WebSockets, gRPC, and more. Create tests with code, low-code, or no-code options. Integrate seamlessly into CI/CD pipelines and APM tools to ensure resilience at any scale.

Gatling is designed to test the performance of today's most demanding systems, across industries and architectures. From modern web apps to AI workloads, Gatling adapts to your use case:

Web applications

Simulate user interactions and ensure fast, reliable front-end performance under load.

Public and private APIs

Validate your API performance, latency, and error handling across high concurrency.

Cloud-based infrastructures

Evaluate performance and resiliency of cloud-native apps, especially after migrations from on-premise to cloud environments.

SQL databases

Measure query response times and throughput under real-world usage scenarios.

Microservices architectures

Test internal service-to-service communication and isolate performance bottlenecks.

IoT systems and protocols

Emulate device fleets and message flows using MQTT, AMQP, and other IoT protocols.

Mobile applications

Reproduce mobile usage patterns and variable network conditions for realistic testing.

LLM and AI-powered APIs

Evaluate AI inference latency and ensure consistent performance for high-volume requests.

Purpose-built for modern performance testing initiatives
Gatling is ideally suited for teams leading today's most impactful performance efforts:

Load-Test-as-Code and Shift-Left Testing

Enable developers to own performance early in the SDLC with test-as-code, CI/CD integration, and flexible scripting in JavaScript, Scala, or Java.

High-Scale Stress Testing

Simulate millions of concurrent virtual users and requests to validate the resilience of large-scale, distributed systems.

Microservices Architecture Support

Coordinate tests across services, queues, and APIs to validate real-world dependencies and interactions at scale.

DevOps-Ready Reliability Testing

Integrate performance testing into your CI/CD pipelines and SRE workflows to ensure continuous reliability and system health.

API-First Performance Validation

Design and execute realistic test scenarios across REST, GraphQL, gRPC, and messaging APIs—ideal for modern digital platforms.

Load testing as a Service

Whatever your starting point, if your goal is load testing, Gatling can support you from start to finish with turnkey solutions.

WEB APP, RICH INTERNET APP, AND FRAMEWORKS

TECHNOLOGY	COMMENT
HTTP/HTTPS	Main protocol Gatling targets
HTML5	Downloads HTML but doesn't render HTML5 content
SOAP API	Supports SOAP envelopes via raw XML in body
REST API	Uses JSON/XML over standard HTTP methods
XML	XML is fully supported as raw text
WEB SERVICES/WSDL	WSDL-based SOAP (XML over HTTP) is fully supported
WEBSOCKETS	Fully supported
AJAX	AJAX requests are regular HTTP calls— fully supported
REACT	React apps make HTTP calls— fully supported
ANGULARJS	AngularJS uses HTTP APIs— fully supported
SINGLE PAGE APPLICATION	SPAs rely on HTTP/API calls— fully supported
PUSH TECHNOLOGIES	Supports push via WebSockets and Server-Sent Events
SERVER-SENT EVENTS (SSE)	Fully supported
GRAPHQL	Supported via HTTP POST with query in body
J2EE	Fully supported if interfaces are exposed over HTTP
PHP	Fully supported as long as it serves HTTP endpoints
MICROSOFT .NET	.NET support depends on the exposed protocol (e.g., HTTP, WebSocket)
KAFKA	Supported (Community plugin)
GRPC	Fully supported
JMS (JAVA MESSAGE SERVICE)	Fully supported via Gatling JMS SDK

IOT PROTOCOLS

TECHNOLOGY	COMMENT
MQTT	We support MQTT over TCP
AMQP	Supported via Community plugin
RABBITMQ MESSAGING AND STREAMING BROKER (AMQP)	Supported via AMQP plugin

NETWORK PROTOCOLS

TECHNOLOGY	COMMENT
FTP (FILE TRANSFER PROTOCOL)	Supported via Community plugin
IMAP (INTERNET MESSAGE ACCESS PROTOCOL)	Supported via Community plugin
SMTP (SIMPLE MAIL TRANSFER PROTOCOL)	Supported via Community plugin
JDBC (JAVA DATABASE CONNECTIVITY)	Supported via Community plugin
TLS	Fully supported

DATABASES

TECHNOLOGY	COMMENT
POSTGRESQL	For all technologies, send SQL queries to any database that provides a compatible JDBC driver
MYSQL	
MICROSOFT SQL SERVER	
ORACLE	
DB2	
SAP HANA	
ODBC/JDBC	

MONITORING AND REMOTE ACCESS

TECHNOLOGY	COMMENT
GIT	Supported via Community plugin
FTP	Supported via Community plugin
SFTP SSH FILE TRANSFER PROTOCOL	Supported via Community plugin

CONTAINERIZED APPLICATIONS AND ARCHITECTURE

TECHNOLOGY	COMMENT
DOCKER	Gatling runs smoothly in native Docker environments
AWS ECS	Supported as a deployment option for running tests in AWS
AZURE CONTAINER APPS	Compatible with Azure's container services
GCP CLOUD RUNNER	Gatling can run tests in GCP Cloud Runner environments
AKS (AZURE KUBERNETES SERVICE)	Gatling integrates with AKS for Kubernetes-based orchestration
EKS (ELASTIC KUBERNETES SERVICE ON AWS)	Compatible with EKS to manage tests in AWS Kubernetes clusters
GKE (GOOGLE KUBERNETES ENGINE)	Works with GKE to deploy and scale load tests
VMWARE	Gatling supports execution on VMware virtual machines
HYPER-V	Gatling also works in Hyper-V virtualized environments

PACKAGED APPLICATIONS

TECHNOLOGY	COMMENT
DOCKERIZED APPLICATIONS	Gatling can easily test any application packaged as a Docker container
GUIDEWIRE	Guidewire-based applications are testable if HTTP APIs are exposed
JIRA	Gatling can test Jira modern instances if you're targeting its exposed REST APIs

Integrations

Gatling Enterprise Edition fits right into your toolchain. From CI/CD to APM, authentication, and team workflows, we provide deep integrations to help you automate, scale, and secure your performance testing process.

API Platforms

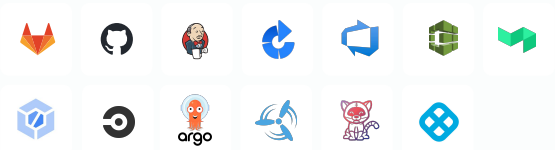
Seamlessly reuse your Postman Collections for load testing, eliminating manual conversions.

Build Tools

Run tests and package simulation directly from your favorite build systems

CI/CD Tools

Automate your testing pipeline with direct CI/CD plugins and scripts.



APM Tools

Correlate performance test metrics with real-time observability data.

Notifications

Keep your team informed with real-time alerts and simulation summaries and results directly to your channels.

custom webhooks

Authentication Sources

Integrate Gatling Enterprise with your organization's SSO provider.

OpenID Connect, SAML v2.0, Azure AD, Google, GitHub, GitLab, Okta

Secrets Manager

Gatling scripts can integrate with a lot of Secrets Manager to securely retrieve and manage secret values after the initialization stage of your load generators.

AWS Secrets Manager, HashiCorp Vault, Azure Key Vault

Ready to evaluate Enterprise Edition?

Whether you're scaling APIs, migrating to the cloud, or handling flash traffic spikes, Gatling helps you deliver fast, reliable performance.

Talk to an expert ›

Gatling