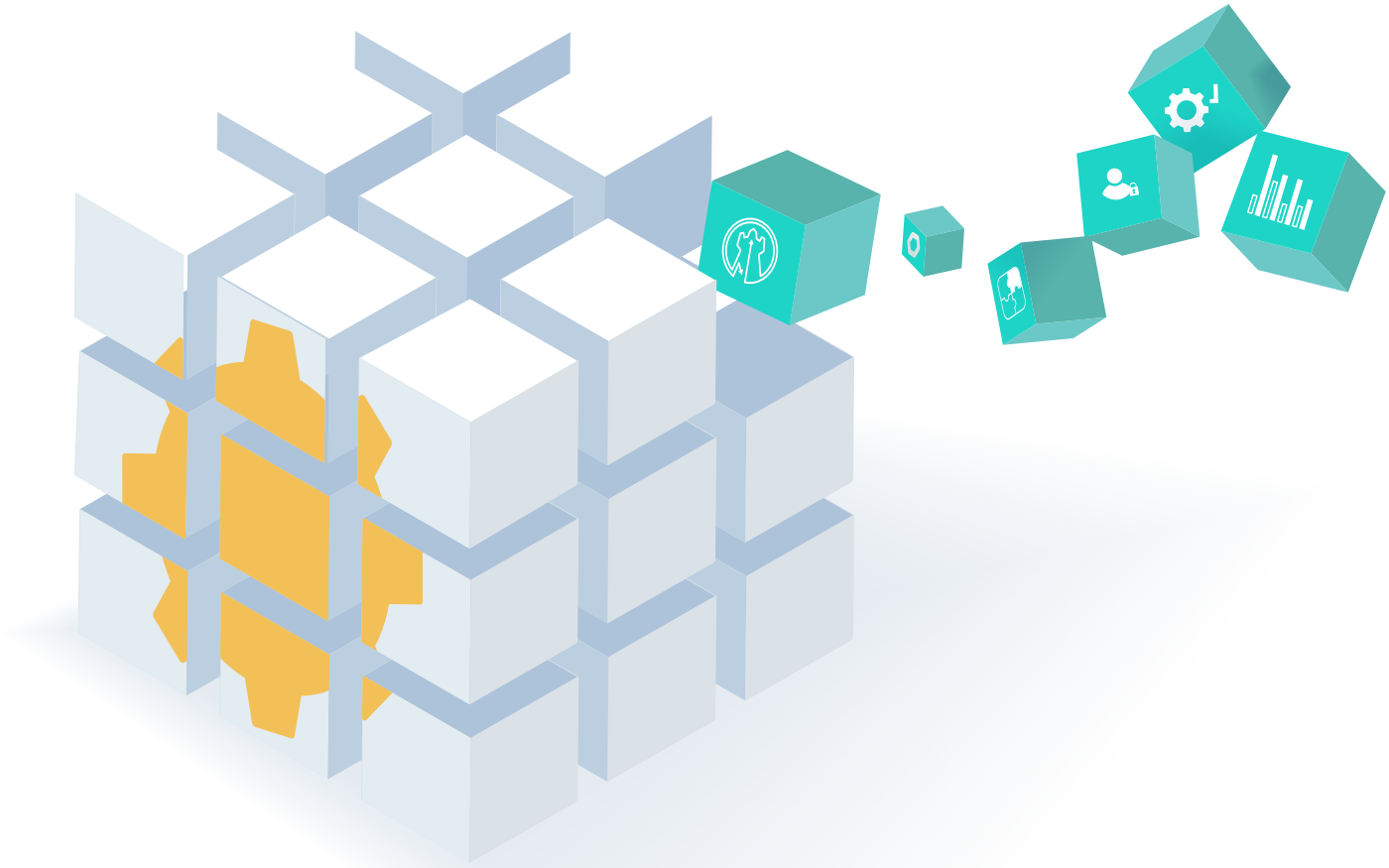
APIFORTRESS

SOLUTION BRIEF

On-Demand Functional Tests and Monitors for Your APIs

Go beyond uptime with functional uptime: a better metric for continuous API quality and reliability



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Overview

Despite the rapidly growing adoption of automated API testing, and application monitoring platforms, APIs continue to fail with little insight. Faster development speeds along with significant increases in integration complexity are only making the API quality-at-speed problem more common and expensive. In this new reality, distributed teams of technical and non-technical stakeholders depend on the APIs that are the backbone of our internal and external systems today.

Traditionally, it has required either building a custom testing and monitoring suite in-house, or buying a costly patchwork of siloed applications barely linked together. However, neither of these approaches have provided highly reliable insight into API performance and resilience under real world conditions.

API Fortress rewrites the rules of API quality by dissolving the distinction between an API test and an API monitor. On the API Fortress platform, API monitors are functional tests at their core. These tests are data-driven and capable of reproducing normal API consumer flows. So that means our monitors go beyond what a traditional synthetic monitor sees. Ultimately, API Fortress allows companies to unify functional testing and monitoring into a holistic unified API quality strategy. This extends coverage to a much wider range of API problems before and after they go live.

Thanks to our API-first platform, notifications and test result data from our functional uptime monitors can be easily integrated with your existing tools. Unify real-time insights about the health of your APIs. Get data and notifications in our detailed reports - or through our integrations with Slack, Datadog, Elastic, JIRA, and other platforms.

In this solution brief, learn more about our breakthrough approach to helping you solve your quality-at-speed problem. Whether just starting your journey to a new level of API quality or optimizing your monitoring strategy, our on-demand API functional monitors can be ready out-of-the-box to accelerate your path without needing to increase IT resources.

Simplified Design & Deployment

It has never been easier to add API tests and functional uptime monitors for your APIs. API Fortress automatically generates functional tests for your partner, public, or mobile app APIs. These API tests are then reviewed by our experts to validate that they will properly monitor the experience of your typical API consumer. In this way, these monitors can capture a much wider variety of API errors - far beyond the contract or synthetic testing of traditional API monitors.

Public APIs

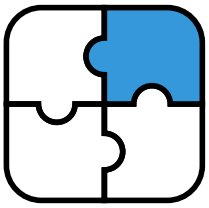
Partner APIs

Mobile APIs

Key Features and Benefits

Unified API Testing and Monitoring

API Fortress unifies your data-driven functional tests with monitoring to create a single holistic API quality dashboard. Use the platform to validate API releases before and after production.

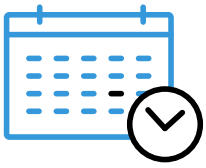


Integration with Existing Toolchain

Connect our API monitoring data and notifications with any of your preferred notifications or messaging tool (e.g., PagerDuty, xMatters, Slack, JIRA, etc.) and analytics dashboard (e.g., Elastic Kibana, Datadog, Splunk, New Relic, etc.).

Automated Onboarding

The API Fortress platform automatically generates functional tests and monitors from payloads or spec files for your public APIs. Deploy proper API monitors with best practices out-of-the-box, and without time or budget barriers standing in the way.

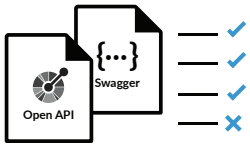


Built-in Scheduler

Get tests and monitors with granular control over when they run, and without needing to plug into a CI/CD platform. Edit tests and monitors without affecting the live version.

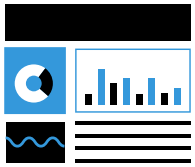
3-legged OAuth Automation

Automate 3-legged OAuth flows, and truly reproduce your API consumers with realistic monitors.



Mass Functional Test Generation

Import OpenAPI or Swagger spec files to generate a large number of functional tests and functional uptime monitors that do more than simply contract test against the spec.

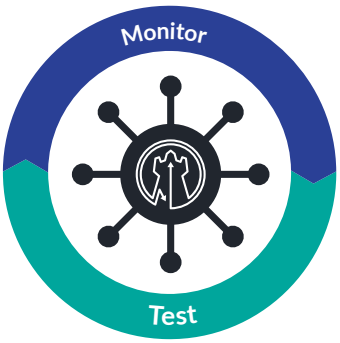


Detailed Reporting and Data

Go beyond a failure report. API Fortress shows which assertion failed and how it failed: it even includes all header information and the payload itself. Find the needle in the haystack.

By aggregating the right real-time data from unified API and data-driven tests, our functional uptime monitors provide more usable and accurate insights about the true uptime of your APIs - even as integrations propagate, databases rapidly change, and API traffic significantly increases.

Functional Uptime Monitors give your analytics and notification tools the right data for continuous improvement and true API uptime.



Data Driven Functional Testing

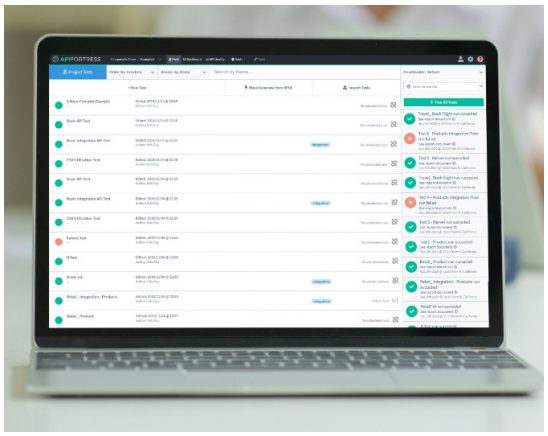
End-to-End (Integration) Testing

Load and Performance Testing

Automated Onboarding: **How it Works**

1. Speak with the API Fortress Team, so we can learn about your API program.

2. If eligible, API Fortress will generate example functional uptime monitors to review with your team.



3. If you're happy with the results, the platform will generate all of your tests and monitors for you, and then deliver a final account that contains everything you need prebuilt and ready out-of-box.

Use Cases

Implement API Testing and Monitoring as a New Initiative

Many organizations are challenged to think API-first, while remaining tethered to legacy technology and processes. These organizations may have focused on UI testing, and only planned to conduct a small amount of manual API testing. API Fortress helps teams move from a focus on UI testing to API testing with as little pain as possible.

With our on-demand platform, you get the right API tests and monitors quickly for continuous API quality, and with no need to invest IT resources. Gain a powerful new metric, functional uptime, to detect more API defects earlier, and diagnose those API defects quickly. Easily integrate business or non-technical testers and other stakeholders into the QA and monitoring process with API Fortress. Functional tests are created with no coding or man hours needed. Now, devs, testers, architects, and business stakeholders can work in parallel.

Increase API Monitoring Coverage

Powerful monitoring and analytics tools such as Datadog, AppDynamics, and New Relic were built for infrastructure and cloud services. While a number of these traditional tools do offer basic API monitoring, API Fortress integrates with these tools to add enhanced API monitoring to detect and diagnose a much wider range of API defects that evade traditional monitors.

Implement Automated Testing With Your CI/CD Pipeline

If your organization is running a CI/CD pipeline, one of your greatest challenges may come from ensuring code quality as constant changes occur in multiple environments throughout product development. Our functional uptime monitors are API tests, and can be deployed in any environment throughout the API lifecycle. In this way, your local and remote team members can get a single version of truth about real-time API health throughout Continuous Integration (CI). Additionally, our monitors continue to automatically run even if changes are made to the CI/CD platform, ensuring that monitoring remains accurate at all times.

Conduct Data-driven Functional Testing

Most mobile apps and web services require APIs that are connected to multiple databases that undergo constant change. Variable data can be provided by the provider or consumer, with the only constant being the inconsistency of those requests. For example, an ecommerce app may allow users to select different shoes with varying colors, sizes, and prices.

Testing these database-connected APIs using static calls from something like a CSV won't properly reproduce real world conditions. That's why data-driven testing is critical to ensure true uptime, allowing APIs to be run in numerous unpredictable manners, and therefore properly tested for normal and edge cases.

Enhance API Resilience Against API Breaches

A growing number of the largest data breaches are turning out to be API breaches. Recently, Nordic APIs published a piece on "5 Major Modern API Data Breaches" in which a common theme emerges: too many companies focus on the security of their app, while neglecting to properly test for functional vulnerabilities.

Functional uptime monitoring could have detected many of the API vulnerabilities that opened the doors for an API breach for the simple reason that most vulnerabilities were caused by human error. By monitoring APIs for real user behavior with functional testing, you can supplement your API security with deeper insights, and even catch API defects caused by human error before it's too late.

About Us

API Fortress is a continuous testing and monitoring platform for APIs that was built from the ground up for shift-left automation and simplified collaboration across teams. By unifying data-driven functional tests with monitoring that can run in any environment, API Fortress detects a much wider range of API issues early in the lifecycle, while significantly accelerating diagnosis with detailed reporting. Now, achieve unlimited quality-at-speed as you integrate API Fortress into any CI/CD platform or DevOps toolchain. Use API Fortress on our hosted cloud at APIFortress.com, or your cloud with a self-managed (on-premises) container.

Find API Fortress in the Forrester Now Tech: Shift-Left Performance Testing Suites Of Tools and Now Tech: Continuous Functional Test Automation Suites. Also find API Fortress in the Gartner Hype Cycle for Application and Integration Infrastructure.

Visit us online to view Case Studies or email us to request an unlisted case study for your industry or use case.

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Start a Free Trial today. Or visit us at www.APIFortress.com to chat with a Solution Specialist and schedule a demo.

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