Does my API Suck?

Not too long ago, this question could amuse programmers for hours, but no one else cared.

No more. If your API sucks, you're losing money and market share, right *now*.

You're at risk for social media mockery, big data breaches, and SLA busting outages.

How many of the top signs of suckage does your API have?

1.	Your documentation is incomplete, wrong, misleading, or just plain incomprehensible.	☐
2.	Users complain that coding simple use cases is just too much hassle.	☐
3.	Users often rely on workarounds—they FTP files instead of using your API's getFile.	☐
4.	Your API is unbalanced or incomplete—you can turn something on, but not off.	☐
5.	Your API's service crashes or responds with garbage when messages are out of order or contain invalid data.	☐
6.	Version mismatches have unpredictable results.	☐
7.	No one is really sure what will happen with edge cases and they don't want to know.	☐
8.	Your API allows your service to be hacked with common attack vectors.	☐
9.	Your service supports several protocols (REST, SOAP,…) or formats (JSON, XML,…), but behavior and data isn't consistent among them.	☐
10.	Your API doesn't provide useful feedback—good and bad input all get the same response.	☐
11.	And probably worst of all, your service is so awesome that it draws traffic spikes, but then your server chokes and dies.	☐

If your API has at least four of these signs, you need **Advanced API Verification.**

Advanced API Verification

Advanced API Verification from System Verification Associates assures your APIs have the usability, robustness, and performance to drive high traffic and top-line growth.

- Proven on hundreds of complex APIs
- Validates documentation correctness and usability
- Evaluates scalability, security, and robustness
- Verifies behavior with deep automated exploration
- Unambiguous "Done" criteria

Say what you do,
Do what you say

Advanced API Verification—a Proven Process

For three years, Bob Binder led a System Verification Associates team at Microsoft supporting validation and testing of 500 critical server-side APIs to comply with a Federal court order.

We scrutinized documentation and used advanced automated testing to reveal omissions, inconsistencies, flaws, and bugs.

This worked so well that over 50,000 interoperability issues were found and corrected. Hundreds of third parties could finally use Microsoft's APIs to build high value applications.

We've expanded and upgraded this technology to verify any API on any stack, including yours.

Sprint	Approach/Deliverables
Discovery	Survey and catalog API documentation, open and closed issues, social media profiles, codebase, and usage logs.
Analysis	Construct usage profile, scrutinize and markup documentation, review function structure; prepare heat map for prioritization.
Design	Configure virtual lab, develop behavior/data models, establish traffic capture/parsers, instantiate adapters.
Verification	Conduct model checking, generate and execute test suites. Collect traffic and run logs, analyze coverage. Prepare final report and conduct briefing.
Support	Provide ongoing independent verification and validation including design review, monitoring, regression testing.

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How does it work?

Advanced API Verification starts with an expert review of your documentation and actual usage. We develop a detailed and realistic model of its data and behavior. This work typically reveals many issues, even for APIs released to production.

Next, we execute the models for in-depth behavior exploration and advanced automated testing.

You'll get test coverage of every testable statement in your doc. Depending on your goals, we'll add deep-dives into behavior, security, robustness, and performance.

Every issue is logged in a tracking tool of your choice. You also receive complete test run logs with over-the-wire message traces, a traceability matrix for your doc, and a detailed test report.

Can you do my Stack?

Critical APIs are everywhere:

- Service-oriented Architecture
- Social media
- Device to cloud—retail, energy, manufacturing, logistics
- Mobile app to cloud
- Entertainment media streaming
- Financial markets and remote payments

Advanced API Verification works for any API, regardless of its protocols, data formats, transport stacks, and programming language bindings.

How do I get started?

Contact Bob Binder:
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or call 312 404 5341.