

What is API Data Generation?

API Data Generation automatically generates **API test data and test scripts directly from OpenAPI specifications** using generative AI. Announced on **October 7, 2025**, it is a new addition to the **Appvance Data Production Library**.

It removes one of the most time-consuming bottlenecks in modern QA: preparing realistic, valid and complete data for API testing in support of full **contract testing**. By using the OpenAPI specification as the blueprint, Appvance IQ creates both the executable test scripts and the data they require — without human intervention.

In short: point AIQ at an OpenAPI definition and get runnable API test scripts plus the test data they need — going from specification to validated API tests in minutes instead of weeks.

The problem it solves

API testing is mission-critical, yet it remains burdened by manual scripting and endless data preparation. Hand-building test data also tends to miss the cases that matter: boundary values, invalid inputs and edge conditions that real clients produce.

What it produces

- **Executable API test scripts** — generated from the OpenAPI definition and aligned with the specification.
- **Synthetic test data** — data sets generated to satisfy the input types, ranges and edge cases the API expects.

Key benefits

Benefit	What it means
Automatic test script generation	Generative AI reads OpenAPI definitions and produces runnable API test scripts aligned with the specification.

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Synthetic test data creation	Data sets are automatically generated to satisfy input types, ranges and edge cases, ensuring APIs are validated against real-world scenarios.
Coverage at scale	Thousands of API flows and data permutations are created in minutes, dramatically expanding regression coverage.
Faster feedback cycles	QA and DevOps teams can integrate the capability into CI/CD pipelines for continuous, automated API validation.

Where it fits

This builds on Appvance's patented AI Script Generation and Digital Twin technologies, which already deliver up to **100X** productivity improvements in test creation and maintenance for UI and end-to-end testing. With API data generation from OpenAPI specs, Appvance IQ provides the industry's only unified, AI-first testing platform that autonomously generates scripts and data across **UI, API and end-to-end flows**.

“Enterprises no longer have to waste time handcrafting API tests and data. The AI now does the heavy lifting — accurately, at scale, and without maintenance debt.” — Kevin Surace, CEO, Appvance

Availability

Available immediately as part of the **Appvance Data Production Library** for AIQ customers (announced October 7, 2025).

Sources

- Appvance press release, “Appvance Expands AIQ With Generative AI for API Test Data Creation” — PRNewswire, October 7, 2025.
- Appvance documentation — Data Production Libraries (DPL) concept pages, docs.appvance.net.