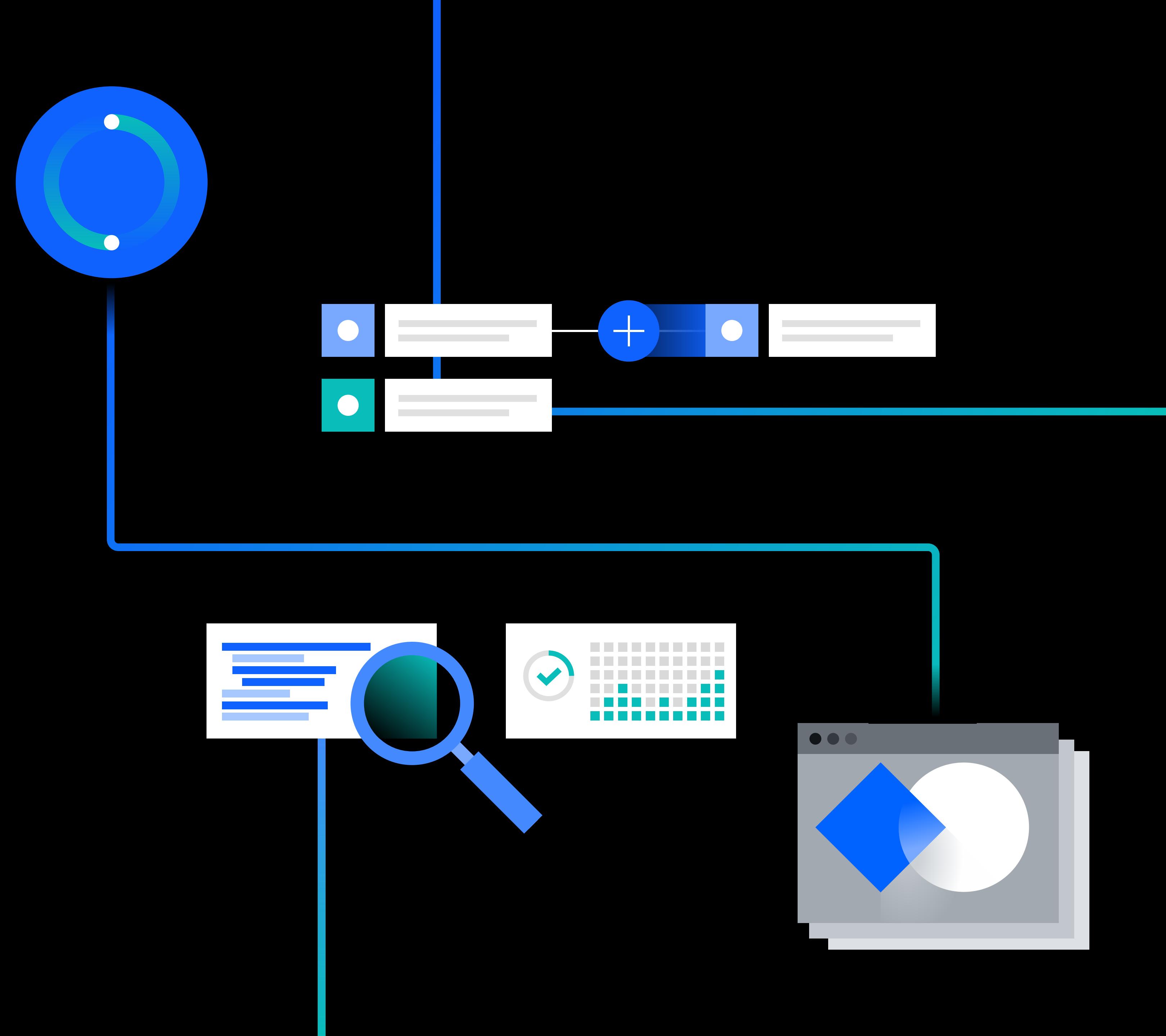


IBM API Connect

in Cloud Pak for Integration



Powering Essential Solutions

With an increasing need for virtual services during the pandemic, APIs (application programming interfaces) continue to be the backbone for crucial infrastructures by connecting applications and data sources.

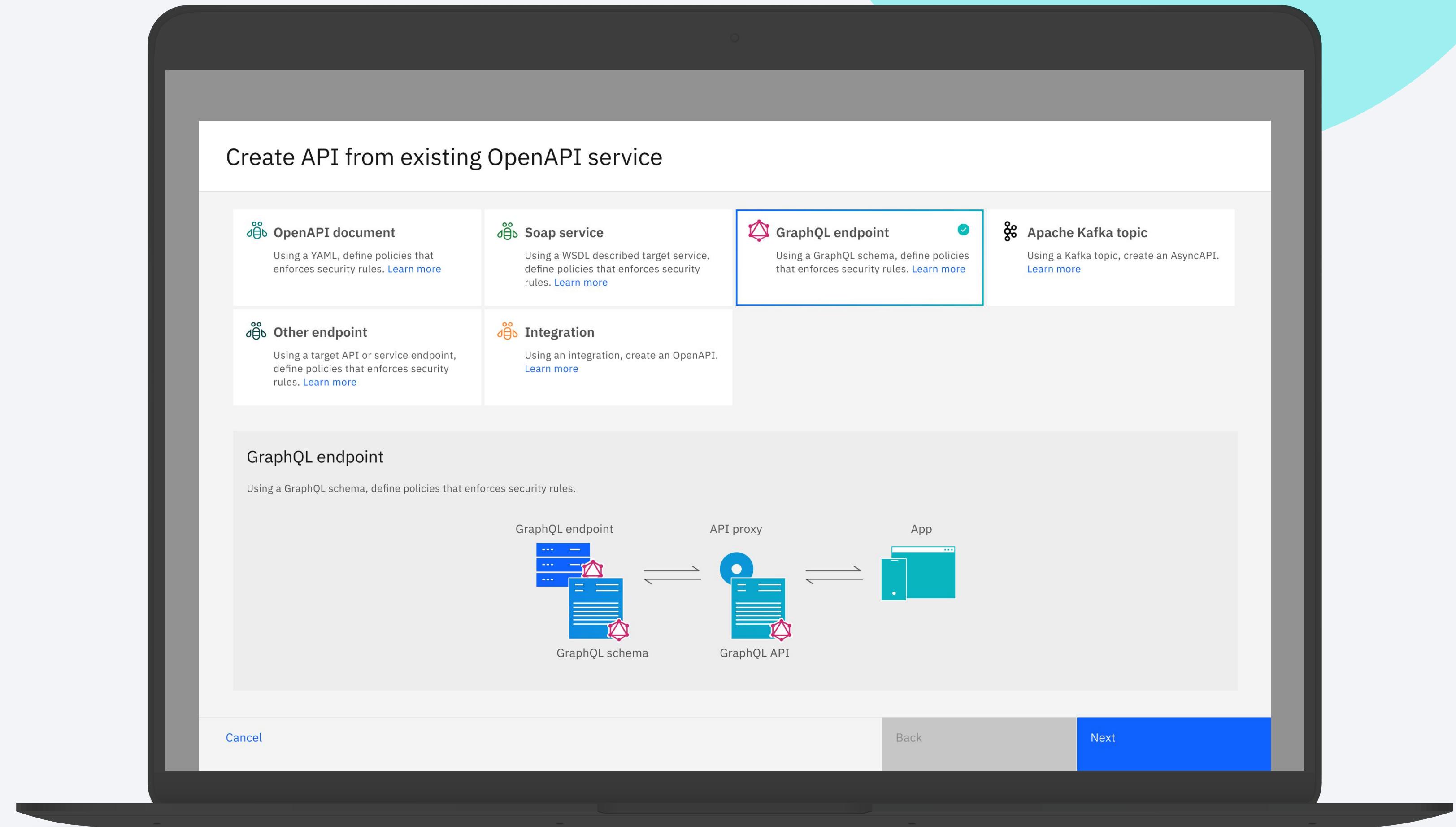
IBM API Connect, as a part of Cloud Pak for Integration, enables software developers to create, manage, and share APIs in a single, unified experience. Through shared assets and automated testing, our solution improves API quality and slashes development cycles from weeks to days.

Following our own Enterprise Design Thinking loop, we completed extensive research to understand our users' pain points and build empathy to design and deliver an elegant product.

Supports all the modern API types

Creating an API requires expertise, especially with emerging API types.
To minimize entry barriers, we:

- Created built-in templates to rapidly create, test and deploy APIs
- ◆ Designed tools to visually compose and compare API architectures
- Incorporated intelligent suggestions to improve data representations



Request

GET http://order.swagger.io/v2/track

Clear Send

Response

HTTP Status: 200 Response Time: 5153ms

Body Header Trace

Reorder Read-only

Operation switch

- GET /account
 - Invoke
 - Parse
- Get /order
 - Map
 - Invoke
 - Map

Show catches Show minimap

Catches

Finally

Full trace Advanced Edit assembly

```

1 toggleState = (element, evt) => {
2   const data = element.dataset;
3   const label = (data.label) ? data.label : '';
4   const previousValue = (data.previousValue) ?
5     data.previousValue : '';
6   const initialEvt = evt;
7   this.changeState({
8     group: data.event,
9     element,
10    label,
  
```

Simplified development loop

Today, software developers need to juggle between separate API editing and testing tools. To address this, we:

- Consolidated building and testing into a single user interface
- ◆ Designed effortless visual debugging tools to isolate and remedy errors

Automate testing with watsonX.AI

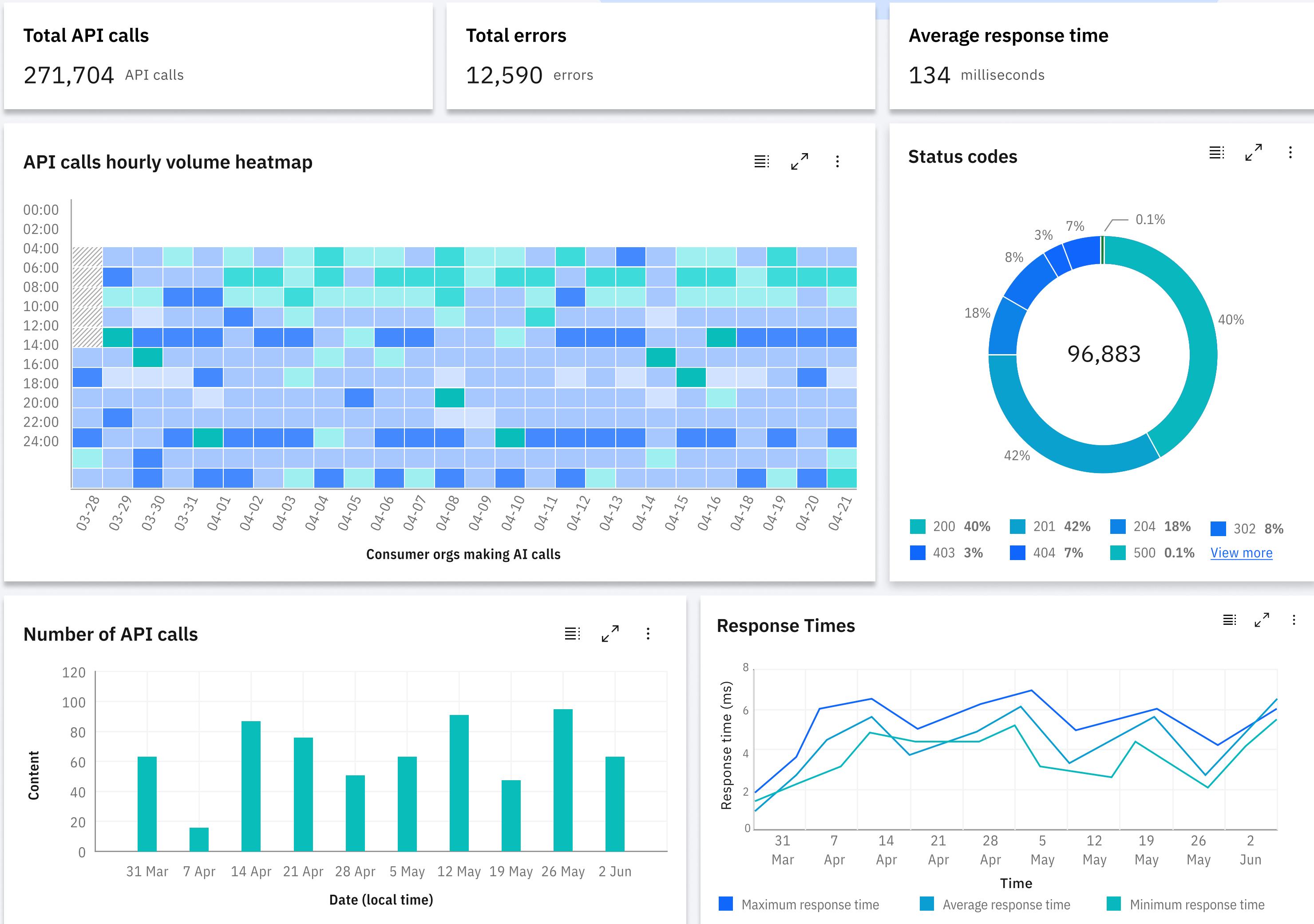
Writing tests is tedious and time-consuming but necessary to ensure services stay up and running. We leveraged an AI solution to:

- Use machine learning to automate API testing with 100% test coverage
- ◆ Evaluate data to identify testing gaps from real use cases
- Derive insights to handle complex scenarios to reduce repetitive tasks

The screenshot shows the IBM API Connect Test interface. The main title is "Bookshop test suite". The navigation bar includes "Tests" (selected), "API quality", "API dashboard", and "Settings". On the left, there's a sidebar with icons for Home, API, Test, and Search. The main content area has tabs for "Test cases" and "Autotest profiles" (with an AI icon). A sub-section titled "Autotest profiles" explains that it automatically generates requests by analyzing APIs. It includes a search bar, a "View API extension" button, and an "Add" button. A table lists six test cases:

Names	Tags	Status	Modified
post_create_new_books	Customer	✓ Complete	Few seconds ago
get_retrieve_new_books	Supplier	✗ Failed	2 minutes ago
delete_remove_books_sold	Customer	✗ Failed	5 hours ago
post_books_sold	Inventory	✓ Complete	10 days ago
put_unload_used_books	Inventory	✗ No result	2 years ago

Pagination at the bottom shows "5" items, "1-5 of 100 items", "1 of 10 pages", and navigation arrows. To the right, a "Recommendations (12)" section provides insights to improve API test coverage, with a "Regenerate insights" button and a search bar. Below that is a "Top recommendations" section listing "200 ok post_sold /sold" with a completeness score of 93%, a "View detail" button, and an "Add test case" button.



Monitor APIs with ease

Monitoring crucial API data is frustrating when it's scattered across different sources. To address this, we:

- Organized significant metrics into a curated dashboard
- ◆ Highlighted trends so potential insights are not left undiscovered

All in one place

It's incredibly challenging to find or reuse assets across integration portfolio. To address this, we:

- Designed a visually engaging and lightweight portal that allows Application developers to discover APIs and other integration assets
- ◆ Organized content that inspire users to continue innovating without duplicating work

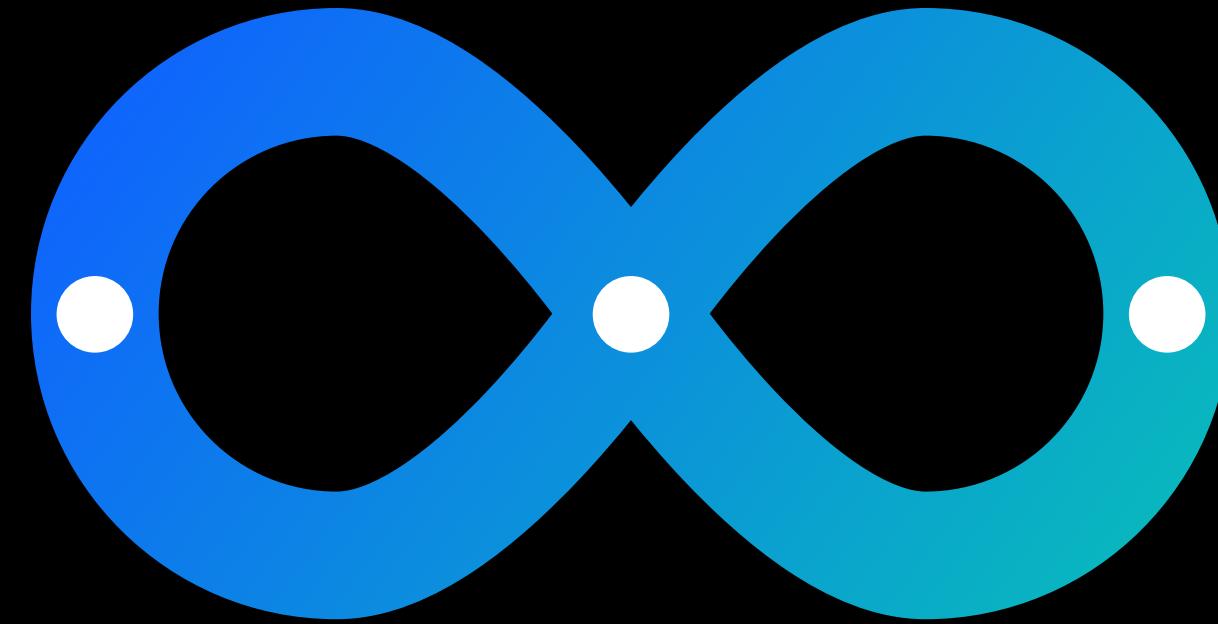
The screenshot shows the 'IBM Automation' API catalog interface. At the top left is a navigation bar with three horizontal lines, the text 'IBM Automation', a bell icon, a user profile icon, and a three-dot menu icon. Below the navigation bar is a search bar with the placeholder text 'Integration'. On the left side of the screen, there is a sidebar with three expandable sections: 'Category', 'Namespaces', and 'API types'.

- Category:** Includes checkboxes for 'All', 'Integration' (which is checked), 'Data' (which is checked), and 'AI'.
 - Namespaces:** Includes checkboxes for 'All', 'Dev' (which is checked), and 'Test'.
 - API types:** Includes checkboxes for 'All', 'Rest (OpenAPI 2.0)' (which is checked), 'Rest (OpenAPI 3.0)' (which is checked), 'GraphQL' (which is checked), and 'AsyncAPI' (which is checked).

The main content area is titled 'API catalog' and displays a list of 'Integration' assets. There are four columns of cards:

Category	Description	Technology	Description
Inventory	Get inventory lists for all stores and markets	REST (OpenAPI 2.0)	Get a list of all store locations
Customers	Create, review, and update customer information	GraphQL	Obtain tracking information for store, marketplace, and customer shipments
Address validation	Online	AsyncAPI	Obtain list of current inventory suppliers
Postal code validation	Online	GraphQL	Global supply chain
Global supply chain	Online	AsyncAPI	Global supply chain

The loop guides us



Observe

Reflect

Make

During our research and design process, we developed domain knowledge about the complexities of APIs in a world that is increasingly reliant on them.

We built a thorough understanding of how software developers think to balance solving their current pain points with anticipating their future needs.

The result is a streamlined, elegant, and efficient API management solution that empowers our users to tackle the world's most pressing challenges.

Customers love us!



“Very powerful and professional API solution with a great interface”
Integration Developer



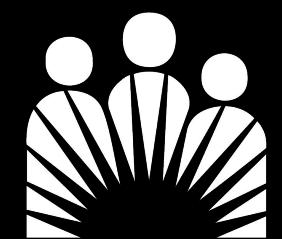
“One of the best API management tool”
Senior System Engineer



“Robust tool for API lifecycle management”
Technical Support Engineer



“A leader for full Life cycle API management”
Gartner Magic Quadrant report



**KAISER
PERMANENTE®**

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new balance

COACH

citibank

TOYOTA