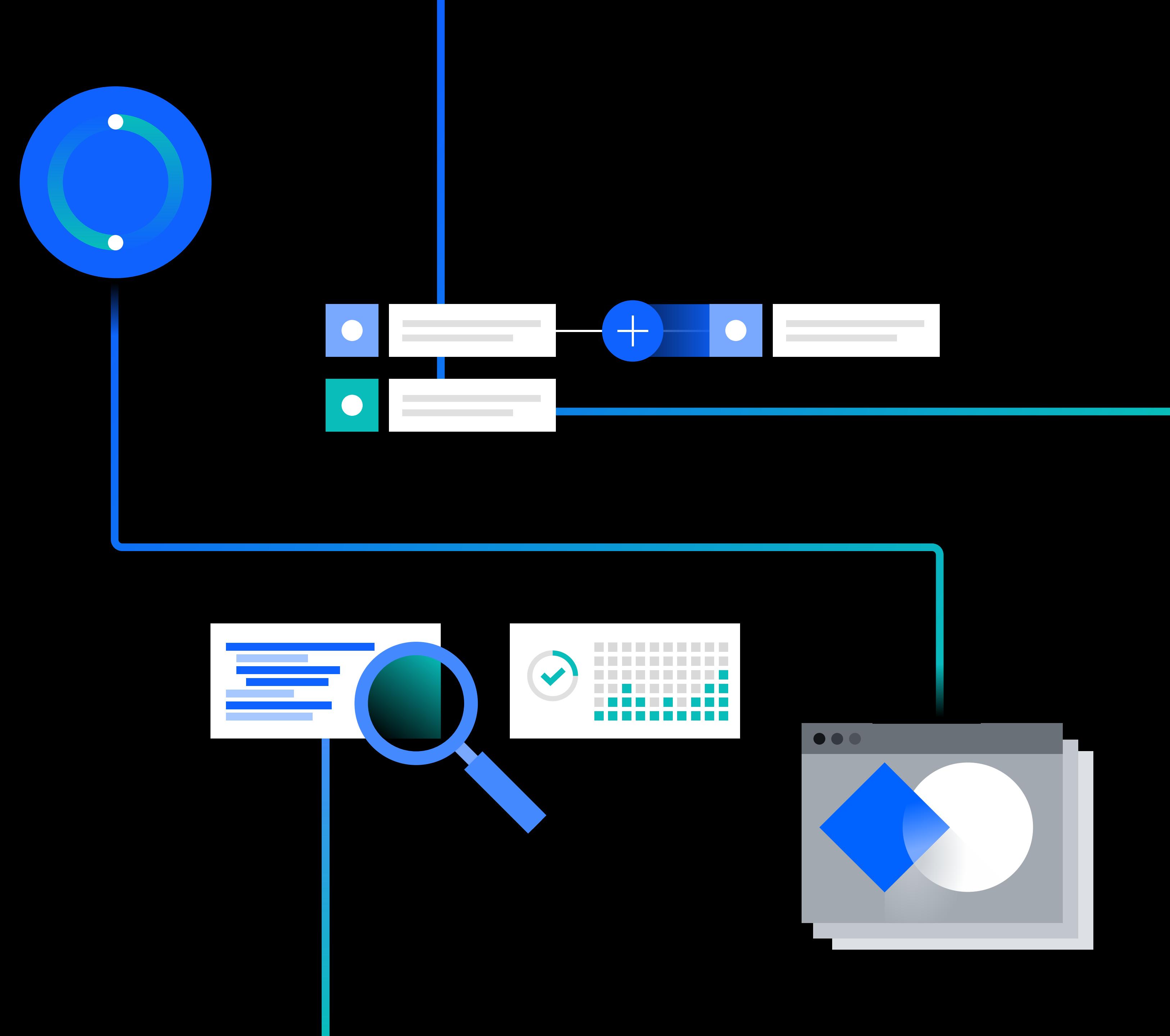


# IBM API Connect

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.

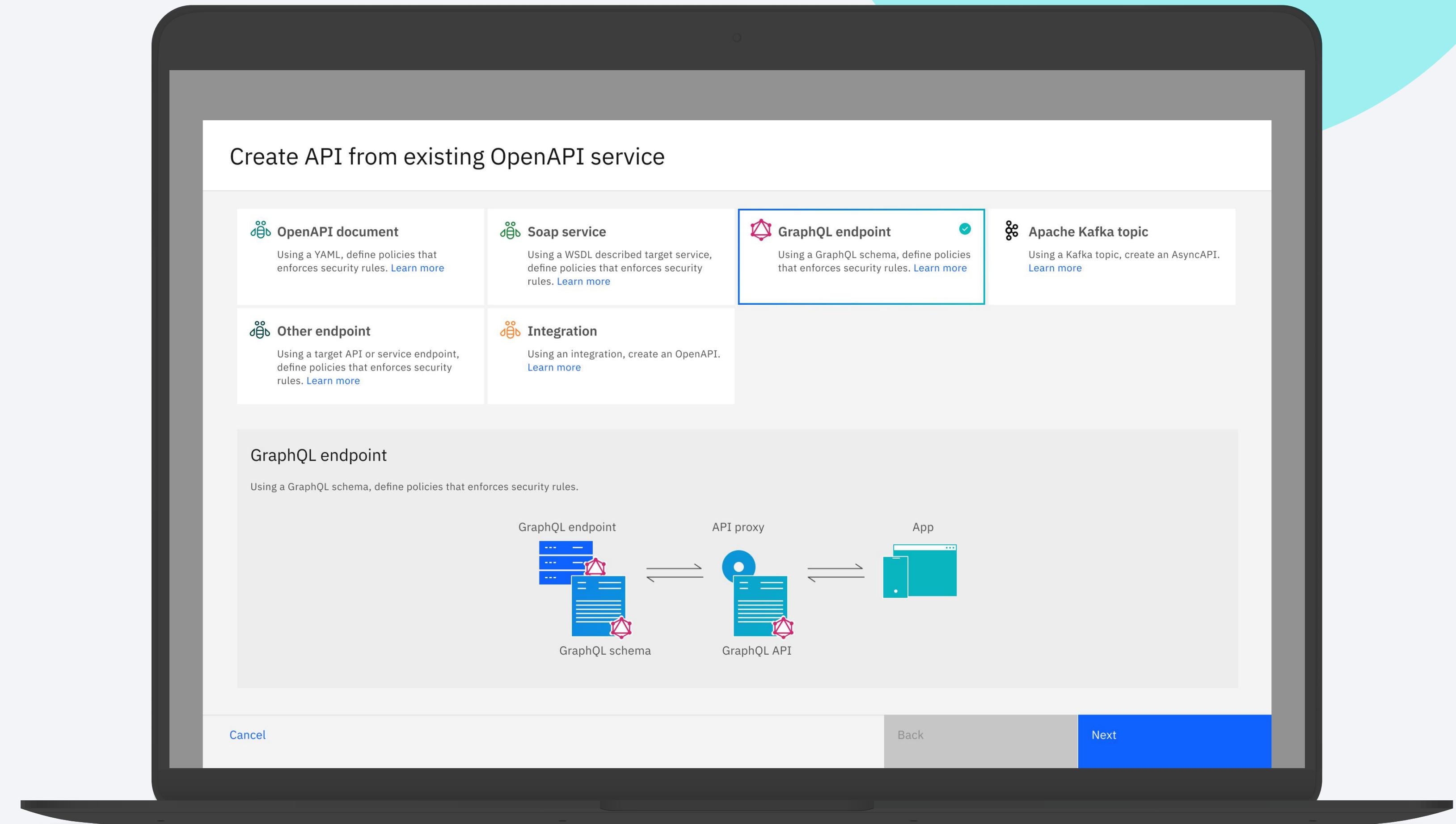
**IBM API Connect**, as a part of Cloud Pak for Integration, enables software developers to create, manage, and share APIs in a single, unified experience. Through shared assets and automated testing, our solution improves API quality and slashes development cycles from weeks to days.

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

IBM API Connect

Test / Bookshop test suite

Tests API quality API dashboard Settings

Test cases Autotest profiles AI

Automatically generate and send thousands of requests by analyzing API, and identifying resources without writing any test cases. [Learn more](#)

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

5 1–5 of 100 items 1 of 10 pages ▶

Recommendations (12)

Improve the Bookshop API test coverage of production use cases by up to 12.5%

Last generated: 04/27/2024 12:20

Regenerate insights

Search for path

Top recommendations

200 ok  
post\_sold  
/sold  
Completeness score: 93% ⓘ

[View detail](#)

[Add test case](#)

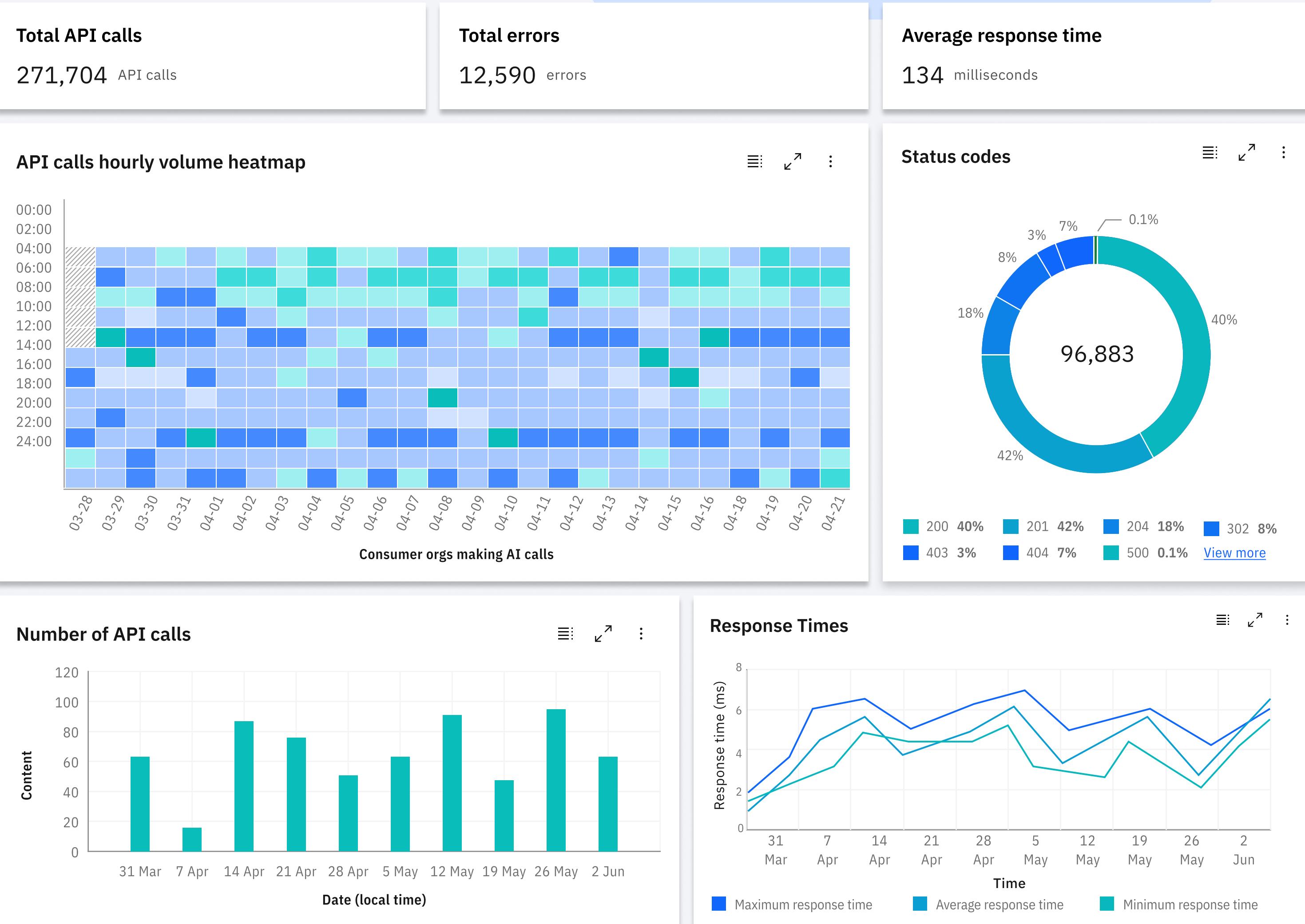
• ○ ○

/sold (3) ▾

/sold/{sold\_id}/cancel (3) ▾

/sold/{sold\_id}/close (3) ▾

/sold/{sold\_id}/open (3) ▾



# 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

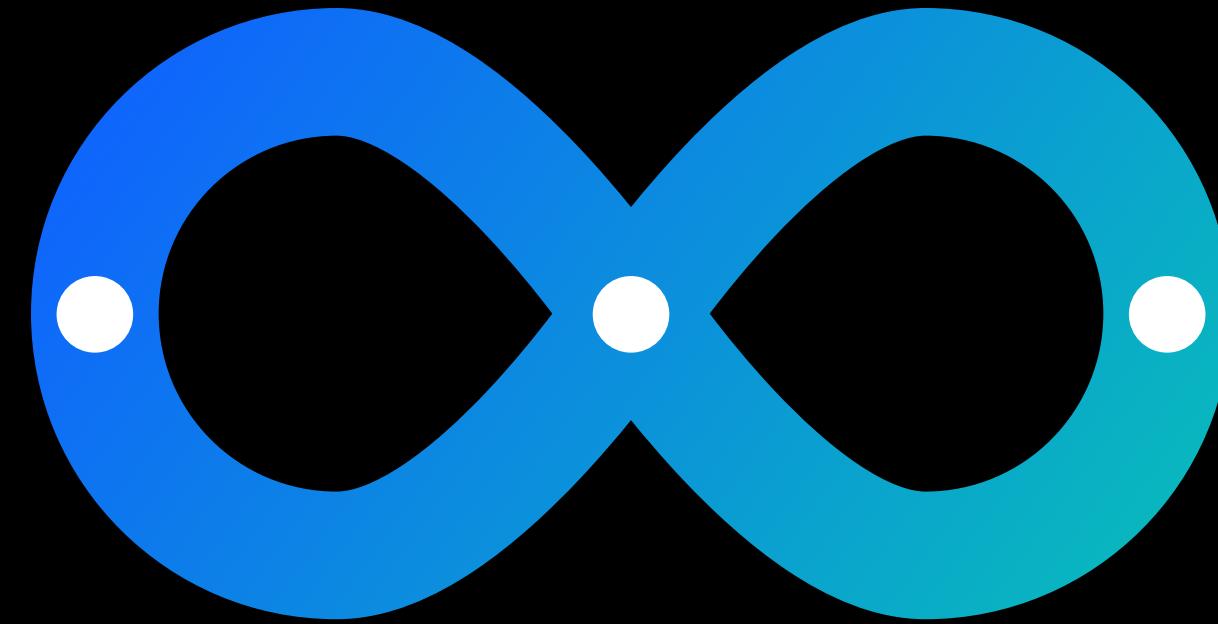
The screenshot shows the 'IBM Automation' API catalog interface. At the top left is a navigation bar with three horizontal lines, the text 'IBM Automation', a bell icon, a user profile icon, and a three-dot menu icon. Below the navigation bar is a search bar with the placeholder text 'Integration'. On 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:

- Inventory:** REST (OpenAPI 2.0). Description: Get inventory lists for all stores and markets. Status: Online.
- Locations:** GraphQL. Description: Get a list of all store locations. Status: Online.
- Shipment tracking:** AsyncAPI. Description: Obtain tracking information for store, marketplace, and customer shipments. Status: Online.
- Customers:** REST (OpenAPI 3.0). Description: Create, review, and update customer information. Status: Online.
- Employees:** GraphQL. Description: Create, review, and update employee information. Status: Online.
- Suppliers:** AsyncAPI. Description: Obtain list of current inventory suppliers. Status: Online.
- Address validation:** REST (OpenAPI 3.0). Description: (empty)
- Postal code validation:** GraphQL. Description: (empty)
- Global supply chain:** AsyncAPI. Description: (empty)

# 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



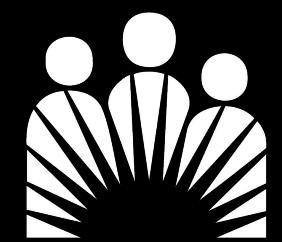
**“One of the best API management tool”**  
Senior System Engineer



**“Robust tool for API lifecycle management”**  
Technical Support Engineer



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



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**new balance**

**COACH**

**citibank**

**TOYOTA**