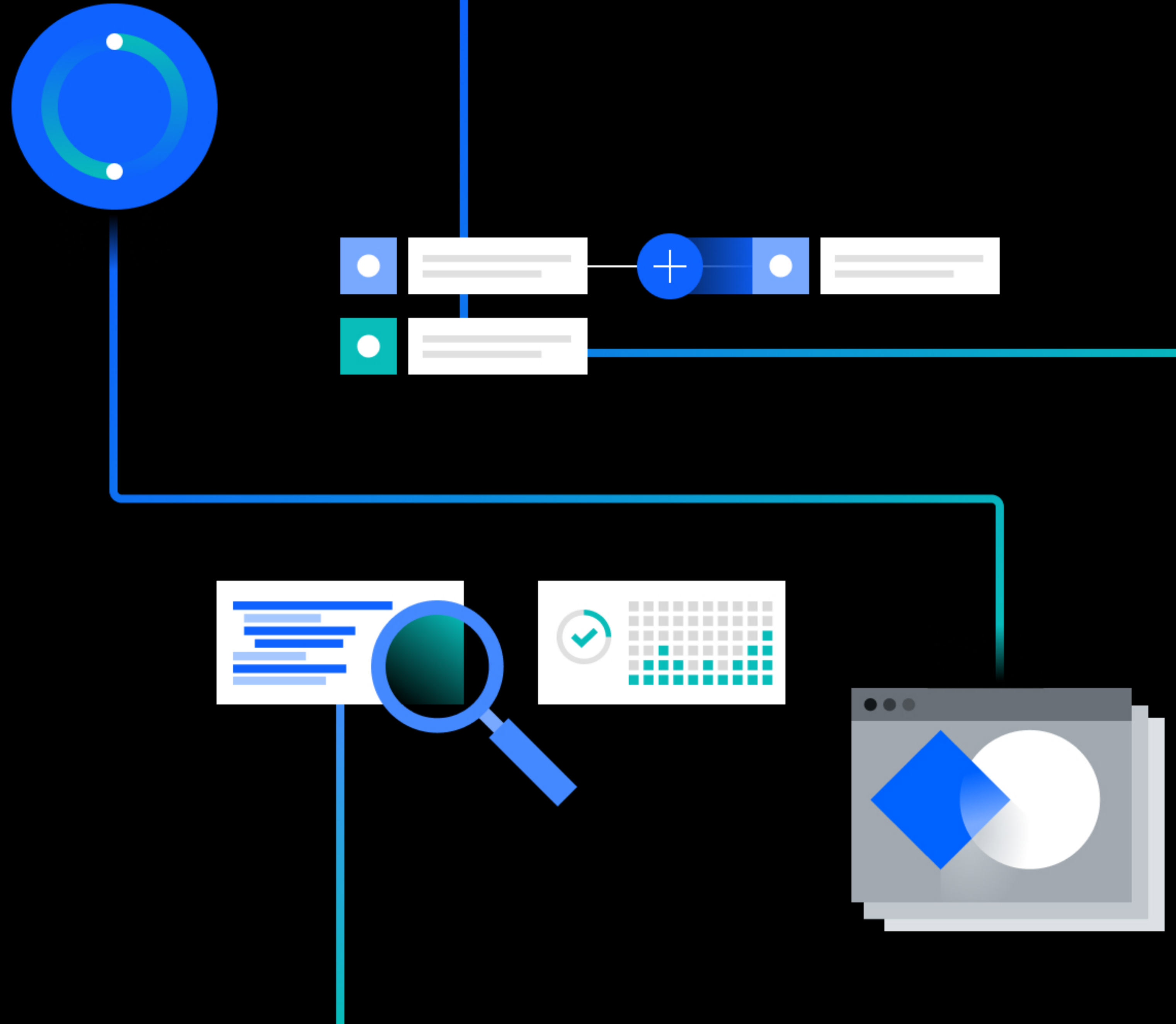


IBM API Connect

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.

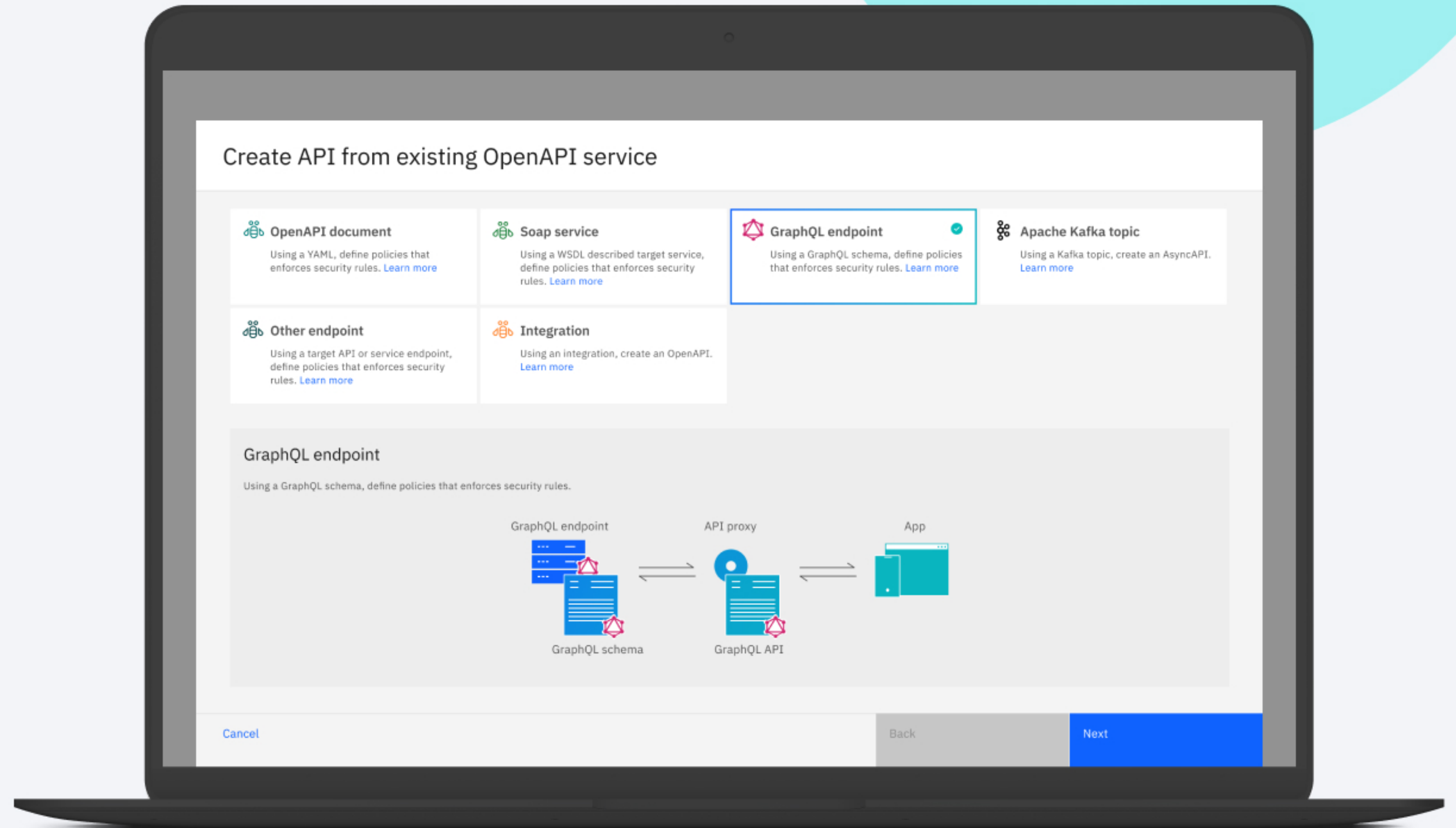
IBM API Connect, as a part of Cloud Pak for Integration, enables software developers to create, manage, and share APIs in a single, unified experience. Through shared assets and automated testing, our solution improves API quality and slashes development cycles from weeks to days.

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

x v

Clear

Send

Response

HTTP Status: 200 Response Time: 5153ms

Body Header **Trace**

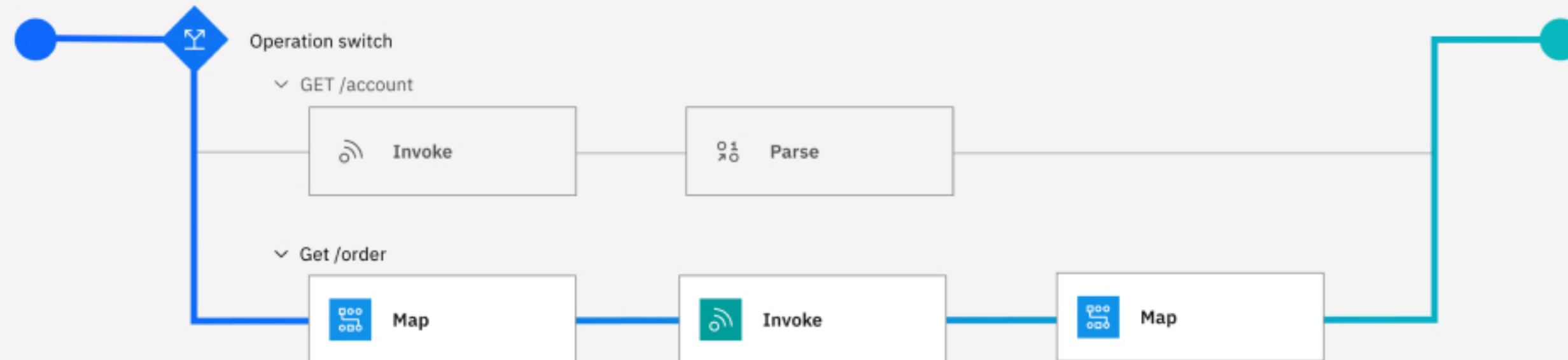
Reorder ↗

Search

Show catches

Show minimap

Read-only



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 Watson 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 displays the IBM Automation web interface. The main content area shows the 'Order' test suite with a table of test results. The table has columns for Name, Tags, Status, and Modified. The tests listed are: post_create_an_order (Passed, 2 minutes ago), post_cancel_an_order (Passed, A day ago), post_close_an_order (Passed, 5 days ago), post_reopen_a_close_order (Passed, 5 days ago), get_retrieve_a_list_of_orders (Failed, 5 days ago), get_retrieve_a_specific_order (Passed, 5 days ago), get_retrieve_an_order_account (Passed, 13 days ago), put_upload_an_order (No result, 13 days ago), and del_delete_an_order (No result, 13 days ago). The interface also includes a sidebar with navigation icons, a top navigation bar with 'Test suites / Order', and a right sidebar with 'Insights (9)' and a 'Watson recommended' section.

IBM Automation

Test suites / Order

View and track your orders and deliveries

Tests API quality API dashboard Settings

Search

Add +

Name	Tags	Status	Modified
post_create_an_order		✓ Passed	2 minutes ago
post_cancel_an_order		✓ Passed	A day ago
post_close_an_order		✓ Passed	5 days ago
post_reopen_a_close_order		✓ Passed	5 days ago
get_retrieve_a_list_of_orders		✗ Failed	5 days ago
get_retrieve_a_specific_order		✓ Passed	5 days ago
get_retrieve_an_order_account		✓ Passed	13 days ago
put_upload_an_order		✖ No result	13 days ago
del_delete_an_order		✖ No result	13 days ago

Items per page: 10 1 - 10 of 24 items 1 of 3 pages

Insights (9)

We identified the insights based on historical data that might help improve your test.

Last update: 04/27/2021 12:20

Update insights

Search for path

Watson recommended

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

200 OK

post_orders

/orders

Completeness score 94%

View detail

Add test case

/orders (3)

/orders/{order_id}/cancel (3)

/orders/{order_id}/close (1)

/orders/{order_id}/open (2)

Total Calls

271,704

Total Errors

12,590

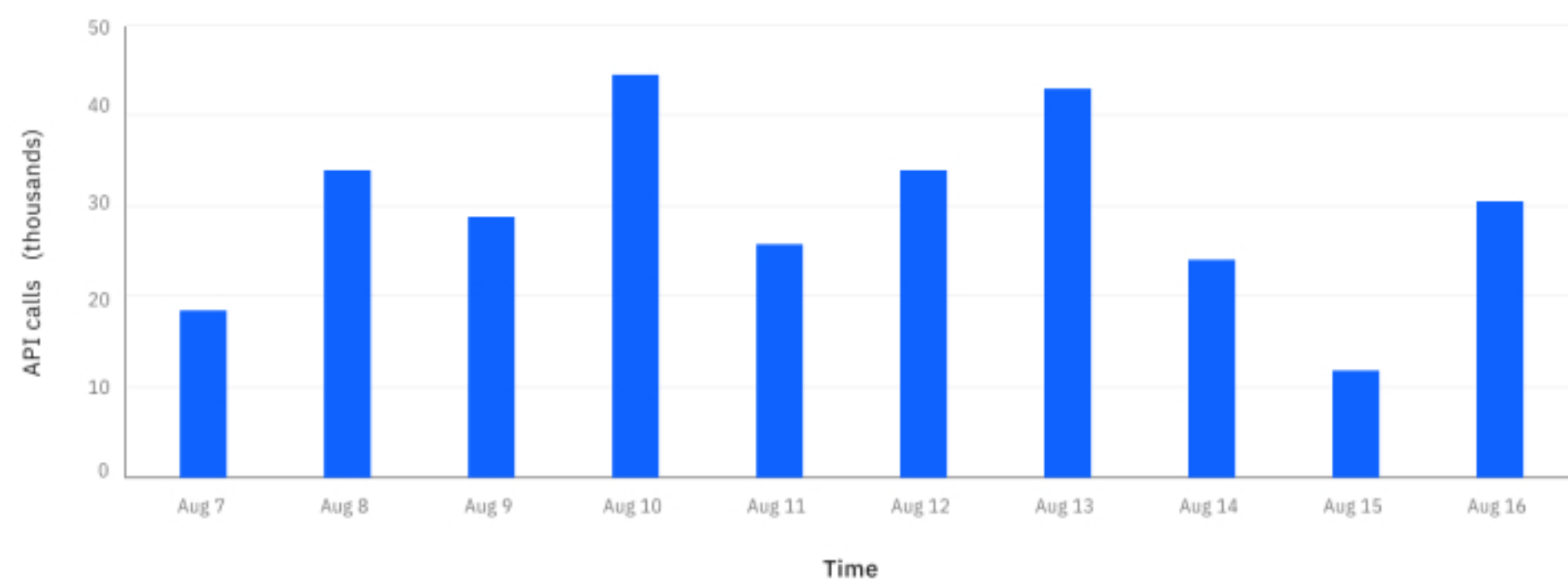
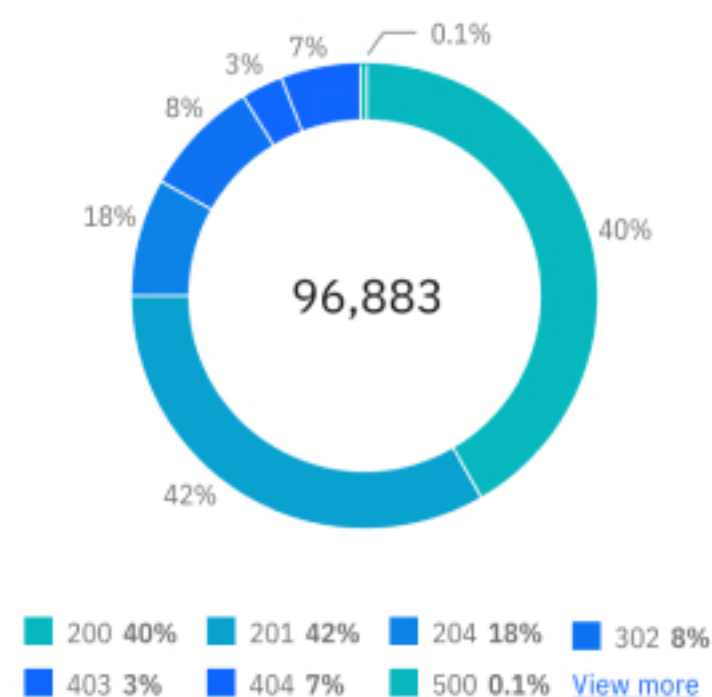
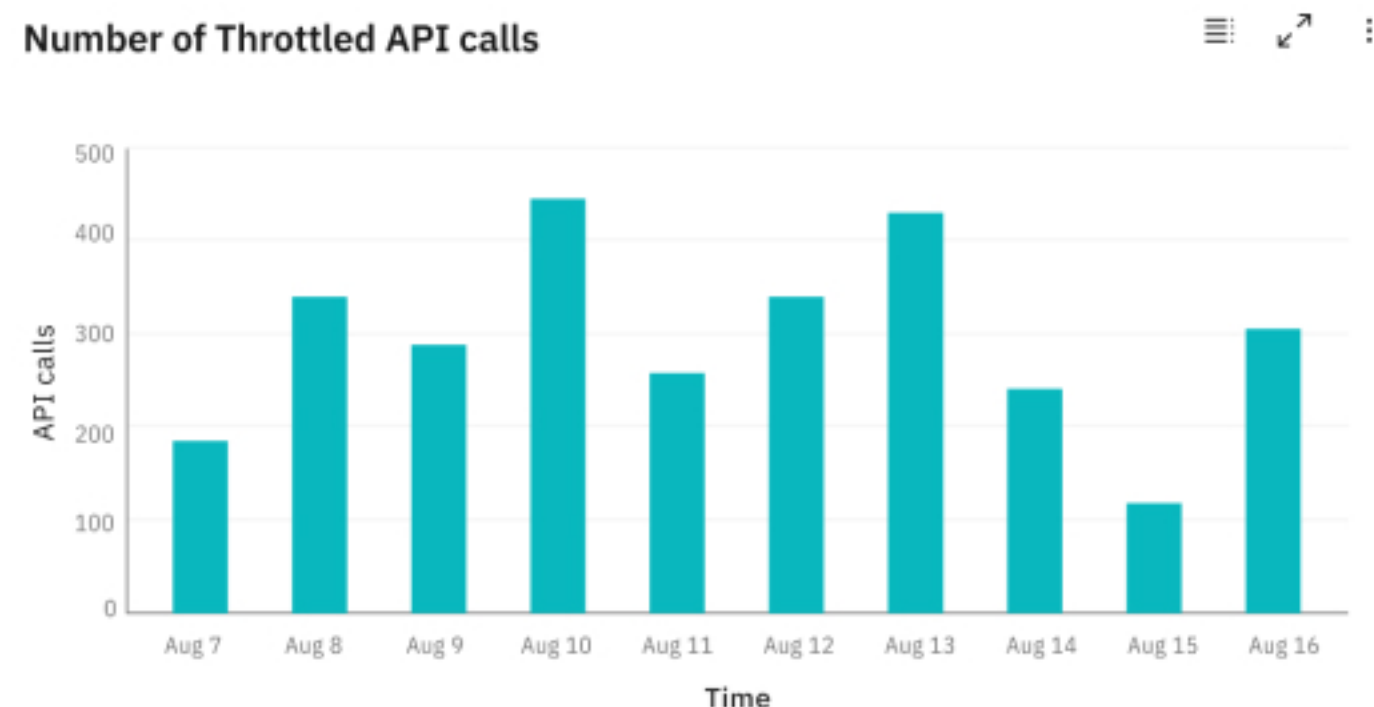
Average Response Time

4.87 ms

Monitor APIs with ease

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

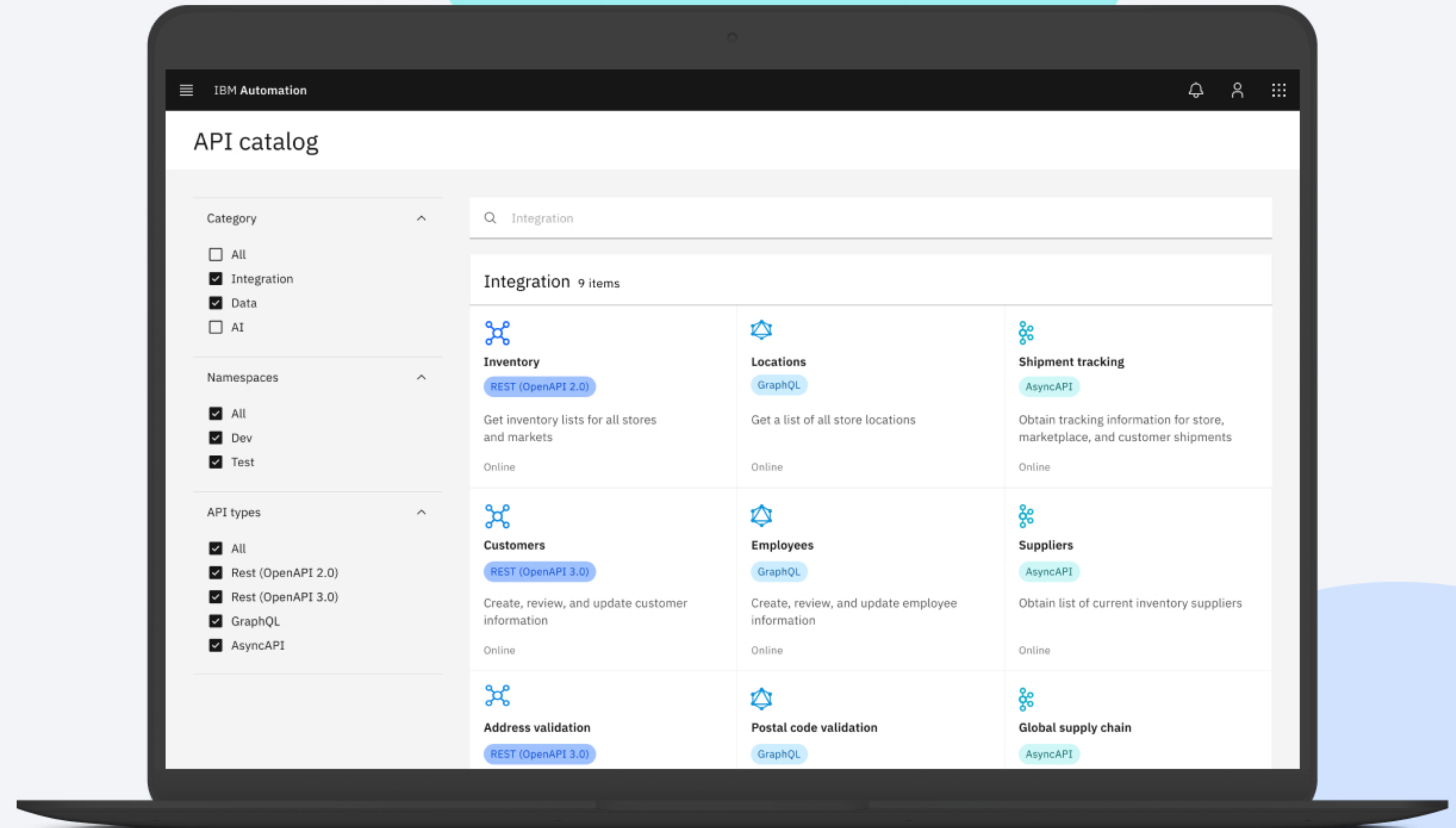
- Organized significant metrics into a curated dashboard
- ◆ Highlighted trends so potential insights are not left undiscovered

Number of API calls**Status codes****Response Times****Number of Throttled API calls**

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 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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