WSO2CON 2024



It's time to go Platformless!

Sanjiva Weerawarana, Ph.D.
Founder, CEO and Head of Products
WSO2

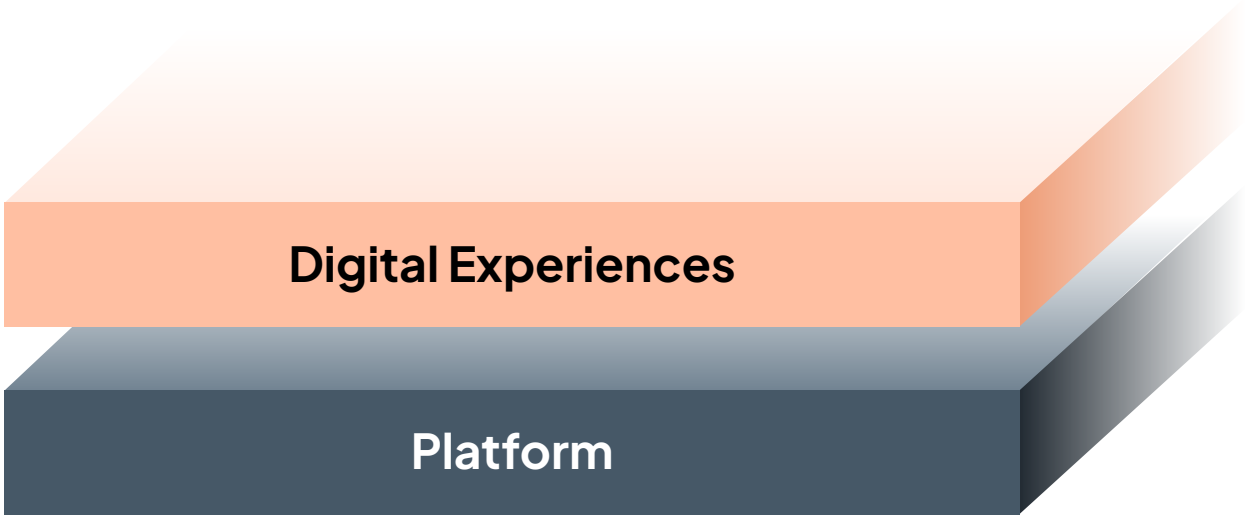
In Greek mythology ..

Atlas, a powerful Titan condemned to eternally hold the heavens on his shoulders, embodies enduring strength and the separation of Earth and sky.



Image by Gordon Johnson from Pixabay

In the enterprise, the platform is Atlas



.. condemned to eternally hold the heavens on his shoulders ..

“Every company is a software company”



Unique digital experiences you create are your competitive advantages.



- Commit to a software culture
- Invest in empowered product managers
- Drive engineering excellence through autonomous teams and flexible architecture
- Win at software by playing the ecosystem game
- Build a specific software go-to-market capability
- Find and keep talent by focusing on mission and work environment

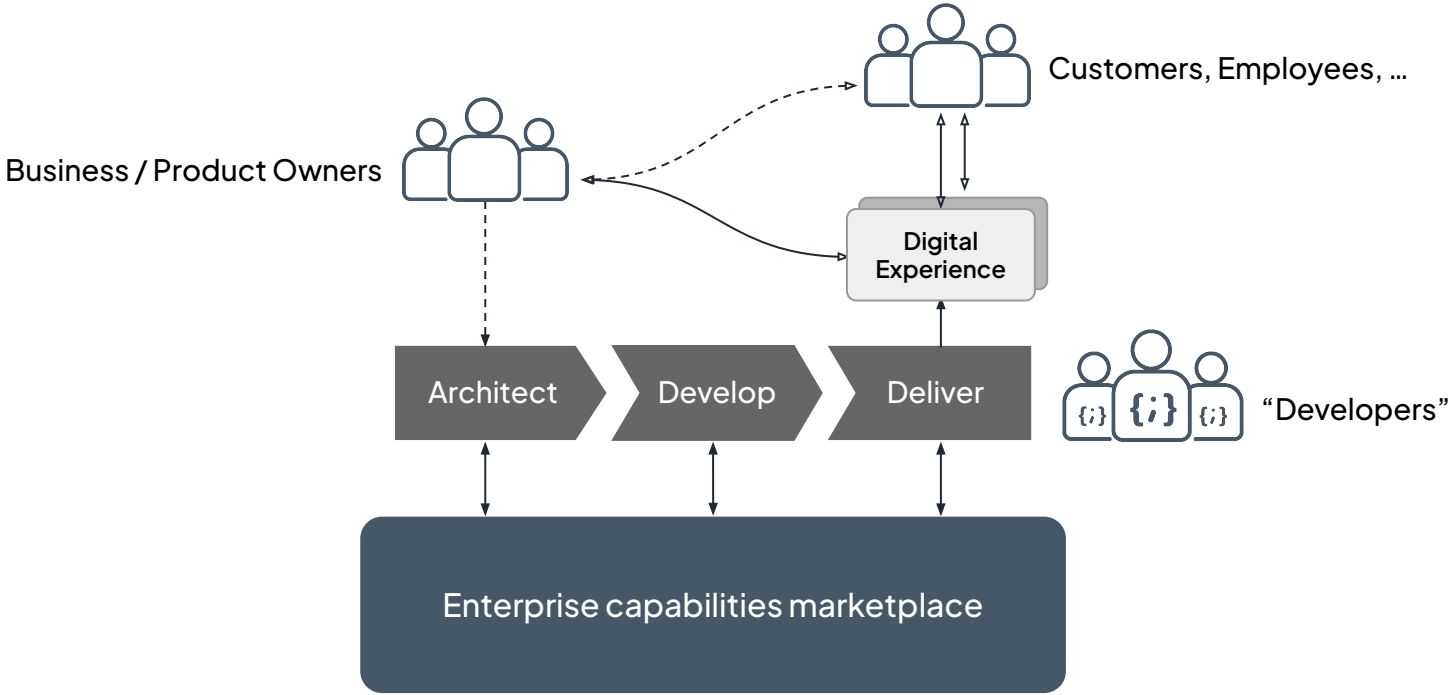
https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/every-company-is-a-software-company-six-must-dos-to-succeed#/



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What the business wants:



What the business gets:

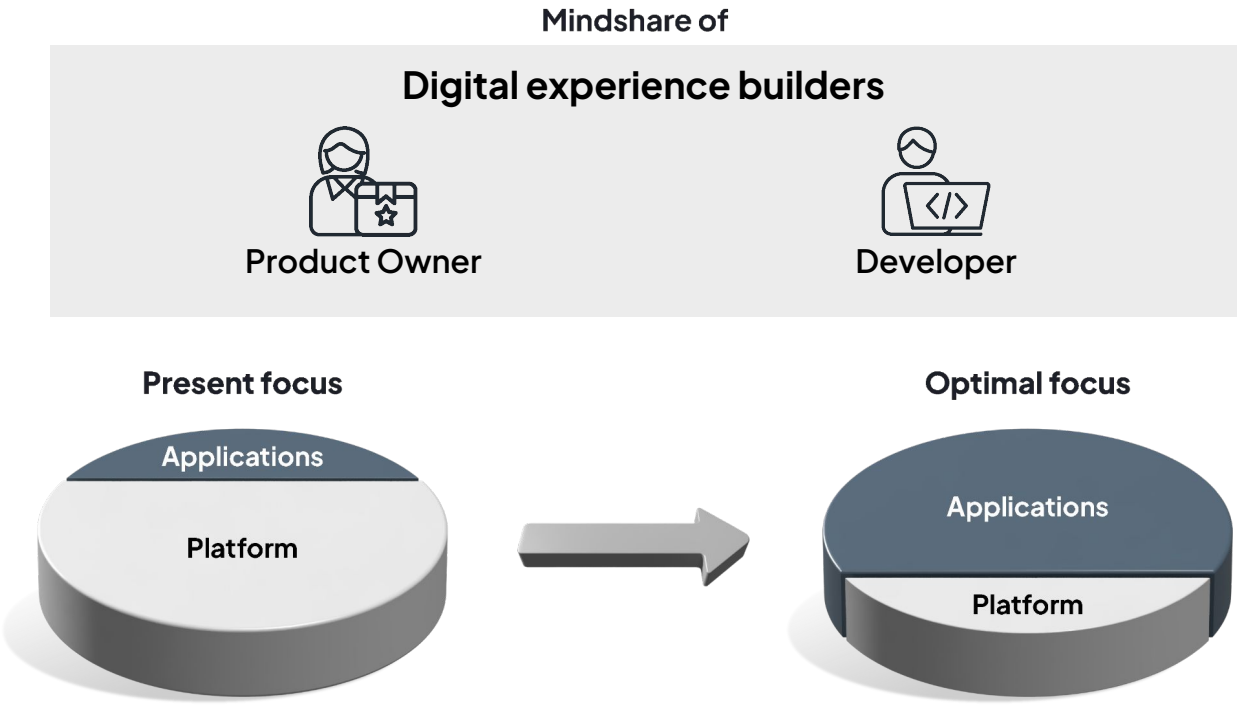
Digital infrastructure

- Containerization & Kubernetes
- Serverless operation
- Multi-environment
- Multi-cloud
- CI/CD, DevOps
- GitOps
- Observability & alerting
- Configuration management
- Firewall, load balancing, geo routing, DNS
- Multi-region deployment
- API management
- Developer self-service
- Cost optimization
- Business insights
- Management insights

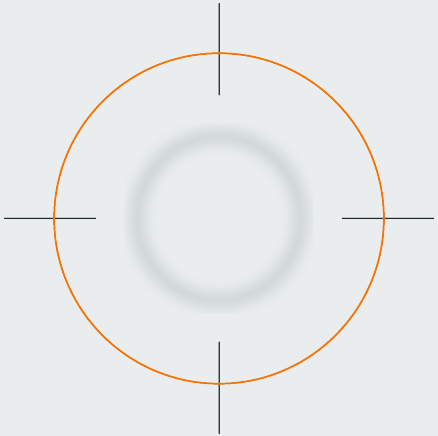
Architecture

- API-first development
- Reuse and API marketplace
- Domain driven development
- Microservice architecture
- Version management
- Release management
- Authentication & authorization

Seeing Atlas distracts digital experience builders!



How do you make the platform disappear from focus?



Dark matter and dark energy is the platform of the universe

Earth *appears* to be platformless



Enterprise collaboration is now platformless

Before

- **Setup**
  - Select and deploy email (SMTP server, spam tools, antivirus, …), chat server, calendar, file shares
  - Set up shared authentication with LDAP and integrate
  - Install multiple clients
- **Operate system**
  - Software maintenance
  - Spam & antivirus maintenance
  - Backup and restore
- **Use (with difficulty)**

With Google Workspace or Microsoft 365

- **Setup**
  - Add DNS records (fully automated for most registrars)
  - Add your users
- ~~**Operate system**~~
- **Use**
  - Discuss etiquette
  - Discuss sharing
  - Discuss knowledge management

Enterprise collaboration is now platformless

Before

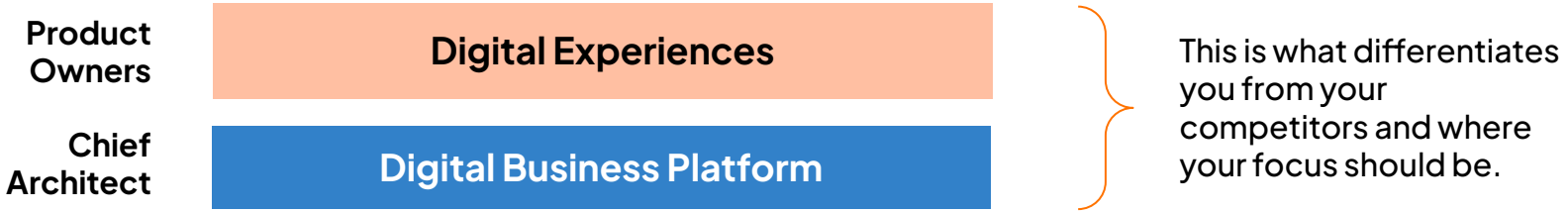
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With Google Workspace or Microsoft 365

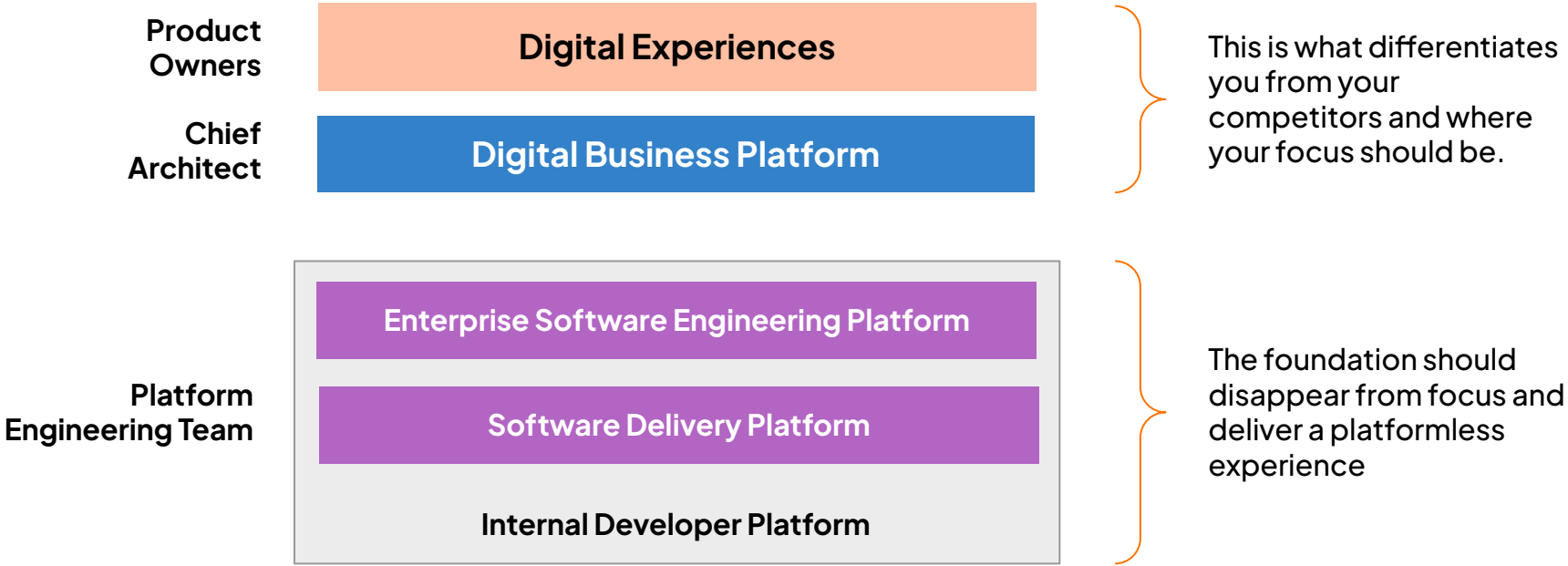
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Just Collaborate!

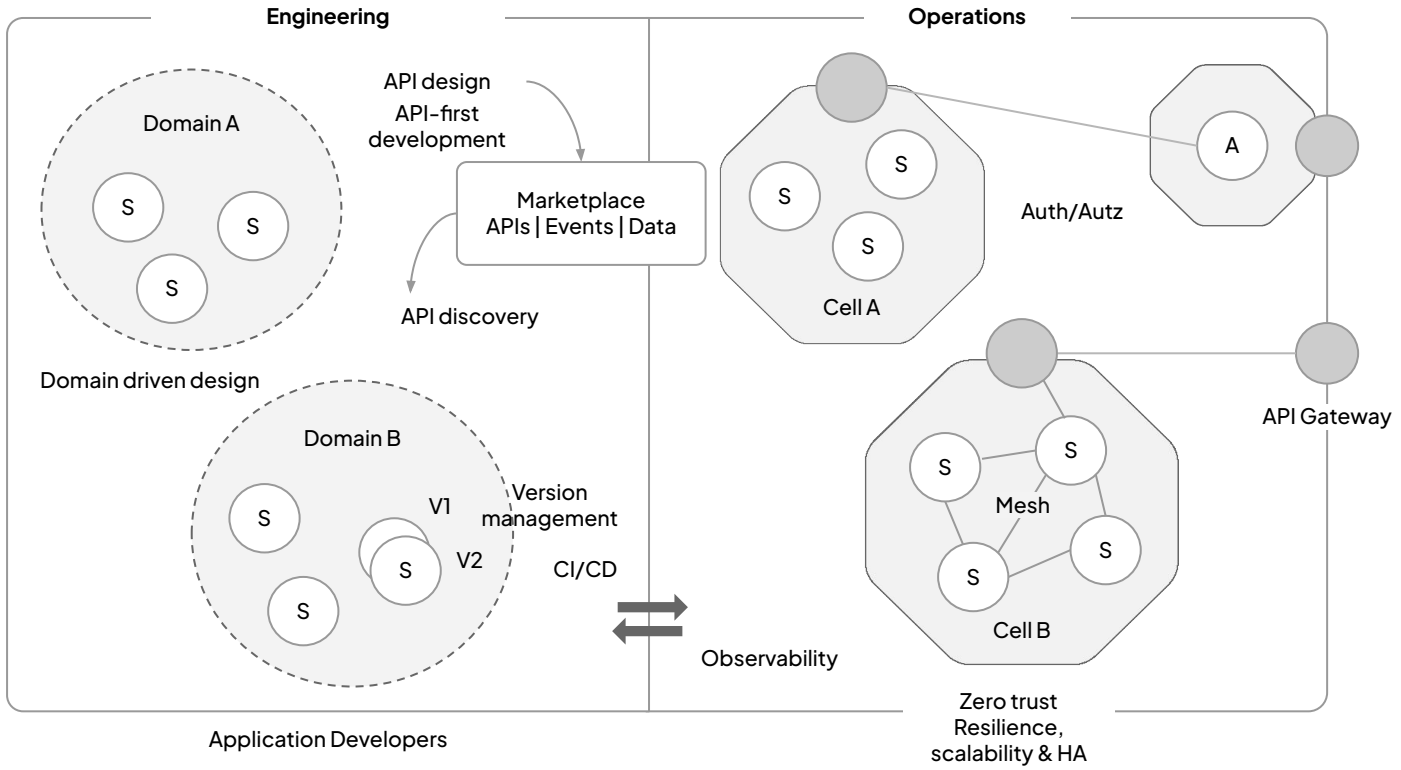
Platformification of your business capabilities



Built on an enabling platform



Platformless enterprise software engineering



Delivering digital experiences

API-First

network services are the fundamental building blocks of all modern software



+

Cloud Native Middleware

runtime infrastructure for building and running



+

Developer Experience

passionate developers creating awesome digital experiences



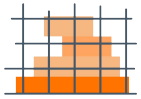
Just Add Developers!

Platform Engineering

internal developer platforms supporting full software delivery lifecycle



Paths to platformless enterprise software engineering



Build

- **Build with your choice of best-of-breed**
  - Including WSO2 technologies
- **Start with a framework, e.g. Backstage**
  - And add runtime application architecture components such as API gateways / marketplaces, cell architecture, service mesh
  - Improve developer experience



Buy

- **SaaS Internal developer platforms**
  - Hosted Backstage providers
  - Harness
  - RedHat developer hub
  - WSO2 Choreo
    - https://wso2.com/choreo

Product Updates

WSO2 product portfolio

Technology for your digital platform



API Management



Integration



Identity & Access Management

Run it yourself, private cloud or SaaS

Go platformless



Internal Developer Platform

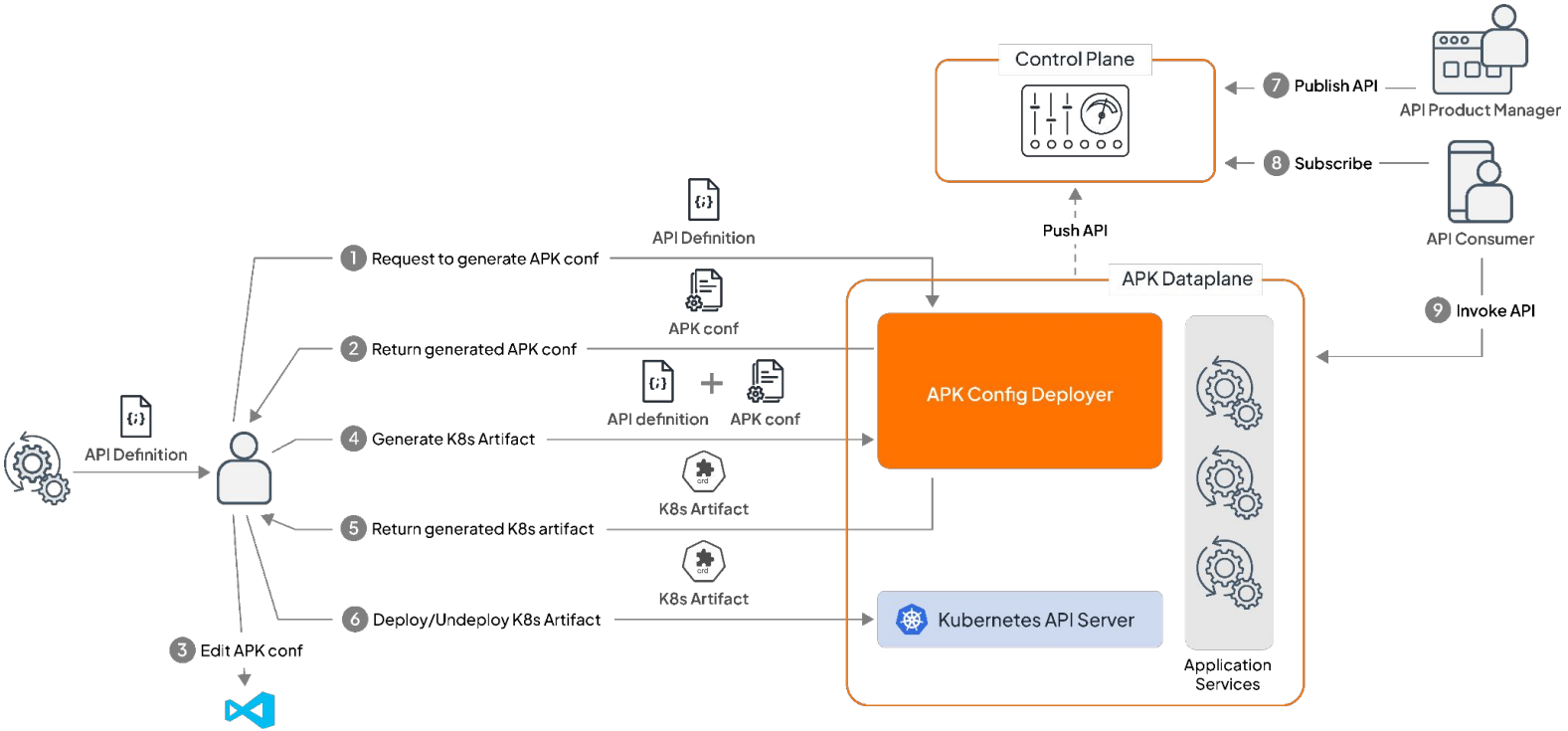
Just add developers

API Management

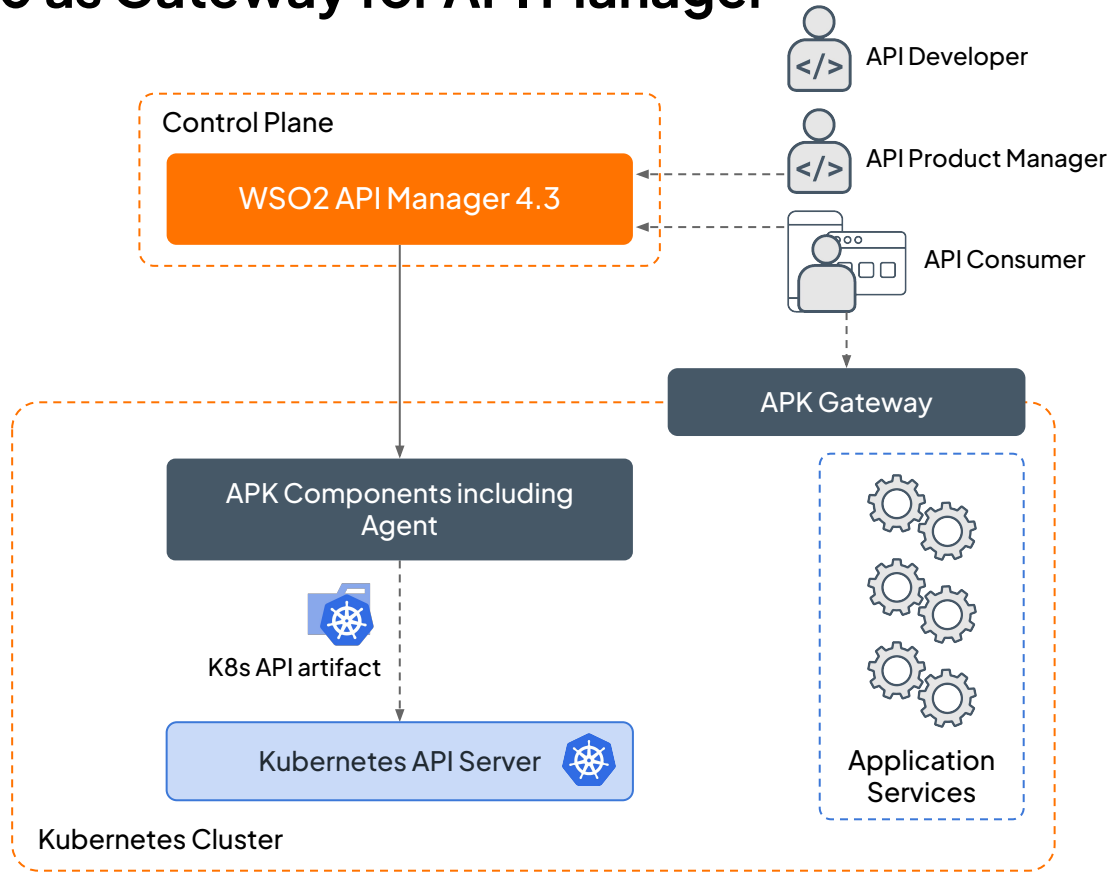
WSO2 API Manager	Run it yourself | Private cloud
WSO2 APK	Run it yourself | Private cloud
Choreo for API Management	SaaS



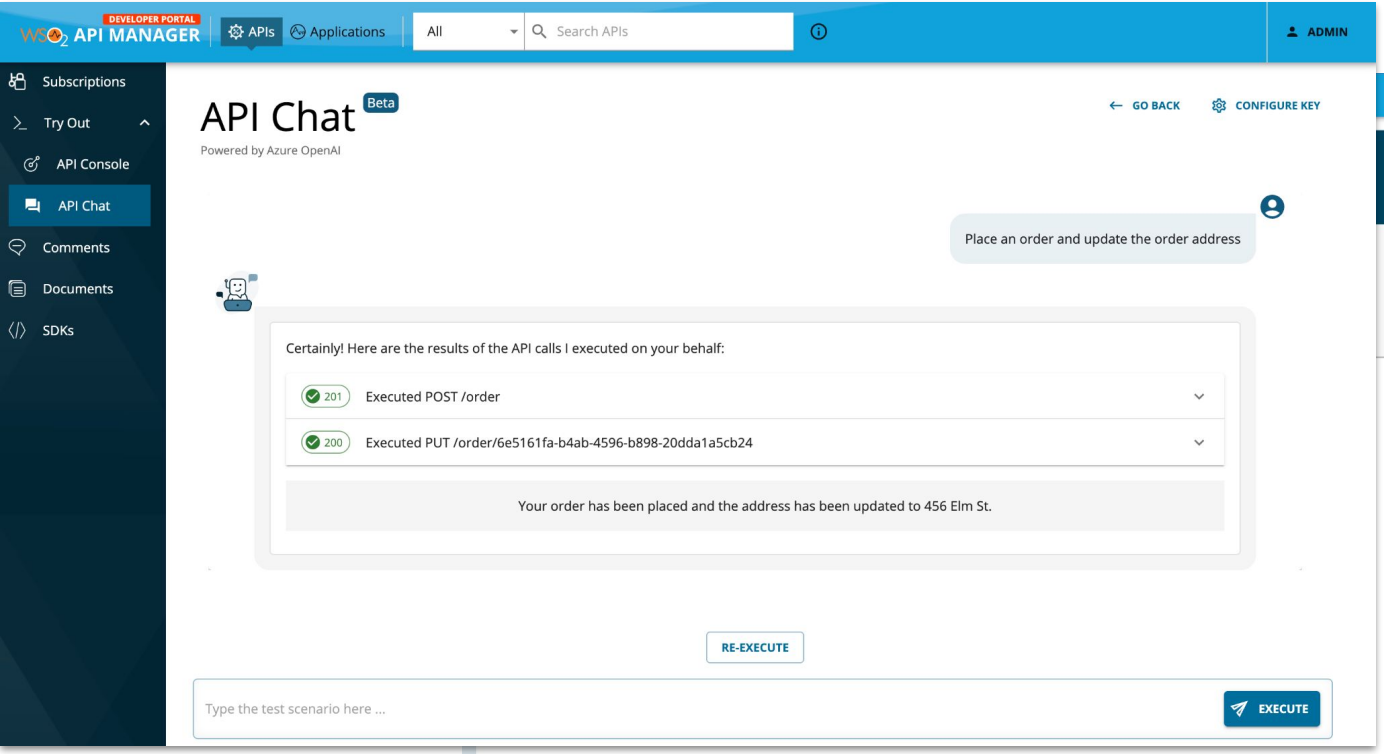
API Manager 4.3.0 as Control Plane for APK 1.1.0

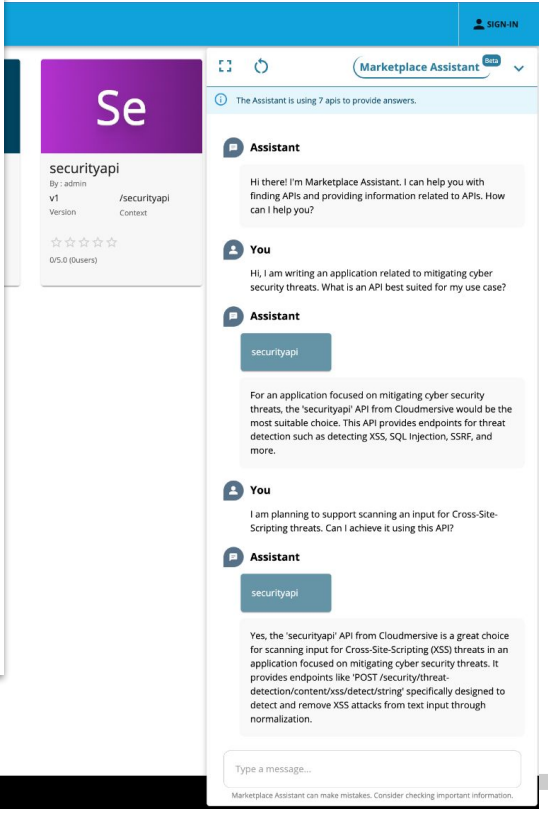


APK 1.1.0 as Gateway for API Manager



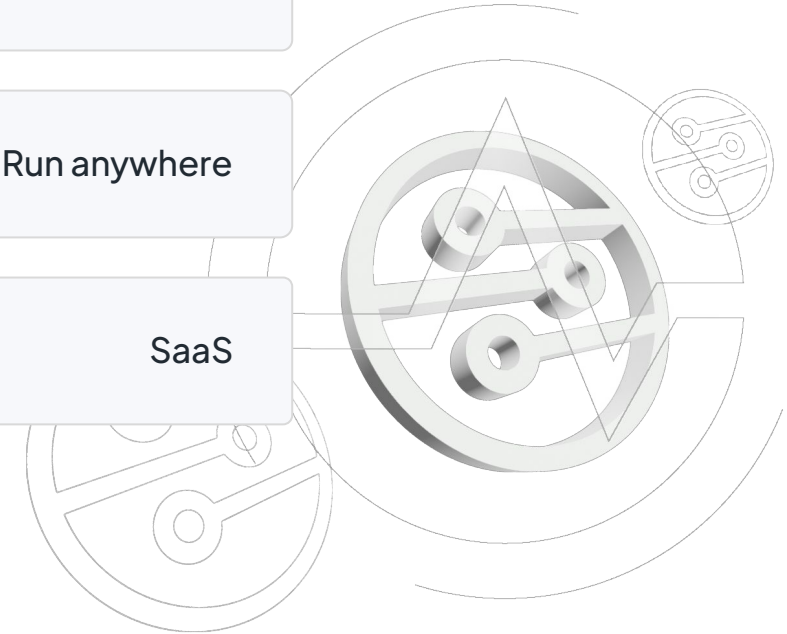
AI-driven Testing and Discovery



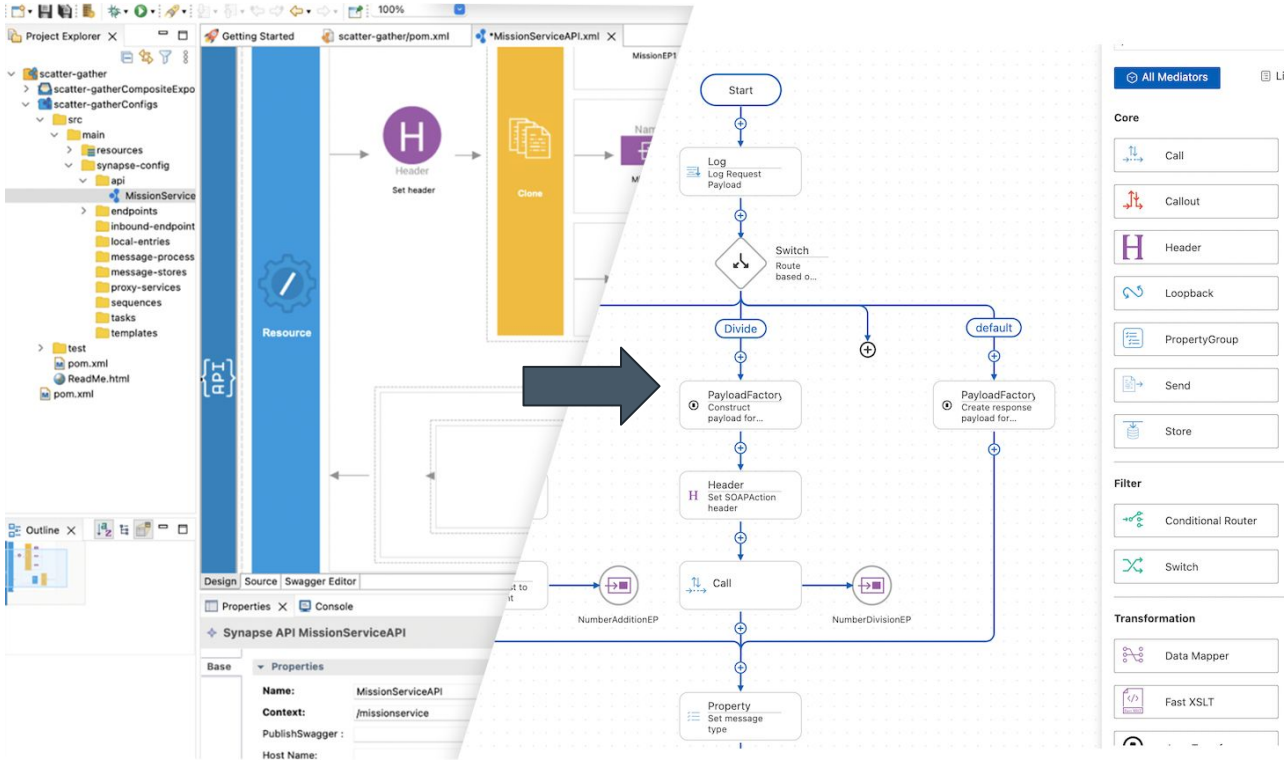


Integration

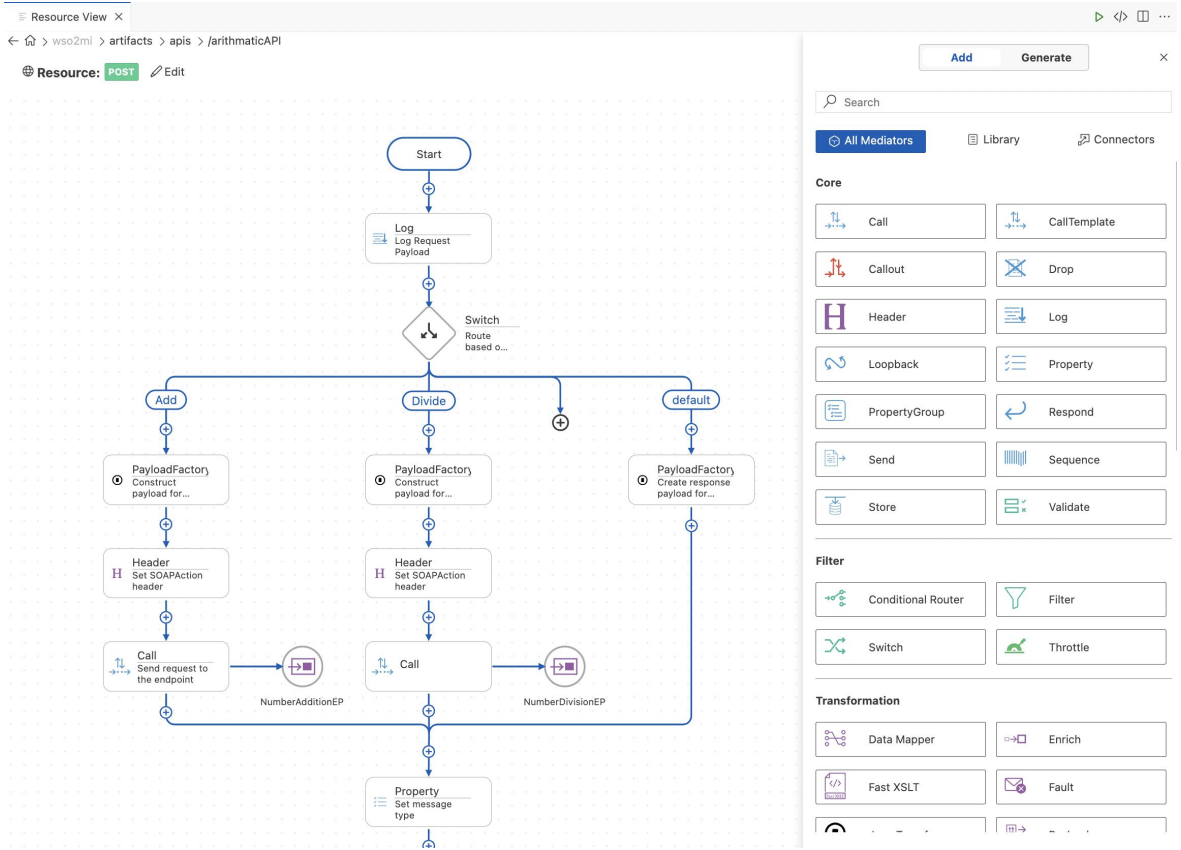
WSO2 Micro Integrator	Run it yourself | Private cloud
Ballerina Swan Lake	Run anywhere
Choreo for Integration	SaaS



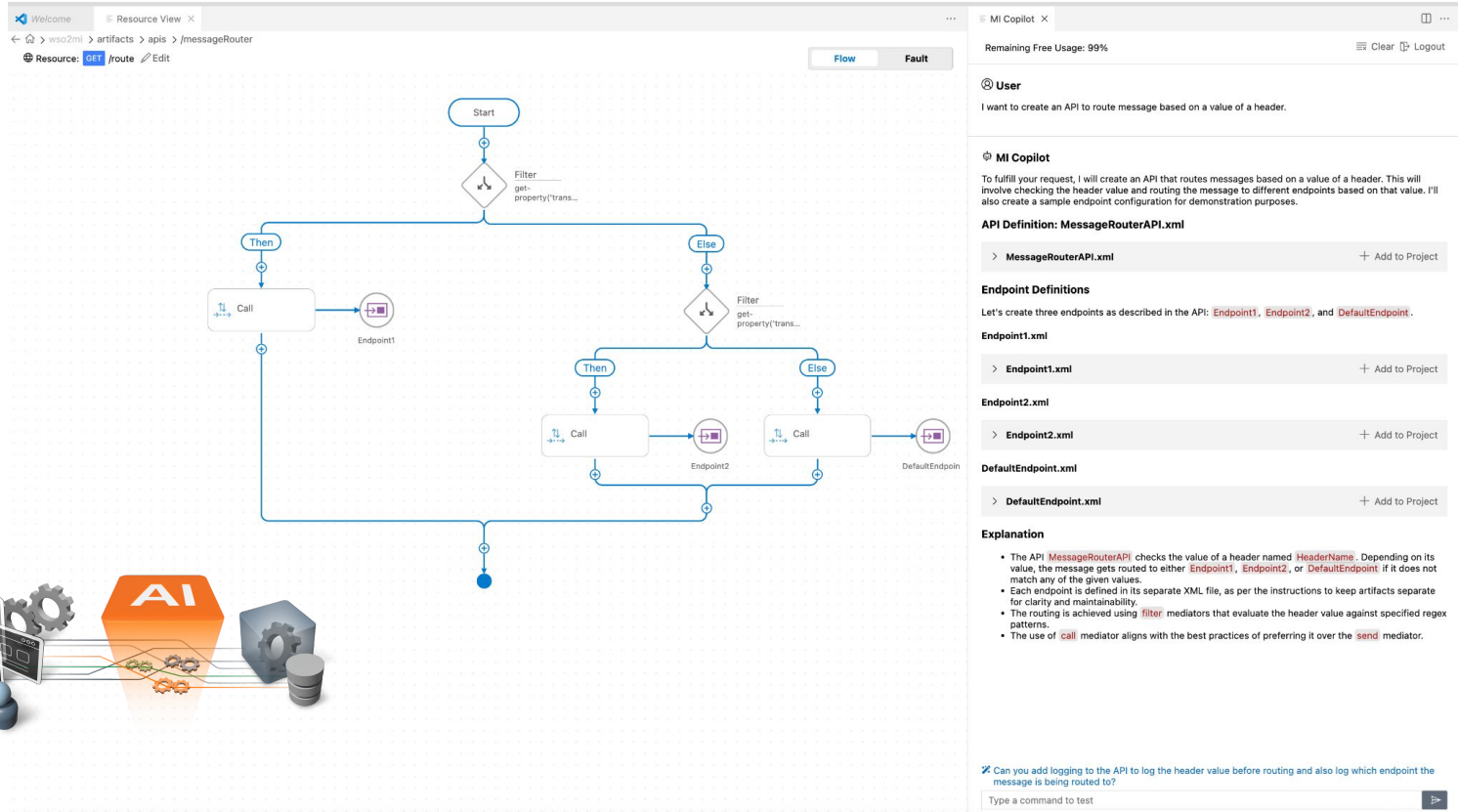
VS Code plugin for Micro Integrator



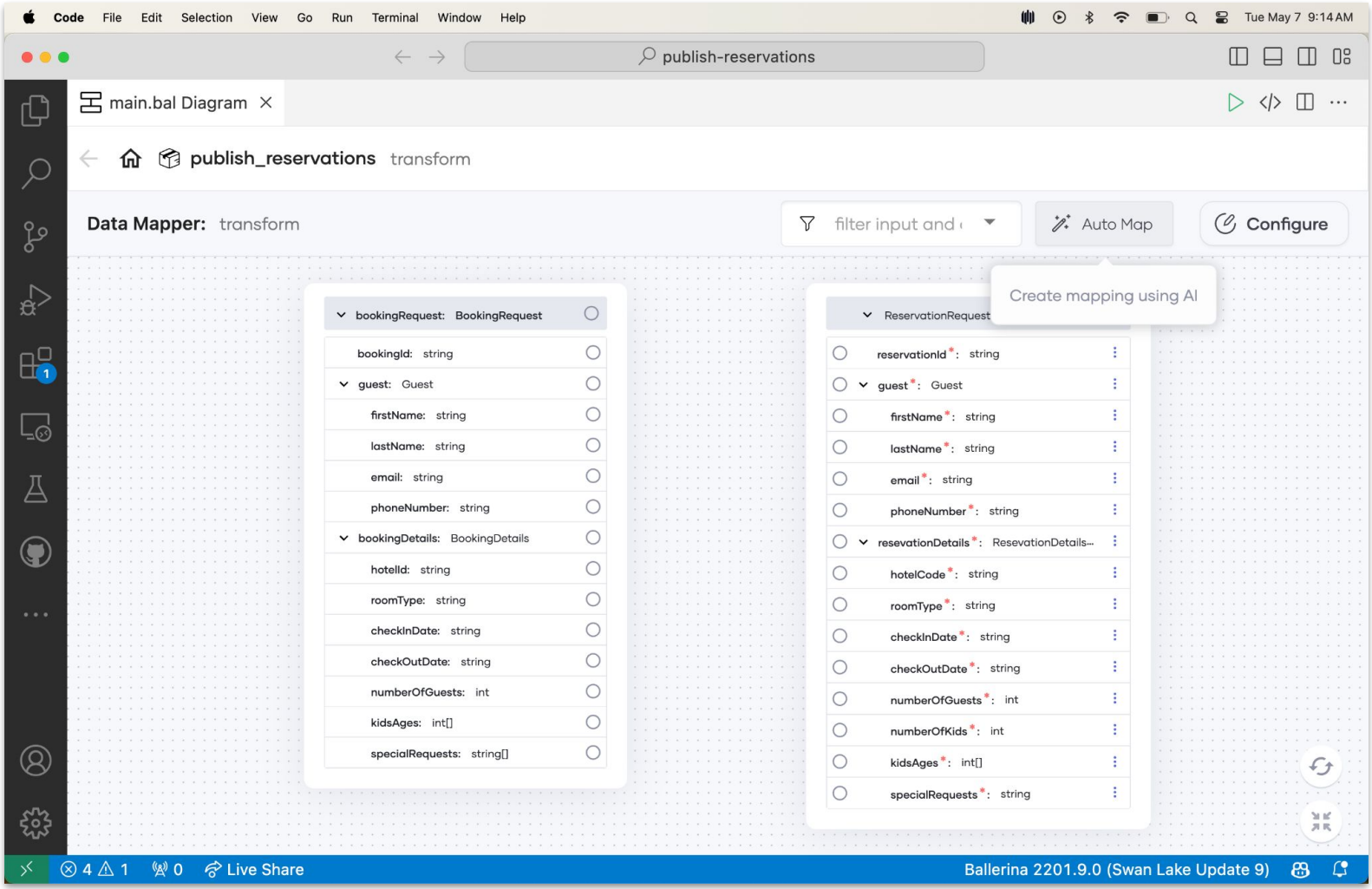
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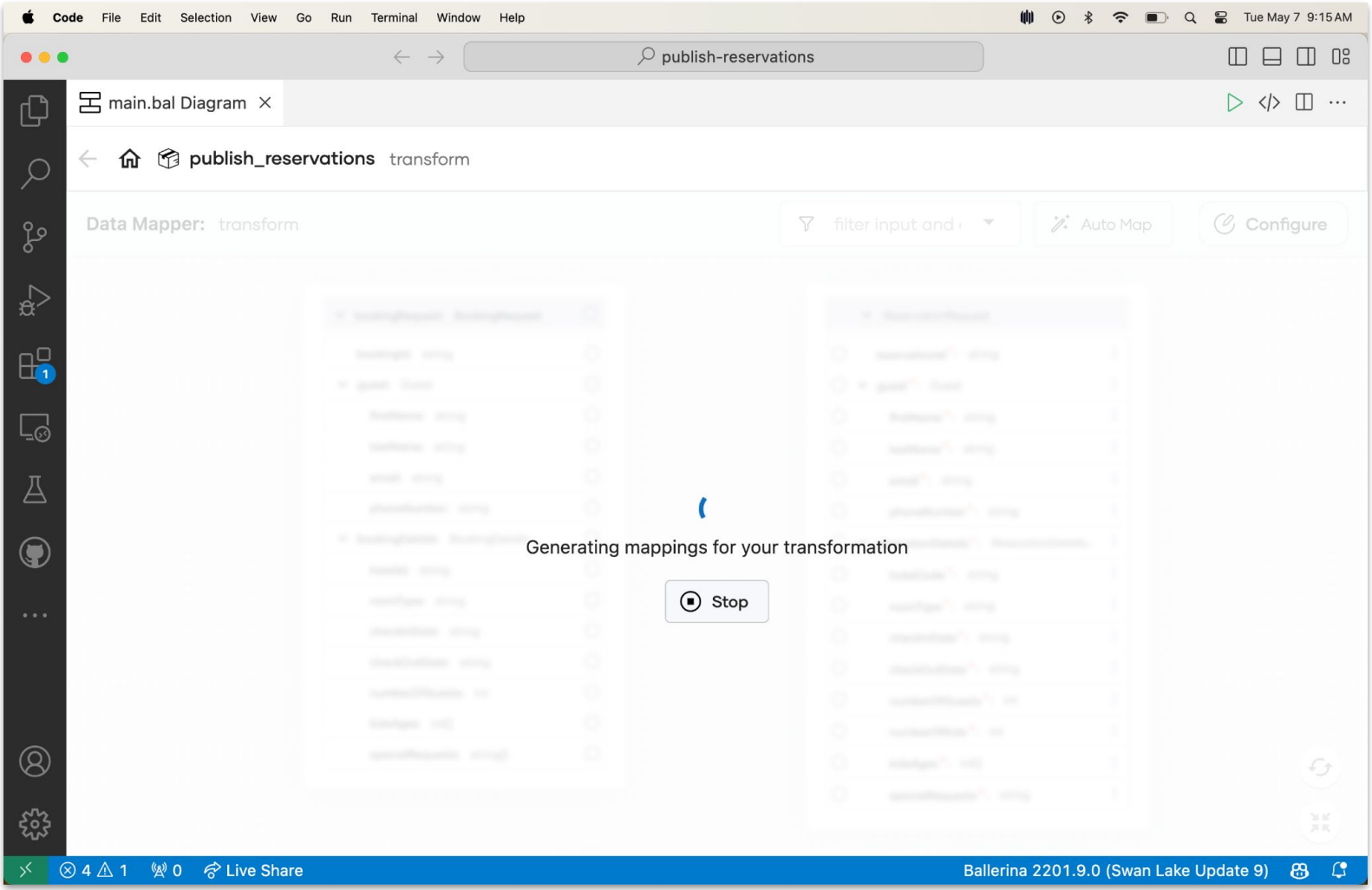


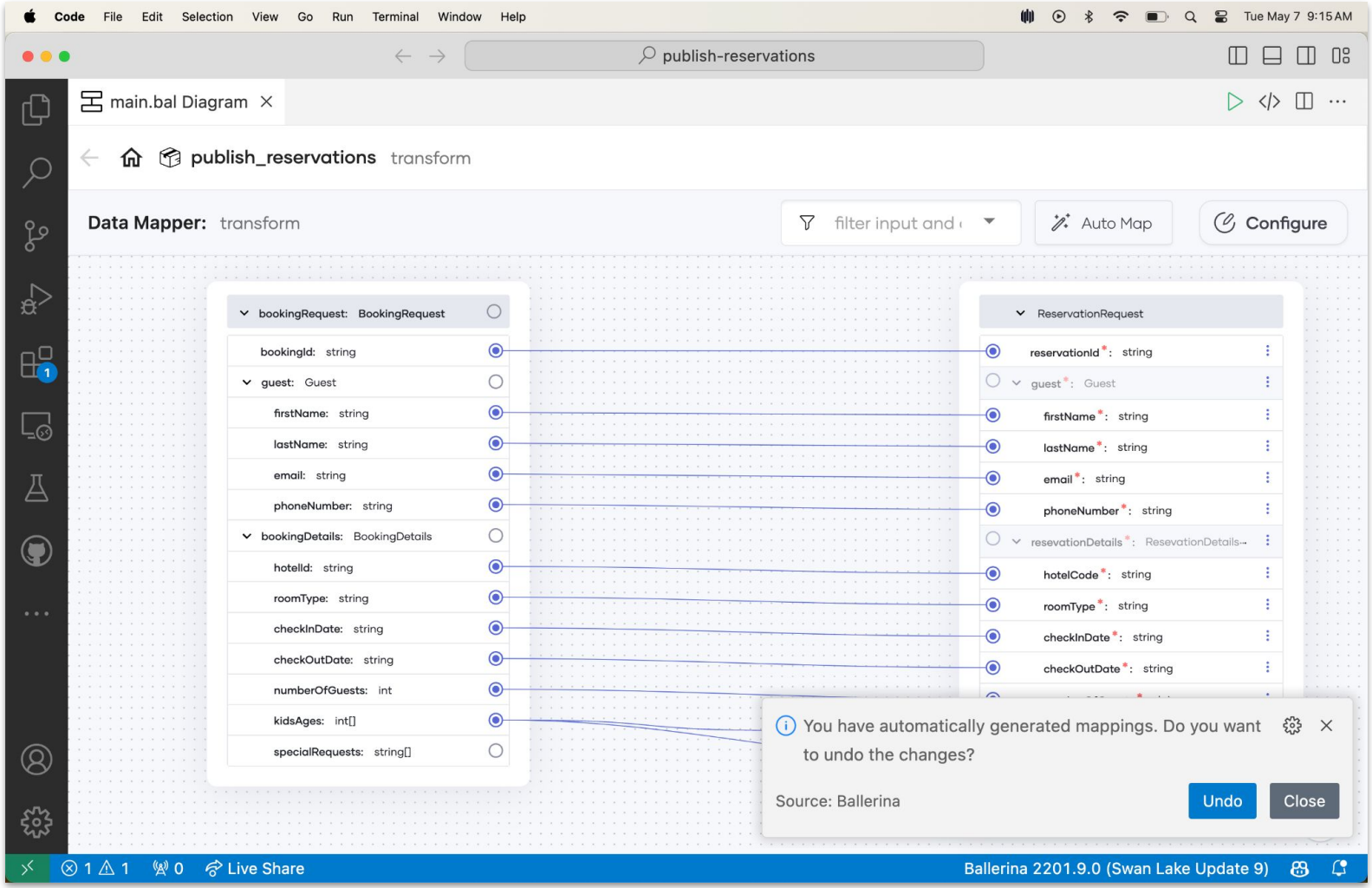
Micro Integrator Copilot



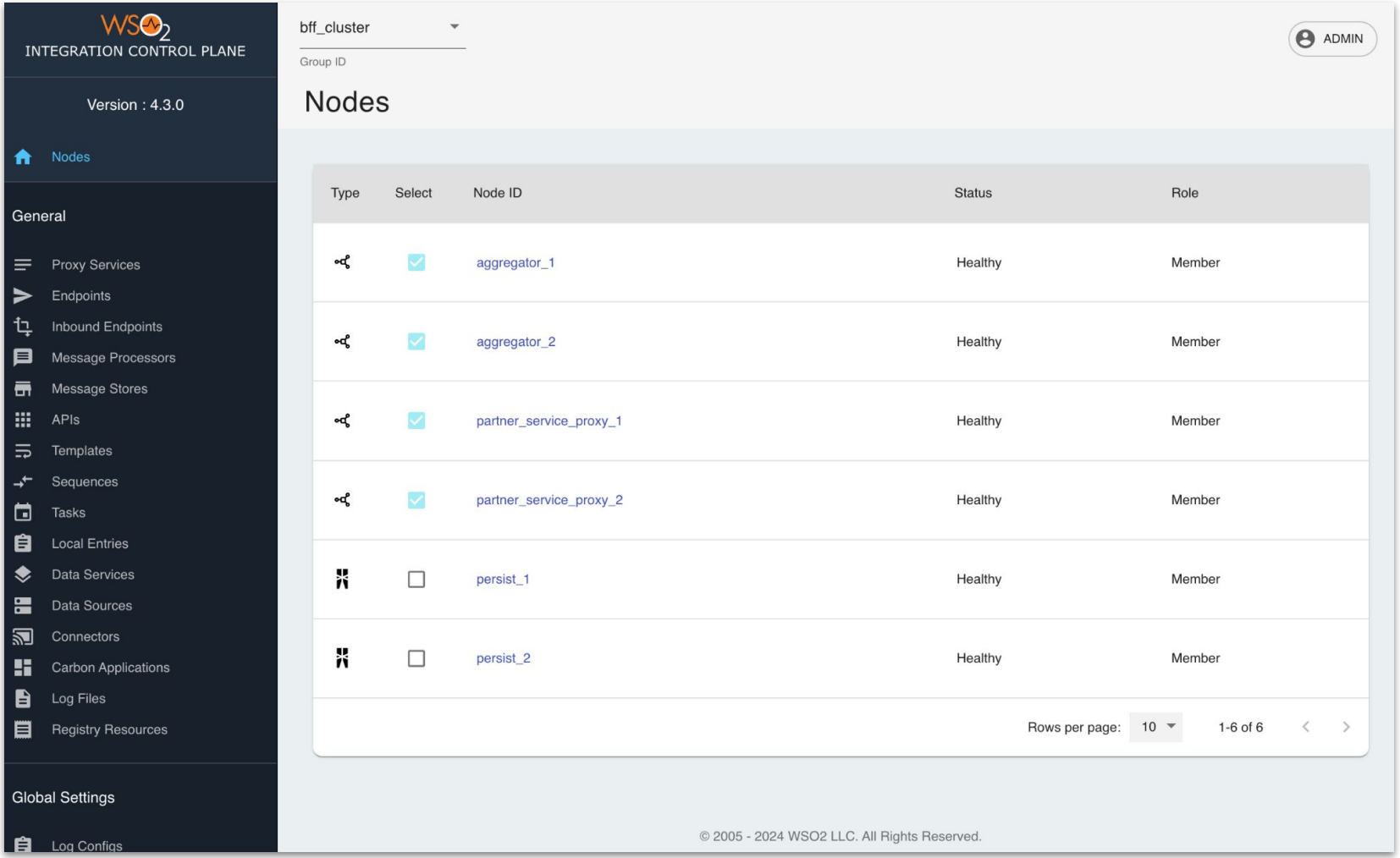
Ballerina


Code File Edit Selection View Go Run Terminal Window Help
Tue May 7 9:14 AM
publish-reservations
main.bal Diagram
publish_reservations transform
Data Mapper: transform
filter input and
Auto Map
Configure
Create mapping using AI
bookingRequest: BookingRequest
bookingId: string
guest: Guest
firstName: string
lastName: string
email: string
phoneNumber: string
bookingDetails: BookingDetails
hotelId: string
roomType: string
checkInDate: string
checkOutDate: string
numberOfGuests: int
kidsAges: int[]
specialRequests: string[]
ReservationRequest
reservationId*: string
guest*: Guest
firstName*: string
lastName*: string
email*: string
phoneNumber*: string
resevationDetails*: ResevationDetails...
hotelCode*: string
roomType*: string
checkInDate*: string
checkOutDate*: string
numberOfGuests*: int
numberOfKids*: int
kidsAges*: int[]
specialRequests*: string
4 1 0 Live Share
Ballerina 2201.9.0 (Swan Lake Update 9)


Code File Edit Selection View Go Run Terminal Window Help
Tue May 7 9:15 AM
publish-reservations
main.bal Diagram
publish_reservations transform
Data Mapper: transform
filter input and
Auto Map
Configure
Generating mappings for your transformation
Stop
4 1 0 Live Share
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Tue May 7 9:15 AM
publish-reservations
main.bal Diagram
publish_reservations transform
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Configure
bookingRequest: BookingRequest
bookingId: string
guest: Guest
firstName: string
lastName: string
email: string
phoneNumber: string
bookingDetails: BookingDetails
hotelId: string
roomType: string
checkInDate: string
checkOutDate: string
numberOfGuests: int
kidsAges: int[]
specialRequests: string[]
ReservationRequest
reservationId*: string
guest*: Guest
firstName*: string
lastName*: string
email*: string
phoneNumber*: string
resevationDetails*: ResevationDetails
hotelCode*: string
roomType*: string
checkInDate*: string
checkOutDate*: string
You have automatically generated mappings. Do you want to undo the changes?
Source: Ballerina
Undo
Close
1 1 0 Live Share
Ballerina 2201.9.0 (Swan Lake Update 9)

Integration Control Plane



Identity & Access Management

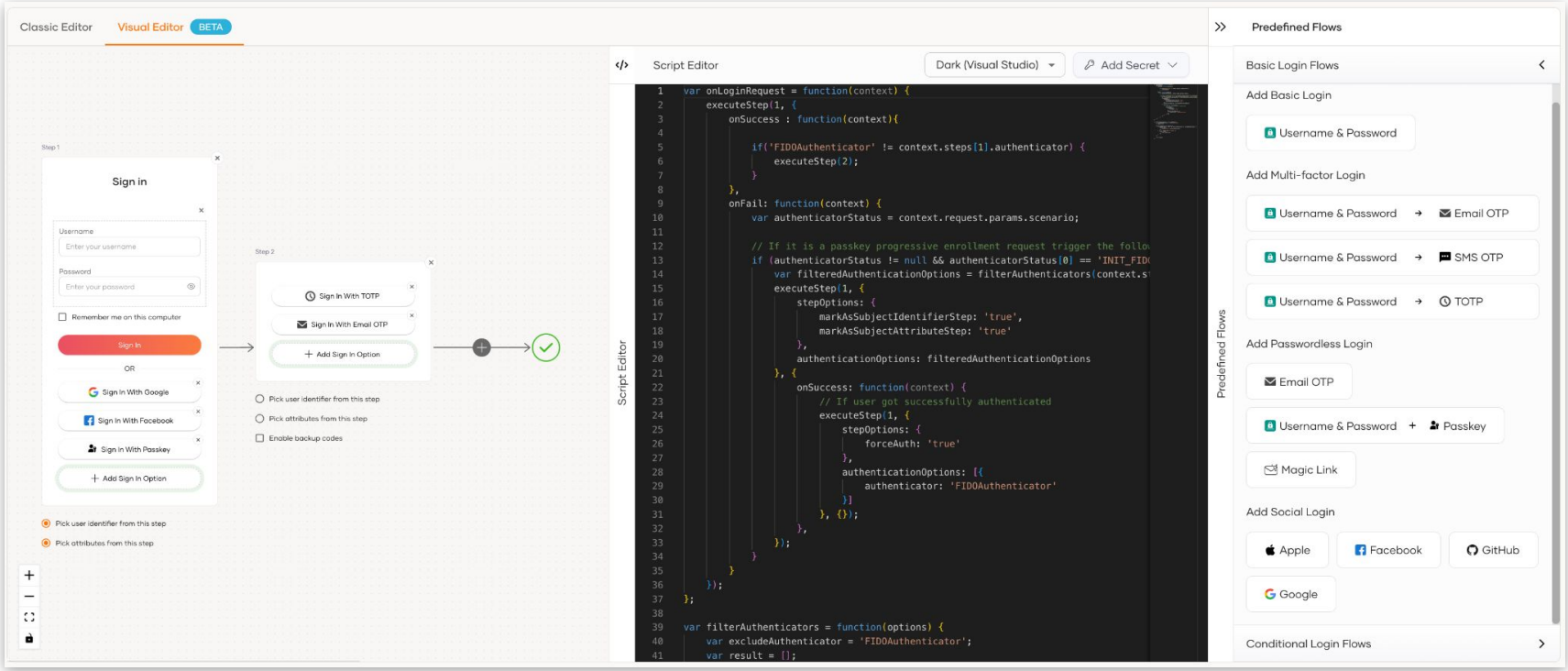
WSO2 Identity Server	Run it yourself | Private cloud
ASGARDEO	SaaS



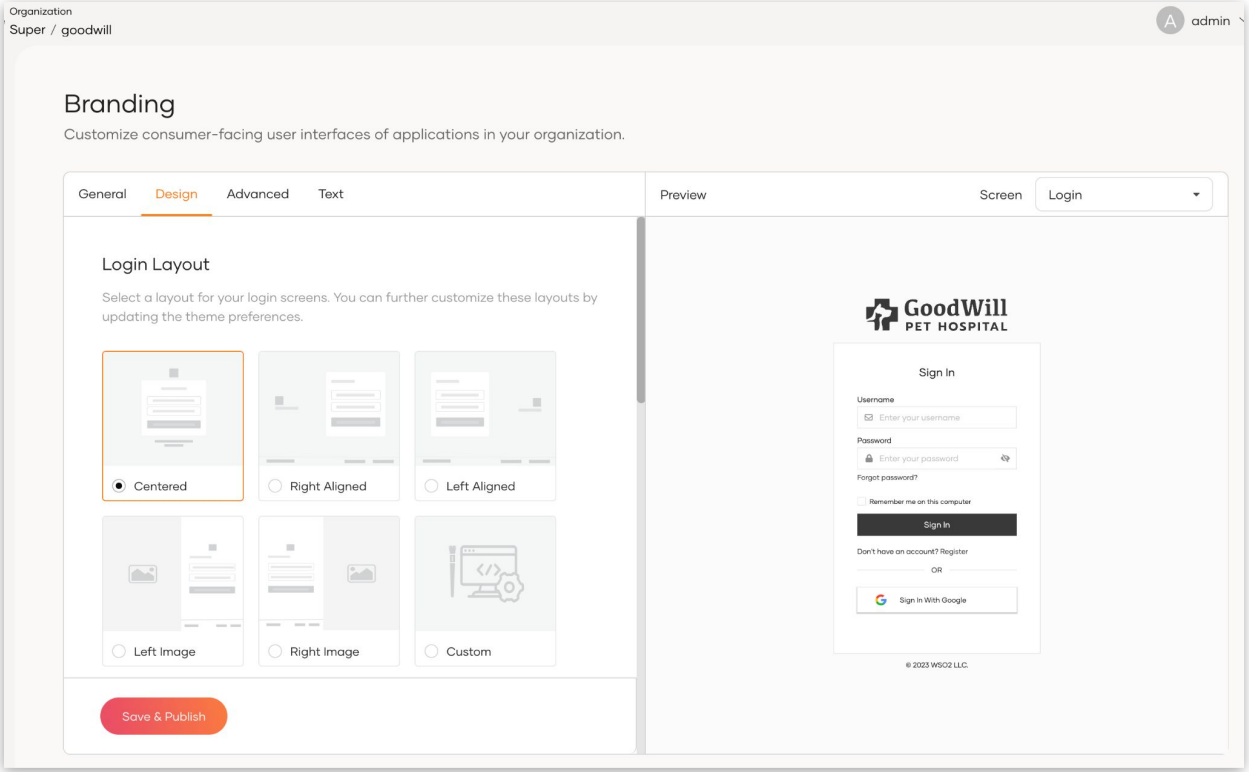
Identity Server & Asgardeo

- B2B CIAM
  - OOTB Organization management capabilities to build B2B CIAM use cases
- App-Native Authentication API
  - APIs to implement complete authentication workflows within the application
- API Resources Authorization Support
  - First class support to, Represent API resources, subscribe applications and RBAC for API resources
- UI/UX enhancements
  - New and improved console UI, Login flow editor, simplified branding
- AI assisted features
  - AI-assisted branding - Apply branding settings
  - AI-assisted login flow builder - Use natural language to build login flows
- Support for Financial-Grade APIs (FAPI)
  - FAPI first-class compliance to FAPI 1.0 and security for high-value APIs with OAuth 2.0
- Post quantum safe cryptography
  - Support to enable quantum safe cryptographic algorithms in the Identity Server

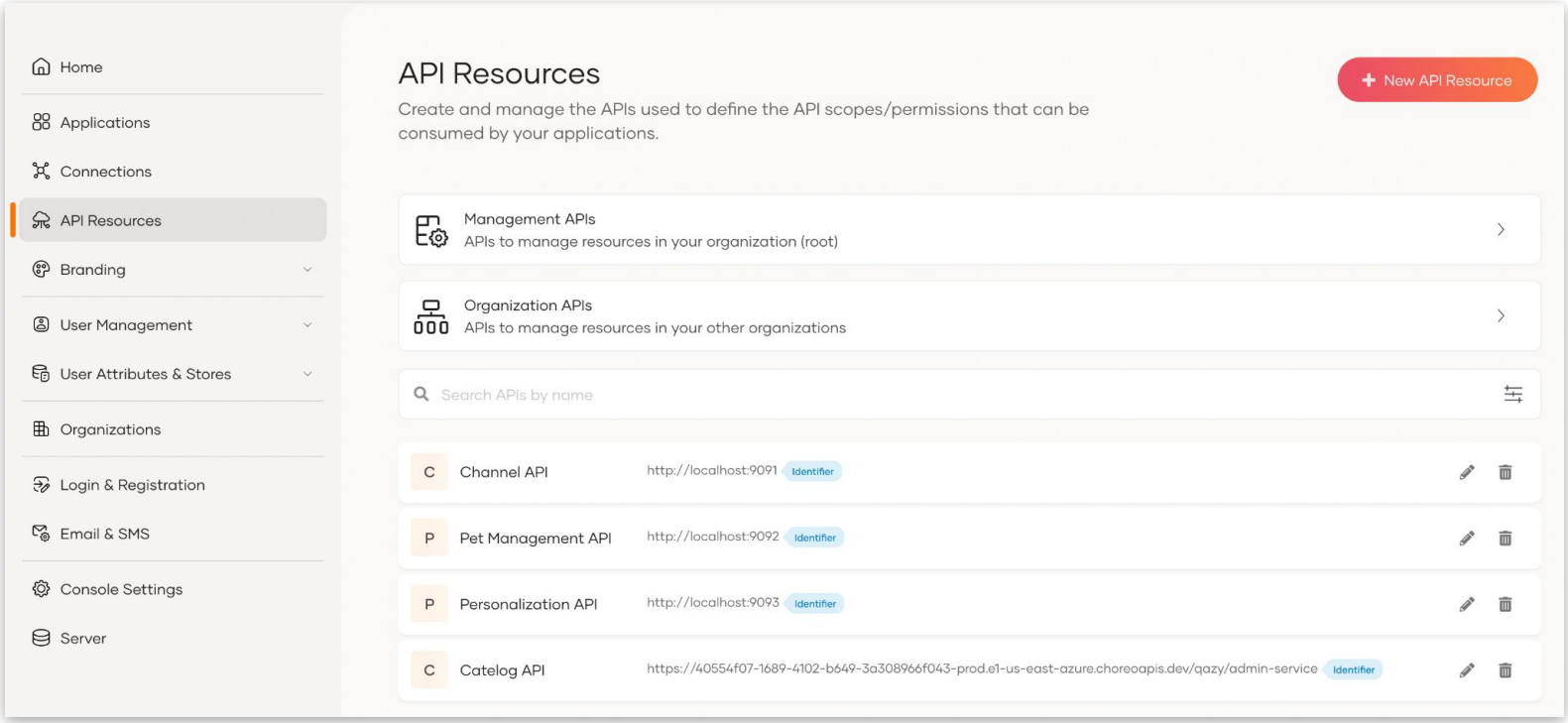
UI/UX enhancements



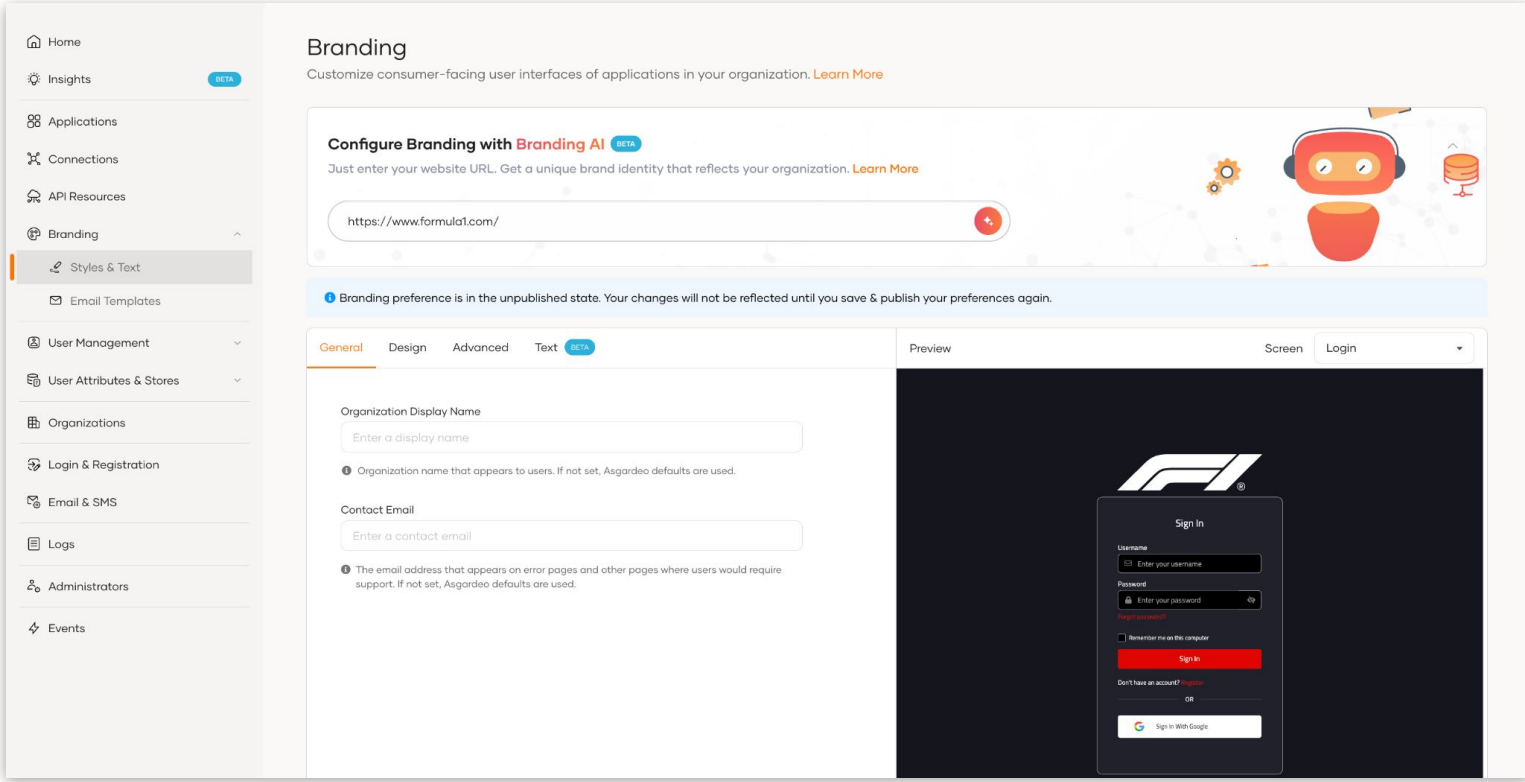
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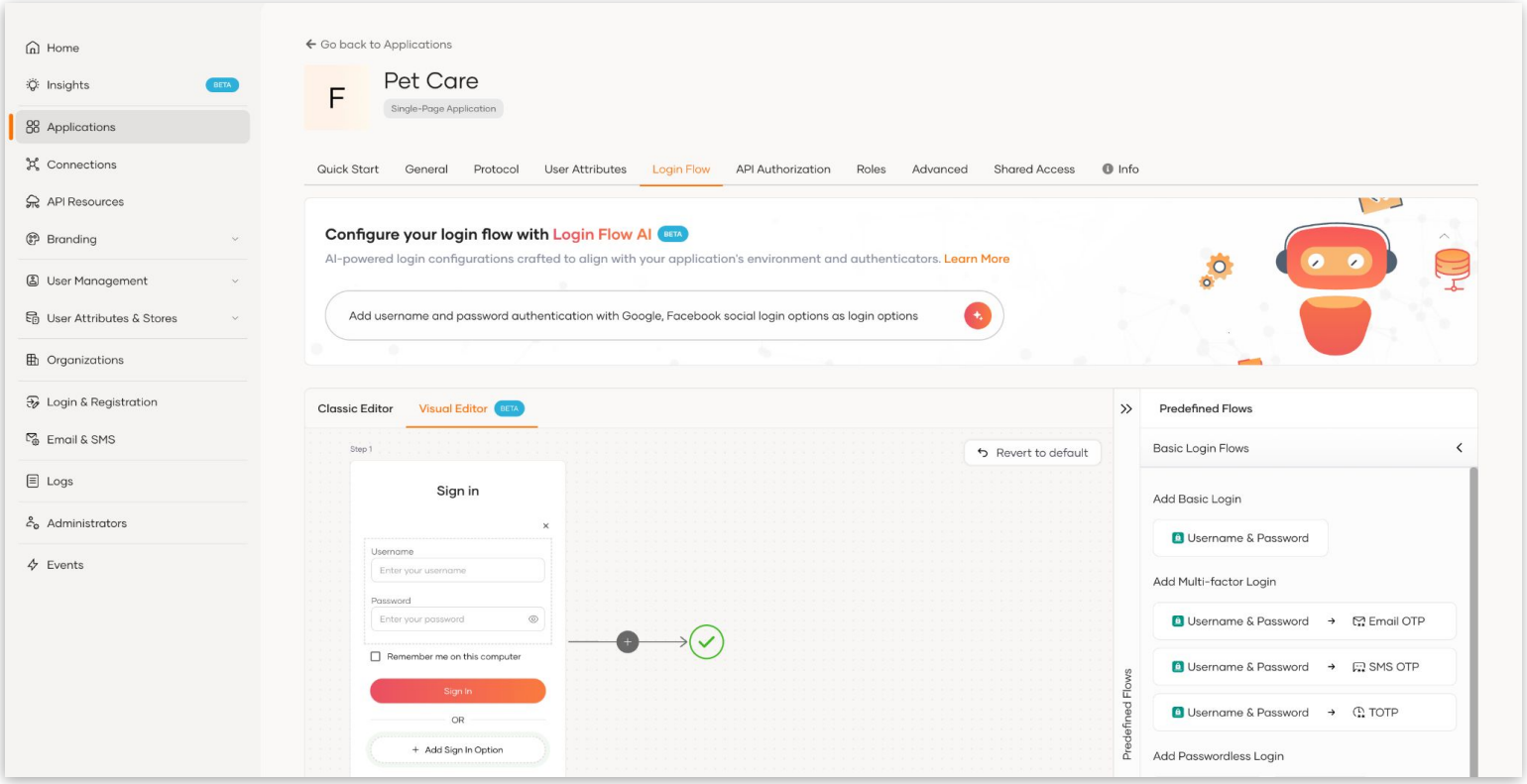
API Resources Authorization Support



AI-assisted branding



AI Assisted Login Flow Builder

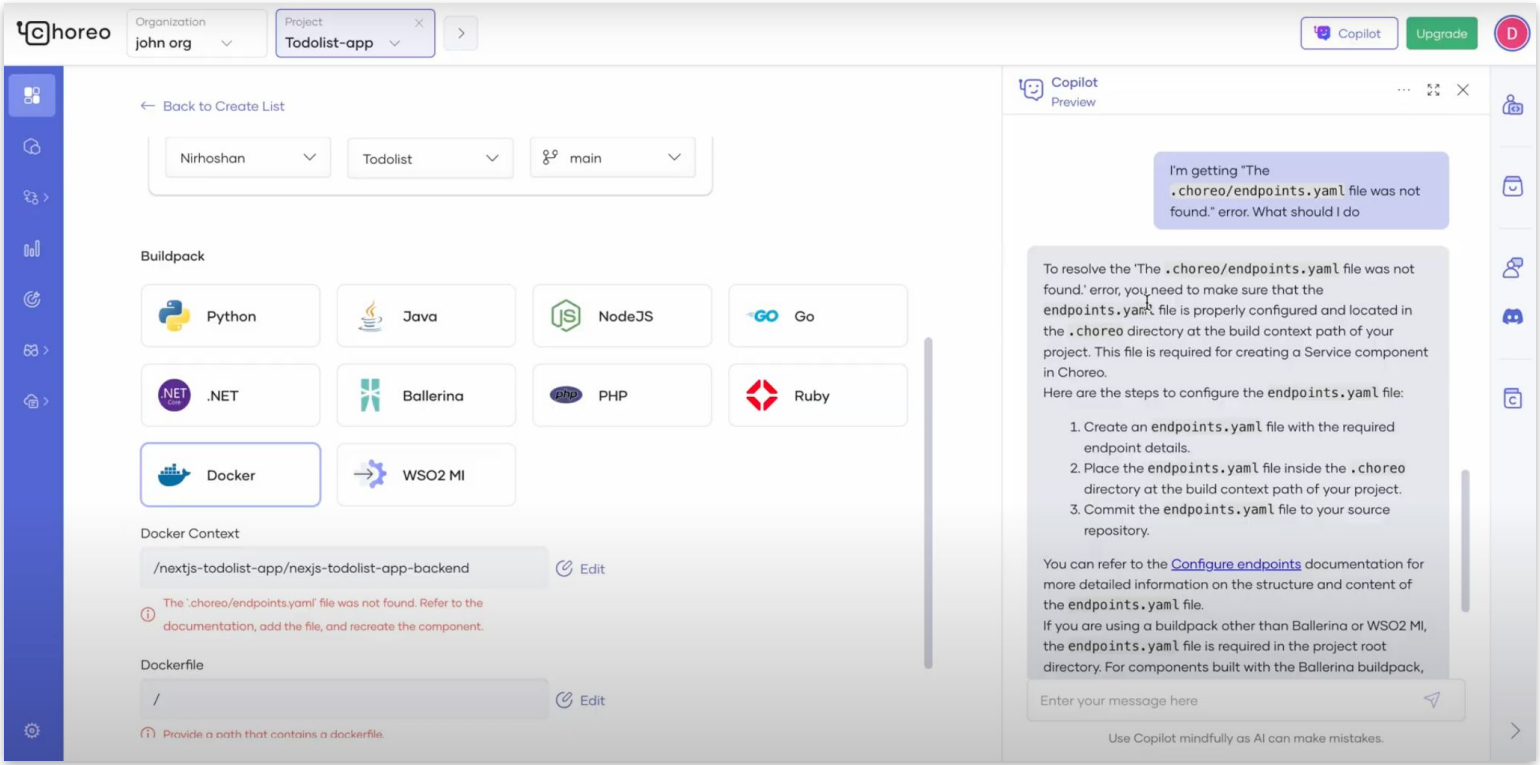


Internal Developer Platform

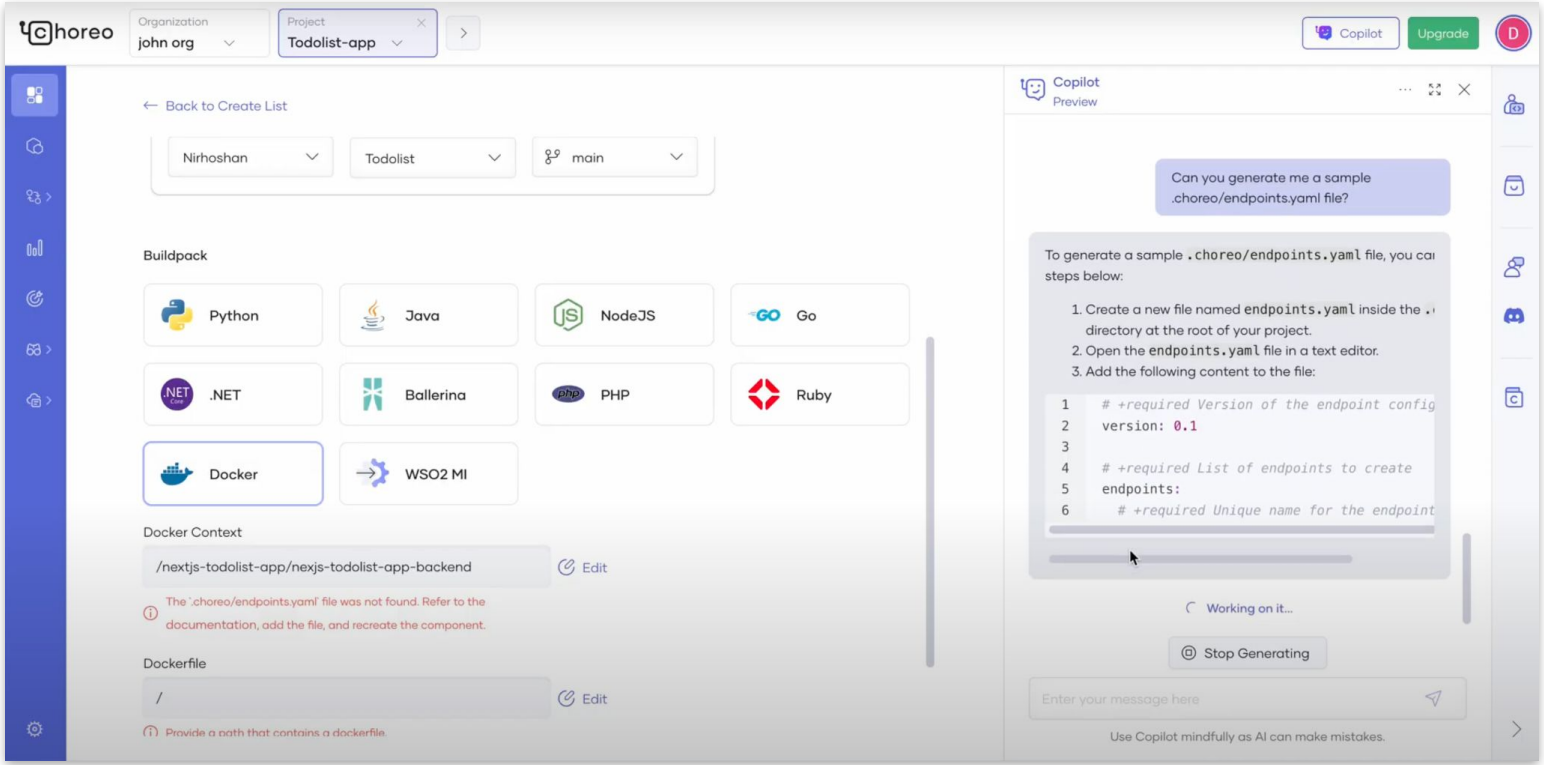
choreo	SaaS



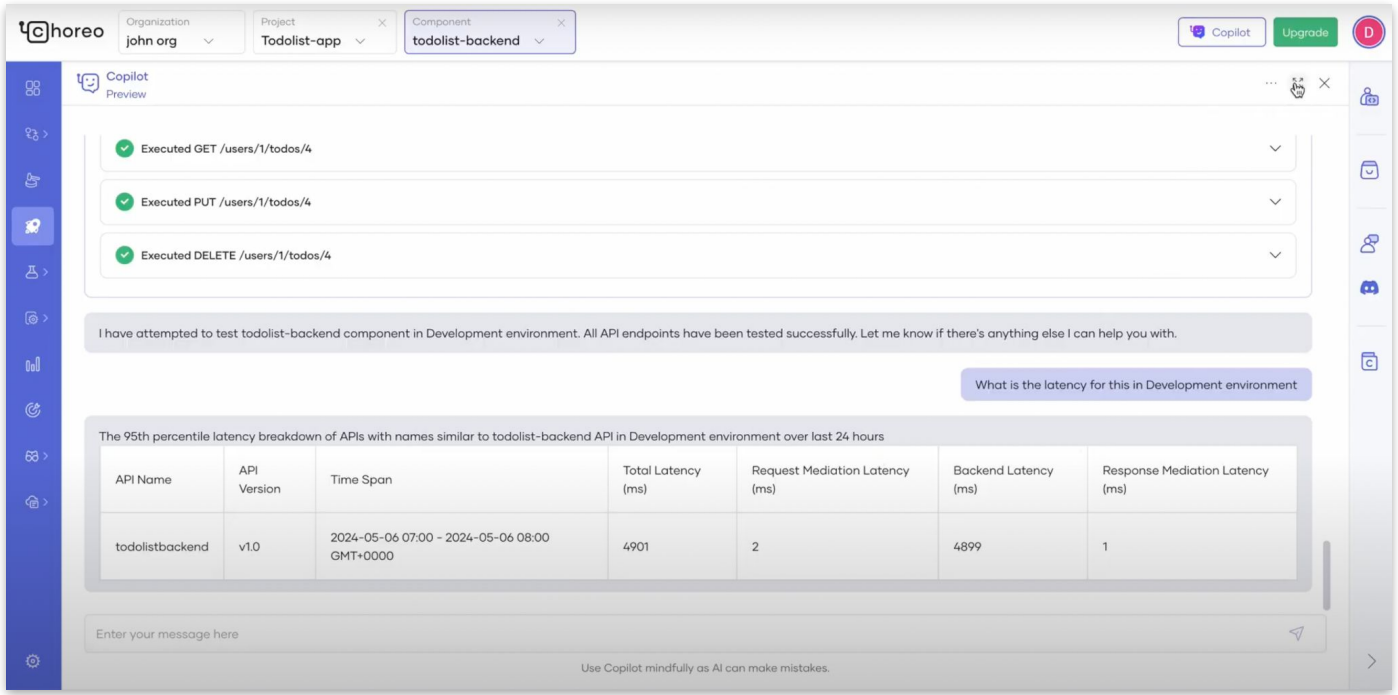
Choreo Copilot



Choreo Copilot



Choreo Copilot



Choreo CLI

```
choreo

Welcome to Choreo CLI, the command-line interface for https://choreo.dev

Available commands:
Resource management:
        create      create a new resource
        delete      delete a resource
        describe    get detailed information about a resource
        list        list available Resources
        link        link directory to a component

Monitoring:
        logs        print logs

Organization and authentication:
        login       login to Choreo
        logout      logout from Choreo
        change-org  switch the active organization


Flags:
        -h, --help      help for choreo
        -v, --version   version for choreo

Use "choreo [command] --help" for more information about a command.


Examples:
To list existing projects or components :
        $ choreo list projects
        $ choreo list components

To create a new project :
        $ choreo create project
```

Choreo – Scale to Zero

Scaling Methods

Scale to Zero
Your deployment will automatically scale down to zero during inactivity and swiftly scale up upon receiving new requests.

HPA
Your deployment will automatically scale based on the CPU and memory usage.

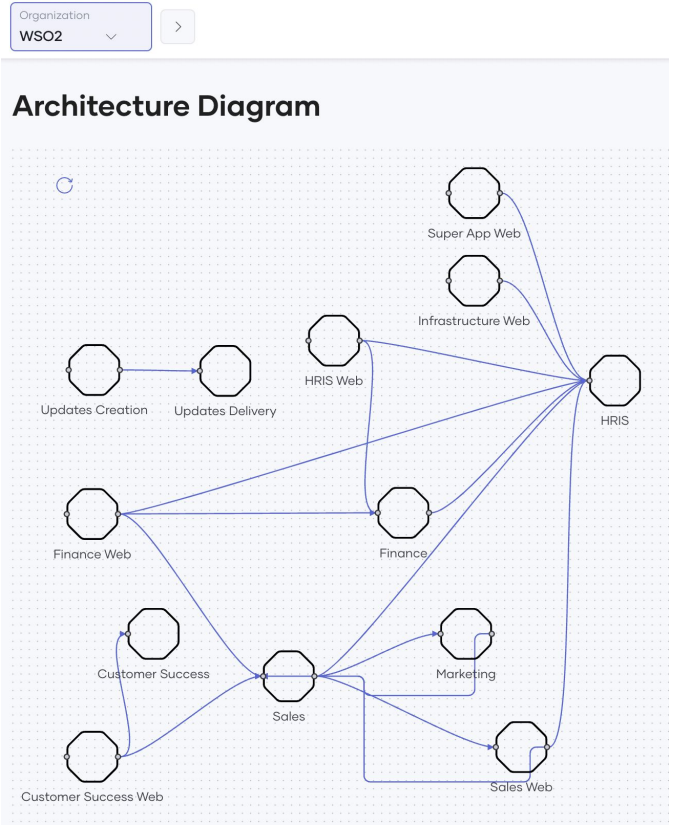
Please refer this documentation to troubleshoot your scaled to zero component.

Scaling Configuration

Max replicas — 5 +

Number of pending requests to spawn a new pod — 100 +

Org level architecture diagram (limited availabilit yet)



The horizontals

AI

- Micro Integrator
  - MI Copilot
- Asgardeo
  - AI-assisted login flow builder
  - AI-assisted branding
- Choreo
  - Choreo Copilot
- API Management
  - AI-assisted API testing
  - AI-powered API marketplace
- Ballerina
  - AI-assisted data mapping

Post Quantum Safe Cryptography

- Ballerina (update 9 release)
  - Post quantum secure service-to-service communications using TLS that supports PQS algorithms
  - Update of Crypto API to include the latest post quantum cryptography algorithms along with OOTB support for 3 classical + post quantum combined KEM and encryption algorithms

- Identity Server
  - Post-quantum secure mode can be enabled in IS 7.0 GA with a few steps
  - Post-quantum secure mode will provide support for PQS TLS in inbound communications, more secure internal encryption and hashing



WSO2 has signed a definitive agreement to be acquired by EQT Partners.

(Announced on Friday, May 3rd)

Strong investment appetite in India

> Our India deal pipeline for 2024 is $5 bn, volumes have ramped up unprecedently: Jean Salata, EQT Chairman

>$210bn
Assets under management

- **30 years** of investment expertise
- **Wallenberg family heritage**

>$60bn
Invested in 49 tech companies

- Unmatched track record in **investing and scaling software and service companies** such as **IFS, SUSE, Acumatica, and Virtusa**

26
Global locations

- **international presence with 1,800 employees**
- Exceptional market knowledge

>70
Technology advisors

- Extensive network of **high-caliber advisors**
- BPEA's deep expertise in **Asia tech sector**

A team united by a passion for technology to unleash growth

EQT + WSO2

- Premier global investment firm
- Expertise in infrastructure software
- Local presence and focused investment in India



- Leading open-source APIM and Integration platform
- Highly responsive, scalable architecture
- Immense potential to expand locally and globally

Joining forces on the next chapter of growth

WSO2, version 2.0

(After we close)

See: https://medium.com/@sanjiva.weerawarana/wso2-to-be-acquired-by-eqt-partners-718839f8ebf8 for more information.

Go forward team

- CEO: Me 😳
- Leadership team: Same
  - And will fill any missing gaps
- Rest of the team: Same
  - And will fill any missing gaps and continue to grow as needed

Go forward plan

- EQT deal team will work with us to come up with a detailed 5 year plan
- We will get an industry experienced board
  - Expecting 5 independent board members, 1–2 from EQT and me
- We will have a new employee stock option program
  - Details to be sorted as part of the 5 year plan
- Goal is to grow ARR massively and get to being an independent company
  - We want to become an institution in enterprise software

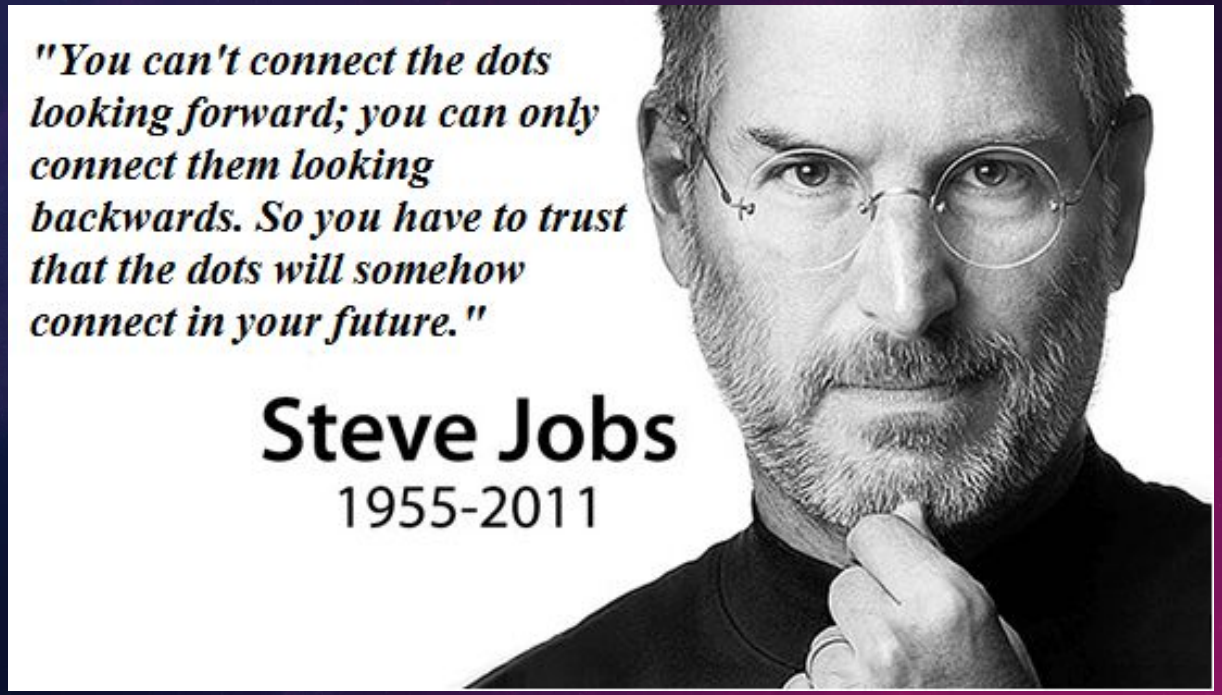
What about our culture?

fight for the culture the way it should be…not the way it was or the way its becoming.

Chamath Palihapitiya, 2011 as he left Facebook
https://techcrunch.com/2011/06/03/facebook-vp-chamath-venture-socialcapital/

Customers & partners (i.e. you!)

- You brought us here and you will be the ones to takes us to the next level
- You will see nothing but the same and better .. if not let me know


"You can't connect the dots looking forward; you can only connect them looking backwards. So you have to trust that the dots will somehow connect in your future."
Steve Jobs
1955-2011

Q & A (?)



Prof. Lisa Randall
Harvard University

Dark Side of the Universe

Prof. Lisa Randall

Professor Lisa Randall studies theoretical particle physics and cosmology at Harvard University. Her research connects theoretical insights to puzzles in our current understanding of the properties and interactions of matter. She has developed and studied a wide variety of models to address these questions, the most prominent involving extra dimensions of space.

Professor Randall was on the list of Time Magazine's "100 Most Influential People" of 2007 and was one of 40 people featured in The Rolling Stone 40th Anniversary issue that year. Prof. Randall was featured in Newsweek's "Who's Next in 2006" as "one of the most promising theoretical physicists of her generation" and in Seed Magazine's "2005 Year in Science Icons". In 2008, Prof. Randall was among Esquire Magazine's “75 Most Influential People.”

Professor Randall earned her PhD from Harvard University and held professorships at MIT and Princeton University before returning to Harvard in 2001. She is also the recipient of honorary degrees from Brown University, Duke University, Bard College, and the University of Antwerp.