



API-First Design & Management with Oracle

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WHY APIS MATTER

In a Digital World, APIs Connect It All

Social

Facebook, Instagram, Twitter, LinkedIn, WhatsApp



Financial

Intuit, PayPal, Chase, Venmo

Transportation

UBER, SFMTA Municipal Transportation Agency, Lyft, Google Maps

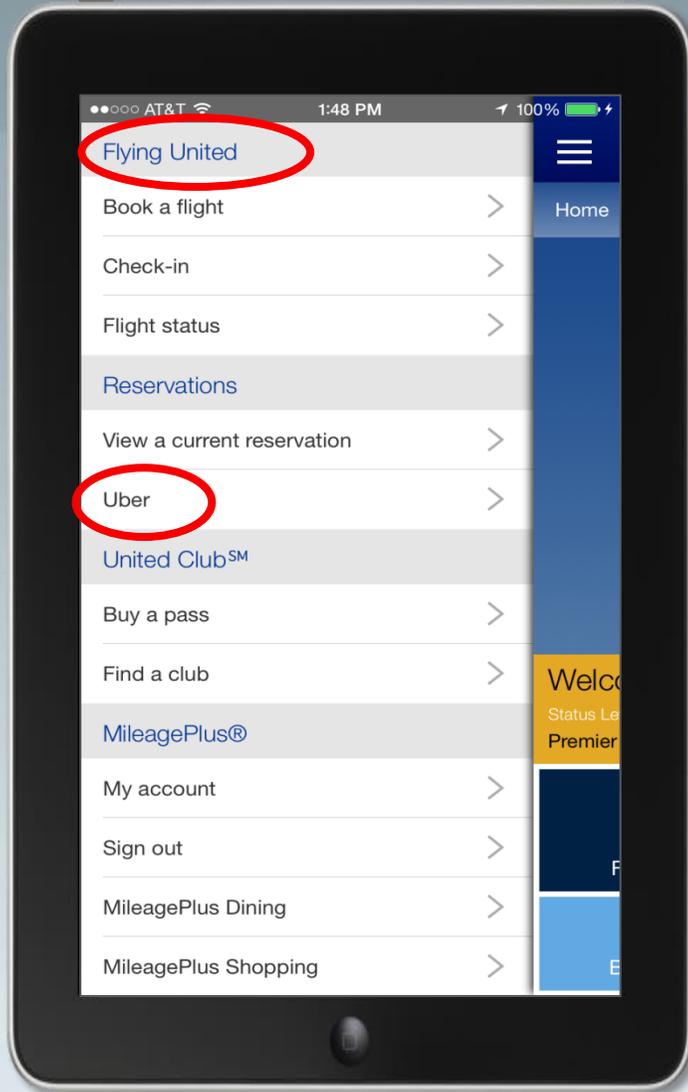
Health

C25K, Nike NTC, and other health-related icons

Productivity

EVERNOTE, slack, twilio

What is an API?



- An API is an **interface** that provides **controlled** access to a business process or data
- Example: booking an Uber ride from an airline's mobile app
 - **Uber benefit:**
 - more exposure → more customers → more revenue
 - **Airline benefit:**
 - cool mobile app feature → happier customers → more revenue

Significant shift in Business to an API Economy

In a 2002 internal memo, Jeff Bezos
(Amazon) mandated:

- All teams use service interfaces
- Teams must communicate through service interfaces
- No other form of interprocess communication allowed
- Runtime technology does not matter
- All service interfaces, without exception, must be externalizeable

The mandate closed with:

"Anyone who doesn't do this will be fired."



API FIRST STRATEGY

Important Definitions

API Management

The process of publishing, documenting and overseeing application programming interfaces (APIs) in a secure, scalable environment.

API-First Development

API-first is a fundamental paradigm shift where APIs are designed, tested, and built *before* applications and mirror the *goals and objectives of the company*

API Design

The process of engaging all stakeholders to *define in human language* the APIs to create a “*contract*” of what will be delivered *before expensive development begins*.

Why Does API Management Matter?



Approach **design**
with the end
in mind



Ensure **security** of
your APIs



Improve **agility** &
quickly meet user
demand

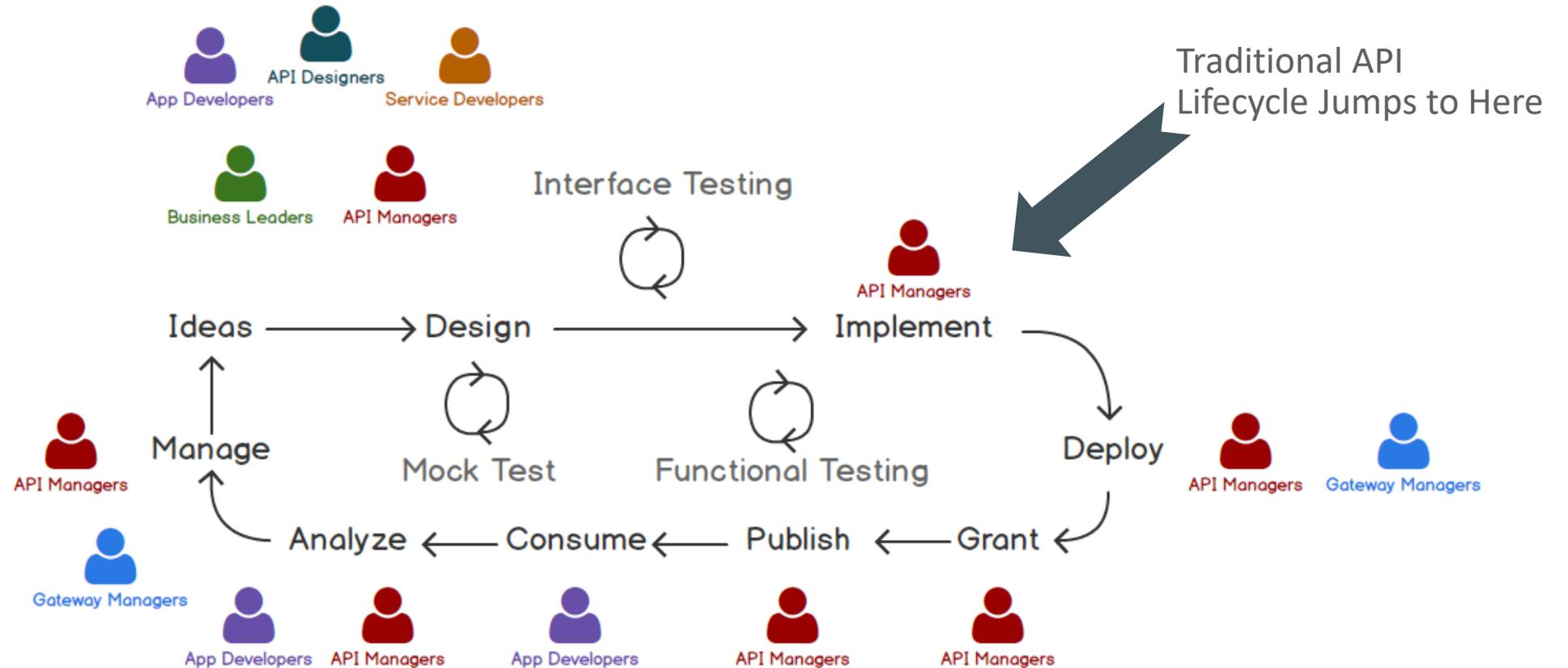


Gain **visibility** &
define the *right*
metrics

DAY IN THE LIFE OF AN API

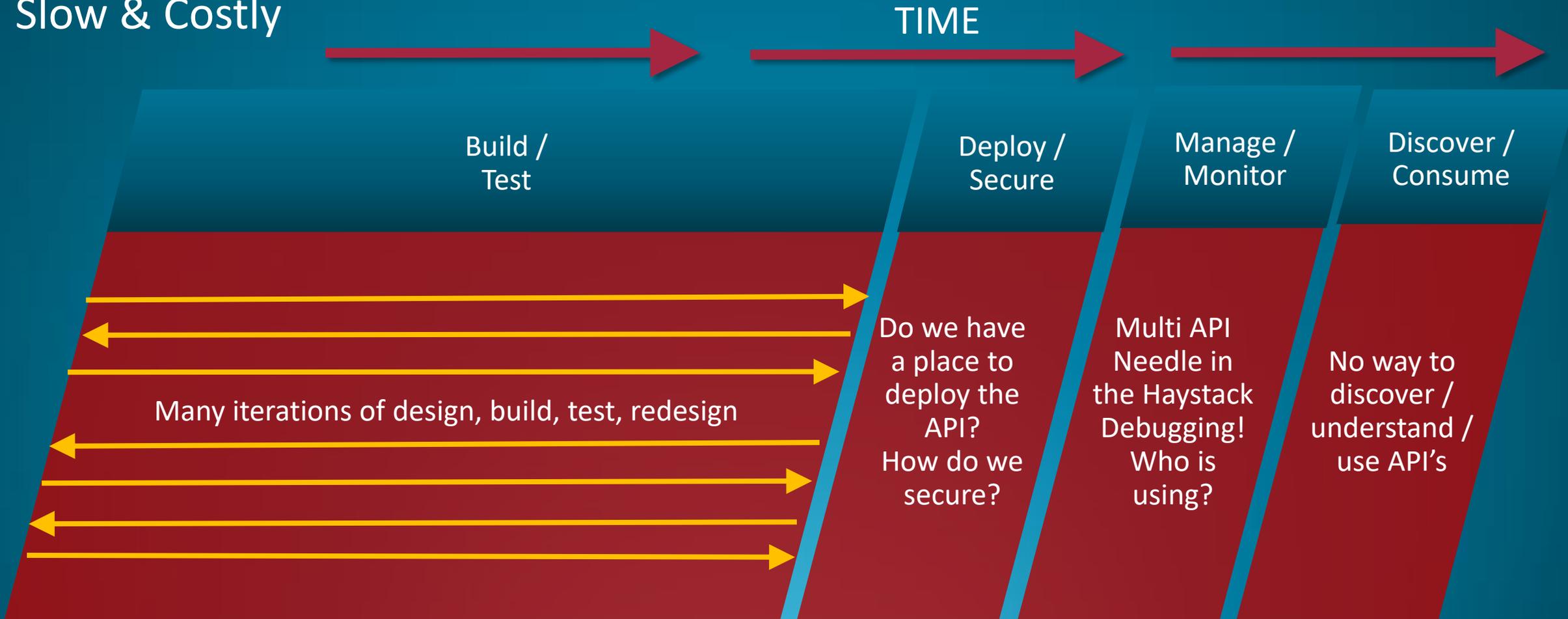
API Lifecycle

From Ideas to Engagement

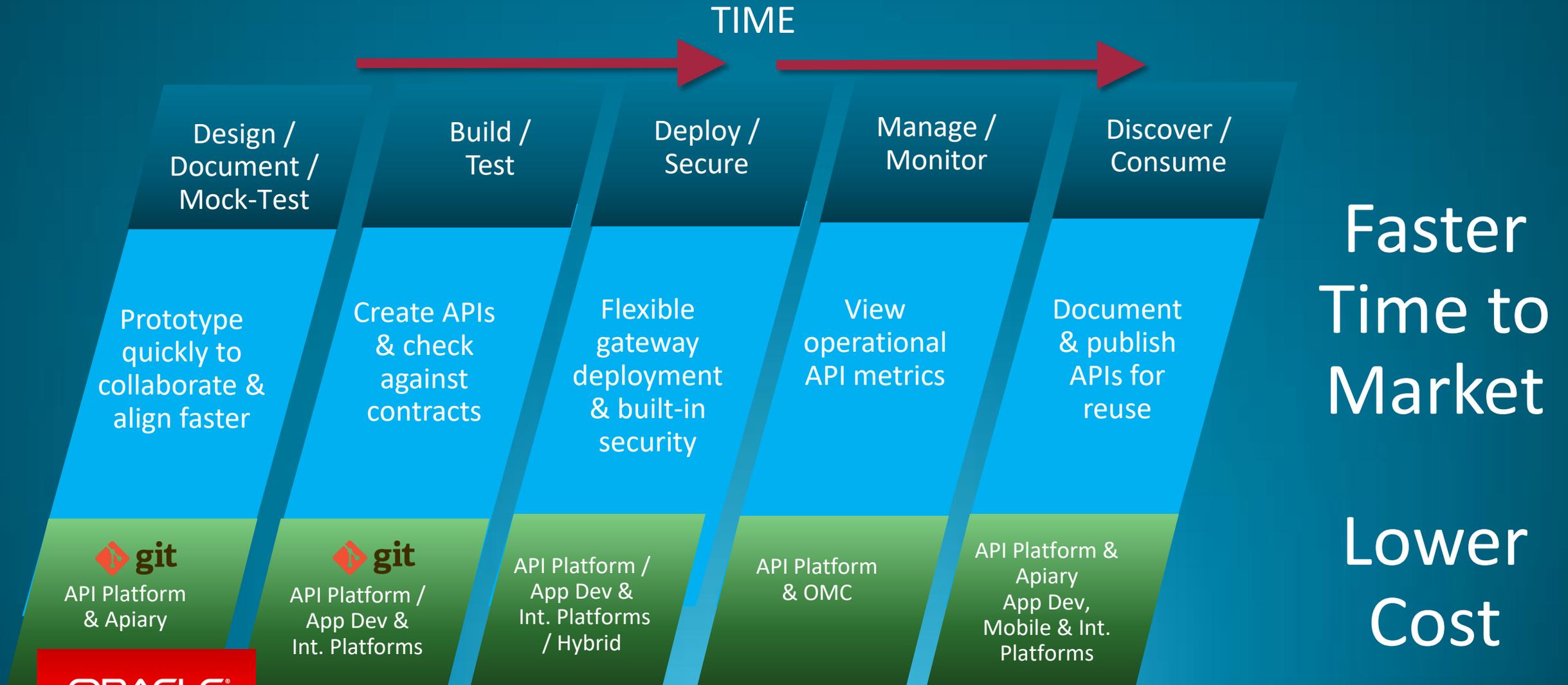


Traditional API Lifecycle

Slow & Costly



The API-First Lifecycle

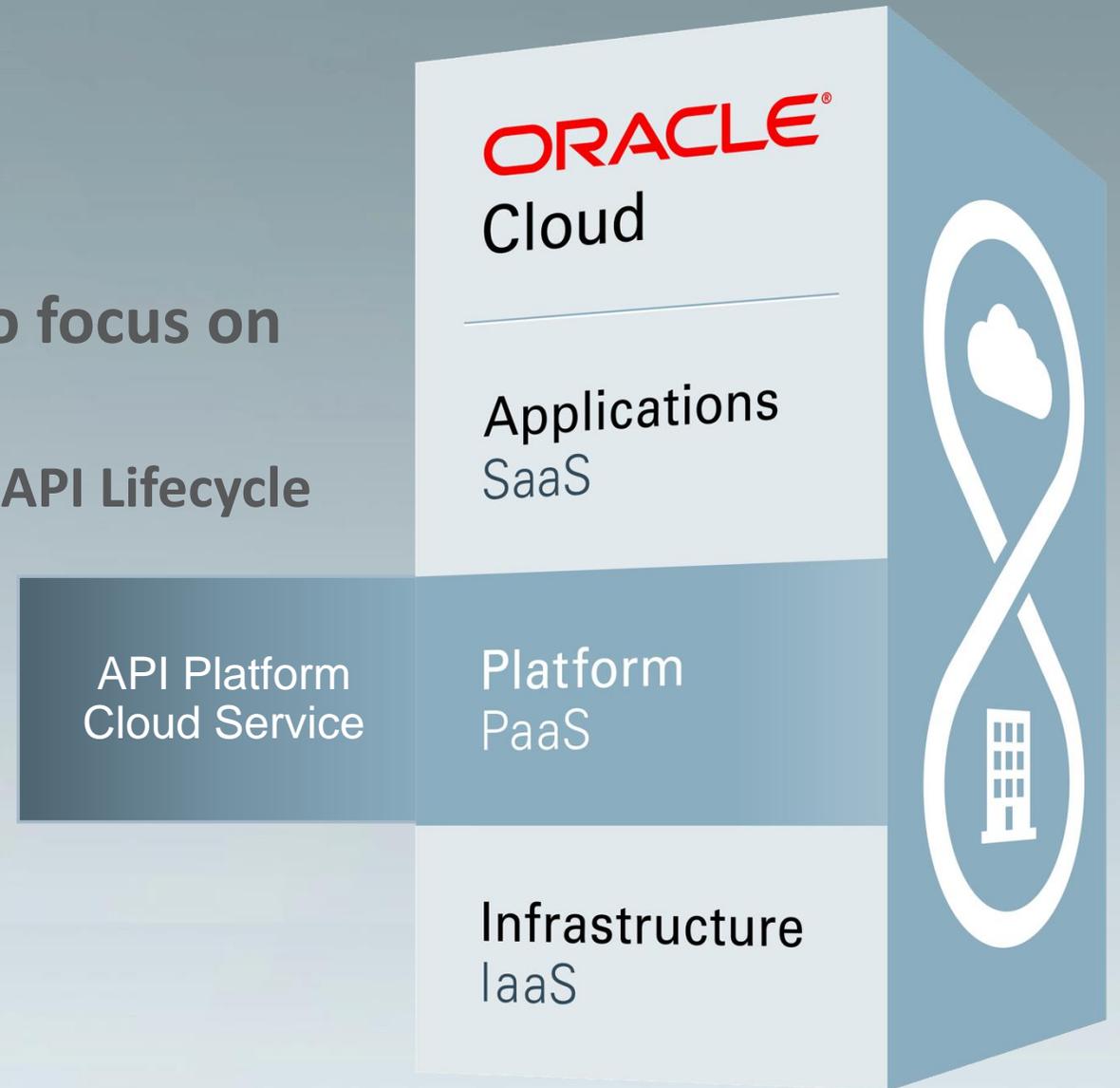


THE ORACLE SOLUTION

Building Great APIs

Complete Lifecycle

- For **teams who build APIs and want to focus on delivering great products**
 - Only solution that **supports the complete API Lifecycle**
 - Allows developers, architects and business to **work together**
 - **Superior to traditional API Management tools** that take too much effort to stitch together and maintain



ORACLE®



apiary

270,000+ API Developers

3M+ API Consumers

API Platform Cloud Service

Next-gen, hybrid architecture

- End-to-end capabilities to

Design.

Build.

Secure.

Deploy.

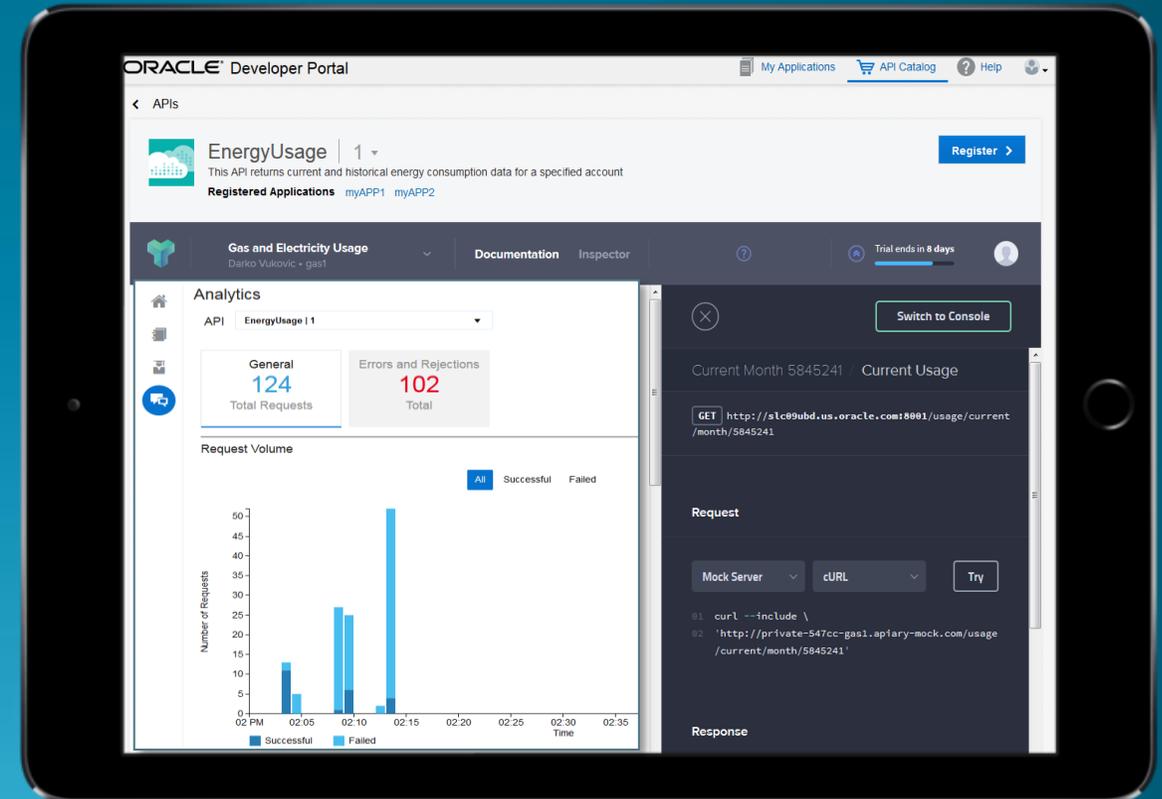
Publish.

Consume.

Monitor.

Easy to use

- Completely new, simplified API management experience
- Support changing business demands
- Clear visibility into who is using APIs
- Operational flexibility – gateways can be deployed in the Cloud or on-premises



Oracle Apiary, a Perfect Starting Point

APIARY TOOLS

APIARY Editor

Interactive Documentation

Mock Server

API Inspector

GitHub Sync

GitHub Integration

Automated Testing

Apiary CLI

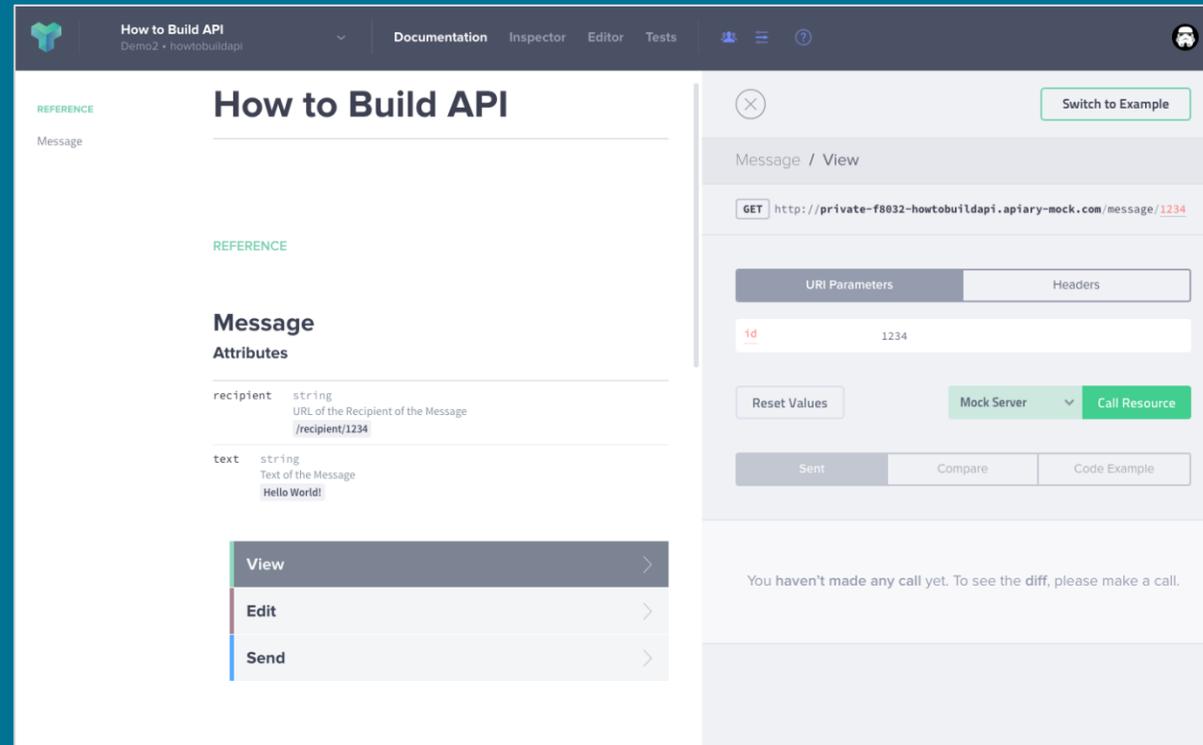
GitHub Enterprise (GHE)
Integration

Integrated Code Examples

Embed Documentation

API Style Guide

Troubleshooting GitHub Sync
and Integration



272,634
HEROES

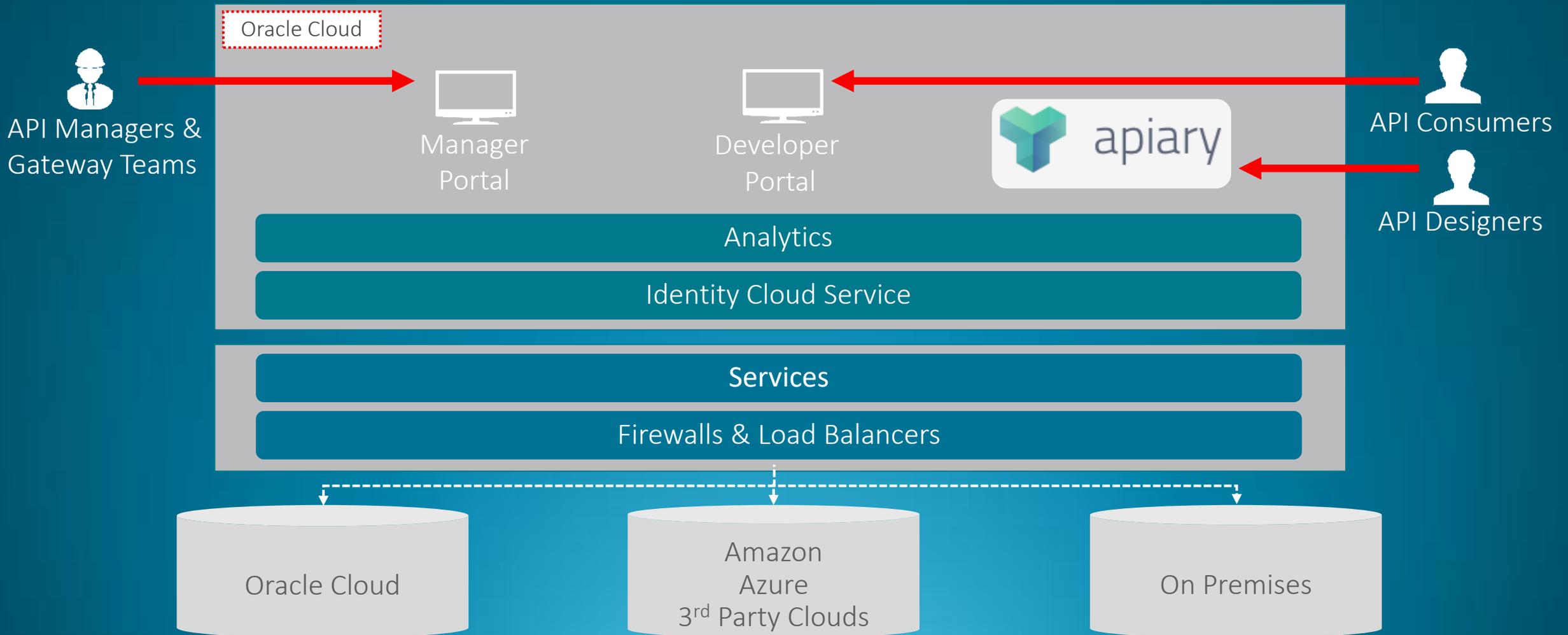
ARE WORKING ON

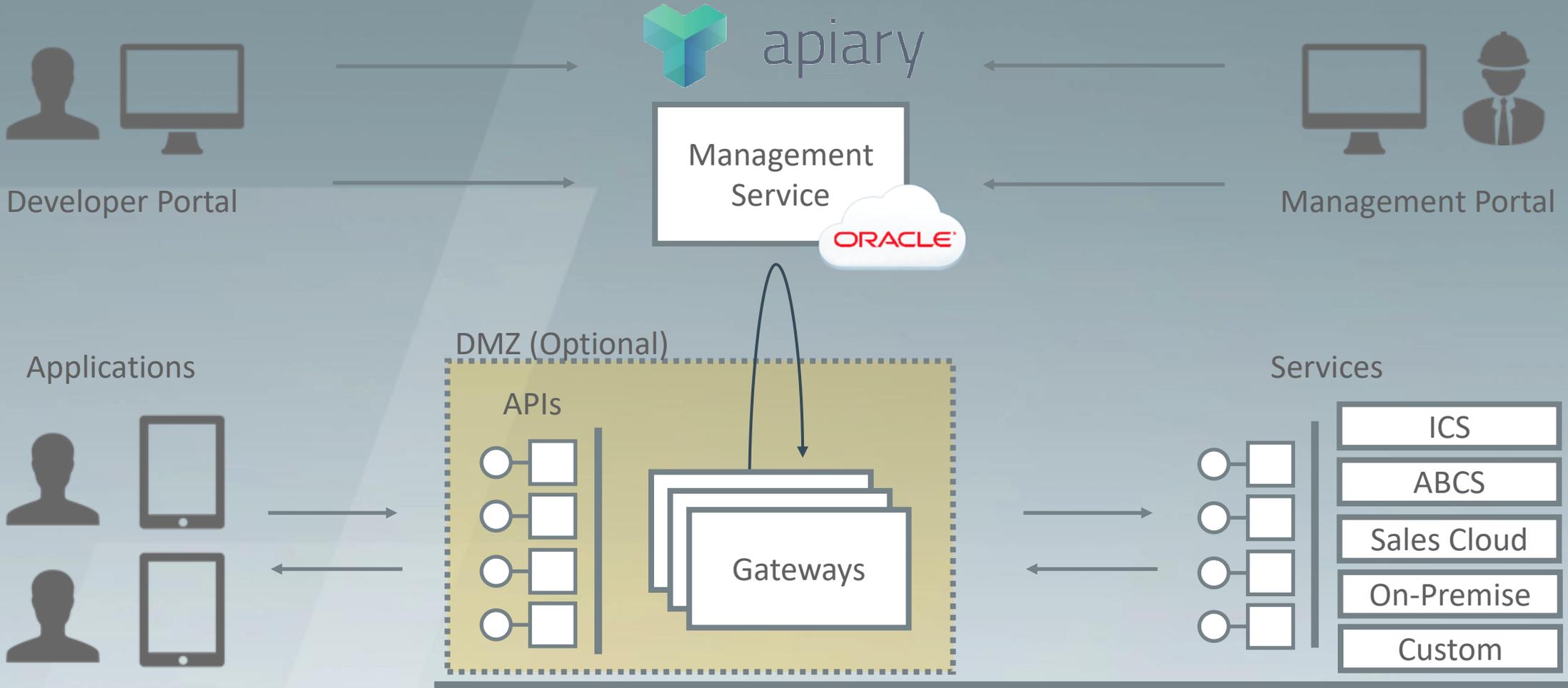
365,901
APIS

BEING CONSUMED BY

3M+
DEVELOPERS

API Platform Cloud Service





Cloud or On-Premise



Oracle Apiary Customer Success

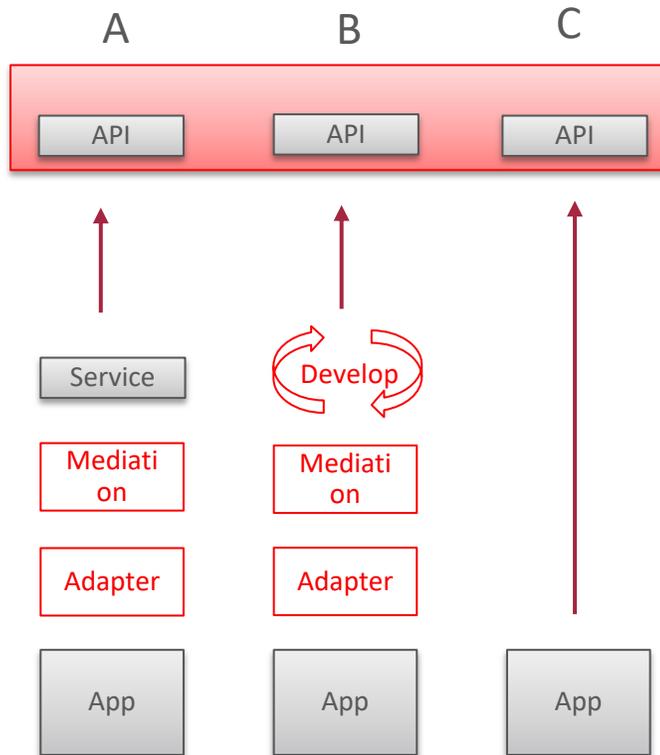


A man with glasses and a denim shirt is gesturing while talking to a woman in a yellow top. They are sitting at a table with several documents, a coffee cup, and a tablet. The background is a bright office setting.

SCENARIO OF DEMONSTRATION

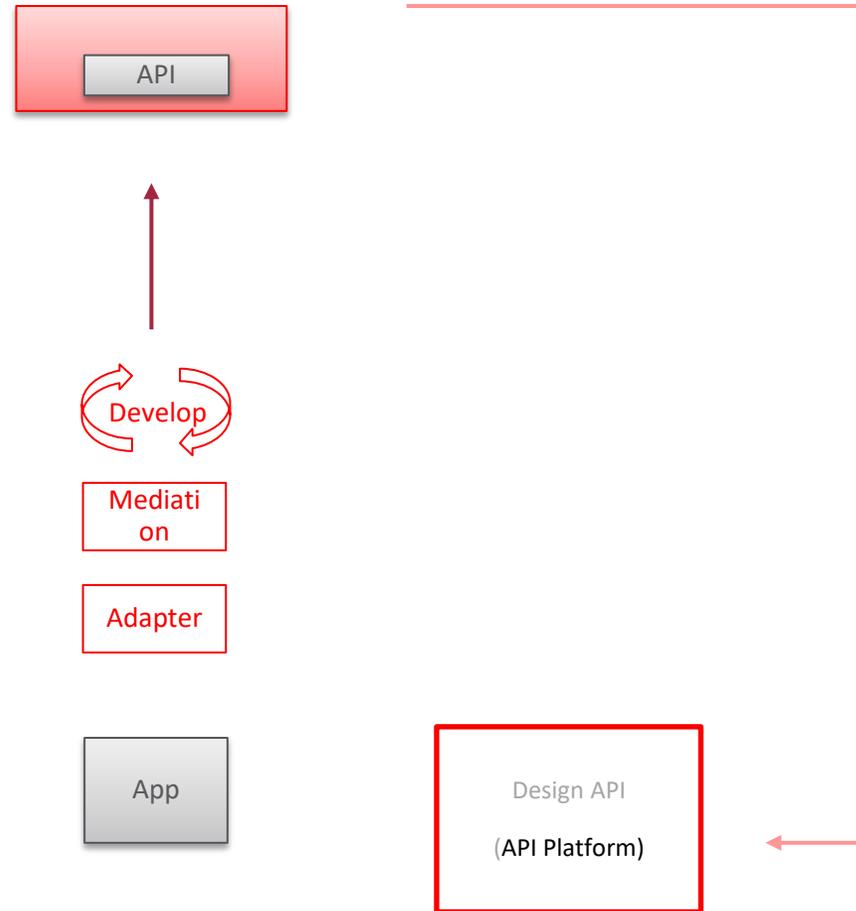
DESIGN FIRST, IMPLEMENT AND EXPOSE SERVICE

Options In Exposing Externally



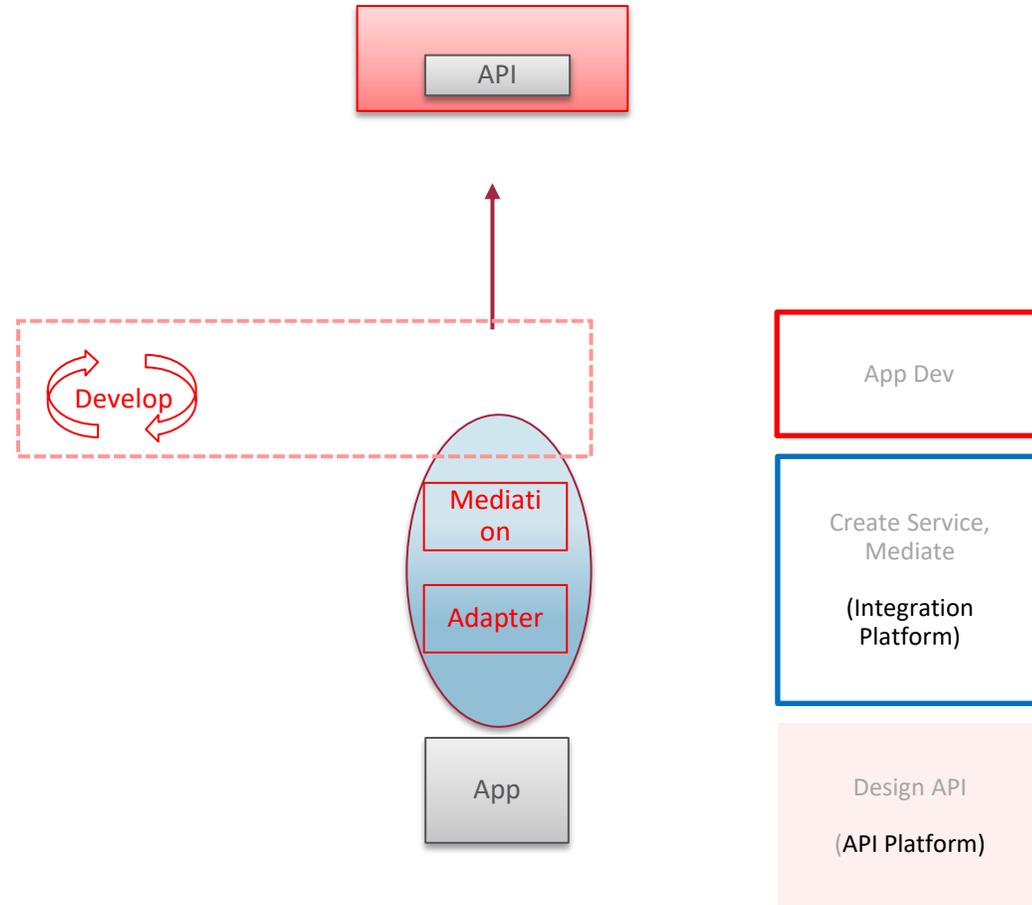
Options In Exposing Externally

B



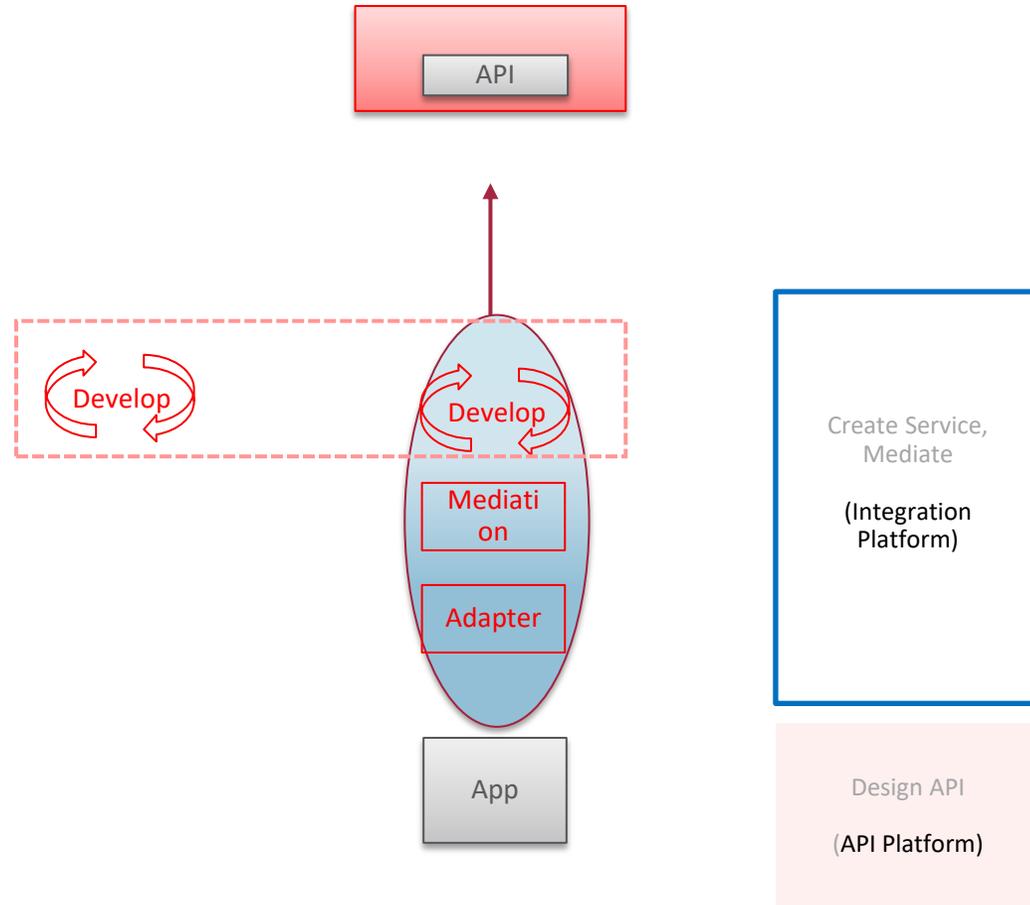
Options In Exposing Externally

B



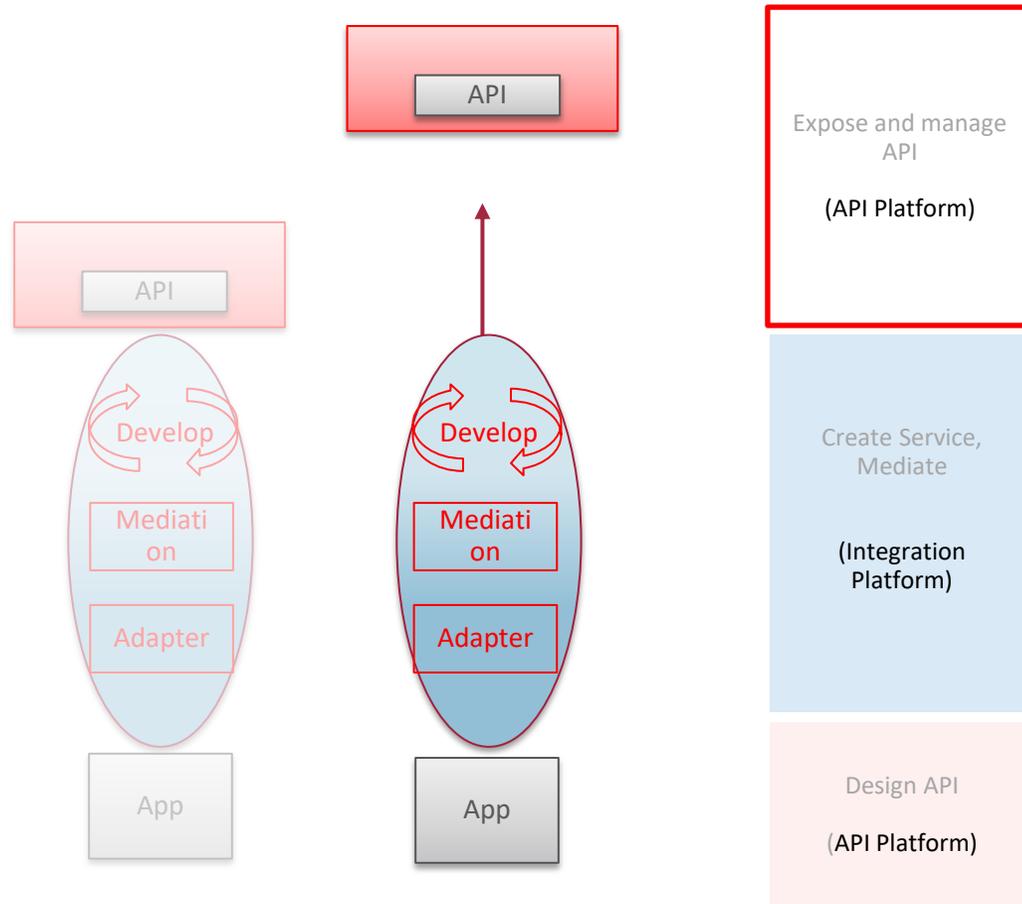
Options In Exposing Externally

B



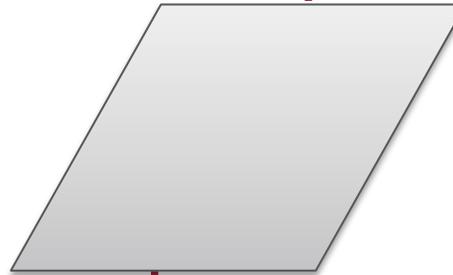
Options In Exposing Externally

B



"orgName":
"contactFirstName":
"contactLastName":
"contactEmail":
"country":

REST (Request
header / Input)



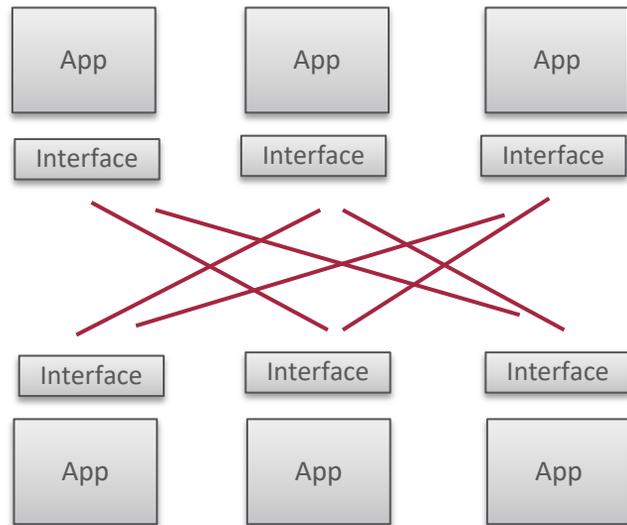
REST(Response
header /
Output)

"orgID":
"status":

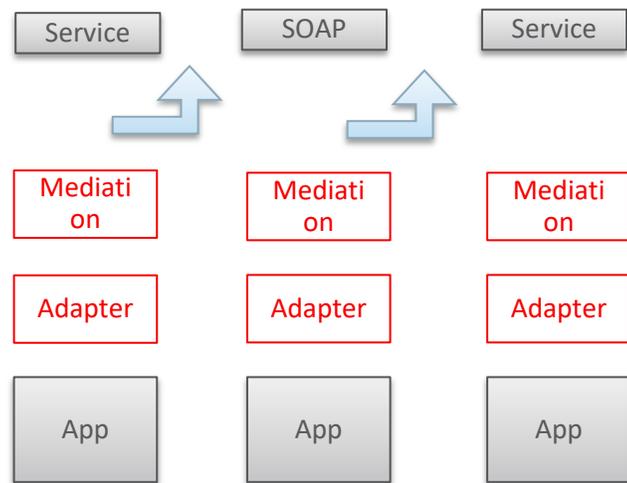
DEMONSTRATION :

DESIGNING & DOCUMENTING APIS, APIARY
INTERACTIVE DOCUMENTATION, APIARY MOCK SERVER

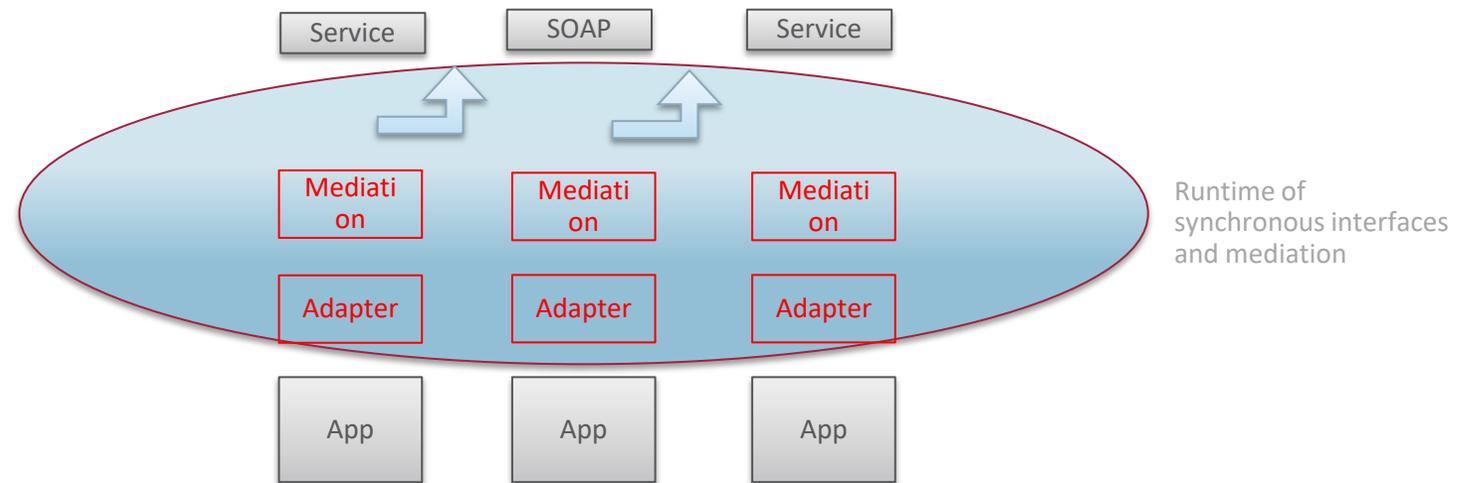
Stage - Point To Point Integrations



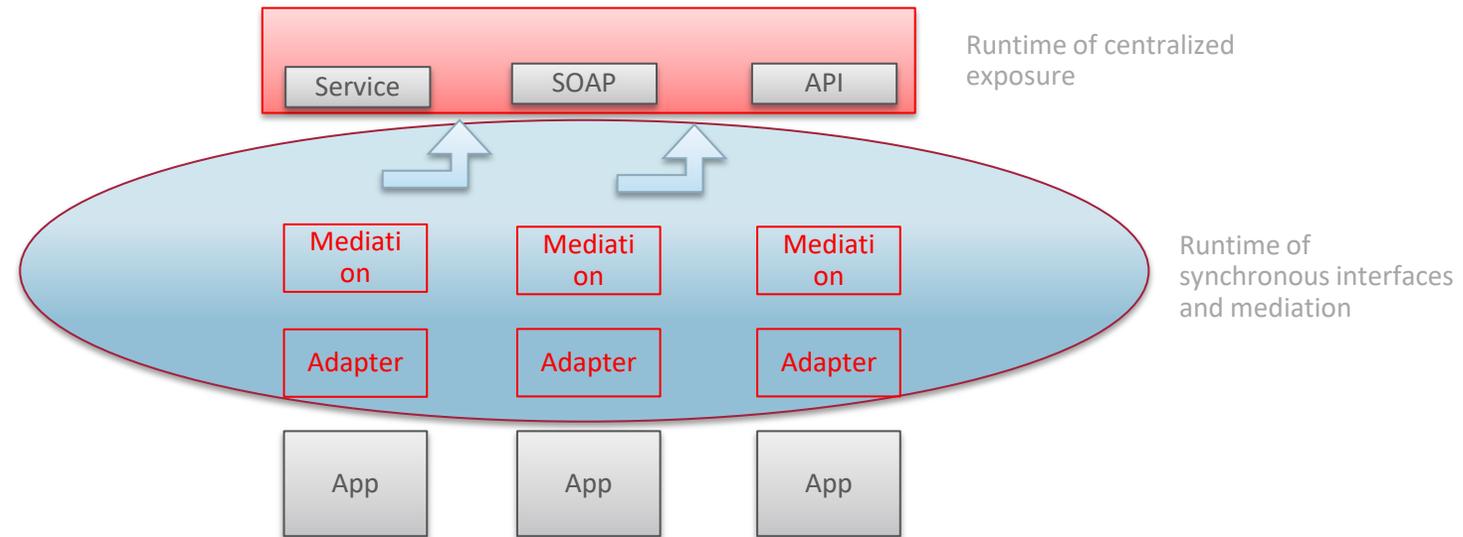
Stage - Service Buses



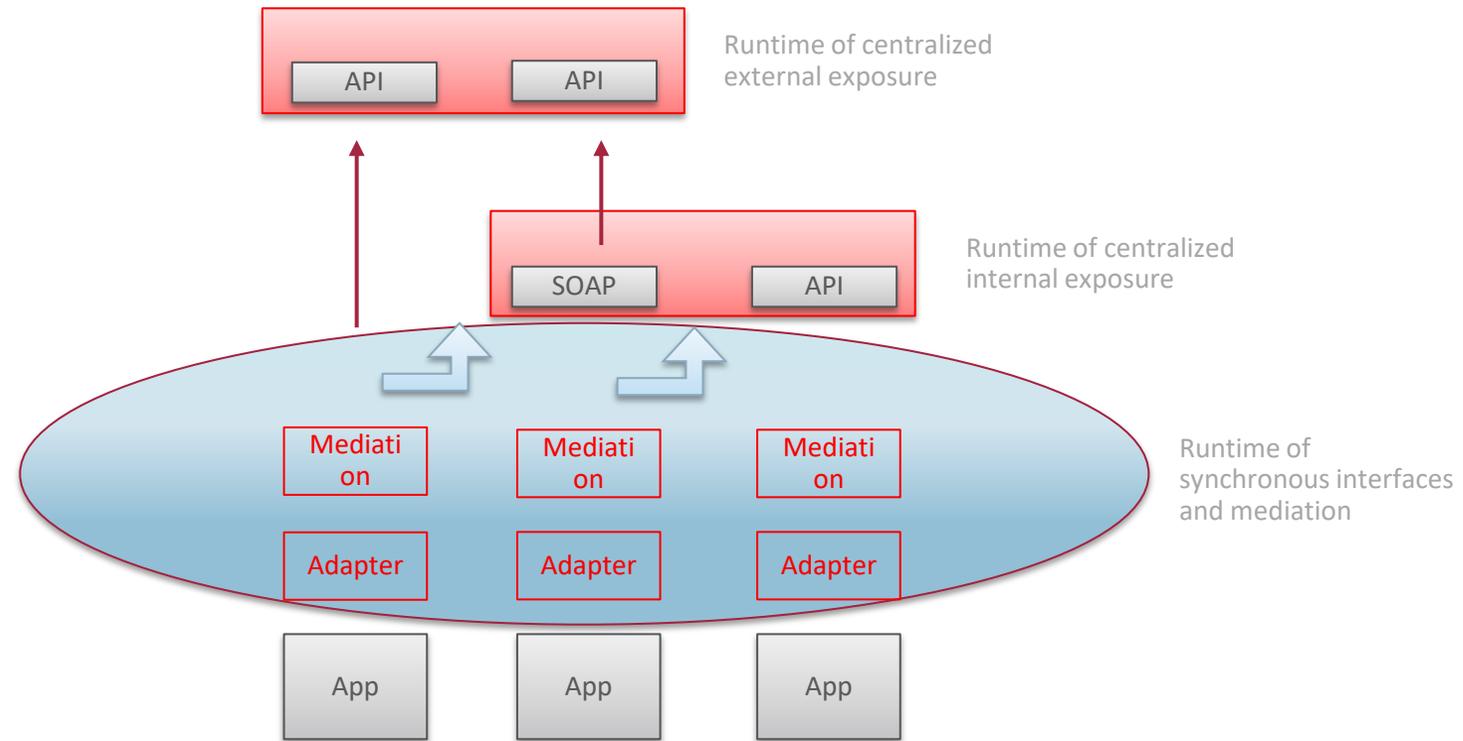
Stage - Service Buses



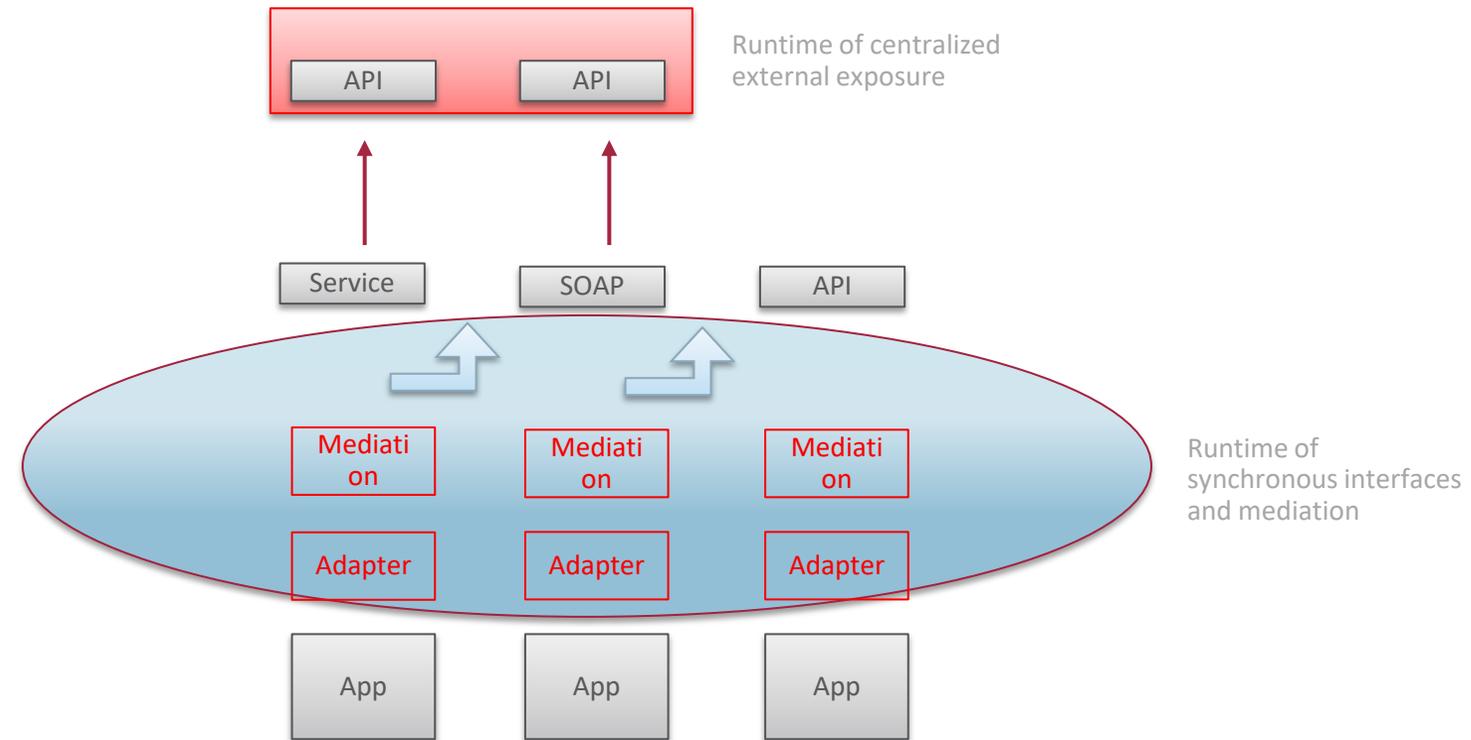
Stage - Gateways



API Gateways



API Gateways



DEMONSTRATION :

CREATE API, DEPLOY API, MANAGE POLICIES, API
ANALYTICS

Governance With API Management

Runtime (policy) governance

Policy enforcement and metering
and security access control

API lifecycle management governance

Governs the interface's life-
cycle (stakeholders,
feedback in every phase),
not the implementation

API design time governance

Defining interface standards, to aid in
the creation of consistent, well-
formed APIs.

Operations management governance

*Capacity and Availability
Management,*
Root cause and Impact Analysis
- Track transactions from the
API where they enter your
business to the back end. *End-
to-end Security* – Use the
appropriate security models
and standards for services and
APIs even if they are different.

DEMONSTRATION :

PUBLISH API AT THE DEVELOPER PORTAL

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