OpenShift 4.x Architecture Workshop

Digital Transformation with API's

July 2019

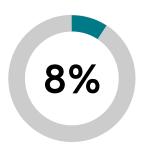


MORE SOFTWARE: INCREASING DIGITAL TOUCHPOINTS

MORE INDEPENDENTLY DEVELOPED, SILOED, CUSTOMER FACING APPS



have 10 or more digital touchpoints



have **100** or more digital touchpoints



API Management Needs



APIs ARE...

- Mission critical to every business (or soon every business)
- Customers and partners depend on it
- Fundamental to company agility and competitiveness
- Web and mobile depend on APIs



APIS ARE FUNDAMENTALLY HARD TO DO

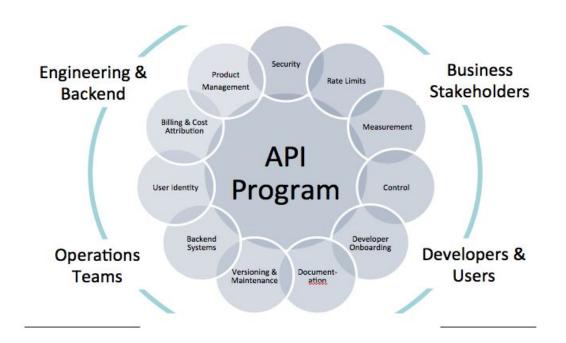
- Business results challenges (key metrics, onboarding audience, support, docs, policies, business model)
- Technical challenges (design, performance, ...)
- Operations challenges (uptime, versions, security, alerts, analytics, rate limits)



What problem do we solve?

ASPECTS OF AN API PROGRAM

Good <u>API development</u> and <u>API management</u> Technology allows customer to focus on business goals and policies





Why Red Hat for API's?



AGILE IN INTEGRATION

Make your platform—not just your software—agile

Agile integration

The application of the agile methods and practices for the purpose of integrating systems, using platforms specially suited for the principles both of agile software development and for productive integration.

Integrating services, apps, APIs and data in an agile way is a solid foundation for competitive advantage



KEY CAPABILITY OF AGILE INTEGRATION APPROACH

Key foundational capabilities for modern software infrastructure

DISTRIBUTED INTEGRATION -Lightweight -Pattern-based -Event-oriented -Community-sourced **FLEXIBILITY**

CONTAINERS

- Cloud-native solutions -Lean artifacts, individually deployable - Container-based scaling and high availability

SCALABILITY

Tools and processes

APIs

-Well-defined, reusable, and well-managed endpoints -Ecosystem leverage

RE-USABILITY



RED HAT 3SCALE API MANAGEMENT

Key capabilities

Control

- Security
- Key management
- Rate limiting
- Policy enforcement
- App and user management
- Provisioning

Visibility

- Analytics
- App tracking
- User tracking
- Traffic alerts
- Engagement
- Developer support

Flexibility

- Distributed
- Multi-department
- Multi-environment
- Highly scalable
- Powerful APIs
- Webhooks



KEY DIFFERENTIATORS

1. **Flexibility/scalability:** Hybrid architecture, separation of policy management from control nodes, highly scalable

2. Quick time to value: Up and running quickly using the SaaS product

3. **Automation:** APIs, code management for configuration, ready for

Ansible/Puppet/Chef, integration coming with

OpenShift

4. **Cost-effective:** Significantly cheaper, in general, than competitors for

equivalent volumes



AWARD WINNING INNOVATION

- Leader in Gartner Magic Quadrant for Full Lifecycle API Management (2016)
- □ CODiE 2017, 2018 SIIA award: Best API Management Platform
- 2017 API World award: Best API Management Platform







Feature Overview



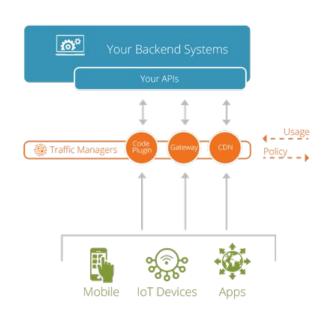
Flexible distributed control

Modular

No single point of failure

Hybrid cloud access

Highly scalable







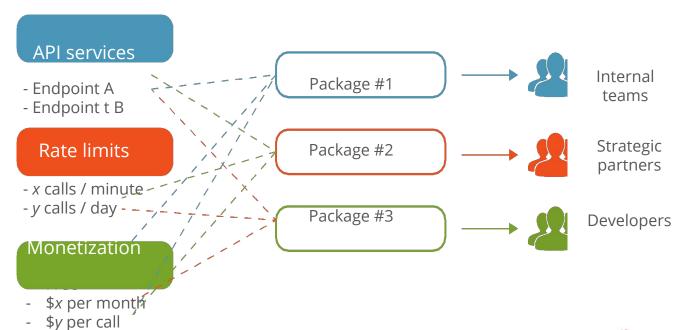




API contracts and rate limits

Package your APIs. Create access tiers. Set rate limits.

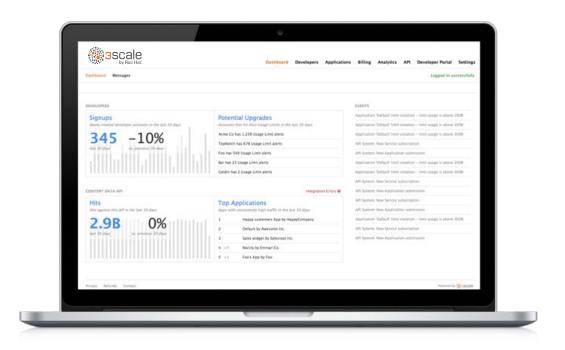
Allow/restrict access to your API endpoints along with rate limits.





Analytics and reporting

Track and monitor usage. Get reports by API, app, method, and metric.





Developer and partner portal

Your brand. Your user experience. Your user interface.











3 Scale Applied



COMMON BUSINESS USE CASES / DRIVERS

Essential conversation to focus on what is driving the customer

initiatives and interest



Mobile and IOT support















CHALLENGE:

- To provide an outstanding customer journey by creating a smart airport experience and facilitating third-party development of mobile apps
- To improve internal and external partner operations and more effectively share data with stakeholders
- To provide accurate, high quality airport information, such as flight or bag info, from data owned by Schiphol and integrated third parties

Schiphol improves the airport passenger experience with Red Hat® JBoss® Fuse and Red Hat 3scale API Management

SOLUTION:

Schiphol chose Red Hat 3scale API Management because the technical integration was frictionless, allowing them to realize the benefits of the industry's most flexible, scalable, and future-growth-oriented platform for both technical and business operations functionality.

RESULTS:

- Improved overall travel experience of customers by use of third-party-developed mobile apps
- Made it easier for partners to customize and extend existing data assets
- Now able to provide comprehensive, high-quality airport information for integration with third parties

66 We want to support the traveler as well as possible with personal and relevant information about the airport. Our API platform and data sharing with APIs is a key element in our best airport digital strategy.

- GARBIS VAN OKBURCHT

I.T. MANAGER, AIRPORT OPERATION SERVICES, AMSTERDAM AIRPORT SCHIPHOL



Learn more

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Thank you!

