

Disrupting in the Digital Economy with an API Strategy

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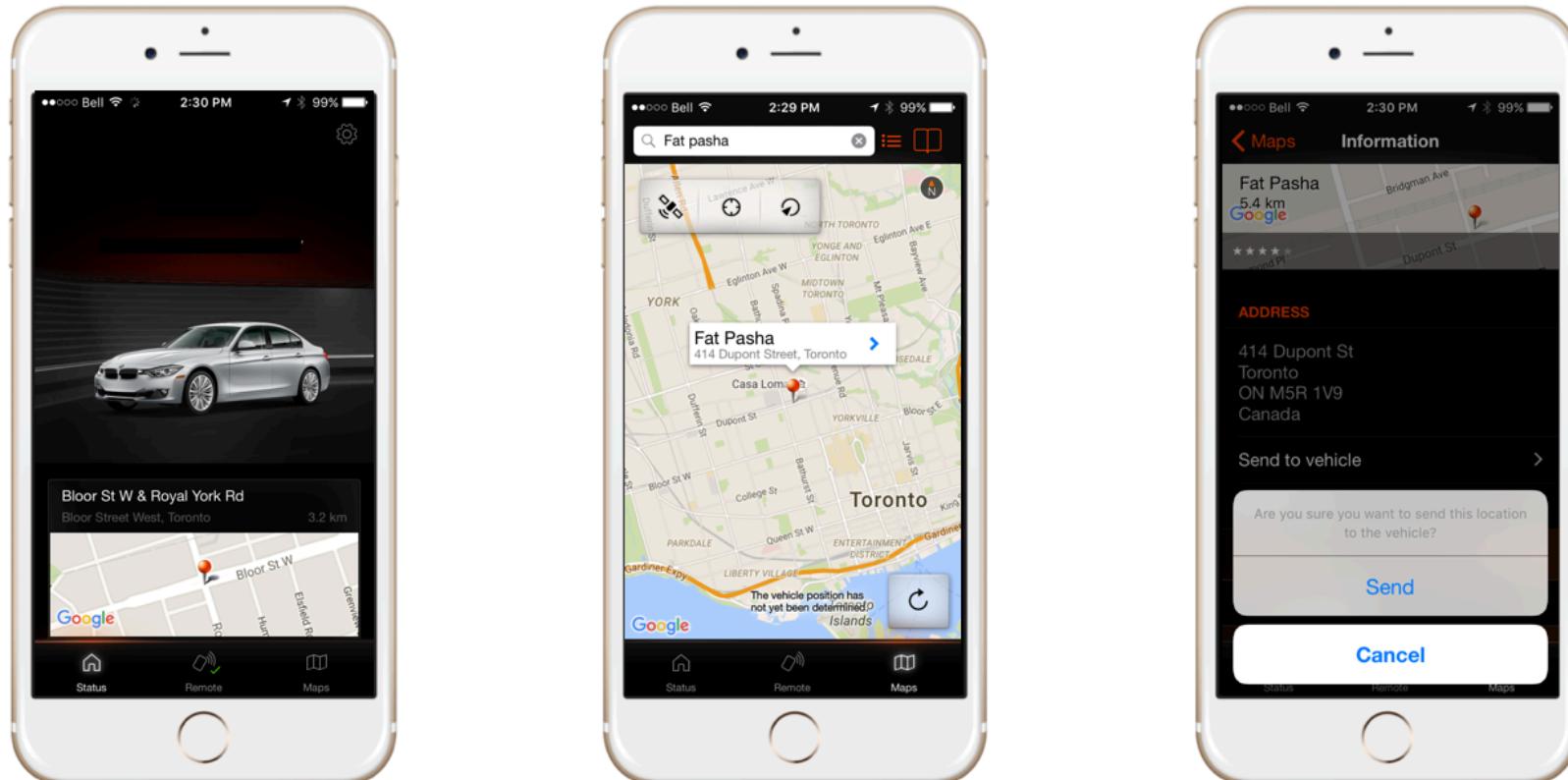
Going to Dinner at a New Restaurant

- How to get there?

- What to order?

- Where to park?

The API Economy in your Daily Life: Real Today



The API Economy in your Daily Life: Possibilities

What if:

Restaurant exposed their menu via an API:

City exposes Green P Parking API

Insurance vendor integrates with Weather Co & Auto Maker APIs

Auto maker integrates with home security API

Auto maker integrates with Grocery API

TV provider exposes programming guide API

The app could:

Pre-order appetizer & provide car's geo location to ensure appetizer arrives as guest does

Reserve a parking spot while driving to the restaurant within the car's mobile app

Reduce available horsepower to car based on weather (and age of driver)

Turn on security cameras when car has left the garage

Determines you will be driving past Grocer on way home and you need milk. Sends order to store for pickup.

Automatically record the Raptors game as the user won't be home in time for tipoff based on geo location of the car

Capturing Benefits in the API Economy

Delightful
Experience



Direct
Revenue

FAR PASHA



Loblaw's

Indirect
Revenue

Bell

Google

nest™

Auto
Vendor

Public API Examples –Travel and Transportation

Yahoo Traffic API	enable you to get traffic alert information from a given location. Use the Traffic REST API to customize your request with many parameters including indicating locations based on city state, zip code, or a combination of any of these things, latitude-longitude, whether to include a map image, or a search radius in miles.
Fleet Manager Open API	vehicle location, performance, and engine diagnostic data is now available to third-party systems via an Application Programming Interface (API) that functions as a web service. This Open API enables managers, resource planners, maintenance technicians to use the data from within Fleet Manager to enhance their operations in a wide variety of ways. This API is related to vehicle fleet management. The data consists of a mix of landmark, performance, and alert data. The alerts are generated by vehicle locations (landmarks), by operating conditions (speed, idle time, rapid acceleration, and many others), vehicle maintenance schedules, and unauthorized use.
Via Michelin	provides users with access to high quality maps, car and pedestrian itineraries, proximity and integrated booking search engine.
Concur	provides online tools for business organizations to manage travel and expense reporting and reimbursement. Integrated travel booking functions combine with expense reporting within a single platform. The API allows integration with applications of customer companies, partner service providers, or independent third-party developers including mobile app developers.
TripAdvisor Content API	featuring reviews and advice on hotels, resorts, flights, vacation rentals, vacation packages, travel guides, and more. TripAdvisor's Content API allows access to business information on travel destinations.

Check All That Apply

~100%

of high tech enterprises
consume APIs

48%

of Gen Digital enterprises offer
their own APIs to the market

<10%

of high tech enterprises worldwide
have a formal API strategy

Digital Transformation Demands a New Architecture



Sampling of Clients who have Publicly Shared Success Stories with IBM



SBERBANK



Telefónica

oBoticário

 **BlueCross
BlueShield**
Minnesota

 **Spark**

 **dealertrack technologies**

 **M2M Technologies Inc**
Open Network for Everyone

 **KAI SER PERMANENTE®**

Analysts Update:

FOR APPLICATION DEVELOPMENT & DELIVERY PROFESSIONALS

The API Management Solutions Market Heats Up

New Players Enter And Established Suppliers Advance A Fast-Evolving Market

September 22, 2015
By [Randy Heffner](#) with [Christopher Mines](#), Derek Nahabedian, Tyler Thurston
104 downloads

FORRESTER®

"IBM is moving faster than others to enhance its solution's capabilities. Among the vendors in the Q3 2014 Wave evaluation, IBM has made the broadest and deepest improvements to its solution."

Full report available on Forrester website at:
<https://www.forrester.com/The+API+Management+Solutions+Market+Heats+Up/fulltext/-/E-res128003>

New Analyst Reviews of API Management market coming in Sept & Oct 2016

- Gartner Full Lifecycle API Management Magic Quadrant → Sept 2016
- Forrester API Management & API Gateways Wave → October 2016
- Contact Forrester & Gartner analysts directly prior to new report for latest point of view on IBM API Connect

An API strategy to...

1

Speed application development

Via self service library of reusable APIs



2

Securely expose systems of record

Apps and data to
Mobile, IoT, &
hybrid cloud apps



3

Publish APIs to expand brand reach

Tap into developer & partner ecosystems



4

Enable new business

Monetize existing and new data & algorithms



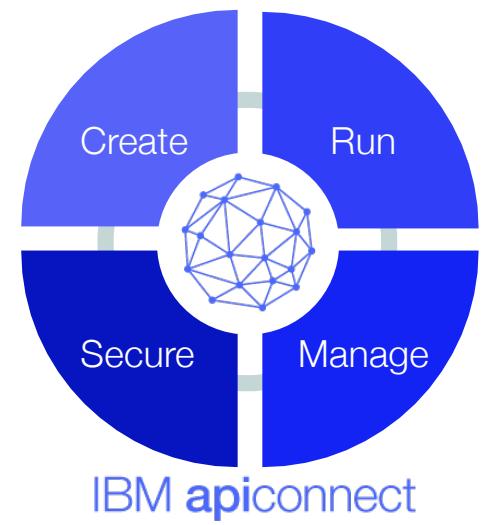
IBM API Connect: Simplified & Comprehensive API foundation

What is API Connect?

An integrated creation, runtime, management, and security foundation for enterprise grade API's and Microservices to power modern digital applications

What does API Connect provide?

- Automated, visual and coding options for creating APIs
- Automated discovery of system of record APIs
- Node.js and Java support for creating Microservices
- Integrated enterprise grade clustering, management and security for Node.js and Java
- Lifecycle and governance for APIs, Products and Plans
- Access control over API's, API Plans and API Products
- Advanced API usage analytics
- Customizable, self service developer portal for publishing APIs
- Policy enforcement, security and control



System & Interaction APIs

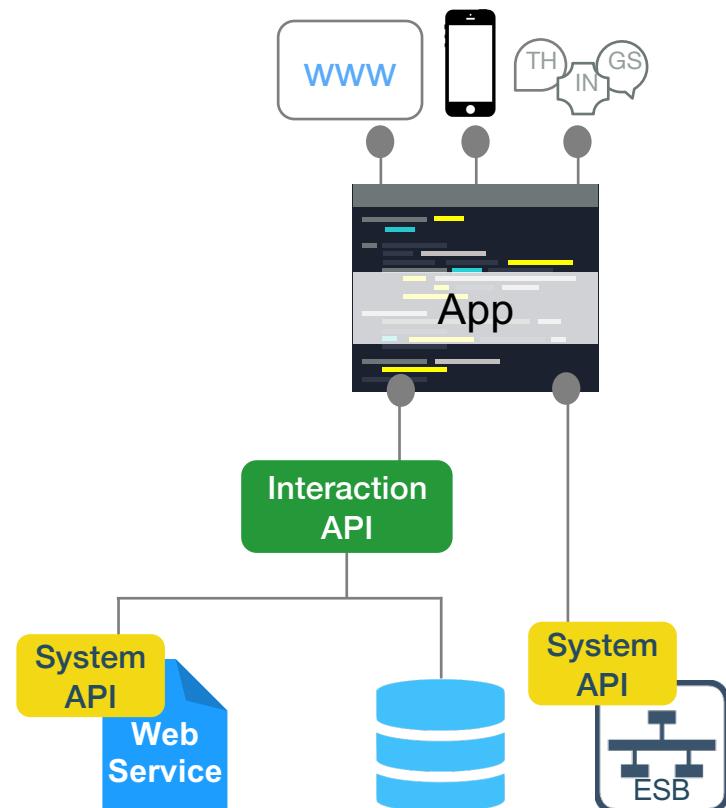
System APIs:

APIs that pass through data from a system of record unchanged

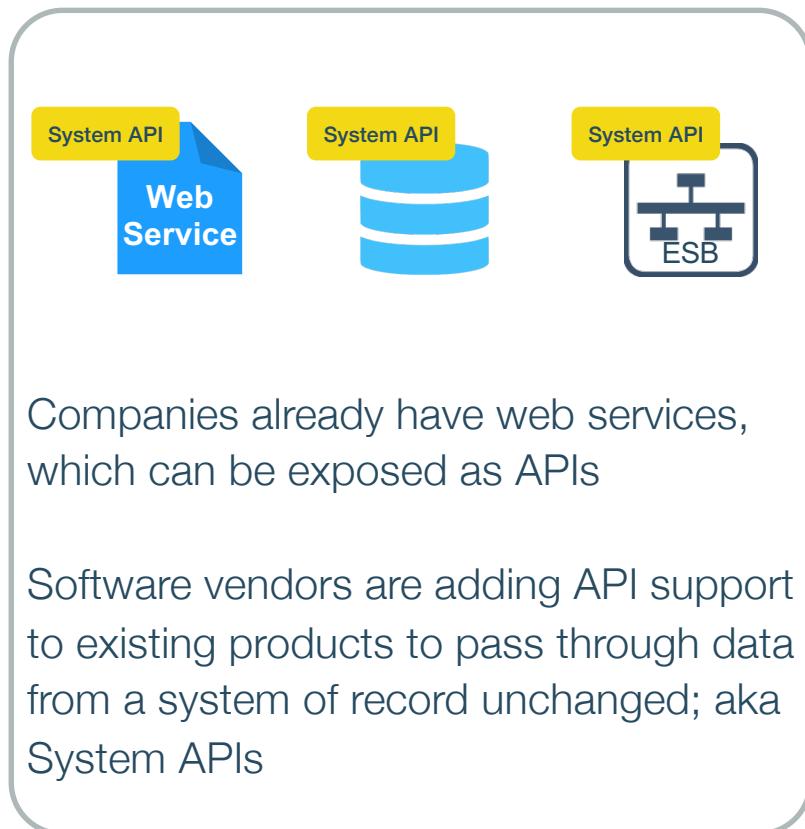
Interaction APIs:

Invoke one or more System API's or data sources, and manipulate the returned data with new logic

Promote reuse across new applications



Already Have APIs?



Vs.



Why are Create & Run Important?

Digital Business Relies on Enterprise Grade APIs

Interaction APIs must be Created & Run

Existing & System APIs are invoked & their results manipulated to create new reusable Interaction APIs

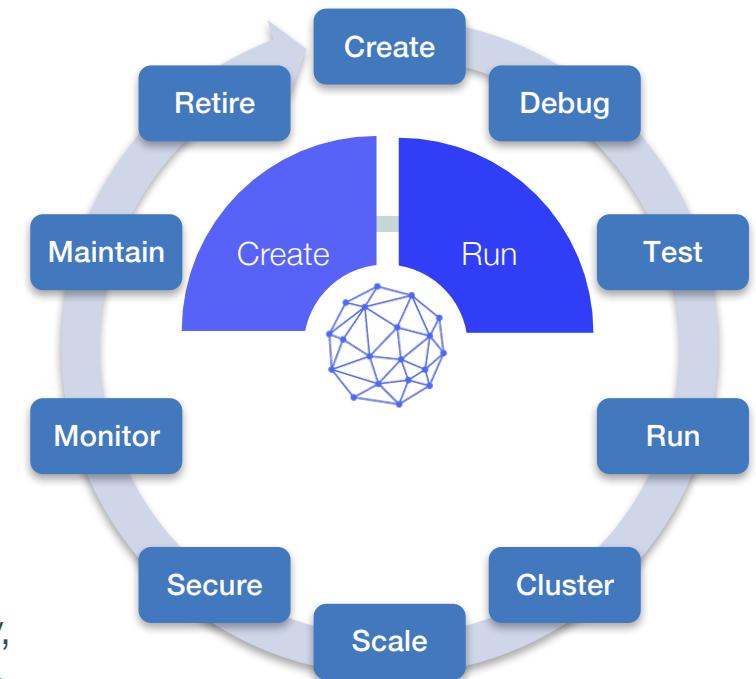
APIs are (small) Applications with

Similar lifecycles:

Creating a new API requires the same iterative process as creating a modern app

Different scale needs:

APIs face web scale demands of the Digital economy, with millions of requests per month; A proven runtime approach is needed to meet these demands

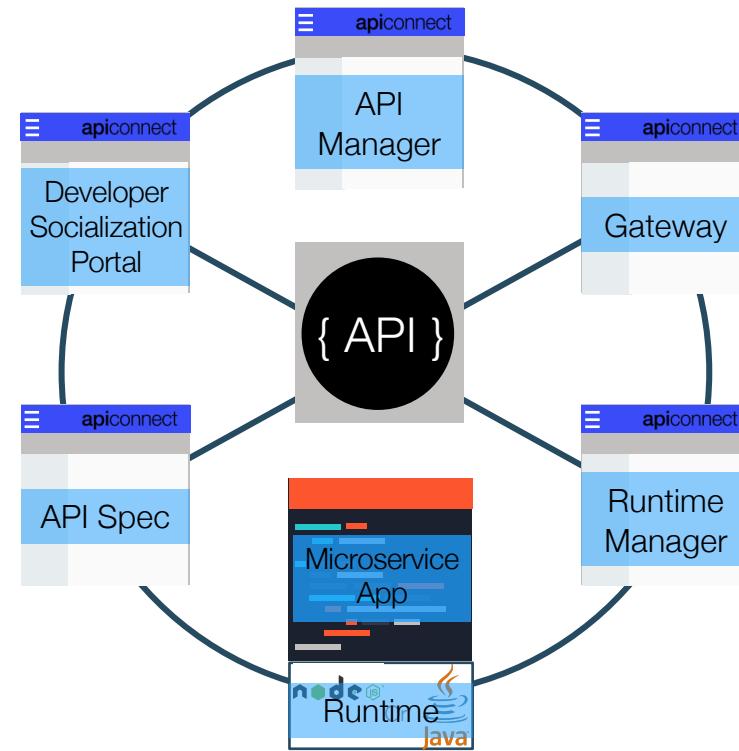


API Connect: An Integrated Experience across the API Lifecycle

All components are integrated and aware of each other; Changes in one stage of the API lifecycle are automatically reflected in other components of API Connect

Deploy, monitor & scale components together for optimal performance

Unified user experience across the API lifecycle

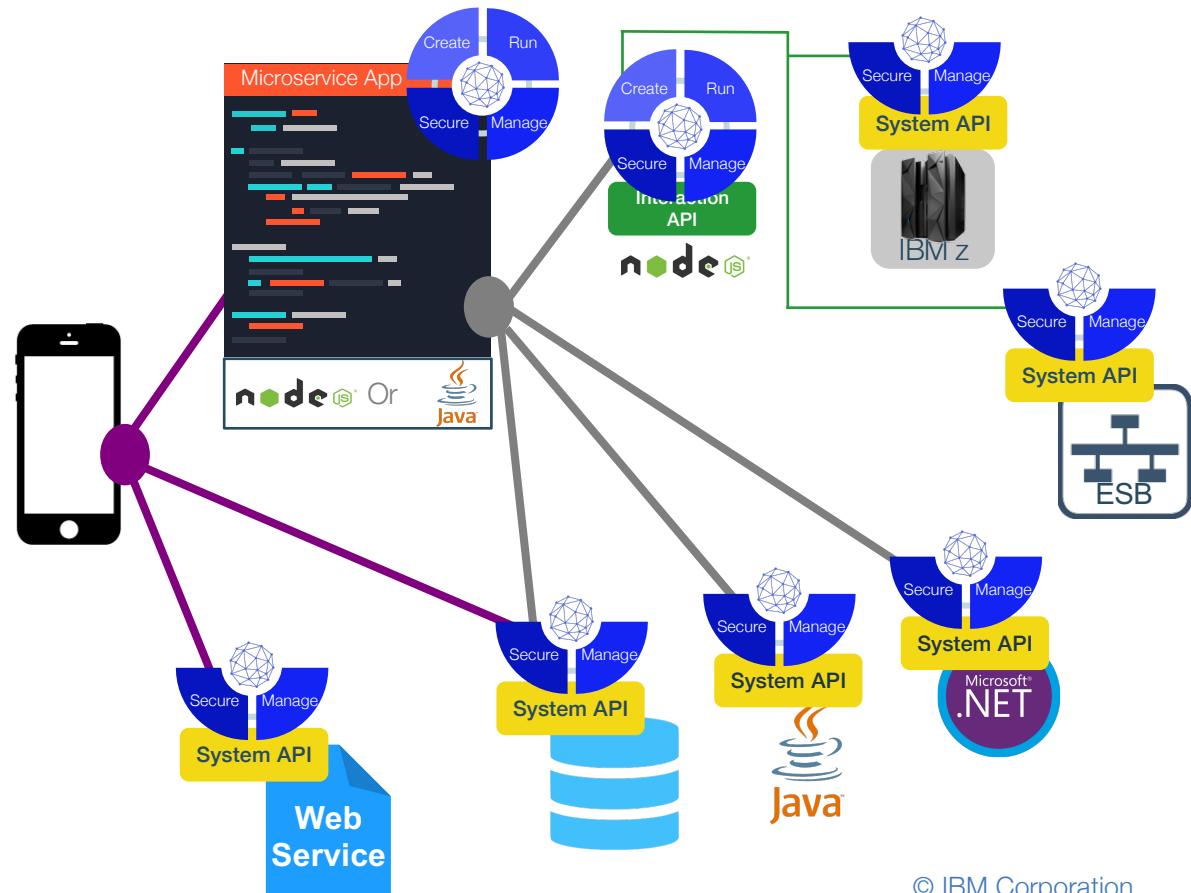


API Connect Powers Digital Applications

Manage and Secure existing or System APIs, regardless of back end language or technology

Create, Run, Manage and Secure new Interaction APIs

Create, Run, Manage and Secure new Microservices in Node.js or Java



API Connect: Grows with your Business Needs

Enterprise

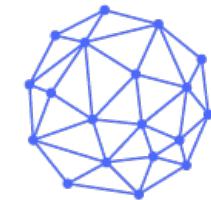
For cross-organization projects

Professional

For initial API projects

Essentials

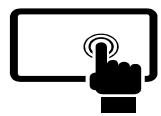
Free for developers



IBM apiconnect



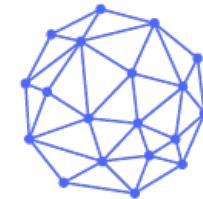
API Connect: Flexible licensing and deployment



Deployment

Deploy where it's most convenient for you

- Deploy on IBM Bluemix
- Deploy to 3rd party clouds
- Deploy on-premises



Licensing

Pay only for what you need

- Subscription (API calls/month)
- Perpetual (per PVU, unlimited API calls)

IBM apiconnect

Number of APIs & API Products	Unlimited
Number of API Application Developers	Unlimited
Cloud infrastructure on IBM Cloud	Included
Data transfer on IBM Cloud	Included

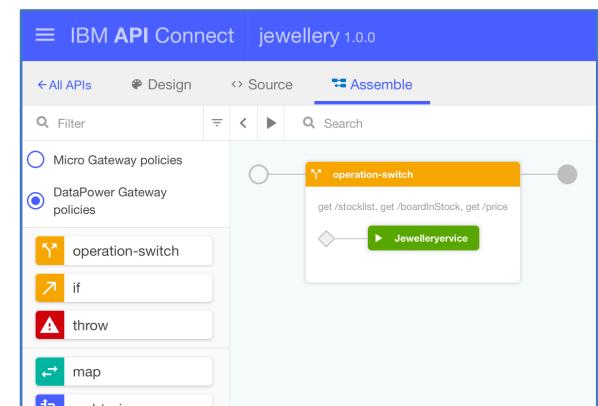
API Connect Offerings – Gateway Options

	Essentials (Free)	Professional	Enterprise
Built For	Developer	Department; Single project	Departments & Cross-enterprise
Gateways included	MicroGateway	MicroGateway	DataPower Virtual MicroGateway

- All editions of API Connect provide integration with DataPower as the API Gateway
- **API Connect Enterprise** includes DataPower Gateway Virtual Edition to provide comprehensive API Gateway security, traffic management, mediation & optimization functionality for enterprise deployments
 - Is the upgrade path for existing IBM API Management v4 clients
- **API Connect Essentials and Professional** are powered by a programmable MicroGateway that empowers developers and supports single departmental/small projects starting their API journey
 - Option to utilize DataPower Gateway to meet advanced, enterprise-grade API Gateway needs

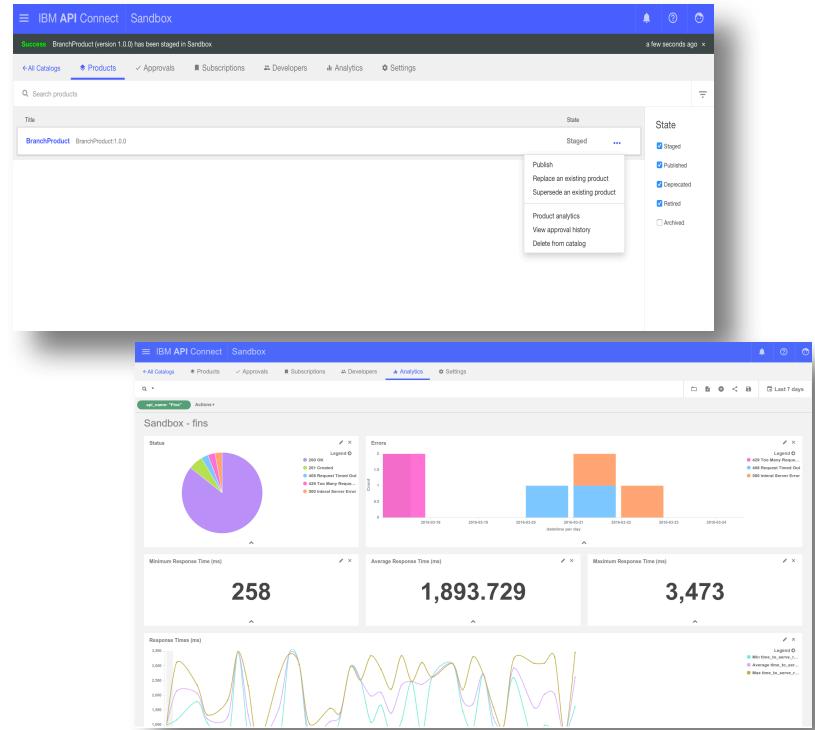
Gateway Choice with Consistency

- API Connect Gateway options address market shifts
 - Microservices apps require a programmable and lightweight gateway
 - Digital teams seek programmability and control
 - Operations teams require scale and security of enterprise API gateway
- API Connect Gateway options are designed to work together
 - MicroGateway targeted at Digital Developer use cases
 - Enterprise gateway targeted at central IT use cases
- MicroGateway Benefits from the Node.js Ecosystem
 - Easy to extend new policies via Node.js community and Node.js skills
- DataPower Virtual Software Edition
 - Included in API Connect Enterprise edition



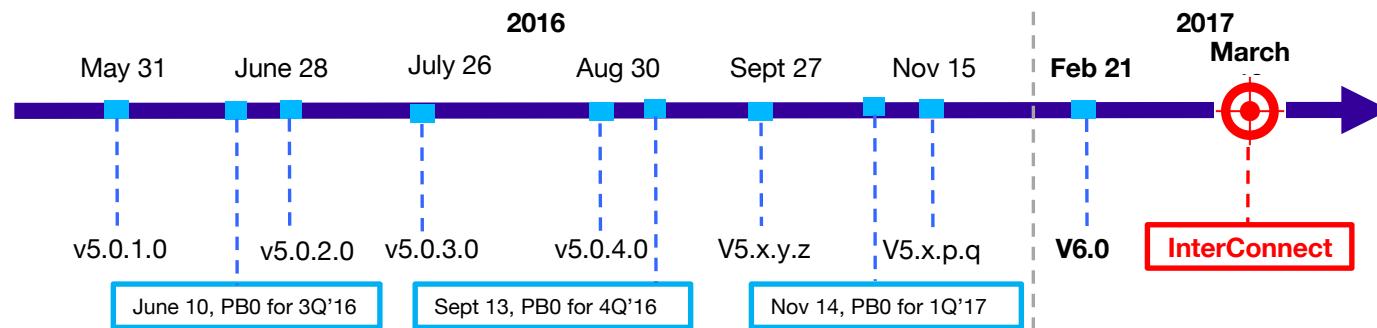
API Connect: A Unified and Modern API Platform

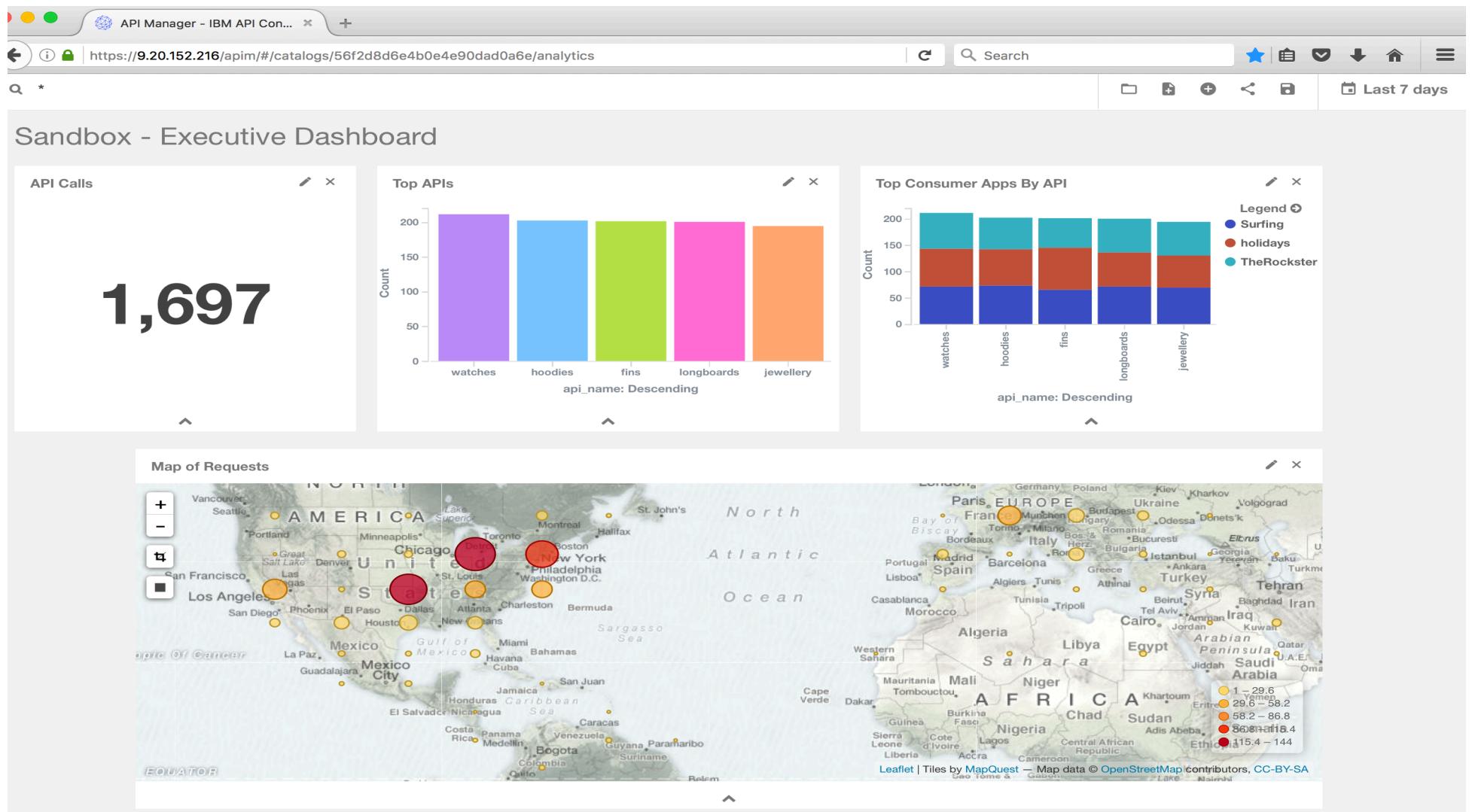
- A complete, unified and modern API platform
 - Developer Toolkit built with developer experience in mind
 - Hybrid deployment models supported out of the box; require architecture re-work for competitors
 - Support for DevOps tool chain integrations, microservices, Node.js (and soon Swift) to align with modern application architectures and practices
 - MicroGateway built for microservices use cases
 - Modern installation and maintenance approaches (self contained virtual images, Docker, NPM-based)



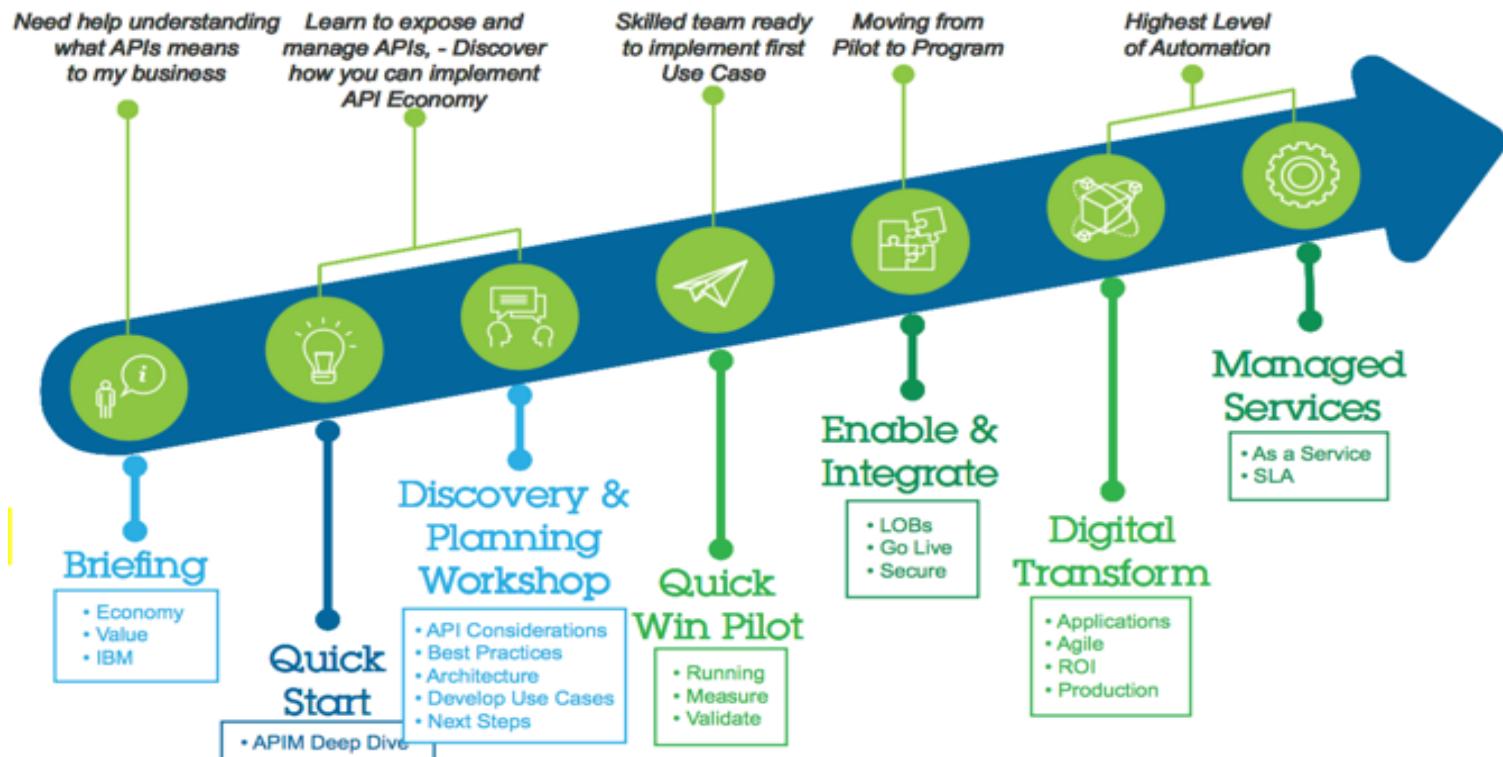
API Connect Agile Development Processes

- Playbacks and input from Sponsor Clients required before GA approval
- Potential release deliveries every 4-6 weeks
- Features not ready for planned release are added to the next release cycle





Services & Training to Ease Your API Economy Journey



Workshops and Service Engagements

<https://www-01.ibm.com/marketing/iwm/iwm/web/signup.do?source=ibm-apimanager>

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API Connect Key Differentiators

1. IBM Install Base & Ecosystem

2. Modern and Complete API platform

3. Create & Run:

- Automated creation of APIs and microservices in Node.js or Java
- Historical leadership in the Java runtime and now Node.js runtime (via StrongLoop) markets
- Unified management of Node & Java for deploying, scaling, clustering, monitoring, etc.

4. Gateway Choice with Consistency:

- Market leading gateway designed for scale & security
- Developer programmable MicroGateway built for microservices workloads

5. Integrations:

- Out of the box integrations to simplify the creation of new APIs and socialization of APIs from SoRs (i.e. SAP Hana, System z, IBM Integration Bus, Oracle DB, etc)
- Unified Connector Framework (based on StrongLoop's Loopback) across IBM Hybrid Integration Family

6. Hybrid Cloud Deployments:

- Deploy on-prem, off-prem or both together, in order to meet SLAs and budgets

7. Developer Ecosystem Investments:

- Node.js, Swift & OpenAPI community investments

8. API Economy Workshops & Services:

- Free and paid workshops, business consulting and professional services

API Connect Demo Video



<https://youtu.be/lmxyiNMER5Y>