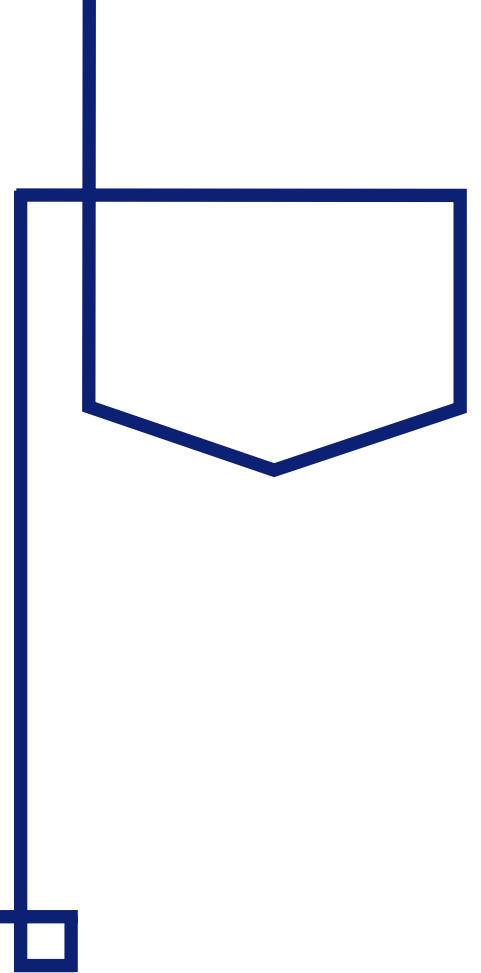


Accelerate your speed to market:

Automate your API governance

Sharad Ballepu, Director, Enterprise API Enablement
U. S. Bank

DeveloperWeek Feb. 2020





Sharad Ballepu

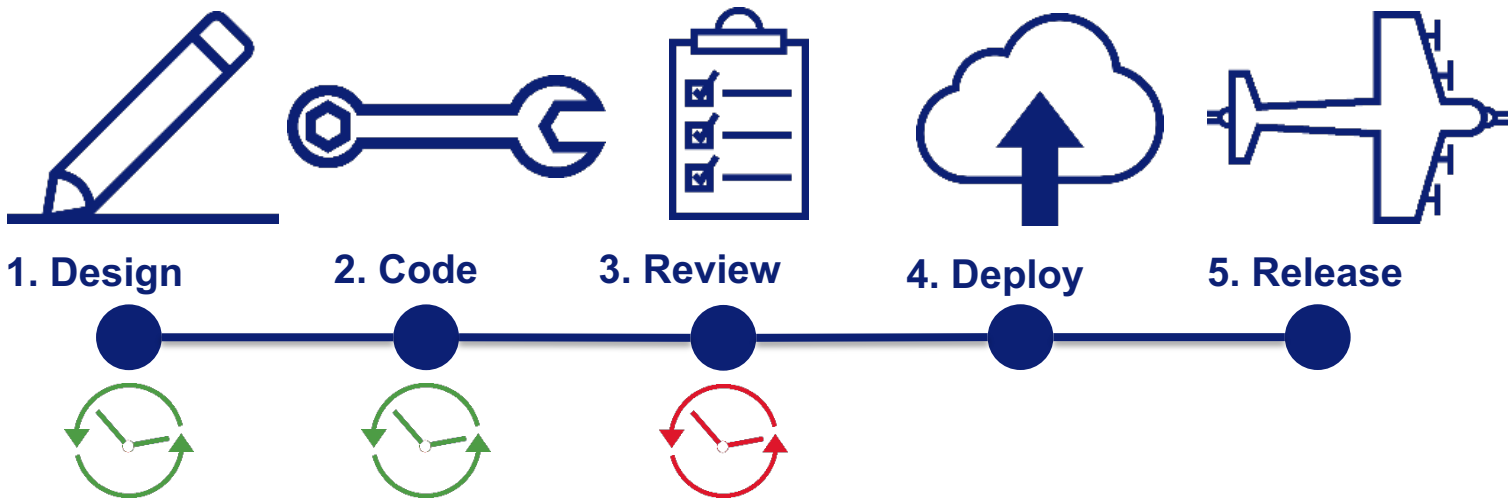
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API lifecycle



Reviews – What are we reviewing?

Design standards

URI/endpoints

HTTP methods

Request/response
payload

HTTP Headers

Query parameters

Response Status
codes

Error Standards

Architecture standards

Communication patterns

Front-to-back architecture

API Versioning

REST / SOAP / GraphQL

Microservices

Service Mesh

API Gateway guidance

Security standards

Authentication

Authorization

Rate limiting

Quota

oAuth

API Key

Other API standards

Naming conventions

Caching

Orchestration

Logging

Other NFRs



Pros and cons of standards / reviews / governance



Consistent design



Developer experience (consumers)



Developer experience (producers)



Support experience



Reuse



More gates



Speed to market



Dependencies



Automate your API Governance to accelerate your speed to market



Develop, document and socialize **standards**



Provide **visibility** into all APIs and API meta-data



Build **framework** to solve for common problems



Federate governance to minimize bottlenecks



Provide **self-service** capabilities to developers

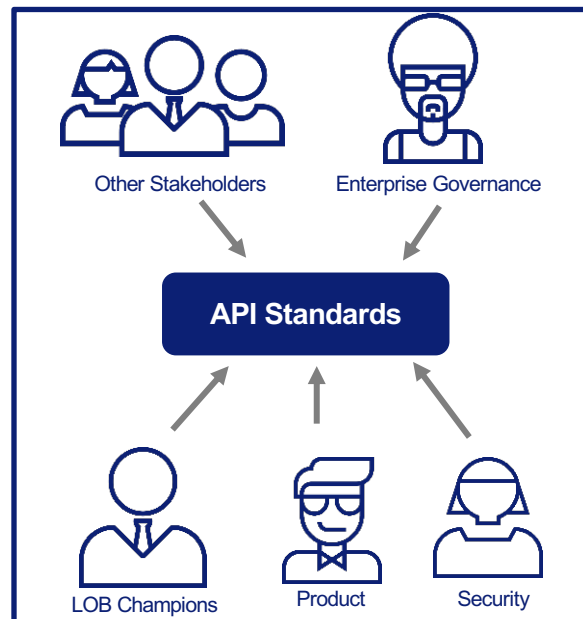


Automate governance checks to eliminate manual interventions



Define standards

- Define standards
 - Design standards
 - Architecture standards
 - Security standards
 - Other standards
- Discuss standards with core group and finalize
- Document standards in a shared location
- Socialization of standards in different forums
- Continuous review and update standards



Provide visibility

- Provide visibility into all APIs serving as Inventory/catalog of all APIs
- Provide visibility into API meta-data
- Simple interface accessible to all developers – Producer Portal
- Target audience
 - API Producers
 - Internal API Consumers
 - Product Management/Business
 - Leadership

Accounts API

Description

- Returns the list of all credit card accounts

API contact

- John Doe

Source code

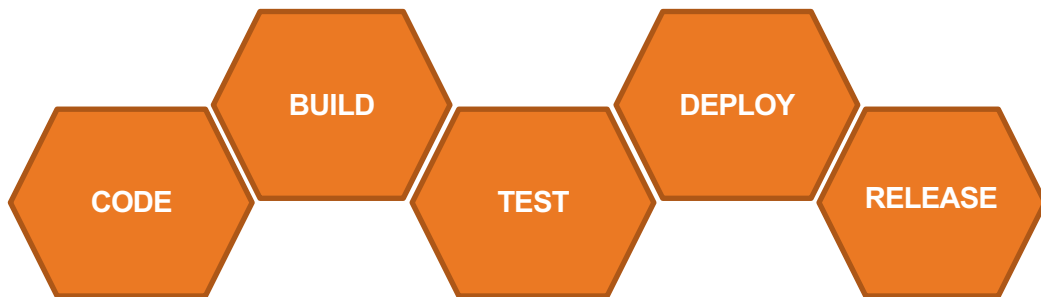
- <https://github.com/apis/accounts-service>

Documentation

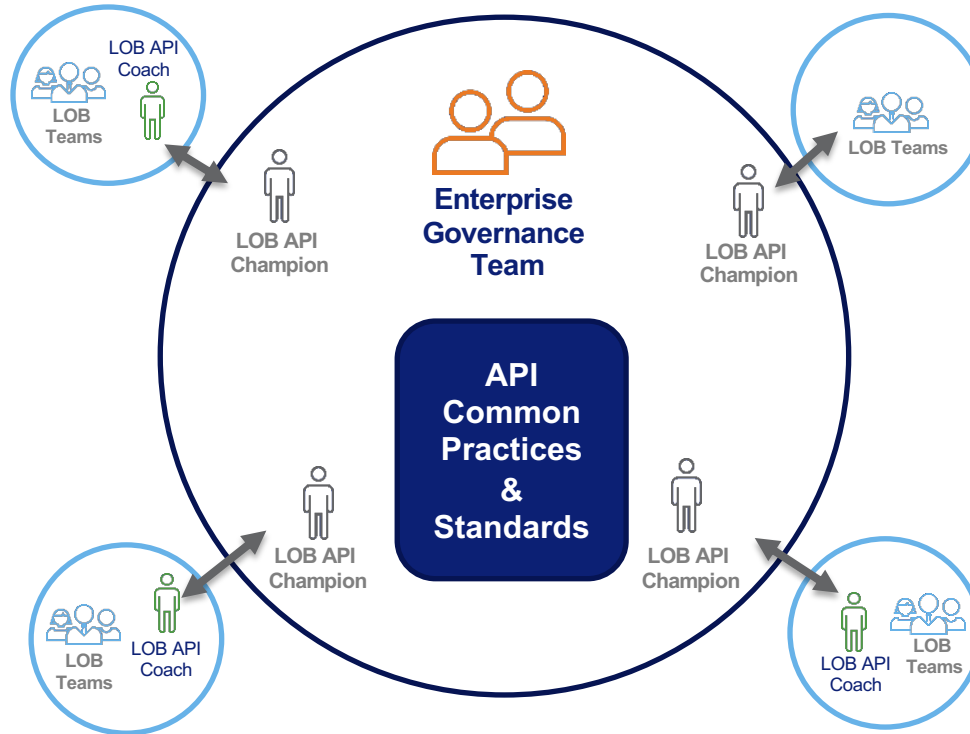
- <https://developer.acme.com/apis/accounts>

Build framework

- Build a code framework to help teams get started with API development quickly and solve for common problems
- Build common use-case based templates that can be used as starter projects to accelerate development
- Standard CI/CD pipeline

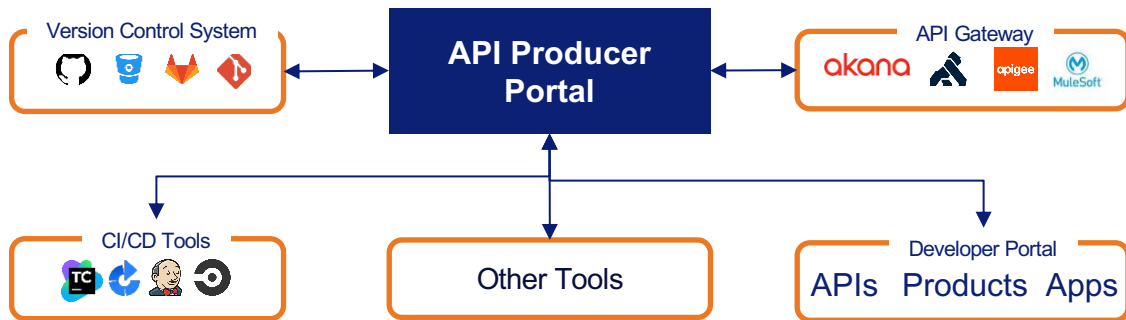


Federate governance



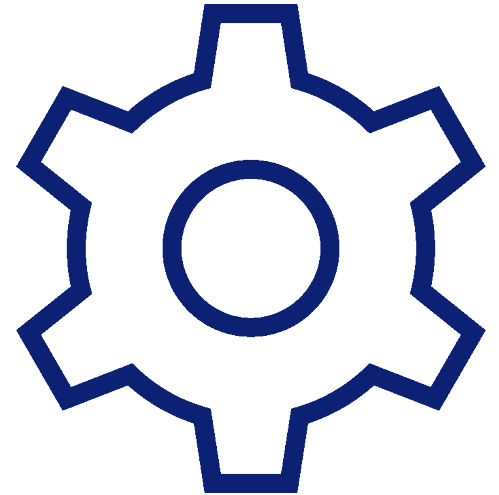
Make self-service

- Producer Portal serves as Inventory for all APIs and manages the lifecycle of APIs
- Role-based access allowing access to different features based on role
- One-stop shop self-service portal for all data and actions

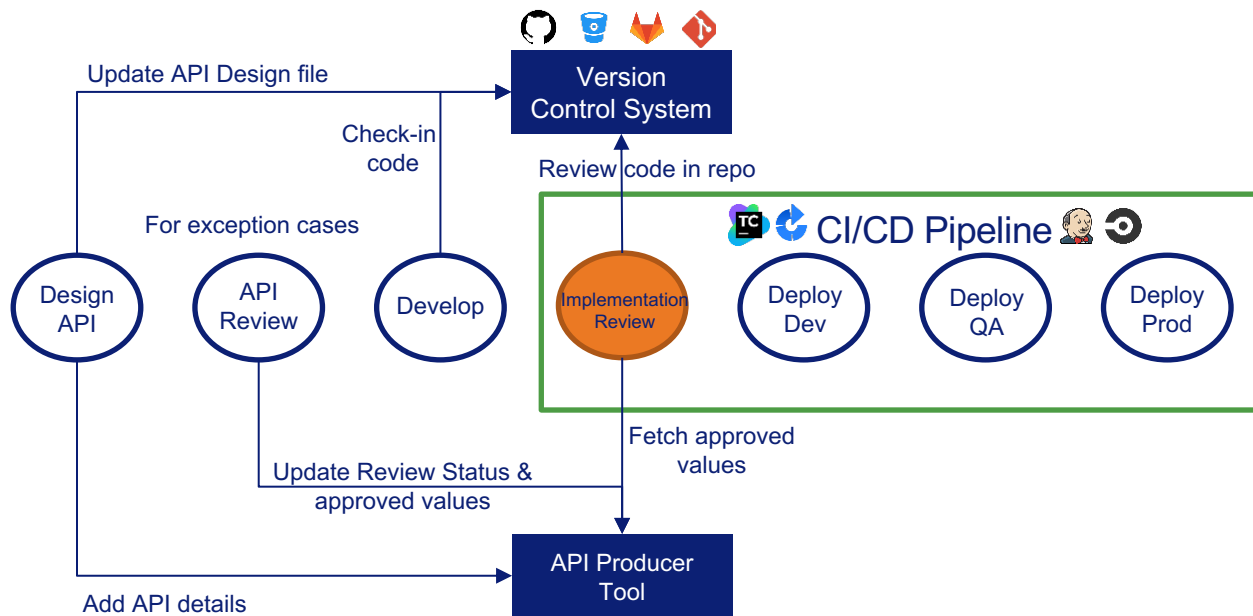


Automate everything

- Automate governance tests validations
- Integrate into CI/CD pipeline or existing process
- Manage all approved values in your Producer Portal
- Account for Exceptions and define an exception process



Putting everything together...



API lifecycle





Thank you

Questions?

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