

WEB DAY



2021

04 MARZO • ONLINE CONFERENCE

EVERYTHING YOU ALWAYS
WANTED TO KNOW ABOUT API
MANAGEMENT
(BUT WERE AFRAID TO ASK)

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KUDOS



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managed/designs

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... AT THE BEGINNING

REST
API
OpenAPI
http

... AT THE END

API CORS
get OAuth OpenID
REST network ip mock JWT
quota OpenAPI delete
throttling
cache user request Web
response filtering
https gateway header
http virtual put
portal product post
rate policy
group SOAP

WHAT CAN YOU DO???

Write code

Caching is easy, but what about throttling?
...and quota...
You have to manage users...
Re-test everything!
And so on....

Use API Management

Convince your customer
Convince your customer
Convince your customer
Because

2400 euros a month?
Are we joking?



WHAT IS API MANAGEMENT

Azure API Management
allows you to
implement a **consistent
and secure** access layer
to your APIs.



API MANAGEMENT ARCHITECTURE

API consumers



AZURE API MANAGEMENT

Abstraction

decouple
modernize
optimize
...

Middleware

secure
protect
cache
...

Monitoring

usage
health
monetization
...

Developer

discover
document
on-board
...

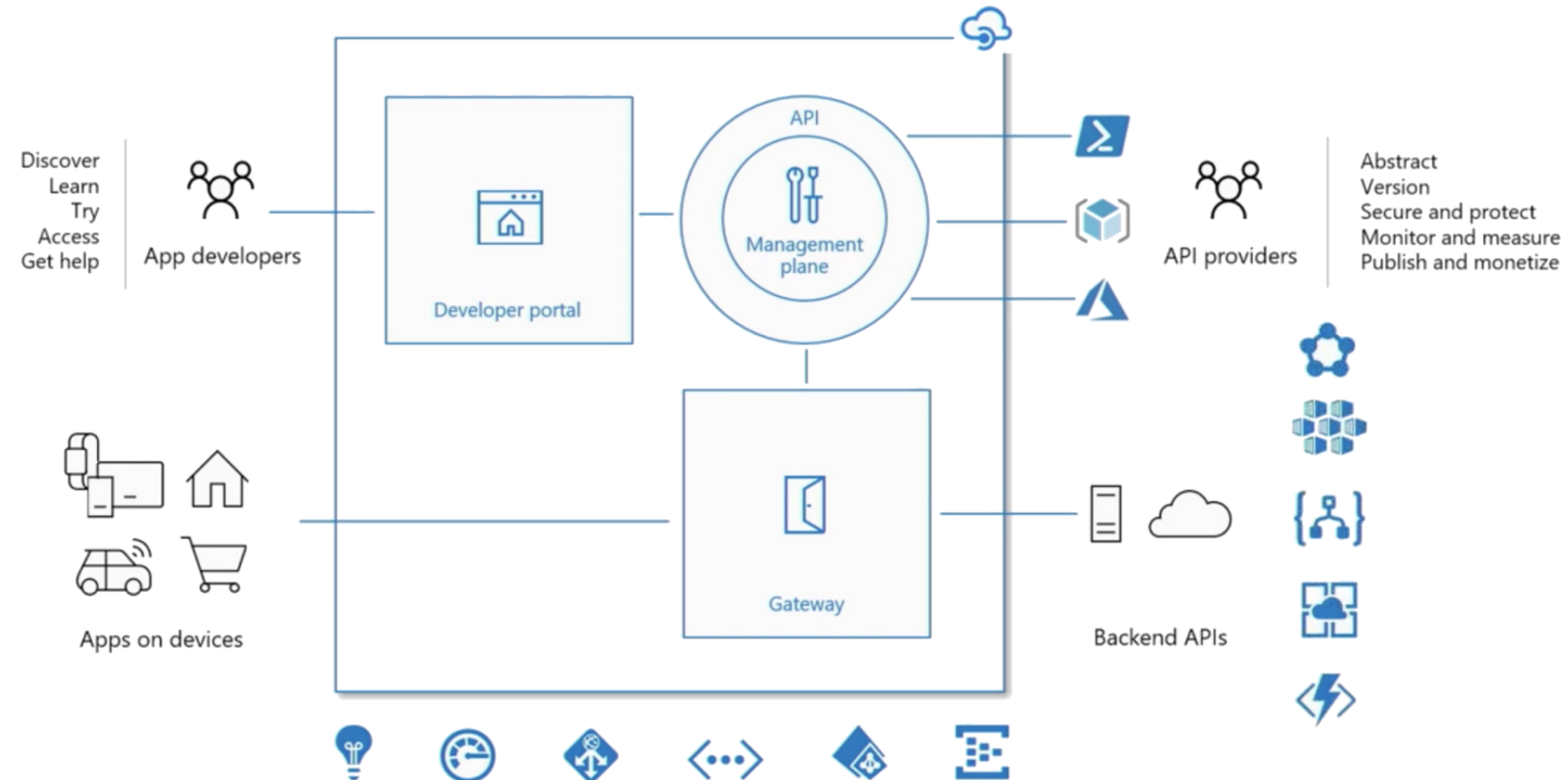
APIs on Azure

Azure APIs

On-prem APIs

3rd party APIs

API MANAGEMENT – COMPONENTS



API MANAGEMENT – COMPONENTS



APIS AND OPERATIONS

Each API
represents a **set
of operations**
available to
developers

Each API contains
a **reference to a
back-end service**
that implements
the API

Each Operations
**map the
operations**
exposed by the
back-end services

You can **configure
the operations**
configuring the
URL mapping,
query string
parameters,
request and
response content.

DEMO ADDING API IN API MANAGEMENT



POLICIES

Change the behavior of
the API through
configuration

Collection of
statements that are
executed sequentially
in a pipeline

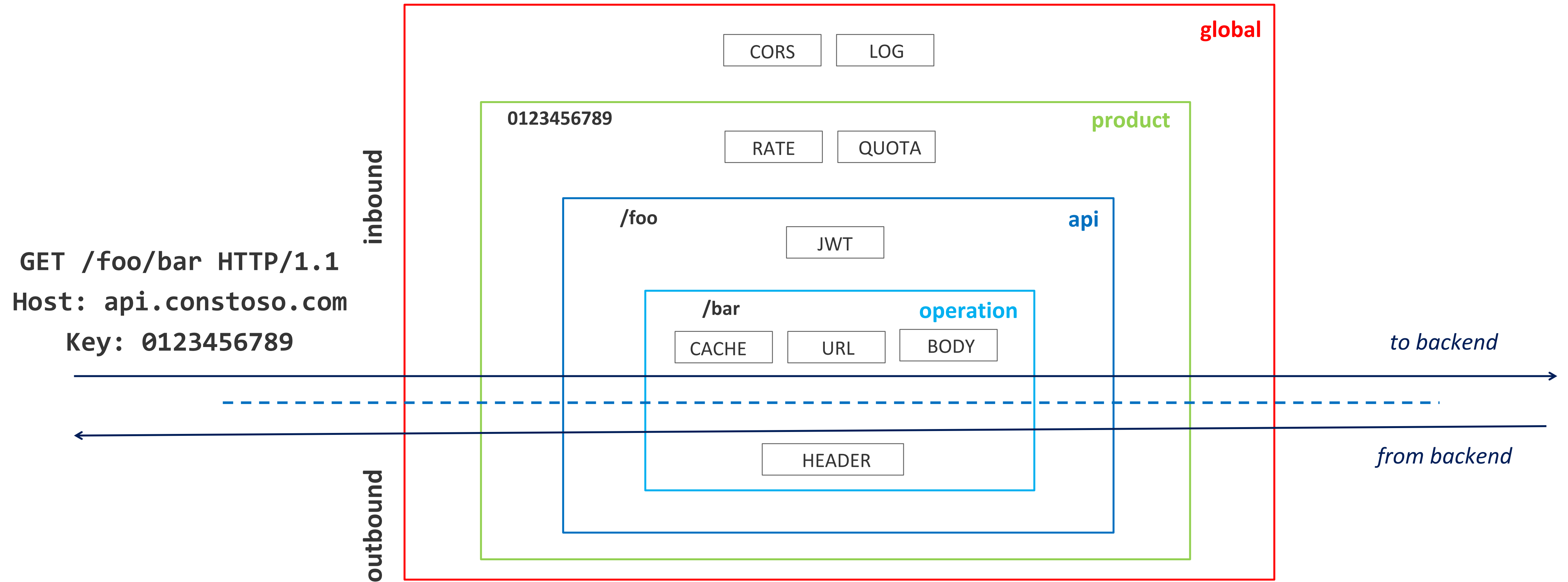
Can be defined at
multiple levels (Global,
Product, API, Operation)

Encapsulate common
API management
functions (e.g. protocol
transformation, caching,
quota, throttling)

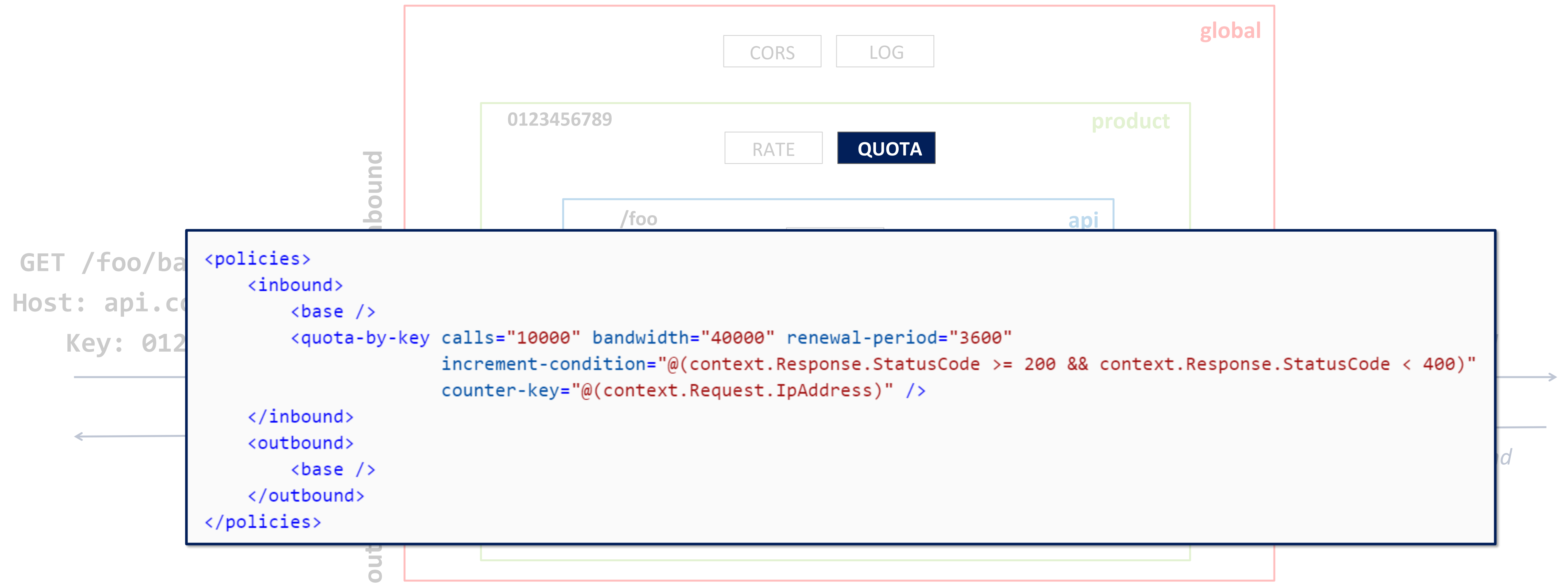
Can be triggered on
error

Each policy is defined as
an XML document

POLICY SCOPES



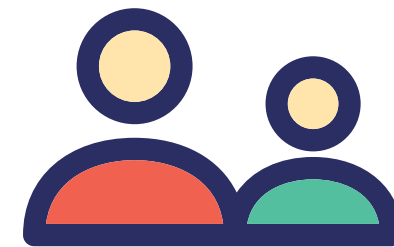
POLICY SCOPES



DEMO MANAGING POLICIES IN API MANAGEMENT

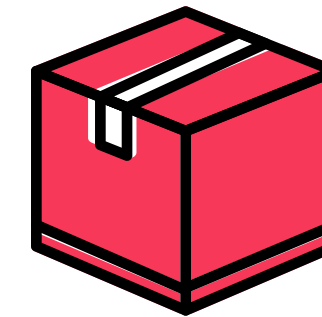


DEVELOPERS, SUBSCRIPTIONS AND PRODUCTS



Developers

Developers represent the user accounts in an API Management service instance



Products

Products are how APIs are surfaced to developers.
Products in API Management have one or more APIs, and are configured with a title, description, and terms of use.



Subscriptions

A subscription is the most common way for API consumers (Developers) to get access to APIs published through an API Management instance (Products)

PRICING

Serverless (no dev portal)

	CONSUMPTION	DEVELOPER	BASIC	STANDARD	PREMIUM	ISOLATED ^{PREVIEW}
Purpose	Lightweight and serverless version of API Management service, billed per execution	Non-production use cases and evaluations	Entry-level production use cases	Medium-volume production use cases	High-volume or enterprise production use cases	Enterprise production use cases requiring high degree of isolation
Price (per unit)	€2.95155 per million calls (1M calls free ³)	~€40.51/month	~€124.11/month	~€579.11/month	~€2,357.17/month	TBA ⁸
Cache (per unit)	External only	10 MB	50 MB	1 GB	5 GB	5 GB
Scale-out (units)	N/A (automatic scaling)	1	2	4	10 per region (call support to add more)	10 per region (call support to add more)
SLA	99.95%	No	99.95%	99.95%	99.99% ¹	99.99%
Isolation	Shared	Private	Private	Private	Private	Private
estimated maximum throughput ² (per unit)	N/A (automatic scaling)	500 requests/sec	1,000 requests/sec	2,500 requests/sec	4,000 requests/sec	4,000 requests/sec
Compute Isolation	No	No	No	No	No	Yes

TAKEAWAYS



End to end solution for managing the lifecycle of your APIs



Developers, products, subscriptions management out-of-the-box



APIs abstraction from their implementation and integration with on-cloud and on-prem backend



Scenarios in which it makes sense to have a fixed monthly cost of managing API Management

- companies that sell services
- companies that need to modernize "old-style" APIs

TAKEAWAYS



End to end



Developers



APIs abstract
cloud and on-



Scenarios
managing APIs

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[Microsoft is a Leader in the 2020 Gartner Magic Quadrant for Full Life Cycle API Management](#)
[| Azure Blog and Updates](#) | [Microsoft Azure](#)



Source: Gartner (September 2020)

-box

with on-

cost of



**API
Management
is awesome!!**

Thanks for your attention!!!!

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REFERENCES

- **API Management Official Documentation**
<https://docs.microsoft.com/en-us/azure/api-management/>
- **API Management Pricing**
<https://azure.microsoft.com/en-us/pricing/details/api-management/>
- **Azure Updates for API Management**
<https://azure.microsoft.com/en-us/updates/?product=api-management>
- **Video**
 - How to get started with Azure API Management
<https://www.youtube.com/watch?v=gA2yxwKo0M0>
 - Azure API Management updates: serverless, schemas, and a new dev portal
<https://myignite.microsoft.com/sessions/54880>
 - How to Configure Azure API Management (APIM)
<https://www.youtube.com/watch?v=cW4XZCIFNMY>
 - Azure API Management 101
<https://azure.microsoft.com/en-gb/resources/videos/azure-api-management-101/>
 - How to build a CI/CD pipeline for API Management
<https://channel9.msdn.com/Shows/Azure-Friday/Build-a-CICD-pipeline-for-API-Management-Part-1>
<https://channel9.msdn.com/Shows/Azure-Friday/Build-a-CICD-pipeline-for-API-Management-Part-2>