



Microsoft Ignite The Tour



BRK30168

Everything you always wanted to know about API Management (but were afraid to ask)



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2400 euros a month?
Are we joking?



What is API Management

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

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

Securing infrastructure

Gating access with API keys, preventing DOS attacks by using throttling, or using advanced security policies like JWT token validation

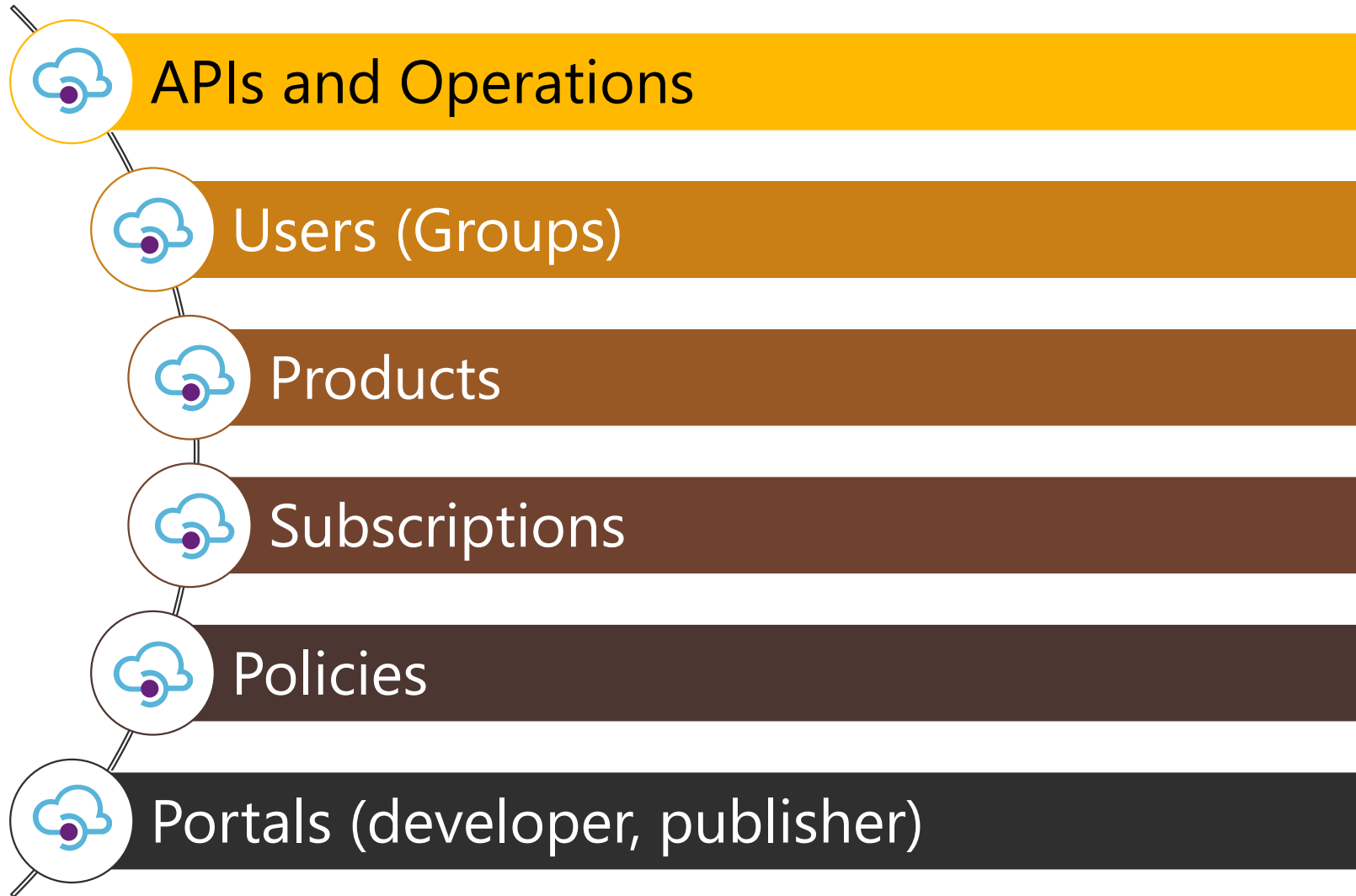
Enabling ISV partner ecosystems

Offering fast partner onboarding through the developer portal and building an API facade to decouple from internal implementations that are not ripe for partner consumption

Running an internal API program

Offering a centralized location for the organization for the internal APIs, gating access based on organizational accounts.

API Management Terminology



Azure 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
...

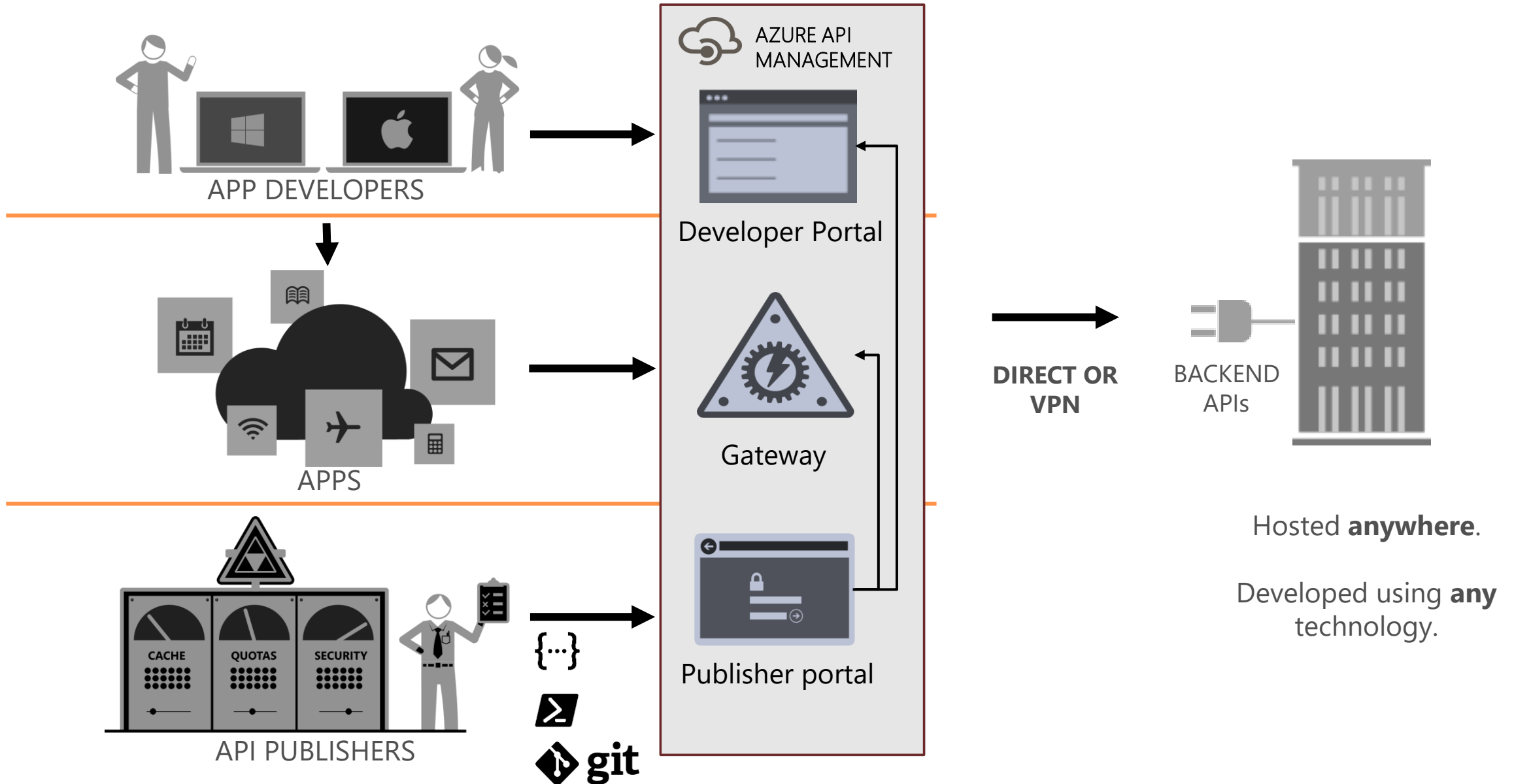
APIs on Azure

Azure APIs

On-prem APIs

3rd party APIs

Azure API Management – Components



Azure API Management – Components

API Gateway

Accepts API Calls from clients

Verifies API keys and other credentials

Enforces quotas and rate limits

API Transformations

Caching

Logging

Publisher Portal

Define APIs and Operations

Define Products

Configure Policies

Analytics

Subscriptions

Groups

Developer Portal

Find available APIs

Read API Documentation

Test APIs

Create accounts and subscribe to products

Access usage analytics

Policies

Pre/Post processing and validation of incoming requests (inbound and outbound directions)

Can be defined at multiple levels:

- Global
- Operation
- API
- Product

Encapsulate common API management functions

- Access control, Protection, Transformation, Caching, ...
- Mutate request context or change API behavior

Chained together into a pipeline

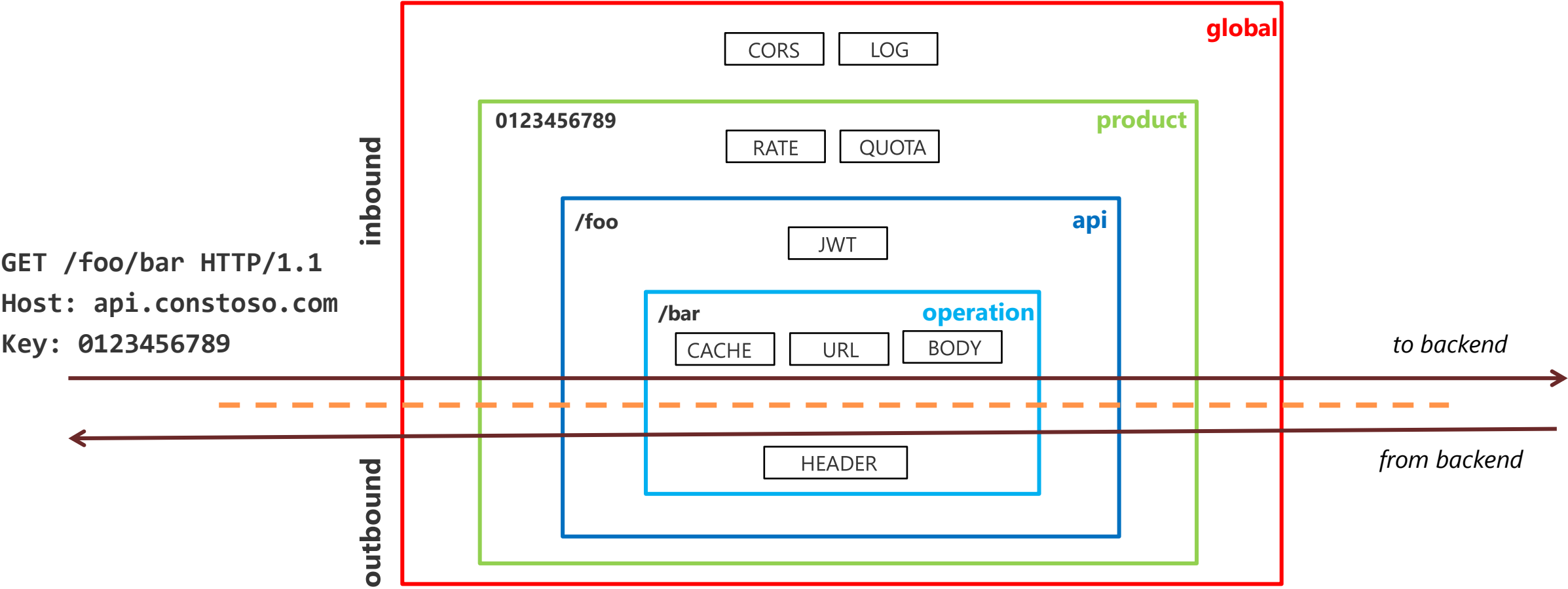
Can be triggered on error

Each policy is defined as an XML document

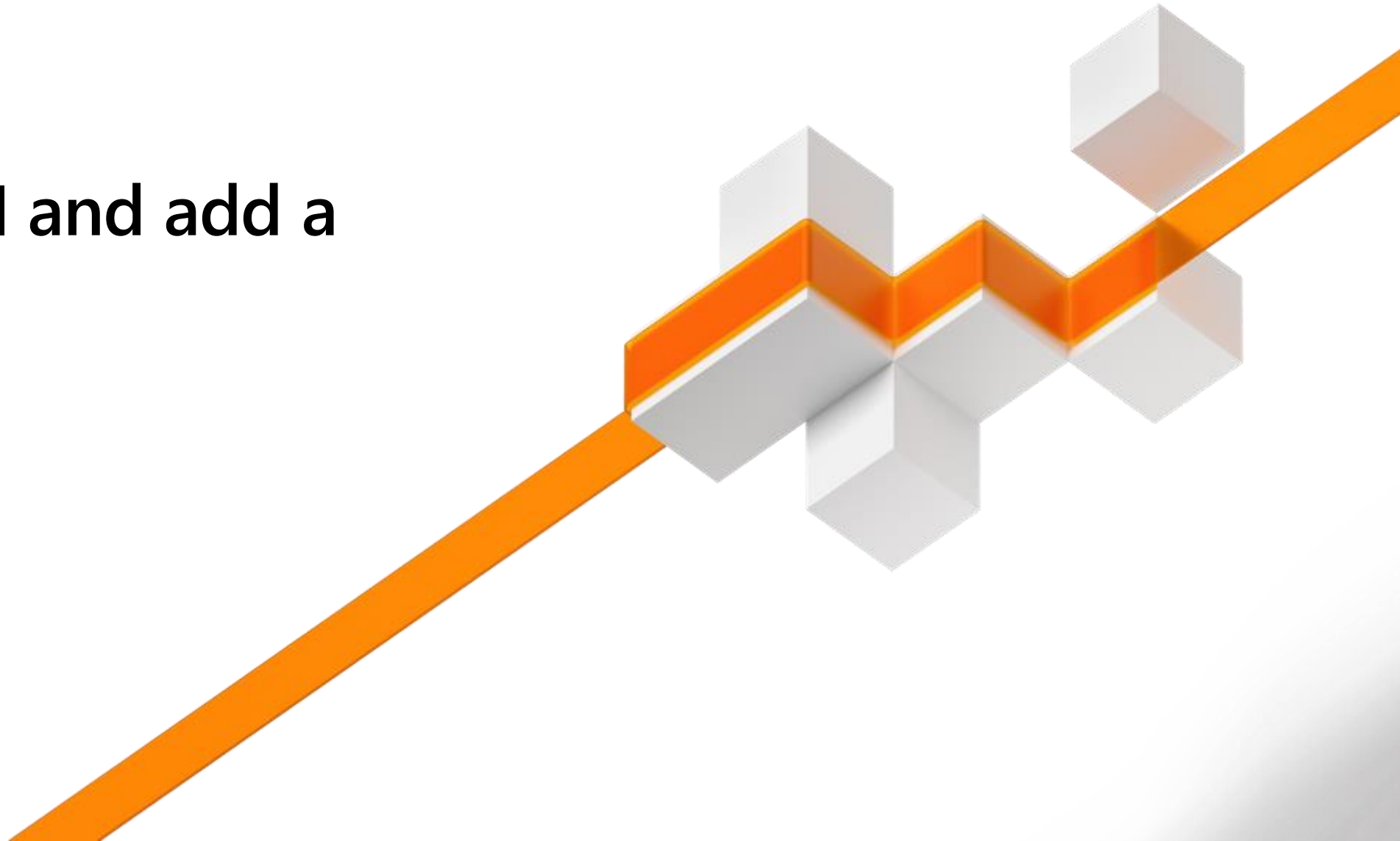
- Dynamic expressions are wrapped in @()

Defined in Publisher Portal
(or Azure Portal)

Policy scopes



**Add new API and add a
policy**



Developers, Subscriptions and Products



Developers represent the user accounts in an API Management service instance.



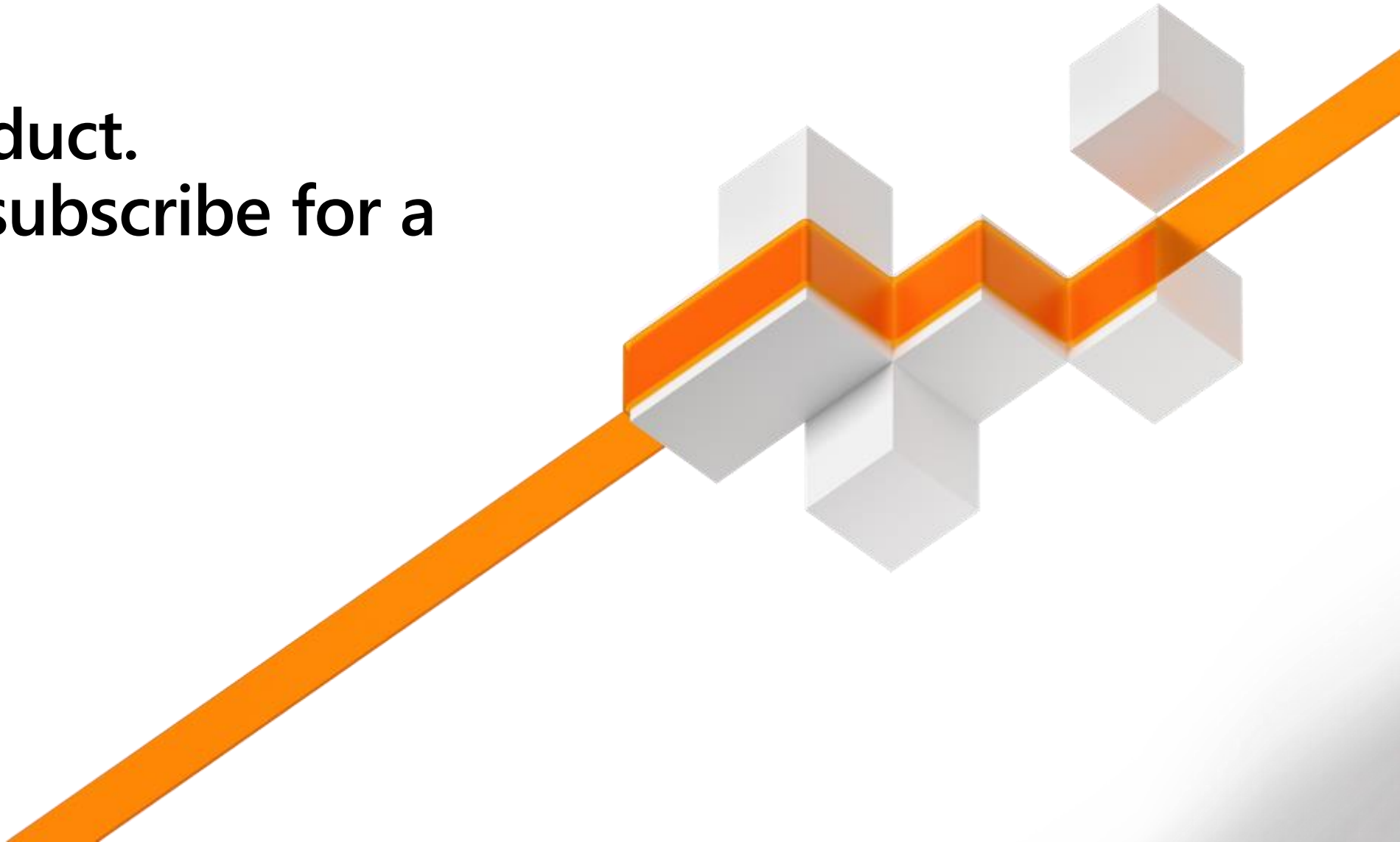
Products are how APIs are surfaced to developers.

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



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

**Create a product.
Signup and subscribe for a
product.**



Pricing

	CONSUMPTION	DEVELOPER	BASIC	STANDARD	PREMIUM
Purpose	Gateway component of API Management offered on a pay-per-use basis	Non-production use cases and evaluations	Entry-level production use cases	Medium-volume production use cases	High-volume or Enterprise production use cases
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
SLA	99.9%	No	99.9%	99.9%	99.95% ¹
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

Serverless, no portals

API Management 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



**API
Management is
awesome!!**

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Thanks for your attention!!!!

Q&A

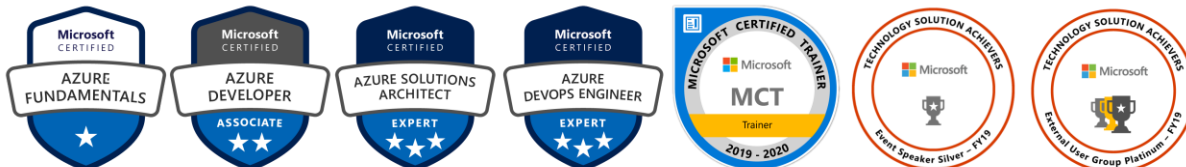
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API Management Reference



 **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>

