Make API Governance work in your unified API Strategy

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Why you cannot live without API Governance



The Critical Role of APIs

"APIs are the critical building blocks for business innovation"

Roey Eliyahu, Forbes Councils Member

"APIs hold systems together. We would be left with isolated data and applications that can't communicate. Without APIs, the technologies we rely on won't work."

apiworx

"APIs are also enabling companies to innovate their business models. The product has become the service delivered via APIs, allowing companies to scale and monetize their new capabilities." "APIs account for more than half of the total traffic generated [...], and they're growing twice as fast as traditional web traffic."

Cloudflare

Cloudflare





How will your Business Change?

Business is increasingly driven by machine-to-machine communication:

- Al Agents
- Embedded Products
- "Go where your customers are"



The number of APIs within your companies will rise!

The number of consumers of these APIs will rise as well.

You need to stay on top of it!





Core Capabilities of API Governance



Inventory of all APIs



Design Consistency



Security



Usage Montoring and Control





Compliance



Quality Assurance

Did you notice something?



I did not talk about technology at all!



API Governance is not bound to any API technology!

Strategic API Management!



Unified API Strategies







The days of one single APIM solution are gone!



We go from this...

API Consumers / Applications
Data Plane
API Gateway A Enforce Policies
\downarrow
On-Prem



11

...to this

API Consumers / Applications	API Consumers / Applications	API Consumers / Applications
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Data Plane	Data Plane	Data Plane
API Gateway A Enforce Policies	API Gateway B Enforce Policies	API Gateway C Enforce Policies
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On-Prem	Cloud 1	Cloud 2



Federated API Management





Unified API Strategies

More common than you think!

"In 2018 only 20% of big enterprises were invested in Federated API Management. This number will grow to at least 60% in the coming years."

Gartner

"At Gartner we expect the 'bring your own gateway' strategy to continue to be big in 2023"



Mark O'Neill Gartner Chief of Research for Software Engineering



API Governance is a task of the control plane!

Don't try to solve it where it does not belong



Discovery

APIs running on any your APIM platforms should be discovered automatically

- Manual processes will fail and create shadow APIs
- Bring in already existing information like specs and other metadata
- Makes configuration and interaction with the APIs much easier as they are already connected to your gateways.

One unified Developer Portal / Catalog

- No need to look in multiple portals
- Answer "What APIs have we published" with a click of a button







Design Consistency

Deploy a centralized approach, triggered from your CI/CD pipelines rather than a local one

- Configure generic rules at one place and not n repos
- Overwrite if needed in the repos

Use a gate keeper

- Build your processes in a way, that APIs not consistent with your style guides are not published to the catalog and are not available to 3rd parties or internal teams
- Automate to facilitate shift left







Security

Use Templates to create new API-Proxies

• Reduce the risk of insecure configuration

Deploy a centralized approach, triggered from your CI/CD pipelines rather than a local one

- Configure generic rules at one place and not n repos
- Overwrite if needed in the repos
- Check the proxies as well! Not only the spec!

Use a gate keeper

- Build your processes in a way, that APIs that are not secure are not published to the catalog and are not available to 3rd parties or internal teams
- Automate to facilitate shift left







Usage Monitoring and Control

Manage API Keys across platforms right inside your control plane

- Have one place to grant and revoke access
- Answer "Who has access" with the push of a button
- Relate API Keys to API usage and usage patterns
- Identify bad citizens

Use API Keys in the first place!

- Do not rely solely on end user authentication
- You need to be able to shut down malicious consumers
- Developers make mistakes!





Compliance

Check all parts involved with compliance

- The API spec
- The nature and shape of the data transferred
- The configuration of the gateway

Embed compliance checks within your pipelines

- Check continuously instead on a per audit basis
- Especially with infrastructure and policies as code every change needs to be compliant
- Store compliance results for audits





Quality Assurance

Run automated tests

- Embed automated tests in your pipeline
- If you define the protection of APIs as code as well, you use the same setup for all runtimes!

Continuously monitor performance

- Watching quality of service is also part of API governance!
- Define watchdogs and automate alerts across all of your platforms





Use The Tools Available!

and

Automate Governance





Wrap Up



Wrap-Up



Never go out there alone! Have API governance in place right from the start of your API journey.



Implement Federated API Management to easily integrate new offerings and technologies into your existing API infrastructure while keeping governance lean.



Embed governance right into your processes, workflows and pipelines.





The APIIDA solution for API Governance

- Know exactly what APIs you publish
- Manage and control access to your APIs
- Have actionable quality and security ratings for all your APIs
- Check quality and compliance automatically with every change
- Guarantee governance while still shifting left API publishing









How Mature is Your API Management?

https://apiida.com/service/apim-maturity-assessment





Or right at our booth!



The API Management Experts



