



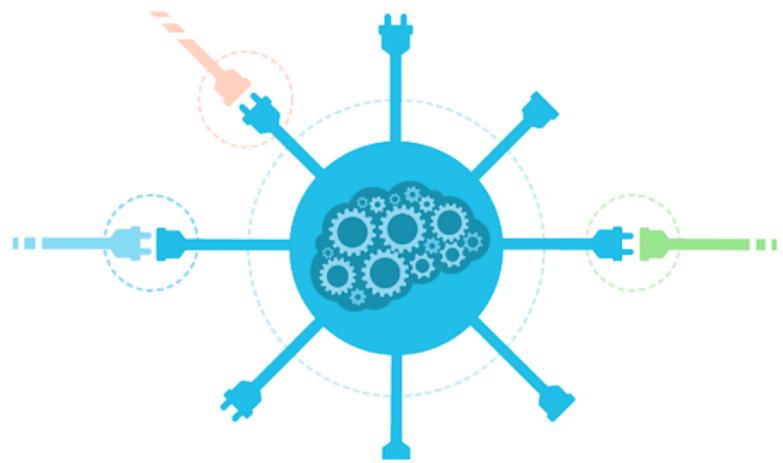
IT COMPASS

IBM Cloud Pak for Integration
Power your digital transformation

A series of thin, light blue lines forming a perspective grid that converges towards the bottom right corner of the slide.

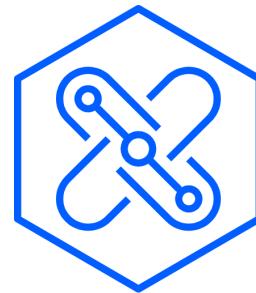
Challenges when exposing APIs

- Documentation
- Security
- Transformation
- Analytics



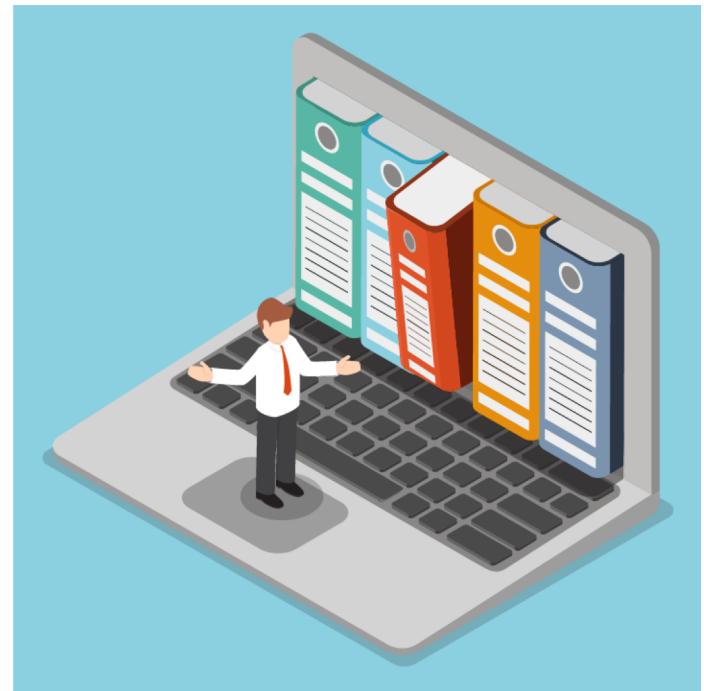
How to overcome those challenges ?

IBM Cloud Pak for Integration



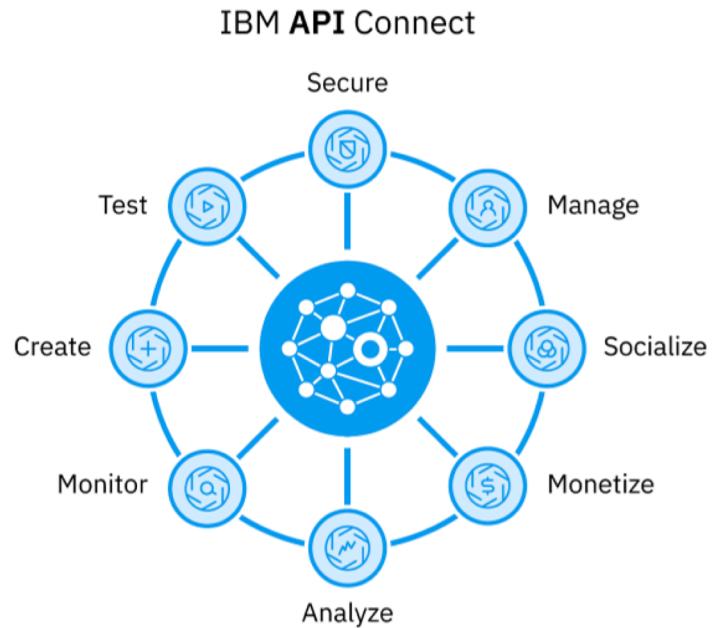
Documentation

- Quickstart guide
- Endpoint definitions
- Code snippets
- Example requests / responses



API Connect

- Visual API Assembly
- Self-service Developer portal
- Security & Control
- API Monitoring & Analytics
- Subscription Management



Developer portal

[LOGIN](#)[CREATE AN ACCOUNT](#)[HOME](#)[GETTING STARTED](#)[API PRODUCTS](#)[SUPPORT](#)

Search



Account Information 1.0.0

APIs

AIS API 1.0.0

Operations

GET /accounts

GET /accounts/{account-id}

GET /accounts/{account-id}/balances

GET /accounts/{account-id}/transact...

GET /consents

POST /consents

GET /consents/{consent-id}

GET /accounts/{account-id}

account

Summary

Read Account Details

Description

Reads details about the addressed account. It is assumed that a consent of the PSU to this access is already given and stored on the IBS Bank system. The addressed details of this account depends then on the stored consent addressed by the OAuth2 access token.

Security

OAuth2 (oauth2 accessCode)

OAuth2

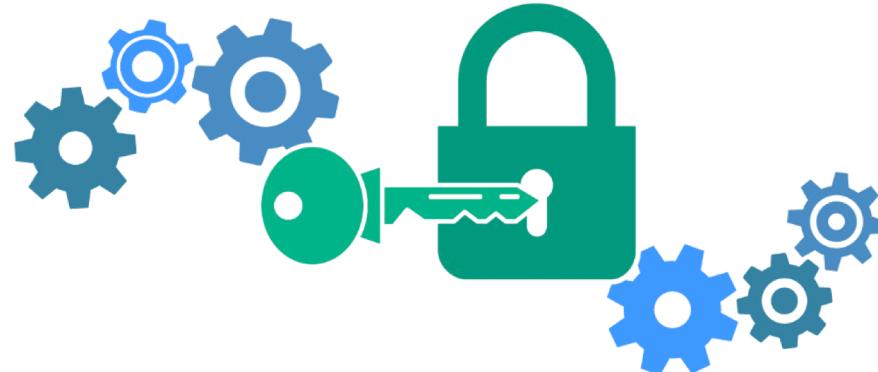
Authorization URL <https://gate.ibs.bg/ibs/psd2/oauth2/authorize>Token URL <https://gate.ibs.bg/ibs/psd2/oauth2/token>

Example Request

```
curl --request GET \
--url https://gate.ibs.bg/ibs/psd2/v1/accounts/REPLACE_ACCOUNT-ID \
--header 'accept: application/json' \
--header 'authorization: Bearer REPLACE_BEARER_TOKEN' \
--header 'psu-accept: REPLACE_THIS_VALUE' \
--header 'psu-accept-charset: REPLACE_THIS_VALUE' \
--header 'psu-accept-encoding: REPLACE_THIS_VALUE' \
--header 'psu-accept-language: REPLACE_THIS_VALUE' \
--header 'psu-device-id: REPLACE_THIS_VALUE' \
--header 'psu-geo-location: REPLACE_THIS_VALUE' \
--header 'psu-http-method: REPLACE_THIS_VALUE' \
--header 'psu-ip-address: REPLACE_THIS_VALUE' \
--header 'psu-ip-port: REPLACE_THIS_VALUE' \
--header 'psu-user-agent: REPLACE_THIS_VALUE' \
--header 'x-ibm-client-id: REPLACE_THIS_KEY' \
--header 'x-request-id: REPLACE_THIS_VALUE'
```

Security

- OAuth 2.0
- Encrypt / Decrypt
- Sign / Verify
- Rate Limits



phhw ph
lq wkh
jdughq

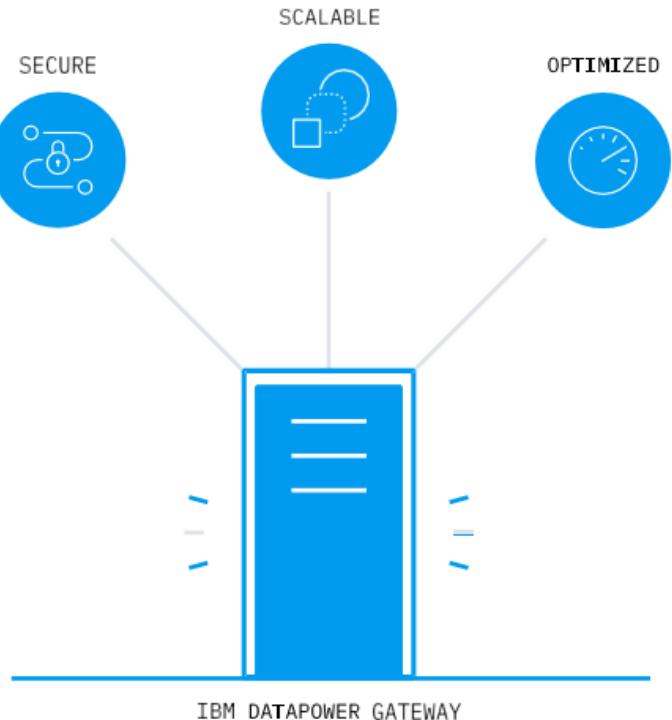


p-3 h-3 h-3 w-3 --> Meet
p-3 h-3 --> me
l-3 q-3 --> in
w-3 k-3 h-3 --> the
j-3 d-3 u-3 g-3 h-3 q-3 -->
garden

Meet me in
the garden

DataPower Gateway

- OAuth provider
- Message encryption
- Message signing
- Rate limits
- Web Service Proxy
- Web App Firewall
- GatewayScript



Transformation

- Message transformation
- Message enrichment
- Message filtering



App Connect Enterprise

App Connect brings together the best of the existing, industry-trusted IBM integration technology with new IBM Cloud native technologies to deliver a platform that supports a breadth of integration needs across a modern digital enterprise

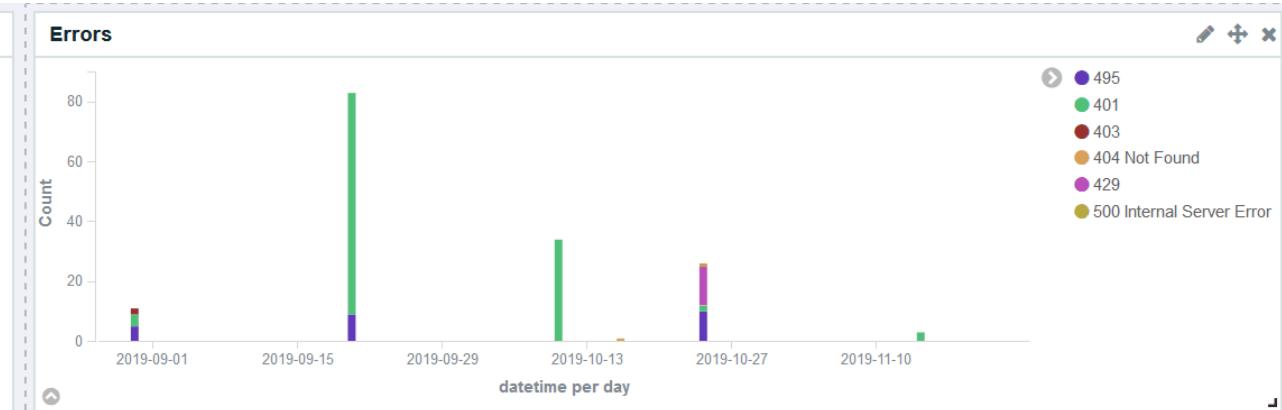
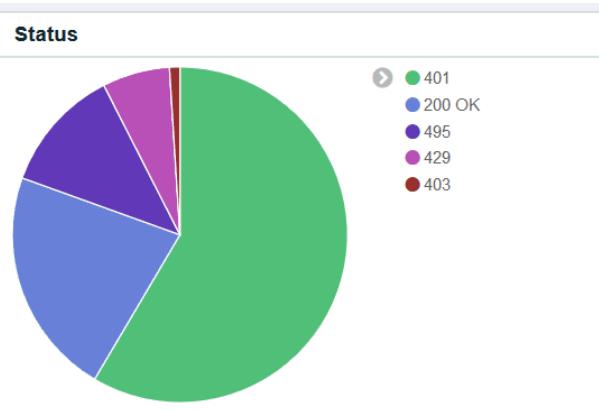


Analytics

- Trending APIs
- APIs response time
- Top developer organizations



API Connect Analytics



Minimum Response Time (ms)

6

Min time_to_serve_request

Average Response Time (ms)

263.401

Average time_to_serve_request

Maximum Response Time (ms)

20,063

Max time_to_serve_request

Complete solution

Client-Tier Mobile, IoT, Web 	 Apps
Interaction Services Tier 	<p>What's needed is the Interaction Services Tier</p> <ul style="list-style-type: none">• Seamless communication between front-end and back-end systems• Supports massive concurrency• Non-blocking, event-driven I/O to remain lightweight• Designed for a microservices architecture• Designed for hybrid cloud deployment• Simplified & comprehensive API lifecycle to Create, Run, Manage and Secure APIs 
Middle-Tier 	Traditional SOA infrastructure designed for internal integration
Enterprise Apps & Data Back-end 	Need for simplified discovery and secure reuse of Systems of Record via APIs

Internal APIs

- Internal developer portal
- Same challenges as the external ones
- Consuming external APIs
- Internal can become external

CONCLUSION

- Speed up time to market
- Less dependencies on vendors
- Less development
- Portals with APIs both external and internal
- Optimized infrastructure





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Thank you!

