

**API BOSS**  
Usecase For

***Xpress Global  
Systems Inc.***

# ABOUT TEKMONKS

- A full service, fast growing, and highly skilled technology firm.
- Founded in the US with headquarters in Washington DC.
- A provider of services to clients from the largest Fortune 500 companies worldwide.
- Zero debt company with a de-risked operating model, maintaining two years of operating cash reserves.
- In strong partnerships with AWS, Azure, Microsoft, and IBM.
- Continuously making history of success and satisfied clients with a 98% rate of repeat business.
- ISO 9001:2015 QMS certified



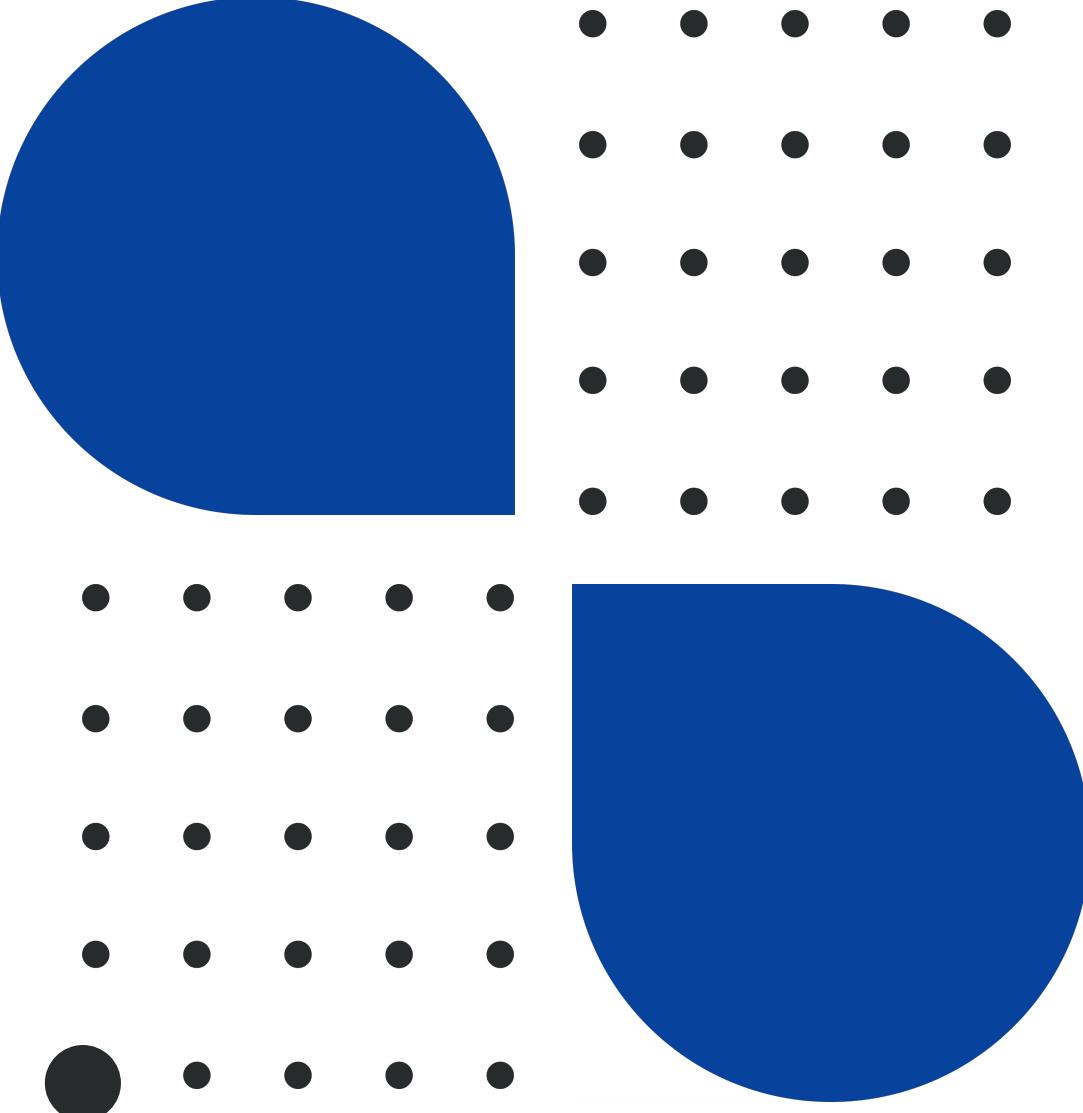


# VISION STATEMENT

To be a reputable Global Corporation providing quality solutions for business issues utilising technology by highly skilled people.



Tekmonks operates from 8 countries & 11 major cities



# CONTENTS

- Xpress Global Services Inc.
- XGSI Challenges
- TekMonks Solution
- Benefits of APIBoss to XGSI
- APIBoss
- APIBoss Key Features



# Xpress Global Systems Inc.

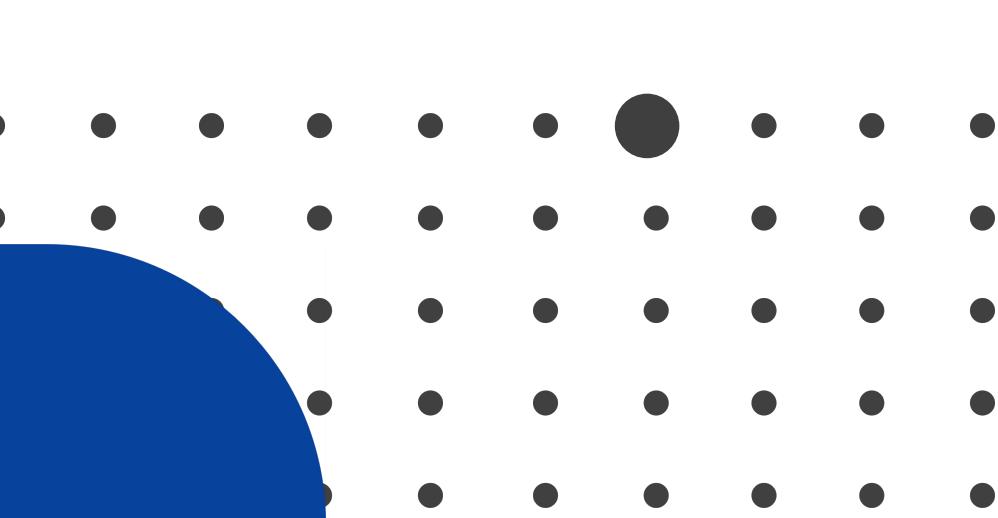
XGSI is a logistics services provider of:

- Specialized Less Than Truckload (LTL) Shipping
- Warehousing, Cutting, & Fulfillment
- Custom Logistics Solutions

**XPRESS GLOBAL SYSTEMS**  


<https://www.xgsi.com>

*“XGS brings innovation, efficiency, and scalability to shipping and distribution of flooring products. We give our partners the intelligence and control they need to compete in a world of increasingly high customer expectations. Our success is built on core values that guide us in everything we do.”*



# **Xpress Global Systems Inc.**

## **Challenges**

### **Security**

- XGSI is using On-Premises Data center to Host application servers, the data center works on a private network, a 3rd Party API Gateway (Azure, AWS) was being used and to connect the 3rd party gateway with VMs, each VM must be exposed to the Public Network, this creates multiple entry points to the Private network.
- The 3rd party API Gateway was trusted by the Network Firewall, this creates potential risk for Masquerade attacks.
- All API traffic between 3rd party API gateway and Data Center was routed through the Public Network, this creates a potential risk for Man-in-Middle attacks or Data leaks

### **Maintainability**

- XGSI wanted to have an easy to maintain solution for their APIs
- They wanted a solution to maintain and manage the APIs not just a reverse Proxy

## Flexibility

- XGSI wanted to integrate the error logging and it is not possible with all the 3rd party API gateways
- XGSI wanted to have features like Throttling, IP Black/Whitelisting controls, which is not possible with all the 3rd party API gateways without added cost.
- XGSI wanted to have data access control for the APIs per the Business logic, ex: 2 APIs can be authenticated with the same account creds (Token), but the data access is different for them.
- XGSI wanted to have support for both static and dynamic Tokens for Authentication at the same time.

## Scalability

XGSI wanted to have On Demand Scalability, the 3rd Party gateways offering on demand scaling increases the infrastructure cost exponentially

# Challenges

**Xpress  
Global  
Systems  
Inc.**

# *Tekmonks* Solution

## **Security:**

One Opening to the Network, APIBoss is Hosted on a Data Center VM and exposed to the public network, other VMs are not needed to be exposed on the Public Network.

All the communication between APIBoss and the Application Servers happens on the Private Network over encrypted channel thus the data is not exposed to unnecessary routes.

## **Maintainability:**

Easy to Maintain solution by APIs clubbing the control at one place



# *Tekmonks* Solution

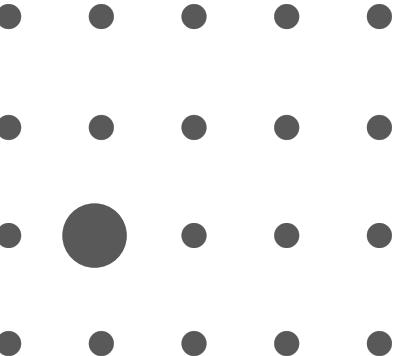
## **Flexibility:**

- APIBoss provides various APIs to perform Admin operations, creating/deleting an API user, IP whitelisting etc.
- The API logs can be easily exposed to another system via APIs
- Various authentication schemes are supported, and the support can be enhanced as per requirements

## **Scalability:**

Both Vertical and Horizontal scaling is possible with APIBoss





# Benefits of API BOSS



- More strict in terms of security

**Protection against DDoS and other Network attacks** By the features of APIBoss like Throttling the attacks can be prevented

**Policy compliance** By the features like Rate limiting Policy compliance can be enforced easily

- Control over Outbound APIs**
- APIBoss provided support for Forward API Management
  - Manages the External APIs being called by other Application servers
  - The API Keys, Tokens etc are managed at one place

# Benefits of API to BOSS



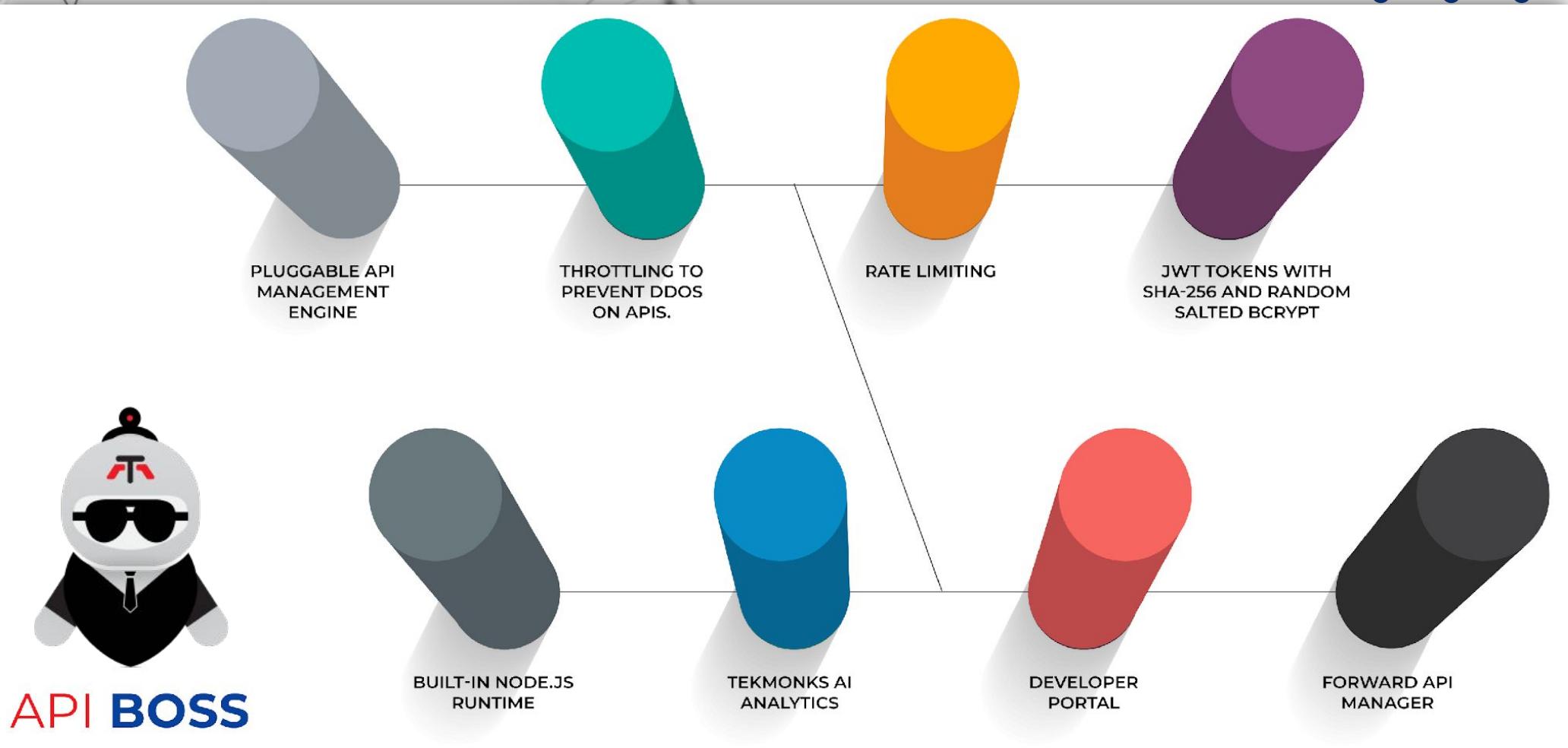
|  |   |
|--|---|
| <b>Highly Business Integrated solution</b> | <ul style="list-style-type: none"><li>The APIs being used for core business process must be monitored closely and every failure must be reported timely, APIBoss logged every API transaction and thus Provided a one place solution to look for API errors</li><li>An API Transaction failure can easily be tracked and reported</li></ul> |
| <b>Bunch of added Features</b>             | <ul style="list-style-type: none"><li>Rate Limiting</li><li>Throttling</li><li>IP Black/Whitelisting, etc</li><li>API Keys</li><li>Auth Tokens</li><li>API Usage/Performance Analytics</li><li>APIs to expose logs for error monitoring and reporting</li></ul>   |



API Boss is the world's most powerful API Manager and Developer Portal for JSON REST APIs and SOAP Web Services. Designed and developed by TekMonks, it has pluggable policies to support agreed Service Level Agreements (SLAs) and various scenarios possible.

The only API manager with forward control and not just backend, API Boss allows management of APIs that are external to the organization. Part of managing is to secure also external partner APIs besides those that are in house. Thus, making it stand out with other API Management tools commercially available.





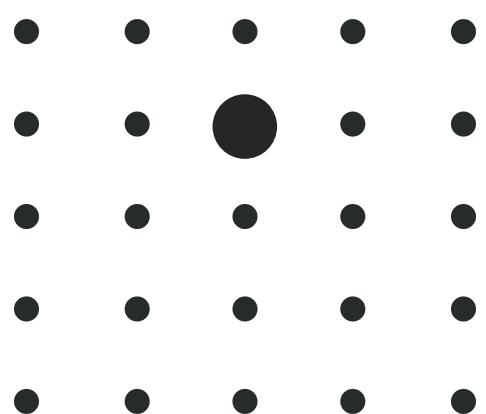
# KEY FEATURES



- 1** Pluggable API Management engine allows managing APIs with rich and complex policies.
- 2** Throttling to prevent Distributed Denial-of-Services (DDoS) on APIs.
- 3** Rate limiting to control requests that ensures policy compliance.
- 4** Support for JSON Web Tokens (JWT) with Secure Hash Algorithm 256-bit (SHA-256) and random salted password-hashing function bcrypt to ensure the highest level of security possible.
- 5** Built in Node.js runtime for creating new APIs or mashing with those that already exist.
- 6** Integration with TekMonks AI Analytics platform for Graphic User Interface (GUI) dashboards on API Metrics
- 7** Built in Developer Portal for exposing APIs in an API Registry
- 8** Forward API Manager for managing external third-party APIs, Keys, and Tokens called by the Enterprise.

# API

# B O S S



## **API Management**

The world's most powerful and complete API Manager, with pluggable policies to support any SLAs or scenarios.

## **Inclusive**

Simply put, no other product manages external partner APIs.

## **Support**

Support for REST, SOAP and even custom APIs, an exclusive feature of API Boss.



**Thank you!**