RADAPI©, Designing RESTful APIs with ease

A Community Project from Jasmine Conseil Labs

About **Jasmine Conseil**

Founded in 2006, Jasmine Conseil is an international consulting firm that works with the best partners and helps its clients overcome their greatest challenges.

Designed to operate as a single entity, Jasmine Conseil is strong in its values and carries a deep commitment to diversity, inclusivity and equity.

We believe in the independence of our clients. This is why we value our collaborative approach which allows us to work closely with them in order to offer them solutions adapted to their realities, quick to implement, for tangible results in the shortest possible time.

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Our values:

We are convinced that our values are the building blocks of our success.
We believe in:
- Social impact
- Respect for others
- The diversity- Inclusiveness

Our expertise:

We offer deep technical, functional experience in all areas in which we let's intervene .Our collaborative approach also allows us to share this expertise with our clients and learn of their experiences.

Our consultants:

Our pool of talents guarantees you in-depth experience, functional and technical knowledge related to your industry and assists you throughout your projects, both remotely and on site.

Our areas of intervention:

- Machining and Agile Project Management
- Business Intelligence
- Ux Design
- Artificial intelligence
- Continuous DevOps and Deployment-
- Migration of the base and support
- Package development

AGENDA : Accelerating API Development with RADAPI

WHY RADAPI© ?

INTRODUCTION

- RADAPI is a powerful and comprehensive platform designed to simplify and accelerate the process of designing, developing, testing, validating and deploying APIs. Whether you are an experienced developer or new to the world of APIs, RADAPI offers a set of essential tools and features to support you throughout the lifecycle of your APIs.

- You can use RADAPI for :

❖ Streamlined API Development

❖ Visual Modeling

❖ Real-Time Synchronization

❖ Integrated Development Environment (IDE)

❖ Integration with Popular Tools

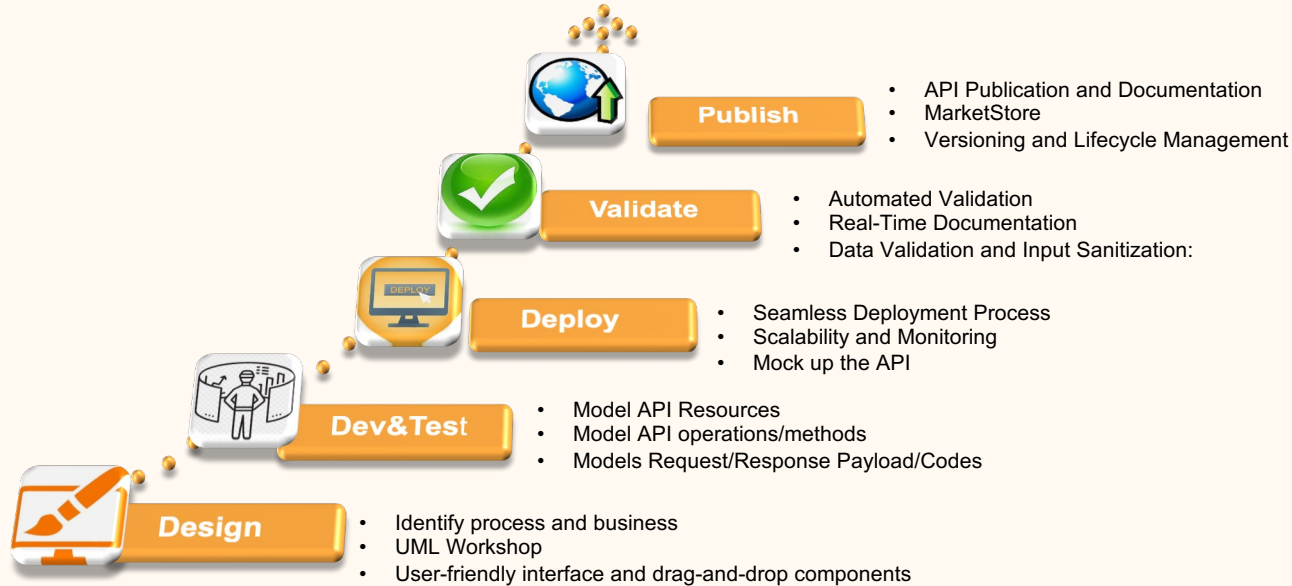❖ Real-Time Performance Monitoring

❖ Marketplace for Extensibility

RADAPI© FOR **WHOM** ?

- RADAPI is an essential tool for API development teams looking to optimize their workflow, improve the quality of their APIs and accelerate their time to market. Whether you are an individual developer or a development team, RADAPI gives you the functionality you need to design, develop, test, validate and deploy APIs efficiently and reliably.

- RADAPI is a R&D project made in Jasmine Conseil labs to to help design teams and developers in the development of APIs using a complete modeling workshop according to the API Design first approach

- RADAPI is a tool made for :

❑ API Developers

❑ Software Development Teams

❑ Enterprises and Organizations

❑ Independent Developers and Freelancers

❑ Software Architecture Professionals

RADAPI Life Cycle Management

Publish
- API Publication and Documentation
- MarketStore
- Versioning and Lifecycle Management

Validate
- Automated Validation
- Real-Time Documentation
- Data Validation and Input Sanitization:

Deploy
- Seamless Deployment Process
- Scalability and Monitoring
- Mock up the API

Dev&Test
- Model API Resources
- Model API operations/methods
- Models Request/Response Payload/Codes

Design
- Identify process and business
- UML Workshop
- User-friendly interface and drag-and-drop components

RADAPI Open Source with Community and Enterprise Components

RADAPI offers the best of both worlds - open-source flexibility and a vibrant developer community, combined with enterprise-grade features for organizations seeking advanced capabilities and dedicated support. It's a comprehensive solution that caters to the diverse needs of developers and businesses alike.

- RADAPI is an open-source API development platform with a thriving developer community.
- Developers can contribute, customize, and collaborate in the open-source community.
- RADAPI also offers enterprise-grade features and support for organizations.
- The enterprise component provides enhanced security, scalability, and tailored functionalities.
- With the enterprise component, businesses can enjoy dedicated support, premium features, and customization options to accelerate their API development process.
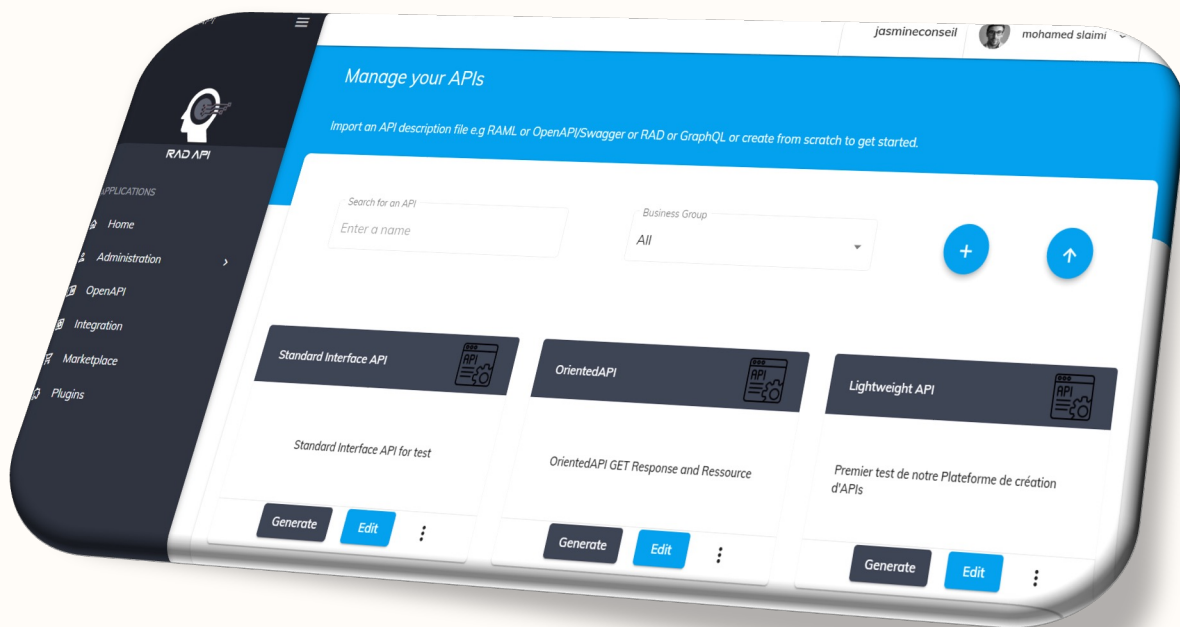- RADAPI combines the power of open-source collaboration with enterprise capabilities.
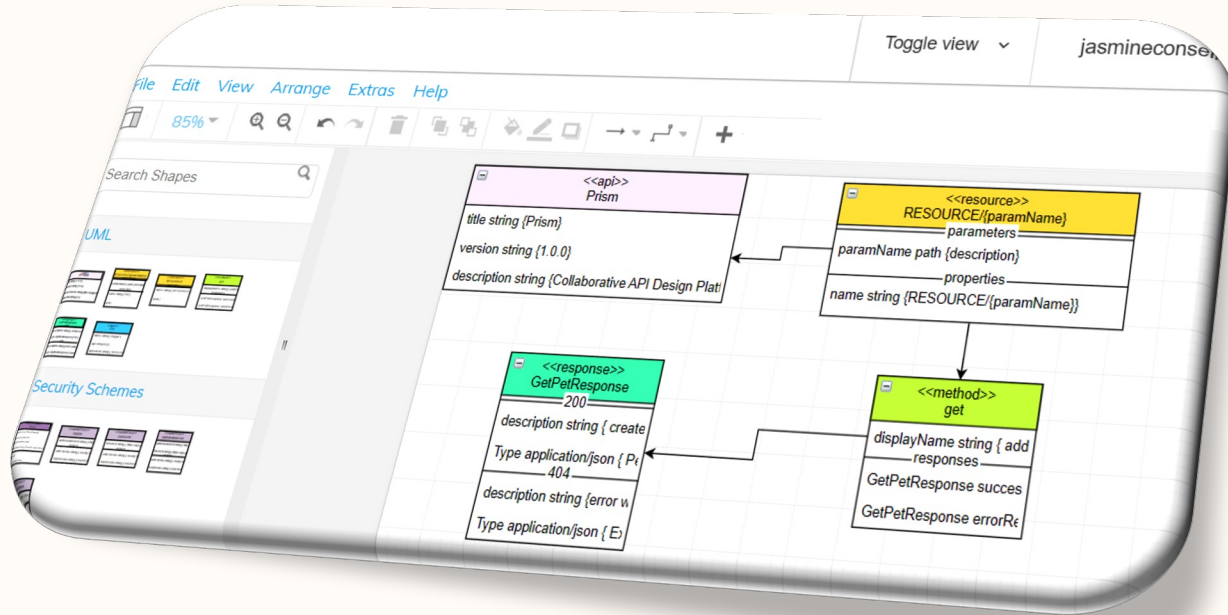
RADAPI

Welcome Page

- After logging into our RAD API application, you will be redirected to the home page for managing your APIs.
- This interface allows you to create and consult new APIs or import a specification file from your machine, whether RAML or OpenAPI.

DESIGN

UML Modeling Workshop

After creating our Prism API, we can now create small use cases allowing us to model the API resources and build GET, POST DELETE response models and methods.
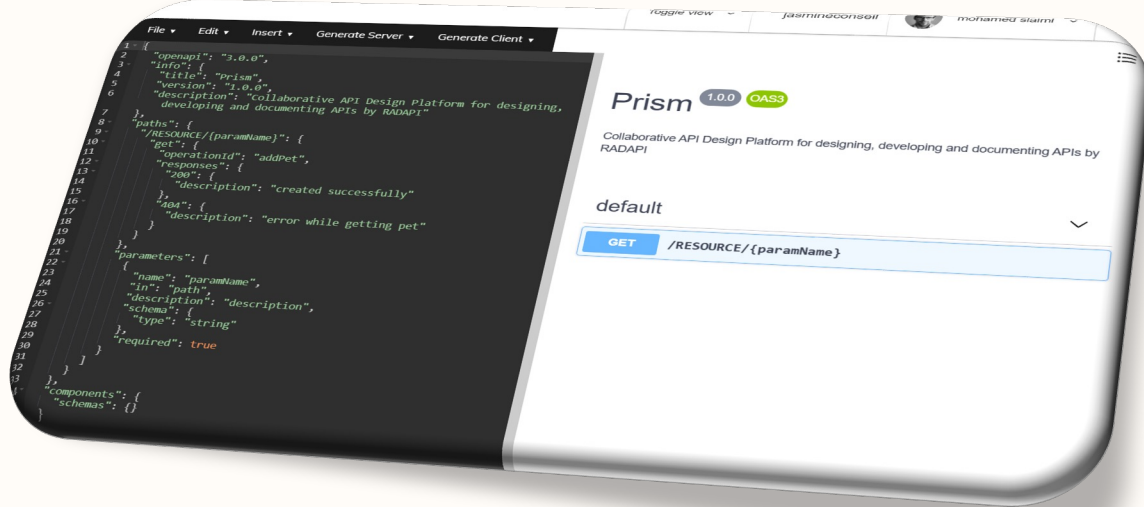
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Code Editor Page

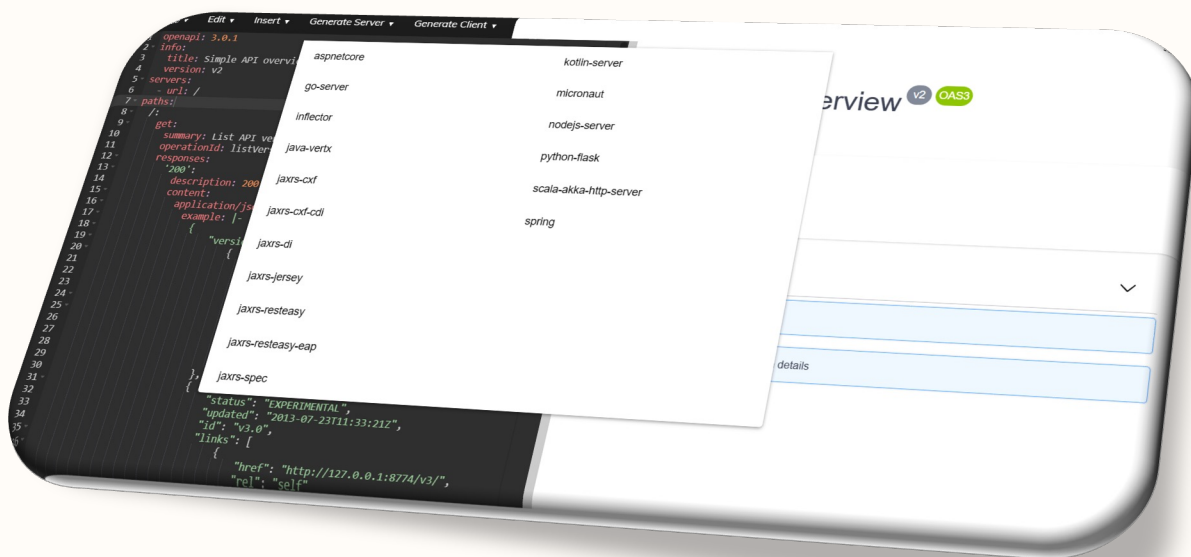The code editor in our RADAPI application has several uses:

Modifying the generated code, API Customization, Debugging and fixing errors, Add business logic, Integration with third-party systems.

In summary, the code editor offers the possibility to customize, adjust and extend your API by editing the generated code. It makes it easy to customize, debug, add business logic, and integrate with other systems to meet your specific project requirements.

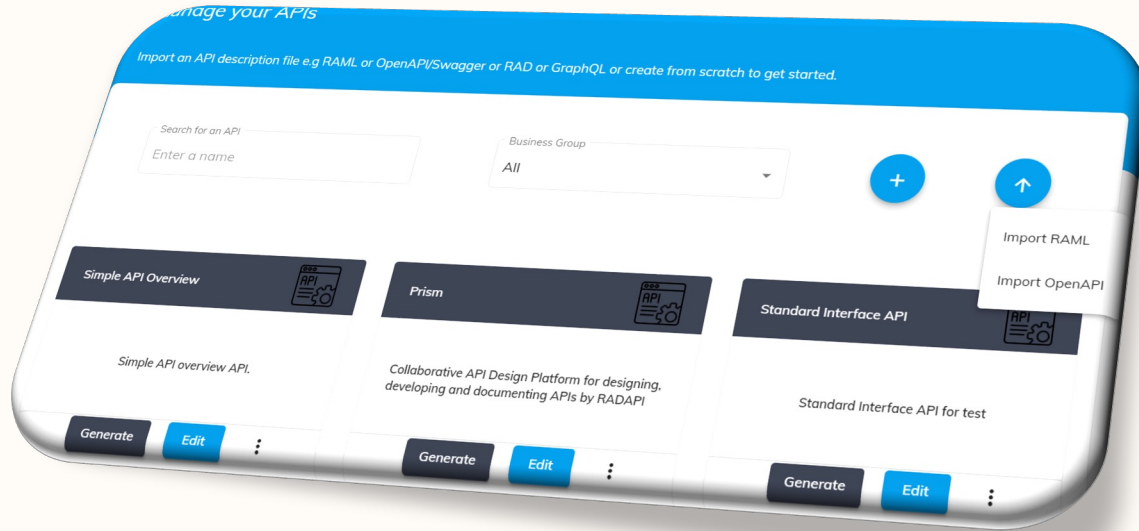# Code Editor Further Features

In this part we have several advantages with the possibility of converting our json file to OAS 3.0, this has several advantages:

- Documentation
- Validation and Compliance
- Code Generation
- Interoperability
- Collaboration

Importing RAML or OpenAPI Files: Seamlessly Integrate API Specifications

- Importing an **OpenAPI** or **RAML** file into our RADAPI Application provides a convenient way to speed up the development process, simplify visual modeling, ensure real-time synchronization between the visual representation and the underlying code , and foster effective collaboration.

- This improves the efficiency, consistency and quality of your APIs, while reducing tedious manual tasks and facilitating communication between team members.
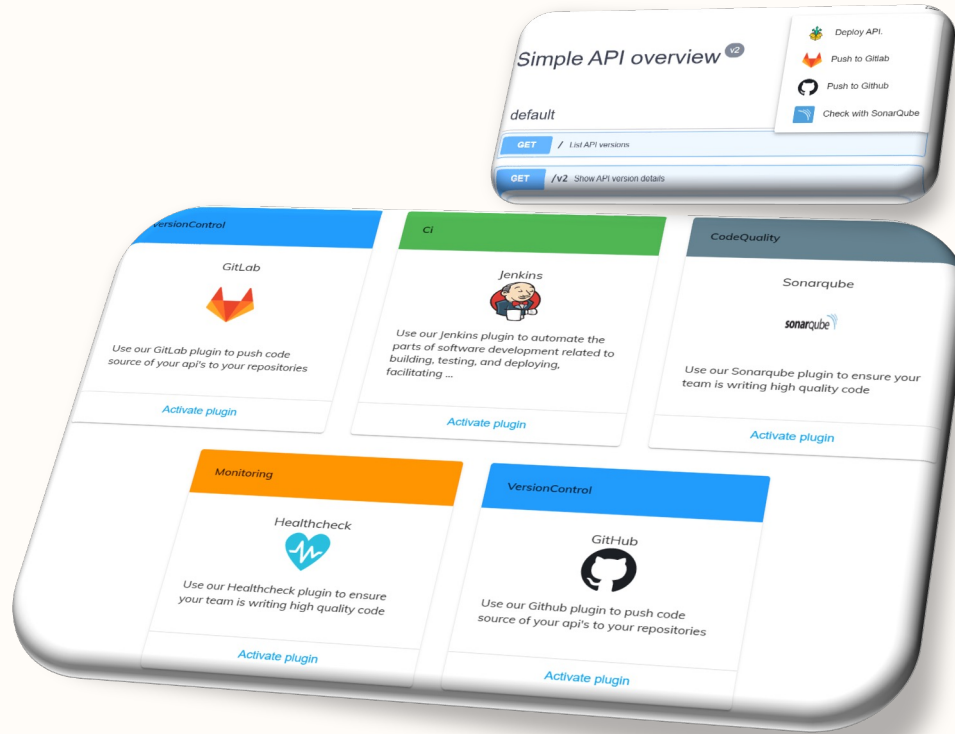
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API Import and Versioning

After importing our file we can directly allow ourselves to modify it if we are authorized to do so as a contributor, which promotes real-time synchronization and improved collaboration.

DEPLOY

Streamlined Deployment with Powerful Plugins:
Loopback GitLab, Jenkins, SonarQube, and HealthCheck

- GitLab: Version control for efficient code management.
- Jenkins: Automation of build, test, and deployment processes.
- SonarQube: Analysis and monitoring of code quality.
- HealthCheck: Real-time monitoring of API performance and availability.
- These plugins enhance LoopBack's capabilities for streamlined development, improved code quality, and efficient deployment of APIs.

API Validation: Ensuring Compliance and Data Integrity

In the development and testing phase of the API life cycle, key focuses include compliance with standards and best practices, robust error handling and exception management, as well as data validation and input sanitization. These aspects ensure the reliability, security, and consistency of the API, resulting in a seamless and enhanced user experience.

In the validation phase, we prioritize ensuring the compliance and integrity of your APIs, implementing rigorous checks and measures to guarantee their adherence to industry standards and best practices :

- Compliance with Standards and Best Practices
- Error Handling and Exception Management
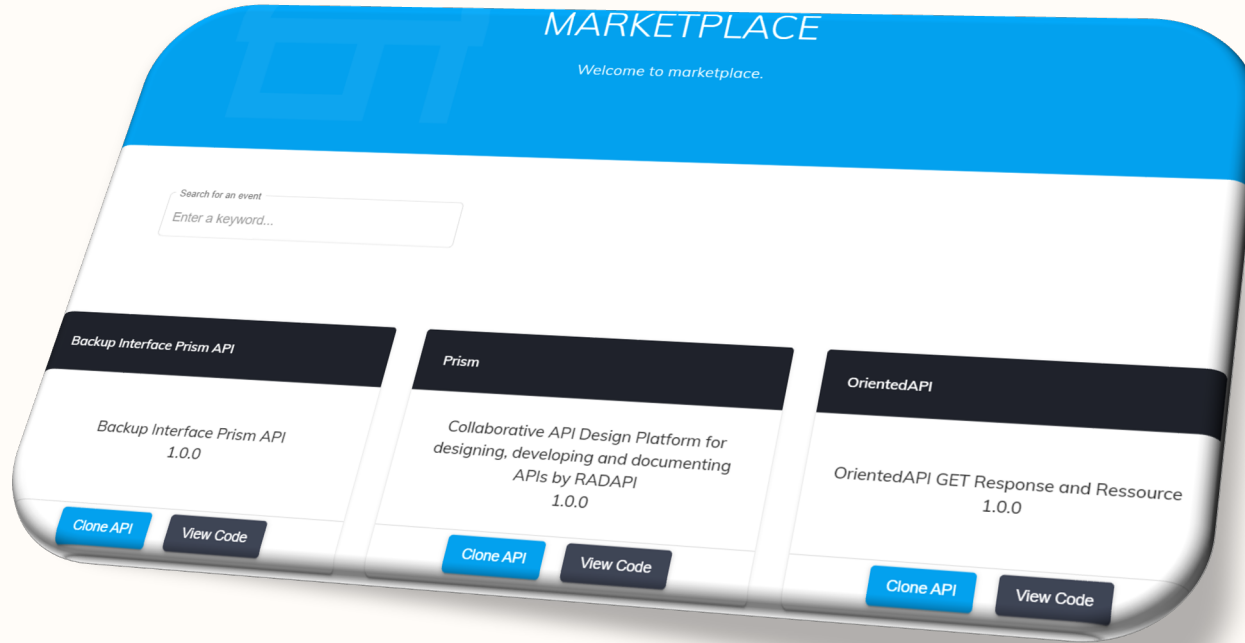- Data Validation and Input Sanitization

PUBLISH

Market Place : Public of RADAPI

Public marketplace serves as a valuable resource for RADAPI users, offering additional plugins and extensions to enhance the functionality and customization of the platform.

Some key points :

❑ Plugins and extensions.

❑ Personalization

❑ Expanding ecosystems

❑ Collaboration and Sharing

❑ Support and Assistance

RADAPI is :

- A comprehensive API development and deployment platform.
- An Intuitive design tools for efficient API creation.
- An Integrated development environment (IDE) for streamlined coding and testing.
- A Seamless integration with GitLab and GitHub for version control.
- An Automated testing, validation, and documentation for reliable APIs.
- A Simplified deployment process with CI/CD integration.
- A Real-time monitoring of API performance with the HealthCheck plugin.
- A Marketplace for additional plugins and extensions.
- A Scalable and flexible to handle increased traffic.
- A Repository to Publish and share APIs with comprehensive documentation.
- Open to other API Management Tools (Anypoint from MuleSoft, …)
- Available in Community and Enterprise Edition

RADAPI: Accelerate API development, deployment, and collaboration.