TM Forum Open APIs

Conformance Certification

Company Name: Vodafone Group (Reference Implementation)

TM Forum Open API Name: 
TMF620 – Product Catalog Management

TM Forum Open API Release Version: 4.1.0

Report Date: 13/10/2023
1. **What Product or Solution does your API support?**

- Vodafone Product Catalog API

The Vodafone Product Catalog API provides a unified interface for managing product offerings, product specifications, and other related product data. It can be used to support a variety of use cases, such as:

- Creating and managing new product offerings
- Updating existing product offerings
- Retrieving product information
- Searching for product offerings based on specific criteria.
- Integrating with other systems, such as CRM and billing systems

2. **Overview of Certified API**

The Vodafone Product Catalog API is a RESTful API that is based on the TMF620 Product Catalog standard. It provides a comprehensive set of endpoints for managing all aspects of the product catalog. The API is designed to be easy to use and integrate with other systems.

3. **Architectural View**

The architectural view of the TMF620 Product Catalog encompasses several key components that work together to provide a robust catalog management solution.

Catalog Database: At the core of the system is a scalable and high-performance catalog database that stores product information, service descriptions, pricing details, and related data.

API Gateway: The API is exposed through a dedicated API gateway, which handles authentication, rate limiting, and request routing. It ensures secure and efficient access to the catalog data.

Business Logic Layer: This layer contains the business rules and logic for product catalog management. It enforces data validation, pricing calculations, and product lifecycle management.

User Interface: This is channel dependent, such as: web, mobile app, etc.

Integration Points: The system offers integration points for external systems, allowing seamless communication with billing systems, order management, and customer relationship management (CRM) systems.
Scalability: The architecture is designed to be scalable, allowing for the addition of new products and services without compromising performance. It can handle the growing demands of a dynamic telecommunications market.

4. Test Results

Comprehensive functional and non-functional testing techniques were employed during the evaluation of the API. This rigorous testing process encompassed various aspects, including authentication, authorization, and the overall API functionality.

The API underwent thorough functional testing to ensure that all interface operations performed as expected. Test cases were designed to validate the accuracy and completeness of the retrieved data.

Non-functional aspects were validated ensuring encompassed performance testing, which assessed the API’s response time, scalability, and overall system load handling capacity. Additionally, security testing was conducted to identify and mitigate vulnerabilities that could potentially compromise the API’s security posture.

The conformance verification process for the REST API successfully validated its functionality, security, and alignment with the Business Process Framework. The rigorous testing procedures, including authentication, authorization, functional, and non-functional testing, ensure that the API is robust, secure, and capable of providing reliable communication mechanism.

In conclusion, TMF620 Product Catalog API, serves as a vital component to ensure the reliable communication as a service. Its adherence to conformance standards and rigorous testing procedures underscores its reliability and utility.

For any inquiries or further details about this conformance verification report, please contact the Digital Engineering team of Vodafone Group.

Click here to see the test results: VODAFONE-TMF620RW API-HTML Results