TM Forum Open APIs

Conformance Certification

Company Name: Vodafone Group (Reference Implementation)

TM Forum Open API Name: TMF637 - Product Inventory Management

TM Forum Open API Release Version: 4.0.0

Report Date: 15/09/2023
1. What Product or Solution does your API support?

Applications retrieval of the representation of a product in the inventory that provide a consistent standardized mechanism to query and manipulate the product inventory.

Use case:
This API may be used by consumer applications retrieval of the representation of a product in the inventory that provides a consistent standardized mechanism to query and manipulate the product inventory.

2. Overview of Certified API

The Product Inventory Management API provides standardized mechanism for product inventory management such as creation, update, and retrieval of the representation of a product in the inventory. It also allows the notification of events related to product lifecycle.

Product resource

A product offering procured by a customer or other interested party playing a party role. A product is realized as one or more service(s) and / or resource(s).

3. Architectural View

Customer engages with a frontend application that invokes TMF637 Product Inventory Management API exposed via an API Management layer. Request traverses the TMF microservice layer towards the secure backend system to retrieve the products.
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 product 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 accurate and aggregated product data for various user entities.

In conclusion, TMF637 Product Inventory Management API v4.0.0 serves as a vital component in the telecommunications ecosystem, facilitating effective retrieval of the product inventory from enterprise servers, and backend services to modelling to customer-facing applications or other enterprise systems. Its adherence to conformance standards and rigorous testing procedures underscores its reliability and utility in accurately tracking and reporting inventory levels.

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: VODAFONEGROUP-TMF637-API-HTML Results