TM Forum Open APIs

Conformance Certification

Company Name: Vodafone Group (Reference Implementation)

TM Forum Open API Name: 
TMF663- Shopping Cart

TM Forum Open API Release Version: 4.0.0

Report Date: 22/01/2024
1. **What Product or Solution does your API support?**

Product: Vodafone OmniShop
Solution: Unified e-commerce platform for seamless purchase of telecom services, devices, and accessories across multiple channels (online, mobile app, retail stores).

Sample Use Cases:
- Enabling customers to create and manage shopping carts across devices and channels, ensuring a consistent experience.
- Facilitating the purchase of both tangible goods (handsets, accessories) and intangible services (telecom network plans).
- Supporting one-off fees (handset purchases) and recurring charges (network service subscriptions).
- Managing promotions and discounts within the shopping cart.
- Integrating with Vodafone's CRM and billing systems for streamlined order processing and fulfillment.
2. **Overview of Certified API**

API Name: TMF663 Shopping Cart API

API Description:
The Shopping Cart API provides a standardized mechanism for managing shopping carts, including:
- Creation: Initiating a new shopping cart for a customer.
- Update: Adding, removing, or modifying items within a cart.
- Retrieval: Fetching cart details for display or modification.
- Deletion: Removing a cart and its contents.
- Notification of events: Receiving updates on cart changes, such as item additions or expiration.

Conformance level: Full conformance
Implementation Technology: Java Spring Boot
Deployment Environment: Vodafone's cloud infrastructure
3. Architectural View
The frontend channels/application that invokes TMF API exposed via an API Management layer. Request traverses the TMF microservice layer towards the secure backend system.
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 customer management.

In conclusion, this TMF API serves as a vital component to ensure the reliable customer management 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 view the test results: \texttt{VODAFONE-TMF663RW-HTMLResults.html}