TM Forum Open APIs

Conformance Certification

Company Name: Vodafone Group (Reference Implementation)

TM Forum Open API Name: 
**TMF702 - Resource Activation**

TM Forum Open API Release Version: **4.0.0**

Report Date: **26/01/2024**
1. **What Product or Solution does your API support?**

Vodafone's TMF702 Resource Activation API supports both internal teams and our customers to efficiently manage resource lifecycles, including activation, configuration, and updates.

Sample Use Case:
Imagine a customer signing up for a new mobile phone plan online. Through Vodafone's self-service portal, they select their desired plan and choose a new phone number. Behind the scenes, the Resource Activation API seamlessly activates the selected mobile number, assigns it to the chosen plan, and configures any associated features (e.g., international calls addon). This provides a smooth and efficient experience for both the customer and our internal teams.
2. **Overview of Certified API**

Vodafone's TMF702 Resource Activation API adheres to the latest TMF Open API standards. It facilitates the following operations on resources:
- **Retrieve**: Find individual or a collection of resources based on specific criteria.
- **Partial Update**: Modify specific attributes of a resource while respecting data integrity constraints.
- **Create**: Add new resources, pre-filling default values and applying creation rules.
- **Delete**: Remove resources for administrative purposes.
- **Event Notification**: Subscribe to and receive notifications about relevant resource events.

**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: VODAFONE-TMF702RW-HTMLResults.html