TM Forum Open APIs

Conformance Certification

Company Name: Vodafone Group (Reference Implementation)

TM Forum Open API Name:
**TMF654 – Prepay Balance Management**

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

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

   The API enables consumers to manage the balance, recharge (top-up), transfer, reserve, unreserve, deduct and balance adjustments of a bucket.

2. **Overview of Certified API**

   This API may be used by consumer applications that manage the balance (top-up) resources.

   **Key Features**

   - Create AdjustBalance
   - List or find Bucket objects
   - Create a TopupBalance
   - Update partially a TopupBalance
   - List or find TopupBalance objects
   - List or find AccumulatedBalance objects
3. Architectural View

Frontend channels/application that invokes TMF654 Prepay Balance Management API exposed via an API Management layer. Request traverses the TMF microservice layer towards the secure backend system to manage the prepay balance.
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 prepay balance management mechanism.

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-TMF654RW-HTMLResults.html