TM Forum Open APIs

Conformance Certification

Company Name: Marand Software

TM Forum Open API Name: TMF620 – Product Catalog Management

TM Forum Open API Release Version: 4.0.0

Report Date: 29/01/2024
1. What Product or Solution does your API support?

This conformance certification report covers the real-world product catalog management API exposed by Marand’s Unified Product Catalog and deployed at Telekom Slovenije.

Telekom Slovenije is the leading provider of comprehensive communication services in Slovenia. Telekom connects users and simplifies their lives, and ensures security through a range of the most advanced ICT services and solutions. Telekom Slovenije’s portfolio encompasses fixed and mobile communications (fixed and mobile telephony, fixed and mobile broadband services, IP telephony, and IP television), digital content and services, multimedia services and digital advertising, system integration, and cloud services (cloud computing), as well as the construction and maintenance of telecommunications networks. Telekom Slovenije also operates through its subsidiaries on the markets of South-Eastern Europe in Kosovo, Bosnia and Herzegovina, Croatia, Serbia, Montenegro and North Macedonia.

Unified Product Catalog (UPC) is a product catalog management system, designed and engineered for communications service providers (CSPs). UPC is a single point of truth for product specifications, product offerings, and prices serving the entire enterprise both, internally and externally. UPC manages all product-related data for fulfillment, assurance, and billing processes, as well as for various systems of digital customer engagement.

Unified Product Catalog (UPC) represents the master product catalog for Telekom Slovenije. UPC manages entire product portfolio including fix and mobile communications, cloud computing, and devices/equipment for B2C, B2B, and wholesale markets. UPC is integrated with Telekom Slovenije’s ERP system, BSS components as well as systems of digital customer engagement (e-commerce).

TMF620 product catalog management API is used to make commercial product catalog data available to OmniCPQ which serves as Telekom Slovenije’s B2B and wholesale quoting and ordering system.
Figure 1 presents a high-level solution architecture and outlines the certified API.
2. **Overview of Certified API**

Unified Product Catalog exposes a TMF620 compliant API to make commercial product catalog data available to various data consumers. The table below lists supported resources and REST operations.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Description</th>
<th>REST Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Specification</td>
<td>API comprises operations to create, update and list product specifications defined in a very flexible model capable of modelling any tangible or intangible object made available to customers. Product specifications include characteristics that describe their technical and commercial properties and relationships to other product specifications.</td>
<td>• Get • List • Post • Patch • Delete</td>
</tr>
<tr>
<td>Product Offering</td>
<td>API comprises operations for managing Product Offerings by wrapping Product specifications with commercial information, prices, and discounts, and providing additional characteristic values in order to be fully ready for selling them on the market through various distribution channels.</td>
<td>• Get • List • Post • Patch • Delete</td>
</tr>
<tr>
<td>Product Offering Price</td>
<td>API comprises operations to create, manage and list prices as a standalone entity, that can be attached to product offerings. Product offering price entity may be used to describe different types of charges and price alterations.</td>
<td>• Get • List • Post • Patch • Delete</td>
</tr>
<tr>
<td>Category</td>
<td>API comprises operations to group product offerings in hierarchical (tree-like) structures. Categories may be used for separating product offerings by lines of business, for simplifying navigation within the product catalog or for improving user experience throughout sales channels.</td>
<td>• Get • List • Post • Patch • Delete</td>
</tr>
</tbody>
</table>

As of the date of the certification report, read-only REST operations (get, list) are in production mode. Write operations are not necessary for supported use-cases and were disabled for performance reasons.
3. Architectural View

Product catalog management component exposes a TMF620 API that makes commercial product catalog data available to product order capture & validation and product configurator components (both components are a part of OmniCPQ software product).

Existing product inventories are persisted in separate legacy and strategic inventories (mobile, B2B/wholesale, B2C) and wrapped with “Customer 360 inventory” which exposes consolidated inventory in a unified way through TMF637 API. This way, a strangler pattern is implemented.

Product configurator (PC) component relies on product catalog data (exposed through TMF620) and existing product inventory (exposed through TMF637). PC serves two main purposes: to determine commercial offering eligibility (qualification) and to drive product configuration in various contexts (e.g. quote, order, shopping cart). Product configurator exposes TMF679 and TMF760 APIs.

Product order capture and validation (POCV) component comprises front-end and back-end components for managing quotes and product orders. POCV relies on TMF679 and TMF760 APIs exposed by the PC for offering qualification and configuration. POCV exposes TMF648 and TMF622 APIs for quote management and product order management.

Figure 2 depicts above mentioned open digital architecture (ODA) components with their exposed and consumed APIs.
Figure 2: component diagram shows ODA components and exposed and consumed APIs

4. Test Results
Click here to see the test results: MARAND-TMF620RW API-HTML Results