TM Forum Open APIs

Conformance Certification

Company Name: Netcracker-NEC

TM Forum Open API Name: TMF640 - Service Activation Management

TM Forum Open API Release Version 4.0.0

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1. **What Product or Solution does your API support?**

Netcracker Digital OSS (Operations Support System) portfolio is built on more than 25 years’ experience of successfully delivering end-to-end service and resource management, enabling service agility and operational efficiency through automation. The product suite simplifies the transition from physical to virtualized and cloud environments and helps service providers to adopt innovative technologies. It provides end-to-end, zero-touch orchestration for traditional and digital services, including SDN/NFV, cloud, IoT and 5G, and automates operations across complex hybrid environments. Service providers benefit from faster service creation and delivery, improved operational agility and lower TCO.

Netcracker Digital OSS is service, technology and vendor-agnostic and fully compliant with open standards and industry best practices, allowing to achieve superior interoperability with service provider’s existing environment.

Netcracker provides a comprehensive integration framework to support integration when implementing Digital OSS solution, including integration with network, BSS/OSS, IT infrastructure management systems, channels, analytics, ERP, DevOps - both within a CSP's environment and with partners' systems. We focus on standardization, automation, reuse, and open approach. Netcracker Digital OSS offers a rich know-how and a wide set of out-of-box connectors and pre-configured adapters. It supports a variety of integration types and techniques, including streaming, database, API-based and others.
2. **Overview of Certified API**

TMF640 Service Activation API been implemented in Service Orchestration module of Netcracker 2023.2 product version and it is fully compliant with TM Forum Open API specification Ver. v4.0.1.

The Service Activation API provides a consistent and standardized mechanism for query, create and modify service. This is particularly useful to configure service or to manage the service lifecycle.

The order to activate functional area includes all activities to support the business/customer layer in delivering ordered services. Order to activate also includes any changes (inflight and post activation) along with lifecycle management of the service.

The Service Activation API supports Use Cases including:
- Create new service
- Monitor long running service creation process
- Modify existing service
- Suspend service / restore service
- Remove service
- Check feasibility of a service
- Design and Assign a service and reserve resources
- Create an inactive service
- Activate an inactive service
- Retrieve service details

3. **Architectural View**

**Netcracker Integration and API Management** layer helps to remove the complexity of a service provider’s existing ecosystem of disparate data types, interfaces and business requirements. Through transparent, standards-driven links between environment components, service providers can centralize management and orchestration and improve visibility into BSS/OSS integrations by using pre-defined automation tools and preconfigured adapters.
The solution guarantees compliance with key industry standards, including those from TM Forum, MEF, ETSI, etc. This approach allows us to address integration challenges for business units, IT and partners efficiently without negatively affecting stakeholders.

TMF640 Service Activation API is implemented as a part of preconfigured adapters on Integration and API Management layer.

Following Architecture diagram shows how Service Activation API functionality is exposed by Netcracker CloudOSS via Integration&API Management layer.

4. **Test Results**

Click here to see the test results: [NETCRACKER-TMF640 API-HTML Results](#)