TM Forum Open APIs

Conformance Certification

Company Name: Suntech S.A.

TM Forum Open API Name: TMF645 – Service Qualification Management

TM Forum Open API Release Version: 4.0.0

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

SunVizion Network Inventory & Planning is a central repository providing visibility of all network assets — through the physical, as well as logical and virtual infrastructure overlays — and across different silos and domains (mobile, home broadband, data centers, IP transport and enterprise services). This includes a wide range of legacy technologies, such as copper, coax, SDH/PDH and ATM.

The solution consists of the following modules. They are all available across *web/cloud, desktop* and *mobile* formats and can be integrated or stand-alone as required:

- **Physical Inventory**
- **Logical Inventory**
- **Network Planning**
- **Service Inventory**
- **Inside Plant**
- **Logistics Management**
- **Number Management**
- **Workforce Management**
- **Workflow**

SunVizion Network Inventory & Planning can give an end-to-end view of resources and services because it gathers information from any network management system in the marketplace.

**Service order management** enables the registration of the *service order* and orchestration of the *fulfillment process*, including automated *service design*: it checks the availability of network resources necessary to provide the service, creates instances of customer facing services (*CFS*) and resource facing services, (*RFS*) and indicates which network resources are necessary to provide the service.

**Resource order orchestration** enables the full *resource design* automation for the network reconfiguration or planned network expansion.

SunVizion provides a series of *network planning algorithms* to make specific tasks more efficient and easier for network operators. They help optimize the use of resources, materials (i.e. cable length), labor cost (i.e. digging) and overall cost to
deliver a project or customer service. SunVizion algorithms seek to identify the optimized placement of nodes as well as the required connectivity between them. Both SunVizion Planning and SunVizion Network Inventory system use the same database, so inventory data is automatically updated almost at the same time as new rollouts are implemented in the network. This allows planners to keep constant tabs on resource availability during the network development stage.

Central repository of network inventory across different domains enables operations staff to have a single view of both physical and logical network aspects, geographically represented on a highly accurate map. SunVizion is integrated with Esri ArcGIS Server. The built-in geodatabase keeps track of all as-built and planned network resources. These resources are visible on top of the map, so planners can see existing infrastructure and network resources, demographics, and customer information in a single view. Data stored in SunVizion can be presented in 3D view which enables users to see how the site looks without visiting it.

The comprehensive SunVizion Network Inventory & Planning solution streamlines the following processes:

- Network planning, including network design and rollout / expansion
- Network augmentation, capacity uplift and change
- Reservation of resources to support quotes and sales
- Allocation of resources to support configuration, delivery and provisioning of services
- Diagnosis and resolution of outages and degradation in network health
- Network audits and asset life-cycle management
- Ongoing maintenance of assets to ensure network health, service reliability and customer satisfaction
- Discovery of current assets, their connectivity and associations with customers and services
- Reconciliation that ensures the accuracy and reliability of data within the inventory solution and the many other data sources that cross-reference it
- Analytics and insight generation for operational business units

SunVizion deployment models include on-premise, hybrid cloud, and public cloud. Cloud agnostic architecture ensures deployment flexibility for modern, enterprise-grade applications that require scaling up and down, availability, and reliability.
2. Overview of Certified API

SunVizion Service Qualification Management API provide a consistent/standardized mechanism to retrieve list of technically available services and to perform a technical eligibility on a service configuration. The API supports model described in TMF645 specification document. SunVizion Service Qualification Management API performs the following operations on a resources:

- Query CheckServiceQualification objects (GET),
- Create CheckServiceQualification objects (POST),
- Query QueryServiceQualification objects (GET),
- Create QueryServiceQualification objects (POST).

3. Architectural View

SunVizion employs flexibly interconnected systems that can be combined into a solution tailored to the projects requirements and providing a path for future growth. Each subsystem is stand-alone, and can be released, sized, and installed together or independently.
4. **Test Results**

Click here to see the test results: [SUNTECH-TMF645 API-HTML Results](#)