TM Forum Open APIs

Conformance Certification

Company Name: Huawei Technologies Co. Ltd

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?**

SmartCare provides service experience solutions for global CSPs, helping CSPs resolve network performance problems, ensure service quality, build high-quality networks, and improve user experience through planning and design, network optimization, and service experience management. In addition, by opening the capabilities of the platform, global carriers, ecosystem partners and Huawei can work together to transform human-dominant CEM (customer experience management to intelligent CEM).

**Service Qualification Management API in Huawei SmartCare**

A key component of the solution is data qualification management which is mapped as part of platform in Huawei SmartCare. The **Service Qualification Management API** can be used to create and query CheckServiceQualification and QueryServiceQualification. It provides an interaction interface with this module and relevant functionalities of Huawei SmartCare. The external systems and the third-parties can access such capabilities via the exposed APIs.

2. **Overview of Certified API**

According to Resource Inventory Management Conformance Profile (TMF645B), the **Service Qualification Management API** is to provide service technical eligibility in the context of the interaction. It has two resources: CheckServiceQualification and QueryServiceQualification.

**CheckServiceQualification**

CheckServiceQualification is used to perform a technical eligibility on service configuration(s). It allows to retrieve services that are technically available in the context of the interaction (place, party, service characteristics, …).

Main attributes are:

- **Description** A string. Description of the serviceQualification.
- **effectiveQualificationDate** A date time (DateTime). Effective date to serviceQualification completion.
- **estimatedResponseDate** A date time (DateTime). Date when the requester expect to provide an answer for the qualification request.
- **expectedQualificationDate** A date time (DateTime). A date (DateTime). Deadline date when the requester expected a qualification answer.
- **expirationDate** A date time (DateTime). Date when the qualification response expires.
• **externalId** A string. Identifier provided by the requester.
• **Href** A string. Hyperlink to access the serviceQualification.
• **Id** A string. Unique identifier of the serviceQualification resource.
• **instantSyncQualification** A boolean. An indicator which when the value is "true" means that requester expects to get qualification result immediately in the response. If the indicator is true then the response code of 200 indicates the operation is successful otherwise a task is created with a response 201.
• **checkServiceQualificationDate** A date time (DateTime). Date when the serviceQualification was submitted.
• **provideAlternative** A boolean. When the value is TRUE means that alternative solutions should be provided.
• **provideUnavailabilityReason** A boolean. When the value is TRUE means that unavailability reason are expected for non available service.
• **qualificationResult** A string. Qualification result for this serviceQualification. It could be: qualified (all qualification item are qualified), alternate (At least one item alternate and no item with unqualified), unqualified (At least one item unqualified).
• **serviceQualificationItem** A list of check service qualification items (CheckServiceQualificationItem []). A list of service qualification items.
• **relatedParty** A list of related parties (RelatedParty []). A list of related party references, defines party or party role linked to this request.
• **State** A task state type (TaskStateType). State of the serviceQualification (acknowledged, inProgress, terminatedWithError, done).

**QueryServiceQualification**

QueryServiceQualification is used to retrieve a list of services that are technically available in the context of the interaction (place, party, service characteristics, ...).

Main attributes are:
• **description** A string. Description of the serviceQualification.
• **effectiveQualificationDate** A date time (DateTime). Effective date to serviceQualification completion.
• **estimatedResponseDate** A date time (DateTime). Date when the requester expect to provide an answer for the qualification request.
• **expectedQualificationDate** A date time (DateTime). A date (DateTime). Deadline date when the requester expected a qualification answer.
• **expirationDate** A date time (DateTime). Date when the qualification response expires.
• **externalId** A string. Identifier provided by the requester.
• **Href** A string. Hyperlink to access the serviceQualification.
• **Id** A string. Unique identifier of the serviceQualification resource.
• **instantSyncQualification** A boolean. An indicator which when the value is "true" means that requester expects to get qualification result immediately in the response. If the indicator is true then the response code of 200 indicates the operation is successful otherwise a task is created with a response 201.
• **queryServiceQualificationDate** A date time (DateTime). Date when the serviceQualification was submitted.
• **searchCriteria** A service qualification item (ServiceQualificationItem). Search structure to retrieve eligible service specification.
• **serviceQualificationItem** A list of service qualification items (ServiceQualificationItem []).
• **relatedParty** A list of related parties (RelatedParty []). A list of related party references, defines party or party role linked to this request.
• **State** A task state type (TaskStateType). State of the serviceQualification (acknowledged, inProgress, terminatedWithError, done).

3. **Architectural View**
The following diagram shows a functional architecture view of Huawei SmartCare:

![Architecture Diagram]

4. **Test Results**
Click here to view the test results: [HUAWEI-TMF645-HTMLResults.html](HUAWEI-TMF645-HTMLResults.html)