**3GPP TSG-CT3 Meeting #132e C3-240151**

**Electronic, 22 - 24 January, 2024**

**Source: China Mobile**

**Title: Pseudo-CR on Management Service Discovery Service Description**

**Spec: 3GPP TS 29.435 v0.1.1**

**Agenda item: 18.49**

**Document for: Approval**

**1. Introduction**

This document introduces Information Collection in TS 29.435 Network Slice Capability Exposure (NSCE) Server Services.

**2. Reason for Change**

This document introduces Management Service Discovery in TS 29.435 Network Slice Capability Exposure (NSCE) Server Services. TS 23.435 clause 4.5 and 9.6 specify the Management Service Discovery service.

**3. Conclusions**

This document introduces Management Service Discovery in TS 29.435 Network Slice Capability Exposure (NSCE) Server Services, defines the new NSCE\_ManagementServiceDiscovery service, its architecture, and service operations.

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.435 Network Slice Capability Exposure (NSCE) Server server Services.

\* \* \* First Change \* \* \* \*

## 5.5 NSCE\_ManagementServiceDiscovery

### 5.5.1 Service Description

The NSCE\_ManagementServiceDiscovery service exposed by the NSCE Server enables a service consumer to:

- create/update/delete a Management Discovery Subscription; and

- receive Management Discovery Notifications.

#### 5.5.2.1 Introduction

The service operations defined for the NSCE\_ManagementServiceDiscovery service are shown in table 5.5.2.1-1.

Table 5.5.2.1-1: NSCE\_ManagementServiceDiscovery Service Operations

|  |  |  |
| --- | --- | --- |
| Service Operation Name | Description | Initiated by |
| NSCE\_ManagementServiceDiscovery\_Subscribe | This service operation enables a service consumer to request the creation of a Management Discovery Subscription at the NSCE Server. | e.g., VAL Server |
| NSCE\_ManagementServiceDiscovery\_Notify | This service operation enables a service consumer to receive Management Discovery Notifications. | NSCE Server |

#### 5.5.2.2 NSCE\_ManagementServiceDiscovery\_Subscribe

##### 5.5.2.2.1 General

This service operation is used by a service consumer to request the creation/update/deletion of a Management Discovery Subscription at the NSCE Server.

The following procedures are supported by the "NSCE\_ManagementServiceDiscovery\_Subscribe" service operation:

- Management Discovery Subscription Creation.

- Management Discovery Subscription Update.

- Management Discovery Subscription Deletion.

##### 5.5.2.2.2 Management Discovery Subscription Creation

Figure 5.5.2.2.2-1 depicts a scenario where a a service consumer sends a request to the NSCE Server to request the creation of a Management Discovery Subscription (see also clause 9.6 of 3GPP°TS°23.435°[14]).

 Figure 5.5.2.2.2-1: Procedure for Management Discovery Subscription Creation

1. In order to request the creation of a new Management Discovery Subscription, the service consumer shall send an HTTP POST request to the NSCE Server targeting the URI of the "Management Discovery Subscription" collection resource, with the request body including the MnSDiscSubsc data structure.

2a. Upon success, the NSCE Server shall respond with an HTTP "201 Created" status code, with the response body containing a representation of the created "Individual Management Discovery Subscription" resource within the MnSDiscSubsc data structure, and an HTTP "Location" header field containing the URI of the created resource.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body, as specified in clause 6.5.7.

##### 5.5.2.2.3 Management Discovery Subscription Update

Figure 5.5.2.2.3-1 depicts a scenario where a service consumer sends a request to the NSCE Server to request the update of an existing Management Discovery Subscription (see also clause 9.6 of 3GPP°TS°23.435°[14]).



Figure 5.5.2.2.3-1: Procedure for Management Discovery Subscription Update

1. In order to update an existing Management Discovery Subscription, the service consumer shall send an HTTP PUT/PATCH request to the NSCE Server, targeting the URI of the corresponding "Individual Management Discovery Subscription" resource, with the request body including either:

- the updated representation of the resource within the MnSDiscSubsc data structure, in case the HTTP PUT method is used; or

- the requested modifications to the resource within the MnSDiscSubscPatch data structure, in case the HTTP PATCH method is used.

NOTE: An alternative service consumer (i.e. other than the one that requested the creation of the targeted resource) can initiate this request.

2a. Upon success, the NSCE Server shall update the targeted "Individual Management Discovery Subscription" resource accordingly and respond with either:

- an HTTP "200 OK" status code with the response body containing a representation of the updated "Individual Management Discovery Subscription" resource within the MnSDiscSubsc data structure; or

- an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP PUT/PATCH response body, as specified in clause 6.5.7.

##### 5.5.2.2.4 Management Discovery Subscription Deletion

Figure 5.5.2.2.4-1 depicts a scenario where a service consumer sends a request to the NSCE Server to request the deletion of an existing Management Discovery Subscription (see also clause 9.6 of 3GPP°TS°23.435°[14]).



Figure 5.5.2.2.4-1: Procedure for Management Discovery Subscription Deletion

1. In order to request the deletion of an existing Management Discovery Subscription, the service consumer shall send an HTTP DELETE request to the NSCE Server targeting the corresponding "Individual Management Discovery Subscription" resource.

NOTE: An alternative service consumer (i.e. other than the one that requested the creation of the targeted resource) can initiate this request.

2a. Upon success, the NSCE Server shall respond with an HTTP "204 No Content" status code.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP DELETE response body, as specified in clause 6.5.7.

#### 5.5.2.3 NSCE\_ManagementServiceDiscovery\_Notify

##### 5.5.2.3.1 General

This service operation is used by a NSCE Server to notify a previously subscribed service consumer on:

- Management Discovery Subscription.

The following procedures are supported by the "NSCE\_ManagementServiceDiscovery\_Notify" service operation:

- MnS discovery Notification.

##### 5.5.2.3.2 Management Discovery Notification

Figure 5.5.2.3.2-1 depicts a scenario where the NSCE Server sends a request to notify a previously subscribed service consumer on Management Discovery event(s) (see also clause 9.6 of 3GPP°TS°23.435°[14]).



Figure 5.5.2.3.2-1: MnS discovery Notification

1. In order to notify a previously subscribed service consumer on Management Discovery event(s), the NSCE Server shall send an HTTP POST request to the service consumer with the request URI set to "{notifUri}", where the "notifUri" variable is set to the value received from the service consumer during the creation/update of the corresponding Management Discovery Subscription using the procedures defined in clause 5.5.2.2, and the request body including the MnSDiscNotif data structure.

2a. Upon success, the service consumer shall respond to the NSCE Server with an HTTP "204 No Content" status code to acknowledge the reception of the notification.

2b. On failure, the appropriate HTTP status code indicating the error shall be returned and appropriate additional error information should be returned in the HTTP POST response body, as specified in clause 6.5.7.

\* \* \* End of Changes \* \* \* \*