**3GPP TSG-CT3 Meeting #132e C3-240131**

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

**Source: China Mobile, Huawei**

**Title: Pseudo-CR on Information Collection 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 Information Collection in TS 29.435 Network Slice Capability Exposure (NSCE) Server Services. TS 23.435 clause 4.7 and 9.8 specify the Information Collection service, where the network slice status collected by the NSCE server could be exposed to other NSCE server(s) if some agreement has been made.

**3. Conclusions**

This document introduces Information Collection in TS 29.435 Network Slice Capability Exposure (NSCE) Server Services, defines the new NSCE\_InfoCollection 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 \* \* \* \*

## 5.8 NSCE\_InfoCollection

### 5.8.1 Service Description

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

* create/update/delete the Information Collection Subscription; and
* receive the Information Collection Notifications.

### 5.8.2 Service Operations

#### 5.8.2.1 Introduction

The service operations defined for the NSCE\_InfoCollection service are shown in table 5.8.2.1-1.

Table 5.8.2.1-1: NSCE\_InfoCollection Service Operations

|  |  |  |
| --- | --- | --- |
| Service Operation Name | Description | Initiated by |
| NSCE\_InfoCollection\_Subscribe | This service operation enables a service consumer to create/update/delete an Information Collection Subscription. | e.g., NSCE Server |
| NSCE\_InfoCollection\_Notify | This service operation enables a service consumer to receive Information Collection Notifications. | e.g., NSCE Server |

#### 5.8.2.2 NSCE\_InfoCollection\_Subscribe

##### 5.8.2.2.1 General

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

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

* Information Collection Subscription Creation;
* Information Collection Subscription Update;
* Information Collection Subscription Deletion.

##### 5.8.2.2.2 Information Collection Subscription Creation

Figure 5.8.2.2.2-1 depicts a scenario where a service consumer sends a request to the NSCE Server to request the creation of an Information Collection Subscription (as defined in clause 9.8 of 3GPP°TS°23.435°[14]).

**Service Consumer**

**NSCE Server**

POST.../subscriptions(InfoCollectSubsc)

2a. 201 Created (InfoCollectSubsc)

2b. 4xx/5xx

Figure 5.8.2.2.2-1: Procedure for Information Collection Subscription Creation

1. In order to request the creation of an Information Collection Subscription, the service consumer shall send an HTTP POST request to the NSCE Server targeting the URI of the "Information Collection Subscriptions" collection resource, with the request body including the InfoCollectSubsc 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 Information Collection Subscription" resource within the InfoCollectSubsc data structure.

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 6.7.7.

##### 5.8.2.2.3 Information Collection Subscription Update

Figure 5.8.2.2.3-1 depicts a scenario where a service consumer sends a request to the NSCE Server to request the update of an existing Information Collection Subscription (as defined in clause 9.8 of 3GPP°TS°23.435°[14]).

**Service Consumer**

**NSCE Server**

PUT or PATCH.../subscriptions/{subscriptionId}

2a. 200 OK (InfoCollectSubsc)/204 No Content

2b. 4xx/5xx

(InfoCollectSubsc or InfoCollectSubscPatch)

Figure 5.8.2.2.3-1: Procedure for Information Collection Subscription Update

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

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

- the requested modifications to the resource within the InfoCollectSubscPatch 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 Information Collection Subscription" resource accordingly and respond with either:

- an HTTP "200 OK" status code with the response body containing a representation of the updated "Individual Information Collection Subscription" resource within the InfoCollectSubsc 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 6.7.7.

##### 5.8.2.2.4 Information Collection Subscription Deletion

Figure 5.8.2.2.4-1 depicts a scenario where a service consumer sends a request to the NSCE Server to request the update of an existing Information Collection Subscription (as defined in clause 9.8 of 3GPP°TS°23.435°[14]).

**Service Consumer**

**NSCE Server**

DELETE.../subscriptions/{subscriptionId}

2a. 204 No Content

2b. 4xx/5xx

Figure 5.8.2.2.4-1: Procedure for Information Collection Subscription Deletion

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

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 6.7.7.

#### 5.8.2.3 NSCE\_InfoCollection\_Notify

##### 5.8.2.3.1 General

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

- information Collection report(s).

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

- Information Collection Notification.

##### 5.8.2.3.2 Information Collection Notification

Figure 5.8.2.3.2-1 depicts a scenario where the NSCE Server sends a request to notify a previously subscribed service consumer on Information Collection report(s) (as defined in clause 9.8 of 3GPP°TS°23.435°[14]).

**NSCE Server**

**Service Consumer**

POST{notifUri}(InfoCollectNotif)

2a. 204 No Content

2b. 4xx/5xx

Figure 5.8.2.3.2-1: Procedure for Information Collection Notification

1. In order to notify a previously subscribed service consumer on Information Collection report(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 Information Collection Subscription using the procedures defined in clause 5.8.2.2, and the request body including the InfoCollectNotif 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 6.7.7.

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