**3GPP TSG-CT WG3 Meeting #116eC3-213325**

**E-Meeting, 19th – 28th May 2021** (revision of C3-213265)

**Source: Samsung**

**Title: Pseudo-CR on Eees\_AppClientInformation service description**

**Spec: 3GPP TS 29.558 v0.3.0**

**Agenda item: 17.9**

**Document for: Decision**

**1. Introduction**

TS 23.558 specifies the Eees\_AppClientInformation service, for the EAS to subscribe to EES to receive Application Client Information based on certain criteria.

**2. Reason for Change**

This pCR proposes the service description of the Eees\_AppClientInformation API.

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.558 v0.3.0.

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

## 5.1 Introduction

*This clause will provide the list of Edge Enabler Server services with their respective service operations.*

The table 5.1-1 lists the Edge Enabler Server APIs below the service name. A service description clause for each API gives a general description of the related API.

Table 5.1-1: List of EES Service APIs

|  |  |  |  |
| --- | --- | --- | --- |
| Service Name | Service Operations | Operation Semantics | Consumer(s) |
| Eees\_EASRegistration | Request | Request/Response | EAS |
| Update | Request/Response | EAS |
| Deregister | Request/Response | EAS |
| Eees\_UELocation | Get | Request/Response | EAS |
| Subscribe | Subscribe/Notify | EAS |
| Notify |
| UpdateSubscription |
| Unsubscribe |
| Eees\_UEIdentifier | Get | Request/Response | EAS |
| Eees\_AppClientInformation | Subscribe | Subscribe/Notify | EAS |
| Notify |
| UpdateSubscription |
| Unsubscribe |

Table 5.1-2 summarizes the corresponding Edge Enabler Server APIs defined in this specification.

Table 5.1-2: API Descriptions

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Service Name** | **Clause** | **Description** | **OpenAPI Specification File** | **apiName** | **Annex** |
|  |  |  |  |  |  |

\* \* \* Next Change \* \* \* \*

## 5.y Eees\_AppClientInformation Service

### 5.y.1 Service Description

The Eees\_AppClientInformation API, as defined in 3GPP TS 23.558 [2], allows an Edge Application Server via Eees interface to obtain the information about the capabilities of the ACs based on certain filter criteria.

Editor’s Note: Details about EAS security credentials, verification and authorization of Eees\_AppClientInformation service operations, by the EES, to be aligned with security aspects defined by SA3.

### 5.y.2 Service Operations

#### 5.y.2.1 Introduction

The service operation defined for Eees\_AppClientInformation API is shown in the table 5.y.2.1-1.

Table 5.y.2.1-1: Operations of the Eees\_AppClientInformation API

|  |  |  |
| --- | --- | --- |
| Service operation name | Description | Initiated by |
| Eees\_AppClientInformation\_Subscribe | This service operation is used by the EAS to subscribe to EES, for reporting of AC information. | EAS |
| Eees\_ AppClientInformation\_Notify | This service operation is used by the EES to notify the EAS about the AC information. | EES |
| Eees\_ AppClientInformation\_UpdateSubscription | This service operation is used by the EAS to update its subscription at EES, for reporting of AC information. | EAS |
| Eees\_ AppClientInformation\_Unsubscribe | This service operation is used by the EAS to remove its subscription from EES, for reporting of AC information. | EAS |

#### 5.y.2.2 Eees\_AppClientInformation\_Subscribe

##### 5.y.2.2.1 General

This service operation is used by the EAS to subscribe for AC(s) information reporting.

##### 5.y.2.2.2 EAS subscribing to AC information reporting from EES using Eees\_AppClientInformation\_Subscribe operation

To subscribe to AC information reporting at the EES, the EAS shall send a HTTP POST message to the EES on the "Application Client Information Subscriptions" resource. The body of the POST message shall include EAS identifier, criteria information to filter the AC(s) information, Notification Destination URI and may include proposed expiry time of the subscription and reporting requirements, as specified in clause 8.y.2.2.3.1.

Upon receiving the HTTP POST message from the EAS, the EES shall:

1. Process the EAS AC information subscription request;

2. verify the identity of the Edge Application Server and check if the EAS is authorized to subscribe for the AC information reporting;

3. if the EAS is authorized to subscribe for the AC information reporting, then the EES shall;

a. create a new resource with the AC Information Subscription as specified in clause 8.y.2.1;

b. return the EAS’s AC information subscription information, the resource URI of the EAS AC information subscription, in the response message.

The EES determines the matching AC information corresponding to the filter criteria information in the subscription request to compose the AC information to the EAS.

If the expiration time is provided, then to maintain the registration, the EAS shall send a subscription update request (as described in clause 5.y.2.4) prior to the expiration time. If the subscription update request is not sent before the expiry time, then the EES shall treat the subscription as unsubscribed and remove the corresponding EAS’s Individual Application Client Information Subscription resource.

#### 5.y.2.3 Eees\_AppClientInformation\_Notify

##### 5.y.2.3.1 General

This service operation is used by the EES to send AC information notifications to the EAS.

##### 5.y.2.3.2 EES notifying the AC information to EAS using Eees\_AppClientInformation\_Notify operation

The EES determines to notify the EAS with the AC information matching the filter criteria, when the AC information updates are available to EES, e.g. EES receives registration request from EEC.

To notify the AC(s) information, the EES shall send an HTTP POST message using the Notification Destination URI received in the subscription request. The body of the HTTP POST message shall include "ACInfoNotification". "ACInfoNotification" includes AC(s) information matching the filter criteria. The AC(s) information consist of AC(s) profiles, UE identifiers hosting the AC(s) and the location information of the UE(s) hosting the AC(s).

Upon receiving the HTTP POST message, the EAS shall process the AC Information Notification and shall respond to the EES with "204 No Content" message.

#### 5.y.2.4 Eees\_AppClientInformation\_UpdateSubscription

##### 5.y.2.4.1 General

This service operation is used by the EAS to update its AC information subscription at the EES.

##### 5.y.2.4.2 EAS updating AC information reporting subscription at EES using Eees\_AppClientInformation\_UpdateSubscribe operation

To update AC information reporting subscription at the EES, the EAS shall send a HTTP PATCH or PUT message to the EES on resource URI identifying the "Individual Application Client Information" Subscription resource representation, as specified in clause 8.y.2.3.3.2 for HTTP PATCH message and in clause 8.y.2.3.3.3 for HTTP PUT message.

The PATCH message includes the parameters (AC filter criteria, Notification Destination, Reporting requirements and proposed expiry time) that need to be replaced in the existing subscription resource.

The PUT message shall replace all the properties of the existing resource with the AC subscription information in the request. The request shall not replace the "easId" property of the existing resource.

Upon receiving the HTTP PATCH or PUT message from the EAS, the EES shall:

1. check the update subscription message from the EAS to see if the EAS is authorized to modify the requested subscription resource;

2. if the EAS is authorized to update the AC information subscription and the easId of the requesting EAS and the easId in the resource match, then the EES shall;

a. update the resource identified by Resource URI of the EAS AC information subscription with the updated information received in the HTTP PATCH or PUT request message;

b. return the updated EAS AC information subscription in the "200 OK" response message or respond with the "204 No Content" message indicating to the EAS that the EAS AC information subscription is updated successfully. In the response message, the EES may provide an updated expiration time to indicate to the EAS when the updated subscription will automatically expire. The EES may respond with.

If the expiration time is provided, then to maintain the subscription, the EAS shall send an update subscription prior to subscription expiry time. If the update subscription request is not sent before the expiry time, then the EES shall treat EAS subscription as unsubscribed and remove the corresponding EAS AC information subscription resource.

#### 5.y.2.5 Eees\_AppClientInformation\_Unsubscribe

##### 5.y.2.5.1 General

This service operation is used by the EAS to unsubscribe from an existing AC information subscription.

##### 5.y.2.5.2 EAS unsubscribing to AC information reporting from EES using Eees\_AppClientInformation\_Unsubscribe operation

To unsubscribe its AC information subscription from the EES, the EAS shall send HTTP DELETE message to the EES, on the resource URI identifying the "Individual Application Client Information Subscription" resource representation as specified in clause 8.y.2.3.3.4. Upon receiving the HTTP DELETE request, the EES shall:

1. verify the identity of the EAS and check if the EAS is authorized to unsubscribe the Individual Application Client Information Subscription resource;

2. if the EAS is authorized to unsubscribe the Individual Application Client Information Subscription resource, then the EES shall unsubscribe the EAS subscription identified by the "subscriptionId" from the EES and delete the resource representing Individual Application Client Information Subscription resource represented by "subscriptionId";

3. return the "204 Not Content" message to the EAS, indicating the successful removal of the subscription information.

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