**3GPP TSG-CT WG3 Meeting #114eC3-211506**

**E-Meeting, 24th February – 05th March 2021** *(revision of C3-211369)*

**Source: Samsung**

**Title: Pseudo-CR on Eecs\_EESRegistration service description**

**Spec: 3GPP TS 29.558 v0.1.0**

**Agenda item: 17.9**

**Document for: Decision**

**1. Introduction**

This contribution proposes the service description for Eecs\_EESRegistration API.

**2. Reason for Change**

TS 23.558 specifies the procedures and information flows for an EES to register itself, update its registration and deregister at a given ECS, using the Eecs\_EESRegisration service API. This service needs to be described in TS 29.558 with further details.

Also, the EES services introduction is updated with Eecs\_EESRegistration service API information.

**3. Conclusions**

<Conclusion part (optional)>

**4. Proposal**

It is proposed to agree the following changes to 3GPP TS 29.558 v0.1.0.

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

## 6.1 Introduction

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

The table 6.1-1 lists the Edge Configuration Server APIs below the service name. A service description clause for each API gives a general description of the related API.

Table 6.1-1: List of ECS Service APIs

|  |  |  |  |
| --- | --- | --- | --- |
| Service Name | Service Operations | Operation Semantics | Consumer(s) |
| Eecs\_EESRegistration | Request | Request/Response | EES |
| Update | Request/Response | EES |
| Deregister | Request/Response | EES |

Table 6.1-2 summarizes the corresponding Edge Configuration Server APIs defined in this specification.

Table 6.1-2: API Descriptions

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

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

## 6.y Eecs\_EESRegistration Service

### 6.y.1 Service Description

The Eecs\_EESRegistration API, as defined in 3GPP TS 23.558 [2], allows an Edge Enabler Server via Eecs interface to register, update its registration and deregister at a given Edge Configuration Server.

Editor’s Note: Details about EES security credentials, verification and authorization of Eecs\_EESRegistration Request, Update and Delete, by the ECS, to be aligned with security aspects defined by SA3

### 6.y.2 Service Operations

#### 6.y.2.1 Introduction

The service operation defined for Eecs\_EESRegistration API is shown in the table 6.y.2.1-1.

Table 6.y.2.1-1: Operations of the Eecs\_EESRegistration API

|  |  |  |
| --- | --- | --- |
| Service operation name | Description | Initiated by |
| Eecs\_EESRegistraiton\_Request | This service operation is used by the EES to register itself to a given ECS. | EES |
| Eecs\_EESRegistraiton\_Update | This service operation is used by the EES to update its registration information at ECS. | EES |
| Eecs\_EESRegistraiton\_Deregister | This service operation is used by the EES to deregister itself from a given ECS. | EES |

#### 6.y.2.2 Eecs\_EESRegistration\_Request

##### 6.y.2.2.1 General

This service operation is used by EES to register itself to a given ECS.

##### 6.y.2.2.2 EES registering to ECS using Eecs\_EESRegistration\_Request operation

To register itself as an Edge Enabler Server at the ECS, the EES shall send an HTTP POST message to the Edge Configuration Server on the "EES Registrations" collection resource. The body of the HTTP POST message shall include the EES profile information, may include proposed expiration time for the registration, as specified in clause 9.y.2.2.3.1.

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

1. Process the EES registration request information;

2. verify the identity of the Edge Enabler Server and check if the EES is authorized to register itself at ECS ;

3. if the EES is authorized to register to ECS, then the ECS shall;

a. store the EES profile and create a new resource with the EES registration information as specified in clause 9.y.2.1;

b. return the EES registration information, the resource URI of the EES registration information, in the response message. The response message may include expiration time to indicate when the EES registration will automatically expire.

#### 6.y.2.3 Eecs\_EESRegistration\_Update

##### 6.y.2.3.1 General

This service operation is used by EES to update its registration information at a given ECS.

##### 6.y.2.3.2 EES updating registration information using Eecs\_EESRegistration\_Update operation

To update the EES registration information at the ECS, the EES shall send a HTTP PUT message to the Edge Configuration Server on resource URI identifying the individual EES registration resource representation as specified in clause 9.y.2.3.3.2, requesting to replace all properties in the existing resource with the EES registration information in the request. The body of the HTTP PUT message shall include the EES profile information, may include proposed expiration time to update the registration. This request shall not replace the eesId property of the existing resource.

Upon receiving the HTTP PUT message from the EES, the ECS shall:

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

2. if the EES is authorized to update the registration information and the eesId information in the request and the resource match, then the ECS shall;

a. update the resource identified by Resource URI of the EES registration information with the updated EES registration information received in the HTTP PUT request message;

b. return the updated EES registration information in the response. In the response message, the ECS may provide an updated expiration time to indicate to the EES when the updated registration will automatically expire.

To maintain registration, the EES shall send the registration update prior to registration expiry time. If the registration update request is not sent before the expiry time, then the ECS shall treat EES as deregistered and remove the corresponding EES registration resource.

#### 6.y.2.4 Eecs\_EESRegistration\_Deregister

##### 6.y.2.4.1 General

This service operation is used by EES to deregister itself from a given ECS.

##### 6.y.2.4.2 EES deregistering from ECS using Eecs\_EESRegistration\_Deregister operation

To deregister itself from the ECS, the EES shall send HTTP DELETE message to the ECS, on the resource URI identifying the individual EES registration resource representation as specified in clause 9.y.2.3.3.3. Upon receiving the HTTP DELETE request, the ECS shall:

1. verify the identity of the EES and check if the EES is authorized to deregister the EES registration information;

2. if the EES is authorized to deregister the EES registration information, then the ECS shall deregister the EES profile from the ECS and delete the resource representing EES registration information.

3. return the "204 Not Content" message to the EES, indicating the successful deregistration of the EES information.

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