**3GPP TSG CT WG3 Meeting #135 *C3-243102r1***

**Hyderabad, IN, 27th – 31st May, 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.538** | **CR** | **0052** | **rev** | **-** | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Correct references and clarify regarding NBI usage. | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | CT3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NBI18 | | | | |  | ***Date:*** | | | 2024-05-20 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-18 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | This TS is NBI but refers to TS 29.500 at many places, which is updated to refer TS 29.122 as required by NBI specifications.  Additionally, some errors related to references are corrected. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Reference is updated to point to appropriate clauses | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | This may lead to misunderstanding and confusion due to incorrect references. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.1, 7.3, 7.4, 7.5.1, 7.5.2, 7.7, 7.8, 7.9, 7.10, 8.1.2.2.3.1, 8.1.2.3.3.1, 8.2.3.2.2, 8.2.3.4.2, 8.3.2.2.3.1, 8.3.2.3.3.1, 8.3.3.2.2, 8.3.3.3.2, 8.3.4, 8.3.4.2.3.1, 9.1.3.2.2, 9.1.3.3.2, 9.2.3.2.2, 9.2.3.3.2, 9.3.3.2.2, A.2, A.3, A.4, A.5, A.6, A.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | | This CR provides backward compatible corrections to the open API defined in this specification:   1. MSGS\_ASRegistration API 2. MSGS\_MSGDelivery API 3. MSGG\_L3GDelivery API 4. MSGG\_N3Delivery API 5. MSGG\_BGDelivery API 6. MSGG\_TopiclistEvent API | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

\* \* \* \* First change \* \* \* \*

## 7.1 General

MSGin5G APIs allow secure access to the capabilities provided by the MSGin5G.

This document specifies the procedures triggered at different functional entities as a result of API invocation requests and event notifications. The stage-2 level requirements and signalling flows are defined in 3GPP TS 23.554 [2].

Several design aspects, as mentioned in the following clauses, are specified in 3GPP TS 29.122 [24] and referenced by this specification.

\* \* \* \* Next change \* \* \* \*

## 7.3 Usage of HTTP

For MSGin5G APIs, support of HTTP/1.1 (IETF RFC 9110 [11], IETF RFC 9111 [14] and IETF RFC 9112 [10]) over TLS is mandatory and support of HTTP/2 (IETF RFC 9113 [16]) over TLS is recommended.

A functional entity desiring to use HTTP/2 shall use the HTTP upgrade mechanism to negotiate applicable HTTP version as described in IETF RFC 9113 [16].

\* \* \* \* Next change \* \* \* \*

## 7.4 Content type

JSON, IETF RFC 8259 [17], shall be used as content type of the HTTP bodies specified in the present specification as specified in clause 5.2.3 of 3GPP TS 29.122 [24]. The use of the JSON format shall be signalled by the content type "application/json".

\* \* \* \* Next change \* \* \* \*

### 7.5.1 Resource URI structure

The resource URI structure of all the APIs specified in this document shall be as specified in clause 4.4.1 of 3GPP TS 29.501 [9].

\* \* \* \* Next change \* \* \* \*

### 7.5.2 Custom operations URI structure

The URI of a custom operation which is associated with a resource shall have the following structure:

**{apiRoot}/<apiName>/<apiVersion>/<apiSpecificResourceUriPart>/<custOpName>**

Custom operations can also be associated with the service instead of a resource. The URI of a custom operation which is not associated with a resource shall have the following structure:

**{apiRoot}/<apiName>/<apiVersion>/<custOpName>**

In the above URI structures, "apiRoot", "apiName", "apiVersion" and "apiSpecificResourceUriPart" are as defined in clause 7.5.1 and "custOpName" represents the name of the custom operation as defined in clause 5.1.3.2 of 3GPP TS 29.501 [9].

\* \* \* \* Next change \* \* \* \*

## 7.7 Error Handling

HTTP error handling shall be supported as specified in clause 5.2.6 of 3GPP TS 29.122 [24].

\* \* \* \* Next change \* \* \* \*

## 7.8 Feature negotiation

The procedures in clause 5.2.7 of 3GPP TS 29.122 [24] shall be applicable for the APIs defined in the present specification. For each of the APIs defined, the applicable list of features is contained in the related API definition.

\* \* \* \* Next change \* \* \* \*

## 7.9 HTTP headers

The MSGin5G API shall support HTTP custom header fields specified in clause 5.2.8 of 3GPP TS 29.122 [24]. No specific custom headers are defined for the MSGin5G API in the present specification.

\* \* \* \* Next change \* \* \* \*

## 7.10 Conventions for Open API specification files

The conventions for Open API specification files as specified in clause 5.2.9 of 3GPP TS 29.122 [24] shall be applicable for all APIs in this document.

\* \* \* \* Next change \* \* \* \*

###### 8.1.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.1.2.2.3.1-1.

Table 8.1.2.2.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.1.2.2.3.1-2 and the response data structures and response codes specified in table 8.1.2.2.3.1-3.

Table 8.1.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ASRegistration | M | 1 | AS registration request information. |

Table 8.1.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ASRegistrationAck | M | 1 | 201 Created | AS information is registered successfully at MSGin5G Server.  The URI of the created resource shall be returned in the "Location" HTTP header. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. | | | | |

Table 8.1.2.2.3.1-4: Headers supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.1.2.2.3.1-5: Headers supported by the 201 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | String | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/msgs-asregistration/<apiVersion>/registrations/{registrationId} |

Table 8.1.2.2.3.1-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

\* \* \* \* Next change \* \* \* \*

###### 8.1.2.3.3.1 DELETE

This method deregisters an AS registration from the MSGin5G Server. This method shall support the URI query parameters specified in the table 8.1.2.3.3.1-1.

Table 8.1.2.3.3.1-1: URI query parameters supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.1.2.3.3.1-2 and the response data structures and response codes specified in table 8.1.2.3.3.1-3.

Table 8.1.2.3.3.1-2: Data structures supported by the DELETE Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| n/a |  |  |  |

Table 8.1.2.3.3.1-3: Data structures supported by the DELETE Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| ASRegistrationAck | M | 1 | 200 OK | The AS DeRegistration information matching the registrationId is deleted. |
| n/a |  |  | 204 No Content | Successful response. The individual AS registration matching the registrationId is successfully deleted. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. | | | | |

Table 8.1.2.3.3.1-4: Headers supported by the DELETE method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.1.2.3.3.1-5: Headers supported by the 204 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.1.2.3.3.1-6: Links supported by the 200 Response Code on this endpoint

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Resource name | HTTP method or custom operation | Link parameter(s) | Description |
| n/a |  |  |  |  |

\* \* \* \* Next change \* \* \* \*

##### 8.2.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in Table 8.2.3.2.2-1 and Table 8.2.3.2.2-2.

Table 8.2.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| ASMessageDelivery | M | 1 | Represents the data to be used for AS to deliver message. |

Table 8.2.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MessageDeliveryAck | M | 1 | 200 OK | AS Message is delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

##### 8.2.3.4.2 Operation Definition

This operation shall support the response data structures and response codes specified in Table 8.2.3.4.2-1 and Table 8.2.3.4.2-2.

Table 8.2.3.4.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| DeliveryStatusReport | M | 1 | Represents the data to be used for Message Gateway (on behalf of Legacy 3GPP UE or Non-3GPP UE) or the Application Server to deliver status report. |

Table 8.2.3.4.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| MessageDeliveryAck | M | 1 | 200 OK | The status report is delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

###### 8.3.2.2.3.1 POST

This method shall support the URI query parameters specified in table 8.3.2.2.3.1-1.

Table 8.3.2.2.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.3.2.2.3.1-2 and the response data structures and response codes specified in table 8.3.2.2.3.1-3.

Table 8.3.2.2.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicListSubscription | M | 1 | Messaging Topic list subscription request information. |

Table 8.3.2.2.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TopicListSubscriptionAck | M | 1 | 201 Created | The creation of an Messaging Topic list subscription resource is confirmed.  The URI of the created resource shall be returned in the "Location" HTTP header. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. | | | | |

Table 8.3.2.2.3.1-4: Headers supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.3.2.2.3.1-5: Headers supported by the 201 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| Location | String | M | 1 | Contains the URI of the newly created resource, according to the structure: {apiRoot}/msgs-topiclistevent/<apiVersion>/topiclist-subscriptions/{subscriptionId} |

\* \* \* \* Next change \* \* \* \*

###### 8.3.2.3.3.1 POST

This method shall support the URI query parameters specified in table 8.3.2.3.3.1-1.

Table 8.3.2.3.3.1-1: URI query parameters supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

This method shall support the request data structures specified in table 8.3.2.3.3.1-2 and the response data structures and response codes specified in table 8.3.2.3.3.1-3.

Table 8.3.2.3.3.1-2: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicListUnsubscription | M | 1 | Messaging Topic list unsubscription request information. |

Table 8.3.2.3.3.1-3: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful response. The individual MSGin5G Server Messaging Topic list subscription matching the subscriptionId is successfully deleted. |
| TopicListUnsubcriptionAck | M | 1 | 200 OK | Response of successfully handled Topic list unsubscription request with status information if subscription is not deleted. |
| NOTE: The mandatory HTTP error status codes for the POST method listed in table 5.2.6-1 of 3GPP TS 29.122 [24] shall also apply. | | | | |

Table 8.3.2.3.3.1-4: Headers supported by the POST method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

Table 8.3.2.3.3.1-5: Headers supported by the 204 response code on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| n/a |  |  |  |  |

\* \* \* \* Next change \* \* \* \*

##### 8.3.3.2.2 Operation Definition

This operation shall support the request data structures shown in Table 8.3.3.2.2-1 and the response data structures and error codes specified in Tables 8.3.3.2.2-2.

Table 8.3.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicSubscription | M | 1 | Information about the Messaging Topic subscription that the MSGin5G Server shall create. |

Table 8.3.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| TopicSubscriptionAck | M | 1 | 200 OK | Successful request to trigger the creation of a subscription for Messaging Topic at the MSGin5G Server. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

##### 8.3.3.3.2 Operation Definition

This operation shall support the request data structures shown in Table 8.3.3.3.2-1 and the response data structures and error codes specified in Tables 8.3.3.3.2-2.

Table 8.3.3.3.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicUnsubscription | M | 1 | Reference used to identify the Messaging Topic subscription that the MSGin5G Server shall remove. |

Table 8.3.3.3.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | Successful request to trigger the removal of a subscription for Messaging Topic(s) on the MSGin5G Server. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

### 8.3.4 Notifications

Notifications shall comply to clause 5.2.5 of 3GPP TS 29.122 [24].

Table 8.3.4.1-1: Notifications overview

|  |  |  |  |
| --- | --- | --- | --- |
| Notification | Callback URI | HTTP method or custom operation | Description  (service operation) |
| TopicList Notification | {notificationURI} | POST | Notify about Messaging Topic list changes from MSGin5G Server. |

\* \* \* \* Next change \* \* \* \*

###### 8.3.4.2.3.1 POST

This method shall support the request data structures specified in table 8.3.4.2.3.1-1 and the response data structures and response codes specified in table 8.3.4.2.3.1-2.

Table 8.3.4.2.3.1-1: Data structures supported by the POST Request Body

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| TopicListNotification | M | 1 | Provides information about subscribed Messaging Topic list. |

Table 8.3.4.2.3.1-2: Data structures supported by the POST Response Body

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response codes | Description |
| n/a |  |  | 204 No Content | The receipt of the Notification is acknowledged. |
| NOTE 1: The mandatory HTTP error status codes for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

##### 9.1.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.1.3.2.2-1 and table 9.1.3.2.2-2.

Table 9.1.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| L3gMessageDelivery | M | 1 | Represents the data to be used for MSGin5G Server to deliver message. |

Table 9.1.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The Message is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

##### 9.1.3.3.2 Operation Definition

This operation shall support the response data structures and response codes specified in Table 9.1.3.3.2-1 and Table 9.1.3.3.2-2.

Table 9.1.3.3.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| DeliveryStatusReport | M | 1 | Represents the data to be used for MSGin5G Server to deliver status report. |

Table 9.1.3.3.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The status report is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

##### 9.2.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.2.3.2.2-1 and table 9.2.3.2.2-2.

Table 9.2.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| N3gMessageDelivery | M | 1 | Represents the data to be used for MSGin5G Server to deliver message. |

Table 9.2.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The Message is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

##### 9.2.3.3.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.2.3.3.2-1 and table 9.2.3.3.2-2.

Table 9.2.3.3.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| DeliveryStatusReport | M | 1 | Represents the data to be used for MSGin5G Server to deliver status report. |

Table 9.2.3.3.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The status report is Delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

##### 9.3.3.2.2 Operation Definition

This operation shall support the response data structures and response codes specified in table 9.3.3.2.2-1 and table 9.3.3.2.2-2.

Table 9.3.3.2.2-1: Data structures supported by the POST Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| BgMessageDelivery | M | 1 | Represents the data to be used for MSGin5G Server to deliver message. |

Table 9.3.3.2.2-2: Data structures supported by the POST Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| n/a |  |  | 204 No Content | The Message is delivered successfully. |
| NOTE: The mandatory HTTP error status code for the POST method listed in Table 5.2.6-1 of 3GPP TS 29.122 [24] also apply. | | | | |

\* \* \* \* Next change \* \* \* \*

# A.2 MSGS\_ASRegistration API

openapi: 3.0.0

info:

title: MSGS\_ASRegistration

version: 1.1.0-alpha.2

description: |

API for MSGS AS Registration Service.

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externalDocs:

description: >

3GPP TS 29.538 V18.4.0; Enabling MSGin5G Service; Application Programming Interfaces (API)

specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.538/

servers:

- url: '{apiRoot}/msgs-asregistration/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

- {}

- oAuth2ClientCredentials: []

paths:

/registrations:

post:

summary: Registers a new AS at a MSGin5G Server

tags:

- AS registration

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ASRegistration'

responses:

'201':

description: AS information is registered successfully at MSGin5G Server

content:

application/json:

schema:

$ref: '#/components/schemas/ASRegistrationAck'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/registrations/{registrationId}:

delete:

summary: Delete an existing AS registration at MSGin5G Server

tags:

- AS DeRegistration

parameters:

- name: registrationId

in: path

description: AS registration Id

required: true

schema:

type: string

responses:

'200':

description: The individual AS registration is deleted successfully.

content:

application/json:

schema:

$ref: '#/components/schemas/ASRegistrationAck'

'204':

description: >

No Content. The individual AS registration resource is deleted successfully.

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

ASRegistration:

description: AS registration data

type: object

required:

- asSvcId

properties:

asSvcId:

type: string

appId:

type: string

targetUri:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

asProf:

$ref: '#/components/schemas/ASProfile'

ASRegistrationAck:

description: AS registration response data

type: object

required:

- asSvcId

- result

properties:

asSvcId:

type: string

result:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/ProblemDetails'

ASProfile:

description: AS profile information

type: object

properties:

appName:

type: string

appProviders:

type: array

items:

type: string

minItems: 1

description: The provider of the AS.

appSenarios:

type: array

items:

type: string

minItems: 1

description: The application scenario.

appCategory:

type: string

asStatus:

type: string

\* \* \* \* Next change \* \* \* \*

# A.3 MSGS\_MSGDelivery API

openapi: 3.0.0

info:

title: MSGS\_MSGDelivery

version: 1.1.0-alpha.3

description: |

API for MSGG MSGin5G Server Message Delivery Service.

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externalDocs:

description: >

3GPP TS 29.538 V18.4.0; Enabling MSGin5G Service; Application Programming Interfaces (API)

specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.538/

servers:

- url: '{apiRoot}/msgs-msgdelivery/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

- {}

- oAuth2ClientCredentials: []

paths:

/deliver-as-message:

post:

summary: AS deliver message to MSGin5G Server

tags:

- AS Message delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/ASMessageDelivery'

responses:

'200':

description: OK, AS Message delivery successful

content:

application/json:

schema:

$ref: '#/components/schemas/MessageDeliveryAck'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/deliver-ue-message:

post:

summary: UE deliver message to MSGin5G Server

tags:

- UE Message delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/UEMessageDelivery'

responses:

'200':

description: OK, UE Message delivery successful

content:

application/json:

schema:

$ref: '#/components/schemas/MessageDeliveryAck'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/deliver-report:

post:

summary: AS or UE deliver status report to MSGin5G Server

tags:

- AS/UE status report delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/DeliveryStatusReport'

responses:

'200':

description: OK, status report delivery successfully

content:

application/json:

schema:

$ref: '#/components/schemas/MessageDeliveryAck'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

ASMessageDelivery:

description: Contains the AS message delivery data

type: object

required:

- oriAddr

- destAddr

- msgId

- stoAndFwInd

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

appId:

type: string

msgId:

type: string

delivStReqInd:

type: boolean

payload:

type: string

priority:

$ref: '#/components/schemas/Priority'

segInd:

type: boolean

segParams:

$ref: '#/components/schemas/MessageSegmentParameters'

stoAndFwInd:

type: boolean

stoAndFwParams:

$ref: '#/components/schemas/StoreAndForwardParameters'

latency:

type: integer

UEMessageDelivery:

description: Contains the UE message delivery data

type: object

required:

- oriAddr

- destAddr

- msgId

- stoAndFwInd

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

appId:

type: string

msgId:

type: string

delivStReqInd:

type: boolean

payload:

type: string

segInd:

type: boolean

segParams:

$ref: '#/components/schemas/MessageSegmentParameters'

stoAndFwInd:

type: boolean

stoAndFwParams:

$ref: '#/components/schemas/StoreAndForwardParameters'

MessageDeliveryAck:

description: Contains the message delivery ack data

type: object

required:

- oriAddr

- msgId

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

msgId:

type: string

status:

$ref: '#/components/schemas/DeliveryStatus'

failureCause:

type: string

MessageSegmentParameters:

description: Contains the message segment parameters data

type: object

properties:

segId:

type: string

totalSegCount:

type: integer

segNumb:

type: integer

lastSegFlag:

type: boolean

StoreAndForwardParameters:

description: Contains the store and forward parameters data

type: object

properties:

exprTime:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

DeliveryStatusReport:

description: Contains the delivery status report data

type: object

required:

- oriAddr

- destAddr

- msgId

- delivSt

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

msgId:

type: string

failureCause:

type: string

delivSt:

$ref: '#/components/schemas/ReportDeliveryStatus'

#

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

DeliveryStatus:

anyOf:

- type: string

enum:

- DELY\_FAILED

- DELY\_STORED

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration but is not used to encode

content defined in the present version of this API.

description: |

Indicates if delivery is a failure, or if the message is stored for deferred delivery.

Possible values are:

- DELY\_FAILED: Indicates that the message delivery is failed.

- DELY\_STORED: Indicates that the message is stored for deferred delivery.

ReportDeliveryStatus:

anyOf:

- type: string

enum:

- REPT\_DELY\_SUCCESS

- REPT\_DELY\_FAILED

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration but is not used to encode

content defined in the present version of this API.

description: |

The delivery status description, including success or failure in delivery.

Possible values are:

- REPT\_DELY\_SUCCESS: Indicates that the report delivery is successful.

- REPT\_DELY\_FAILED: Indicates that the report delivery is failed.

Priority:

anyOf:

- type: string

enum:

- HIGH

- MIDDLE

- LOW

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration but is not used to encode

content defined in the present version of this API.

description: |

Application priority level requested for this message.

Possible values are:

- HIGH: Indicates the messages should be sent in high priority.

- MIDDLE: Indicates the messages should be sent in middle priority.

- LOW: Indicates the messages should be sent in low priority.

\* \* \* \* Next change \* \* \* \*

# A.4 MSGG\_L3GDelivery API

openapi: 3.0.0

info:

title: MSGG\_L3GDelivery

version: 1.1.0-alpha.2

description: |

API for MSGG L3G Message Delivery Service.

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externalDocs:

description: >

3GPP TS 29.538 V18.4.0; Enabling MSGin5G Service; Application Programming Interfaces (API)

specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.538/

servers:

- url: '{apiRoot}/msgg-l3gdelivery/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

- {}

- oAuth2ClientCredentials: []

paths:

/deliver-message:

post:

summary: deliver message to Legacy 3GPP Message Gateway

tags:

- L3G Message delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/L3gMessageDelivery'

responses:

'204':

description: No Content, Message delivery successful

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/deliver-report:

post:

summary: deliver status report to Legacy 3GPP Message Gateway

tags:

- L3G status report delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/DeliveryStatusReport'

responses:

'204':

description: No Content, status report delivery successfully

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

L3gMessageDelivery:

description: Contains the L3G message delivery data

type: object

required:

- oriAddr

- destAddr

- msgId

properties:

oriAddr:

$ref: '#/components/schemas/Address'

destAddr:

$ref: '#/components/schemas/Address'

appId:

type: string

msgId:

type: string

delivStReqInd:

type: boolean

payload:

type: string

segInd:

type: boolean

segParams:

$ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/MessageSegmentParameters'

Address:

description: Contains the Message type data

type: object

required:

- addrType

- addr

properties:

addrType:

$ref: '#/components/schemas/AddressType'

addr:

type: string

#

# SIMPLE DATA TYPES

#

#

# ENUMERATIONS

#

AddressType:

anyOf:

- type: string

enum:

- UE

- AS

- GROUP

- BC

- TOPIC

- type: string

description: >

This string provides forward-compatibility with future

extensions to the enumeration but is not used to encode

content defined in the present version of this API.

description: |

Represent the type of message request.

Possible values are:

- UE: The address type is UE.

- AS: The address type is AS.

- GROUP: The address type is GROUP.

- BC: The address type is BC.

- TOPIC: The address type is TOPIC.

\* \* \* \* Next change \* \* \* \*

# A.5 MSGG\_N3GDelivery API

openapi: 3.0.0

info:

title: MSGG\_N3GDelivery

version: 1.1.0-alpha.1

description: |

API for MSGG N3G Message Delivery Service.

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externalDocs:

description: >

3GPP TS 29.538 V18.4.0; Enabling MSGin5G Service; Application Programming Interfaces (API)

specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.538/

servers:

- url: '{apiRoot}/msgg-n3gdelivery/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

- {}

- oAuth2ClientCredentials: []

paths:

/deliver-message:

post:

summary: deliver message to NON-3GPP Message Gateway

tags:

- N3G Message delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/N3gMessageDelivery'

responses:

'204':

description: No Content,Message delivery successful

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/deliver-report:

post:

summary: deliver status report to NON-3GPP Message Gateway

tags:

- N3G status report delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/DeliveryStatusReport'

responses:

'204':

description: No Content, status report delivery successfully

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

N3gMessageDelivery:

description: N3G message delivery data

type: object

required:

- oriAddr

- destAddr

- msgId

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

appId:

type: string

msgId:

type: string

delivStReqInd:

type: boolean

payload:

type: string

segInd:

type: boolean

segParams:

$ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/MessageSegmentParameters'

\* \* \* \* Next change \* \* \* \*

A.6 MSGG\_BGDelivery API

openapi: 3.0.0

info:

title: MSGG\_BGDelivery

version: 1.0.0-alpha.3

description: |

API for Broadcast Message Delivery Service.

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externalDocs:

description: >

3GPP TS 29.538 V18.5.0; Enabling MSGin5G Service; Application Programming Interfaces (API)

specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.538/

servers:

- url: '{apiRoot}/msgg-bgdelivery/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

- {}

- oAuth2ClientCredentials: []

paths:

/deliver-message:

post:

summary: deliver message to Broadcast Message Gateway

tags:

- Broadcast Message delivery

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/BgMessageDelivery'

responses:

'204':

description: No Content, Message delivery successful

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

BgMessageDelivery:

description: Broadcast message delivery data

type: object

required:

- oriAddr

- msgId

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

appId:

type: string

msgId:

type: string

delivStReqInd:

type: boolean

payload:

type: string

segInd:

type: boolean

segParams:

$ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/MessageSegmentParameters'

priority:

$ref: 'TS29538\_MSGS\_MSGDelivery.yaml#/components/schemas/Priority'

\* \* \* \* Next change \* \* \* \*

A.7 MSGS\_TopiclistEvent API

openapi: 3.0.0

info:

title: MSGS\_TopiclistEvent

version: 1.0.0-alpha.1

description: |

API for Topic Messaging Event Service.

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externalDocs:

description: >

3GPP TS 29.538 V18.4.0; Enabling MSGin5G Service; Application Programming Interfaces (API)

specification; Stage 3

url: https://www.3gpp.org/ftp/Specs/archive/29\_series/29.538/

servers:

- url: '{apiRoot}/msgs-topiclistevent/v1'

variables:

apiRoot:

default: https://example.com

description: apiRoot as defined in clause 5.2.4 of 3GPP TS 29.122

security:

- {}

- oAuth2ClientCredentials:

- msgs-topiclistevent

paths:

/topiclist-subscriptions:

post:

summary: subscribe to Messaging Topic list on a MSGin5G Server

tags:

- Topic List Subscription

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TopicListSubscription'

callbacks:

MessagingTopicListNotification:

'{request.body#/notificationURI}':

post:

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TopicListNotification'

responses:

'204':

description: No Content (successful notification)

'307':

$ref: 'TS29122\_CommonData.yaml#/components/responses/307'

'308':

$ref: 'TS29122\_CommonData.yaml#/components/responses/308'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

responses:

'201':

description: Topic list on the MSGin5G Server is successfully subscribed

content:

application/json:

schema:

$ref: '#/components/schemas/TopicListSubscriptionAck'

headers:

Location:

description: 'Contains the URI of the newly created resource'

required: true

schema:

type: string

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/topiclist-subscriptions/{subscriptionId}:

post:

summary: Unsubscribe to Messaging Topic list on a MSGin5G Server

tags:

- Topic List Unsubscriptionn

parameters:

- name: subscriptionId

in: path

description: Topic list subscription Id

required: true

schema:

type: string

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TopicListUnsubscription'

responses:

'200':

description: The individual Topic list unsubscription is successfully handled with the subscription not deleted.

content:

application/json:

schema:

$ref: '#/components/schemas/TopicListUnsubscriptionAck'

'204':

description: >

No Content. The individual MSGin5G Server Messaging Topic list subscription matching the subscription Id is successfully deleted.

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/request-topic-subscription:

post:

summary: subscribe to Messaging Topic on a MSGin5G Server

tags:

- Messaging Topic Subscription

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TopicSubscription'

responses:

'200':

description: The Messaging Topic subscription is created successfully.

content:

application/json:

schema:

$ref: '#/components/schemas/TopicSubscriptionAck'

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

/request-topic-unsubscription:

post:

summary: unsubscribe to Messaging Topic on a MSGin5G Server

tags:

- Messaging Topic Unsubscription

requestBody:

required: true

content:

application/json:

schema:

$ref: '#/components/schemas/TopicUnsubscription'

responses:

'204':

description: >

No Content. The Messaging Topic subscription is removed successfully.

'400':

$ref: 'TS29122\_CommonData.yaml#/components/responses/400'

'401':

$ref: 'TS29122\_CommonData.yaml#/components/responses/401'

'403':

$ref: 'TS29122\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29122\_CommonData.yaml#/components/responses/404'

'411':

$ref: 'TS29122\_CommonData.yaml#/components/responses/411'

'413':

$ref: 'TS29122\_CommonData.yaml#/components/responses/413'

'415':

$ref: 'TS29122\_CommonData.yaml#/components/responses/415'

'429':

$ref: 'TS29122\_CommonData.yaml#/components/responses/429'

'500':

$ref: 'TS29122\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29122\_CommonData.yaml#/components/responses/503'

default:

$ref: 'TS29122\_CommonData.yaml#/components/responses/default'

components:

securitySchemes:

oAuth2ClientCredentials:

type: oauth2

flows:

clientCredentials:

tokenUrl: '{tokenUrl}'

scopes: {}

schemas:

#

# STRUCTURED DATA TYPES

#

TopicListSubscription:

description: Messaging Topic list subscription data

type: object

required:

- oriAddr

- destAddr

- notificationURI

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

notificationURI:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/Uri'

secCred:

type: string

exprTime:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

suppFeat:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/SupportedFeatures'

TopicListUnsubscription:

description: Messaging Topic list unsubscription data

type: object

required:

- oriAddr

- destAddr

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

destAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

secCred:

type: string

TopicListSubscriptionAck:

description: Response of Messaging Topic list subscription

type: object

required:

- subStat

properties:

subStat:

type: string

exprTime:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

suppFeat:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/SupportedFeatures'

TopicListUnsubscriptionAck:

description: Response of Messaging Topic list unsubscription

type: object

required:

- subStat

properties:

subStat:

type: string

TopicSubscription:

description: Messaging Topic subscription data

type: object

required:

- oriAddr

- msgTopics

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

msgTopics:

type: array

items:

type: string

minItems: 1

description: A list of Messaging Topics to be subscribed.

secCred:

type: string

exprTime:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

TopicSubscriptionAck:

description: Response of Messaging Topic subscription

type: object

required:

- subStat

properties:

subStat:

type: string

exprTime:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

TopicUnsubscription:

description: Messaging Topic unsubscription data

type: object

required:

- oriAddr

- msgTopics

properties:

oriAddr:

$ref: 'TS29538\_MSGG\_L3GDelivery.yaml#/components/schemas/Address'

secCred:

type: string

msgTopics:

type: array

items:

type: string

minItems: 1

description: A list of Messaging Topics to be unsubscribed.

TopicListNotification:

description: Messaging Topic list changes notification data

type: object

required:

- msgTopics

properties:

exprTime:

$ref: 'TS29122\_CommonData.yaml#/components/schemas/DateTime'

msgTopics:

type: array

items:

$ref: '#/components/schemas/MessagingTopic'

minItems: 1

description: list of Messaging Topics for notification.

MessagingTopic:

description: Represent Messaging Topic information

type: object

required:

- msgTopic

- updateStat

properties:

msgTopic:

type: string

updateStat:

$ref: '#/components/schemas/UpdateStatus'

#

# ENUMERATIONS DATA TYPES

#

UpdateStatus:

anyOf:

- type: string

enum:

- CREATED

- DELETED

- type: string

description: >

This string provides forward-compatibility with future extensions to the enumeration

and is not used to encode content defined in the present version of this API.

description: |

Represents the Messaging Topic Update status.

Possible values are:

- CREATED: Indicates Topic newly created.

- DELETED: Indicates Topic newly deleted.

\* \* \* \* End of changes \* \* \* \*