**3GPP TSG-SA4 Meeting #110e *S4-201056***

**Virtual meeting, August 19 - 28, 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **PSEUDO CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **26.512** | **CR** | **<CR#>** | **rev** | **<Rev#>** | **Current version:** | **1.3.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network |  |

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|  | | | | | | | | | | |
| ***Title:*** | Update on Metrics Reporting | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson LM | | | | | | | | | |
| ***Source to TSG:*** | S4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GMS3 | | | | |  | ***Date:*** | | | 2020-08-17 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | Metrics reporting clauses 7.8 and 11.4 are currently empty. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Add text in clauses. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Not possible to provision or report metrics. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 7.8, 11.4 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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's revision history:*** | |  | | | | | | | | |

================================== First change ==================================

## 7.8 Metrics Reporting Provisioning API

### 7.8.1 Overview

The Metrics Reporting Provisioning API allows an 5GMS System operator or a 5GMSd Application Provider to configure the Metrics Collection and Reporting procedure for a particular Provisioning Session at interface M1d.

### 7.8.2 Resource structure

The Metrics Reporting Provisioning API is accessible through the following URL base path:

{apiRoot}/3gpp-m1d/v1/provisioning-sessions/{provisioningSessionId}/

Table 7.8.2‑1 below specifies the operations and the corresponding HTTP methods that are supported by this API. In each case, the Provisioning Session identifier shall be substituted into {provisioningSessionId} in the above URL template and the sub-resource path specified in the second column of the table shall be appended to the URL base path.

Table 7.8.2-1: Metrics Reporting Configuration resource

|  |  |  |  |
| --- | --- | --- | --- |
| Operation | Sub‑resource path | Allowed HTTP method(s) | Description |
| Create a metrics reporting configuration | metrics‑reporting‑configuration | POST | Create and optionally provide a configuration; returns the *{metricsReportingConfigurationId}*. |
| Read metrics reporting configuration | metrics‑reporting‑configuration/  {metricsReportingConfigurationId} | GET | Read the values of an existing configuration. |
| Update metrics reporting configuration | PUT | Provide a replacement configuration. |
| Delete metrics configuration | DELETE | Delete a configuration, disables reporting. |

### 7.8.3 Data model

The data model for the MetricsReportingConfiguration resource is specified in Table 7.8.3-1 below:

Table 7.8.3‑1: Definition of MetricsReportingConfiguration resource

|  |  |  |  |
| --- | --- | --- | --- |
| Property name | Type | Cardinality | Description |
| metricsReportingConfigurationId | String | 1..1 | An identifier for this Metrics Reporting Configuration that is unique within the scope of the enclosing Provisioning Session. |
| scheme | Array(URI String) | 0..1 | The scheme associated with this metrics configuration. A scheme may be associated with 3GPP or with a non-3GPP entity. If not specified, the 3GPP metrics scheme urn:‌3GPP:‌ns:‌PSS:‌DASH:‌QM10 from TS 26.247 shall apply. |
| dataNetworkName | String | 0..1 | The Data Network Name (DNN) which shall be used when sending metrics report for this metric configuration.  If not specified, the default DNN shall be used. |
| reportingInterval | DurationSec | 0..1 | The sending interval between metrics reports for this metric configuration.  If not specified, a single final report shall be sent after the streaming session has ended. |
| samplePercentage | Percentage | 1..1 | The proportion of streaming sessions that shall report metrics for this metric configuration.  If not specified, reports shall be sent for all sessions. |
| urlFilters | Array(String) | 1..N | A list of content URL patterns for which metrics reporting shall be done for this metric configuration.  If not specified, reporting shall be done for all URLs. |
| metrics | Array(String) | 1..N | A list of metrics which shall be collected and reported for this metric configuration.  For the 3GPP scheme urn:‌3GPP:‌ns:‌PSS:‌DASH:‌QM10 the listed metrics shall correspond to one or more of the metrics as specified in clauses 10.3 and 10.4, respectively, of TS 26.247 [7], and the quality reporting scheme and quality reporting protocol as defined in clauses 10.5 and 10.6, respectively, of [7] shall be used.  If not specified, the complete (or default if applicable) set of metrics associated with the specified scheme shall be collected and reported. |

================================== Next change ==================================

## 11.4 Metrics Reporting API

### 11.4.1 General

The Metrics Reporting API allows the Media Session Handler to send metrics reports to the 5GMSd AF. This procedure is configured by the ServiceAccessInformation resource, as defined in clause 11.2.3. Note that multiple metrics configurations can be active at the same time, each identified by a unique metricsReportingConfigurationId.

### 11.4.2 Reporting procedure

Metrics reports related to a specific metricsReportingConfigurationId shall be submitted to one of the URLs selected from the ClientMetricsReportingConfiguration.serverAddresses array of the ServiceAccessInformation resource (see clause 11.2.3). The path of the URL should conform to the following general format:

{apiRoot}/3gpp-m5d/v1/metrics-reporting/{aspId}

where {aspId} shall be substituted by the 5GMS Client with the relevant Application Service Provider identifier.

The only HTTP method supported by this endpoint is POST.

### 11.4.3 Report format

This data structure is used by the Media Session Handler to report collected metrics.

Table 11.3.3.1.-1: Definition of MetricsReport format

|  |  |  |  |
| --- | --- | --- | --- |
| Property | Data type | Cardinality | Description |
| metricsReportingConfigurationId | string | 1..1 | Identifies the metrics configuration which controlled the collection and reporting for this report. |
| report | bytes of data | 1..1 | The data container representing the metrics report. The structure of the report depends on the metric scheme defined. For the 3GPP scheme urn:‌3GPP:‌ns:‌PSS:‌DASH:‌QM10 the quality reporting is defined in clauses 10.5 and 10.6 of TS 26.247 [7]. |