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| CHANGE REQUEST |
| Meeting ID:\* | PRO 32 |
| Source:\* | Bob Flynn, Convida Wireless, Flynn.Bob@ConvidaWireless.com Dale Seed, Convida Wireless, Seed.Dale@ConvidaWireless.com |
| Date:\* | 2017-10-30 |
| Reason for Change/s:\* | See the introduction  |
| CR against: Release\* | Release 3 |
| CR against: WI\* | [x]  Active - WI-0058 - 3GPP & Cellular IoT Interworking [ ]  MNT maintenance / < Work Item number(optional)>Is this a mirror CR? Yes [ ]  No [x] mirror CR number: (Note to Rapporteur - use latest agreed revision)[ ]  STE Small Technical Enhancements / < Work Item number (optional)>Only ONE of the above shall be ticked |
| CR against: TS/TR\* | TS-0004 Version 3.4.0 |
| Clauses \* | Annex B |
| Type of change: \* | [ ]  Editorial change[ ]  Bug Fix or Correction[x]  Change to existing feature or functionality[ ]  New feature or functionalityOnly ONE of the above shall be ticked |
| Impacted other TS/TR(s) | <TS/TR number>, <Version Number>, and <Description on which aspect should be reflected in this TS/TR> |
| Post Freeze checking:\* | This CR contains only essential changes and corrections? YES [x]  NO [ ] This CR may break backwards compatibility with the last approved version of the TS? YES [ ]  NO [x]  |
| Template Version: January 2017 (Do not modify) |

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GUIDELINES for Change Requests:

Provide an informative introduction containing the problem(s) being solved, and a summary list of proposals.

Each CR should contain changes related to only one particular issue/problem.

In case of a correction, and the change apply to previous releases, a separate “mirror CR” should be posted at the same time of this CR

Mirror CR: applies only when the text, including clause numbering are exactly the same.

Companion CR: applies when the change means the same but the baselines differ in some way (e.g. clause number).

Follow the principle of completeness, where all changes related to the issue or problem within a deliverable are simultaneously proposed to be made E.g. A change impacting 5 tables should not only include a proposal to change only 3 tables. Includes any changes to references, definitions, and acronyms in the same deliverable.

Follow the drafting rules.

All pictures must be editable.

Check spelling and grammar to the extent practicable.

Use Change bars for modifications.

The change should include the current and surrounding clauses to clearly show where a change is located and to provide technical context of the proposed change. Additions of complete clauses need not show surrounding clauses as long as the proposed clause number clearly shows where the new clause is proposed to be located.

Multiple changes in a single CR shall be clearly separated by horizontal lines with embedded text such as, start of change 1, end of change 1, start of new clause, end of new clause.

When subsequent changes are made to content of a CR, then the accepted version should not show changes over changes. The accepted version of the CR should only show changes relative to the baseline approved text.

## Introduction

This contribution provides changes for parameter data type mapping between oneM2M and 3GPP for Communication pattern configuration request/response messages. The mappings are w.r.t the T8 interface APIs defined for Configuration of Traffic patterns procedures.

### -----------------------Start of change 1-------------------------------------------

B.2. Configuration of AESE Communication Patterns

B.2.1. Direct Mode: Configuration of AESE Communication Patterns (Tsp)

B.2.1.1. Introduction

A 3GPP Underlying Network has dedicated interfaces for requesting to configure of Application Enablement Service Exposure (AESE) Communication Patterns. The normative references for applicable interfaces are found in 3GPP TS 23.682 [15]. The specification for the interface S6t is described in 3GPP TS 29.336 [37]. S6t interface uses Diameter Base Protocol as specified in IETF RFC 3588 [13].Through the interface, the CSE shall act as a Diameter client as described in IETF RFC 6733 [14].

In this direct mode, the CSE works as a 3GPP SCEF to configure/delete communication patterns of nodes. (See clause 7 and 8 in 3GPP TS 29.336 [37] for procedures and protocol details.)

B.2.1.2. Configuration Information Request command

When a CSE issues a configuration information request for AESE Communication Patterns to the HSS, the CSE shall send a Configuration-Information-Request (CIR) command (see 3GPP TS 29.336 [37] for details). The following table provides the parameters mapping between oneM2M and 3GPP. The data format needs to be converted accordingly.

Table B.2.1.2-1: Mapping between oneM2M resource and 3GPP AVP

|  |  |  |
| --- | --- | --- |
| **oneM2M <trafficPattern> Resource Attribute or Child Resource** | **3GPP Communication-Pattern-Set AVP** | **Reference** |
| *periodicIndicator* | Periodic-Communication-Indicator | clause 7.4.42 |
| *periodicDurationTime* | Communication-Duration-Time | clause 7.4.42 |
| *periodicIntervalTime* | Periodic-Time | clause 7.4.42 |
| *stationaryIndication* | Stationary-Indication | clause 7.4.42 |
| *validityTime* | Validity-Time | clause 7.4.42 |
| *dataSizeIndicator* | n/a in Rel-13 | clause 7.4.42 |
| *targetNetwork* | n/a (only for oneM2M use) | clause 7.4.42 |
| <schedule> | Scheduled-Communication-Time | clause 7.4.9 |

B.2.1.3. Configuration Information Answer command

As a result of configuration information request for AESE Communication Patterns to HSS, the CSE receives a Configuration-Information-Answer (CIA) command (see 3GPP TS 29.336 [37] for details). The following table provides the parameters mapping between the oneM2M and 3GPP. The data format needs to be converted accordingly.

Table B.2.1.3-1: Mapping between oneM2M resource and 3GPP AVP

|  |  |  |
| --- | --- | --- |
| **oneM2M <trafficPattern> Resource Attribute** | **3GPP AESE-Communication-Pattern-Config-Status AVP** | **Reference** |
| *providedToNSE* | AESE-Error-Report | clause 7.4.42 |

B.2.2. Configuration of Communication Patterns (T8)

B.2.2.1. Introduction

The 3GPP T8 interface supports configuration of communication patterns as defined by TS 23.682 [15]. The protocol specification for the T8 interface is described in 3GPP TS 29.122 [45]. Additional details are provided in clause 7.6 of TS-0026[44]. An IN-CSE may use the T8 interface API to suggest anticipated traffic parameters for ADN AEs or ASN/MN-CSEs.

B.2.1.2. Communication Pattern Configuration Request/Response

The IN-CSE requests a Communication Patterns Configuration by sending a message to the 3GPP SCEF to configure the traffic patterns. The following table provides parameter mappings between oneM2M and 3GPP.

Table B.2.1.2-1: Communication Pattern Configuration Request/Response Mapping

|  |  |  |
| --- | --- | --- |
| **3GPP parameter** | **oneM2M attribute/dataType** | **References and notes** |
| scsAsId | m2m:ID | Identifier of the SCS/AS. Pre-provisioned to IN-CSE. |
| tltrId | xs:positiveInteger | Long term transaction identifier. Assigned by IN-CSE based on internal policies/pre-provisioning |
| ttrId | xs:positiveInteger | Short-term transaction identifier to correlate request and response.Assigned by IN-CSE based on internal policies/pre-provisioning |
| self | xs:anyURI | Assigned by SCEF and returned in Monitoring Event Subscription response.  |
| externalId | m2m:externalID | Configured by IN-CSE with the M2M-Ext-ID of the UE to be monitored.  |
| msisdn | - | Not currently used by IN-CSE |
| externalGroupId | m2m:externalID | Configured by IN-CSE with the externalGroupID of the group being monitored.  |
| CPParameterSets | *m2m:activityPatternElements* | Shall represent a set of communication patterns for configuration. Mapping is explained in detail in clause 8.3.5.2 of [6] |
| tltrIdsForDeletion | *List of xs:positiveInteger* | Shall map to the tltrId of the communication pattern set that needs to be deleted. This information will be derived from the updated *activityPatternElements* attribute or based on IN-CSE internal policies. |

### -----------------------------------End of change 1 --------------------------------------------

CHECK LIST

* Does this Change Request include an informative introduction containing the problem(s) being solved, and a summary list of proposals.?
* Does this CR contain changes related to only one particular issue/problem?
* Have any mirror CRs been posted?
* Does this Change Request make **all** the changes necessary to address the issue or problem? E.g. A change impacting 5 tables should not include a proposal to change only 3 tables?Does this Change Request follow the drafting rules?
* Are all pictures editable?
* Have you checked the spelling and grammar?
* Have you used change bars for all modifications?
* Does the change include the current and surrounding clauses to clearly show where a change is located and to provide technical context of the proposed change? (Additions of complete clauses need not show surrounding clauses as long as the proposed clause number clearly shows where the new clause is proposed to be located.)
* Are multiple changes in this CR clearly separated by horizontal lines with embedded text such as, start of change 1, end of change 1, start of new clause, end of new clause.?