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| --- | --- |
| CHANGE REQUEST | |
| Meeting ID:\* |  |
| Source:\* |  |
| Date:\* |  |
| Reason for Change/s:\* |  |
| CR against: Release\* |  |
| CR against: WI\* | Active <WI-0001>  MNT maintenance / < Work Item number(optional)>  Is this a mirror CR? Yes  No  mirror CR number:  STE Small Technical Enhancements / < Work Item number (optional)>  Only ONE of the above shall be ticked |
| CR against: TS/TR\* | -0002 V5.3.0 |
| Clauses \* |  |
| Type of change: \* | Editorial change  Bug Fix or Correction  Change to existing feature or functionality  New feature or functionality  Only ONE of the above shall be ticked |
| Other TS/TR(s) impacted | None |
| Post Freeze checking:\* | This CR contains only essential changes and corrections? YES  NO  This CR may break backwards compatibility with the last approved version of the TS? YES  NO |
| Template Version: January 2019 (do not modify) | |

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The document to which this cover statement is attached is submitted to oneM2M. Participation in, or attendance at, any activity of oneM2M, constitutes acceptance of and agreement to be bound by terms of the Working Procedures and the Partnership Agreement, including the Intellectual Property Rights (IPR) Principles Governing oneM2M Work found in Annex 1 of the Partnership Agreement.

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 proposes to add new requirements to TS-0002 v5.3.0 to address issues related to privacy regulations such as GDPR.

Especially, this contribution proposes to add requirements to support pseudonymisation and anonymisation of privacy data in oneM2M based on its referencing regulations. Please refer Section 10 Conclusion in TR-0062 "oneM2M System Enhancement to Support Privacy Data Protection Regulations".

The contents below show the justification for the requirements:

Pseudonymization and anonymization can reduce the risk of data loss and assist a data processor in fulfilling their data compliance regulations. Therefore, pseudonymization and anonymization are considered key techniques to be used in IoT platforms to be compliant with GDPR. These two techniques are different and provide different results after processing. Therefore, the use of these techniques by an IoT platform may depend on the degree of risk and how the data will be processed. In addition, various algorithms and implementations are also available for each of the techniques.

* **Pseudonymization** means the processing of personal data in such a manner that the personal data can no longer be attributed to a specific data subject without the use of additional information, provided that such additional information is kept separately and is subject to technical and organisational measures to ensure that the personal data are not attributed to an identified or identifiable natural person.
* **Anonymization** meansthe data must be stripped of sufficient elements such that the data subject can no longer be identified. More precisely, that data must be processed in such a way that it can no longer be used to identify a natural person by using ‘all the means likely reasonably to be used’ by either the controller or a third party. An important factor is that the processing must be irreversible.

Specifically, the GDPR defines pseudonymization in Article 3, as “the processing of personal data in such a way that the data can no longer be attributed to a specific data subject without the use of additional information.” To pseudonymise a data set, the “additional information” must be “kept separately and subject to technical and organisational measures to ensure non-attribution to an identified or identifiable person.”

In order to process privacy data in oneM2M based on regulations, the oneM2M system should provide a set of attributes to hold information to be used for data processing. In particular, some necessary information for the processor to process privacy data are as follows:

* Which regulations to be applied?
* Is the data subject of private data?
* What kinds of rules have to be applied?
* What kinds of techniques or algorithms have to be used?
* Which parts of data are private data?

<https://git.onem2m.org/specifications/ts/ts-0002/-/merge_requests/7>

<https://git.onem2m.org/specifications/ts/ts-0002/-/merge_requests/7/diffs?commit_id=1a40c0a2a819d880c13a00fc1372f4dd78f8ed08>

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

---a/TS-0002-oneM2M-Requirements.md  
+++b/TS-0002-oneM2M-Requirements.md

@@ -709,6 +709,9 @@ NOTE3: The solution would be complete and will be a part of the oneM2M core func

|SER-082<br />See ARC--2018-0062 |The oneM2M System shall support M2M Service Subscriber and M2M Service User profiles specifying their restrictions (e.g. privacy restrictions, max number and/or types of applications and devices the M2M Service Subscriber and its authorized M2M Service Users are allowed to register to the M2M System, the maximum number of resources or bytes of data that the M2M Service Subscriber can store in the M2M System, etc.) and their default configurations (e.g. access control policies, expiration times, max number of content instances, etc.). | |

|SER-083<br />See RDM-2019-0054R01 |The oneM2M System shall support access control and authorization mechanisms for the M2M Service Subscriber or M2M Service User information, based on dynamic parameters (e.g. on/off duty time schedule, location, role or job position etc.). |Rel-4 |

|SER-084<br />See RDM-2019-0054R01 | The oneM2M System shall be able to access M2M Service Subscriber information or M2M Service User information based on dynamic parameters (e.g. on/off duty time schedule, location, role or job position, etc.) from M2M Applications. |Rel-4 |

|SER-0xx<br />See TR-0062 | The oneM2M System shall support the ability to apply pseudonymisation and anonymisation techniques to data based on specified privacy preferences, ensuring compliance with applicable privacy regulations (e.g., GDPR) and protecting data subject identity. |Rel-4 |

|SER-0xx<br />See TR-0062 | The oneM2M System shall ensure that "additional information" used for pseudonymisation is securely stored and access-controlled, allowing only authorized entities to link pseudonymised data back to the data subject while maintaining separation from the main data set. |Rel-4 |

NOTE 1: The above requirement does not cover items outside of the oneM2M System, e.g. Underlying Networks.

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