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| CHANGE REQUEST |
| Meeting ID:\* | PRO 32.2 |
| Source:\* | Bob Flynn, Convida Wireless; Flynn.bob@convidawireless.com |
| Date:\* | 2018-01-13 |
| Reason for Change/s:\* | Ignore trailing ‘/’ |
| CR against: Release\* | Release 3 |
| CR against: WI\* | [ ]  Active <Work Item number> [ ]  MNT maintenance / < Work Item number(optional)>Is this a mirror CR? Yes [x]  No [ ] mirror CR number: (PRO-2018-0029)[x]  STE Small Technical Enhancements / < Work Item number (optional)>Only ONE of the above shall be ticked |
| CR against: TS/TR\* | TS-0004 Version 3.5.0 |
| Clauses \* | 6.2.4 |
| 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 [x]  NO [ ]  |
| Template Version: January 2017 (Do not modify) |

**oneM2M Notice**

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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

Protocol contribution to explicitly state that a trailing ‘/’ in a targetURI shall be ignored.

HTTP request paths generally treat the presence or absence of a trailing slash identically.

the oneM2M specifications do not normatively specify a behaviour.

Which means the following targetURIs MAY give the same result or give “not found” for URL2.

URL1="<http://incse-demos.wot.io:9011/DEMOSCSE01>"

URL2="<http://incse-demos.wot.io:9011/DEMOSCSE01/>"

Since there is no special semantic distinction in oneM2M I would suggest that we (a) accommodate this common equivalence in our CSE and (b) suggest that the standards body make the equivalence *explicitly required* in the specs.

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

### oneM2M Resource Addressing

Authorized oneM2M entities can operate on a oneM2M resource by addressing the resource identifier as the target address (i.e. ***To*** parameter) in a request primitive. There are two resource addressing methods:

1. Structured resource identifier (used in Hierarchical Addressing): the identifier is constructed as a relative path from the CSEBase resource via parent resources.
2. Unstructured resource identifier (used in Non-hierarchical Addressing): the identifier uniquely identifies the resource in the domain of its Hosting CSE.

Virtual resource addressing is specified in clause 6.8.

Furthermore each resource identifier can be expressed in either

1. CSE-relative format, or
2. SP-relative format, or
3. Absolute format

A single attribute of the targeted oneM2M resource shall be addressable adding the sub-address,(targeted-attribute-name) following a "#" character after the resource address. This sub-address representing an attribute name shall be the short name (clause 8.2).

The syntax of the resource identifier in ABNF notion [20] is as follows:

resource-identifier = (structured-resource-identifier / unstructured-resource-identifier) [ "#" targeted-attribute-name ]

structured-resource-identifier = [CSE-ID "/"] first-segment \*("/" resource-name)

first-segment = resource-name / "-" / unstructured-CSE-relative-resource-identifier

unstructured-resource-identifier = [CSE-ID "/"] unstructured-CSE-relative-resource-identifier

unstructured-CSE-relative-resource-identifier = 1\*unreserved

resource-name = 1\*unreserved

If the resource-name is used in the first-segment production rule, it shall be the *resourceName* of the <CSEBase> resource. The character "-" (dash) can be used in the first-segment as a shortcut for the *resourceName* of the <CSEBase> resource.

When including resource identifiers into the Content parameter of response primitives (clause 7.5.2), the resource Hosting CSE shall use the CSE-relative format since the Originator knows the Hosting CSE ID.

All resource identifiers are case sensitive, so for example you could have two distinct resources one with identifier cin00856 and the other one with identifier CIN00856.

The Resource Hosting CSE shall ignore a trailing ‘/’ in the resource identifier, if present.

### -----------------------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.?