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| CHANGE REQUEST | |
| Meeting ID:\* | SDS 65 |
| Source:\* | Miguel Angel Reina Ortega, ETSI, [MiguelAngel.ReinaOrtega@etsi.org](mailto:MiguelAngel.ReinaOrtega@etsi.org) |
| Date:\* | 2024-06-27 |
| Reason for Change/s:\* | operationResult multiplicity |
| CR against: Release\* | Rel-5 |
| CR against: WI\* | Active < WI-0077>  MNT maintenance / < Work Item number(optional)>  Is this a mirror CR? Yes  No  mirror CR number: SDS-2022-0009R01-TS-0001\_operationResult\_multiplicity\_R3  STE Small Technical Enhancements / < Work Item number (optional)>  Only ONE of the above shall be ticked |
| CR against: TS/TR\* | TS-0001 v5.6.0 |
| Clauses \* | 9.6.12, 10.2.5.3 |
| 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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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 CR proposes a change for multiplicity of request/operationResult attribute to make it optional so that it can be not present while an operation is not completed.

After some discussion, three options have been proposed:

1. Make operationResult optional (as proposed initially in this contribution)
2. Initialize operationResult to NULL instead of empty
3. Initialized operationResult to a acknowledgement for the associated non-blocking request. For info, the following values will be specified in TS-0004 in the associated contribution:
   1. responseStatusCode = ACCEPTED (1000)
   2. requestID = request identifier of the associated non-blocking request

The majority decides that operationResult should be initialized to the proposed value (option 3)

## ----------------------- Start of Change 1--------------------------------------------

Table 9.6.12-2: Attributes of *<request>* resource

| Attributes of  *<request>* | Multiplicity | RW/  RO/  WO | Description |
| --- | --- | --- | --- |
| *resourceType* | 1 | RO | See clause 9.6.1.3. |
| *resourceID* | 1 | RO | See clause 9.6.1.3. |
| *resourceName* | 1 | WO | See clause 9.6.1.3. |
| *expirationTime* | 1 | RW | See clause 9.6.1.3. The value of the *expirationTime* is chosen by the CSE dependent on the ***Request Expiration Timestamp***, ***Result Expiration Timestamp***, ***Result Persistence*** and ***Operation Execution Time*** parameters associated with the original request. |
| *parentID* | 1 | RO | See clause 9.6.1.3. |
| *creationTime* | 1 | RO | See clause 9.6.1.3. |
| *lastModifiedTime* | 1 | RO | See clause 9.6.1.3. |
| *accessControlPolicyIDs* | 0..1 (L) | RO | See clause 9.6.1.3. |
| *labels* | 0..1 (L) | RO | See clause 9.6.1.3. |
| *dynamicAuthorizationConsultationIDs* | 0..1 (L) | RO | See clause 9.6.1.3. |
| *custodian* | 0..1 | RW | See clause 9.6.1.3. |
| *operation* | 1 | RO | It contains the value of the parameter ***Operation*** in the original request message. |
| *target* | 1 | RO | It contains the value of the parameter ***To*** in the original request message. |
| *originator* | 1 | RO | It contains the value of the parameter ***From*** in the original request message. |
| *requestID* | 1 | RO | It contains the value of the parameter ***Request Identifier*** in the original request message. |
| *metaInformation* | 1 | RO | Meta information about the request. The content of this attribute is equivalent to information in any other optional parameters described in clause 8.1. |
| *primitiveContent* | 0..1 | RO | Contains the content that is carried in the ***Content*** parameter of the original request message. |
| *requestStatus* | 1 | RO | Contains information on the current status of the Request, e.g. "accepted and pending". |
| *operationResult* | 1 | RO | Contains the result of the originally requested operation in line with the ***Result Content*** parameter and the ***Primitive Profile Identifier*** parameter associated with the original request once the operation has been completed. |

-------------------------------------------------- End of Change 1---------------------------------------

## ----------------------- Start of Change 2--------------------------------------------

#### 10.2.5.3 Create *<request>*

As specified in clause 9.6.12, creation of a *<request>* resource shall only be done on a Receiver CSE implicitly when a Registree AE or a Registree/Registrar CSE of the Receiver CSE issues a request to the Receiver CSE for targeting any other resource type or requesting a notification in non-blocking mode. Therefore, the creation procedure of a *<request>* resource cannot be initiated explicitly by an Originator.

The specific conditions to create a *<request>* resource are as follows: When an AE or CSE issues a request for targeting any other resource type or requesting a notification in non-blocking mode, i.e. the ***Response Type*** parameter of the request is set to either '*nonBlockingRequestSynch'* or '*nonBlockingRequestAsynch'*, and the Receiver CSE supports the *<request>* resource type as indicated by the *supportedResourceType* attribute of the *<CSEBase>* resource representing the Receiver CSE.

The Receiver CSE of a non-blocking Request that was issued by either:

* a Registrar AE of the Receiver CSE; or
* a Registree/Registrar CSE of the Receiver CSE;

is the Hosing CSE for the *<request>* resource that shall be associated with the non-blocking request.

The Hosting CSE shall follow the procedure outlined in this clause.

**Step 001:** The Receiver shall:

1. Assign values to the *resourceID* and *resourceName* attributes of the *<request>* resource to be created.
2. Assign a value to the following common attributes specified in clause 9.6.1.3:

a) *parentID*;

b) *creationTime*;

c) *expirationTime*: The Receiver shall assign a value that is consistent with the ***Request Expiration Timestamp***, ***Result Expiration Timestamp*** and ***Result Persistence*** parameters effective for the associated non-blocking request that implied the creation of this <request> resource (within the restriction of the Receiver policies). If a value consistent with the ***Request Expiration Timestamp***,***Result Expirati*on Timestamp** and ***Result Persistence*** parameters effective for the associated non-blocking request that implied the creation of this <request> resource cannot be supported, due to either policy or subscription restrictions, the Receiver will assign a new value;

d) *lastModifiedTime*: which is equals to the creationTime;

e) *stateTag*;

f) *accessControlPolicyIDs*: Populate with the resource identifier of an <accessControlPolicy> that contains the following:

i) In the *privileges* attribute:

1) Allow RETRIEVE, UPDATE and DELETE operations for the Hosting CSE.

2) Allow RETRIEVE and DELETE operations for the Originator, i.e. the value of the ***From*** parameter.

ii) In the *selfPrivileges* attribute:

1) Allow UPDATE operations for the Originator, i.e. the value of the ***From*** parameter.

1. Assign any other RO (Read Only) attributes of *<request>* resource type within the restriction of the Receiver policies:

a) Operation: Value of the parameter ***Operation*** in the associated non-blocking request that implied the creation of this *<request>* resource;

b) Target: Value of the parameter ***To*** in the associated non-blocking request that implied the creation of this *<request>* resource;

c) Originator: Value of the parameter ***From*** in the associated non-blocking request that implied the creation of this *<request>* resource;

d) *requestIdentifier*: Value of the parameter ***Request Identifier*** in the associated non-blocking request that implied the creation of this *<request>* resource;

e) *metaInformation*: The content of this attribute is set to information in any other optional parameters described in clause 8.1. given in the associated non-blocking request that implied the creation of this *<request>* resource;

f) content: Value of the parameter ***Content*** - if any - in the associated non-blocking request that implied the creation of this *<request>* resource;

g) *requestStatus*: Information on the initial status of the associated non-blocking request that implied the creation of this *<request>* resource. The initial value of this attribute shall be identical to the status that is contained in the Acknowledgement response message of the associated non-blocking request. Possible values for status information contained in this attribute are specified in oneM2M TS-0004 [3]. The value of this attribute is subject to changes according to the progress in processing of the non-blocking request that implied the creation of this *<request>* resource;

h) *operationResult*: Initially indicates acknowledgement for the associated non-blocking request. This attribute will be used for representing the result of the originally requested operation - if any - in line with the ***Result Content*** parameter and the ***Primitive Profile Identifier*** parameter in the associated non-blocking request that implied the creation of this *<request>* resource.

**Step 002:** The Receiver shall create the *<request>* resource.

Table 10.2.5.3-1: *<request>* CREATE

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| <*request*> CREATE | |
| Information in Request message | Not applicable. For *<request>* resources, explicit creation via a Request message shall not be supported |
| Pre-Processing at Originator | Not applicable. There is no Originator. *<request>* resources are only created implicitly |
| Processing at Receiver | Different to the non-registration CREATE procedure described in clause 10.1.2, see outlined steps described in the present clause above |
| Information in Response message | Not applicable. Since *<request>* resources shall not be created explicitly, no response messages will be sent after creation. However, the address of a *<request>* resource will be passed back as a reference to the Originator of an associated non-blocking request that implied the creation of this *<request>* resource |
| Post-Processing at Originator | None |
| Exceptions | None |

-------------------------------------------------- End of Change 2---------------------------------------