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| --- |
| CHANGE REQUEST |
| Meeting ID:\* | PRO 33 |
| Source:\* | Bob Flynn, Convida Wireless; Flynn.bob@convidawireless.com |
| Date:\* | 2018-01-07 |
| Reason for Change/s:\* | collectedEntityID updates |
| CR against: Release\* | Release 3 |
| CR against: WI\* | [ ]  Active <Work Item number> [ ]  MNT maintenance / < Work Item number(optional)>Is this a mirror CR? Yes [ ]  No [x] mirror CR number: (Note to Rapporteur - use latest agreed revision)[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 \* |  |
| 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) |

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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 reflect changes in ARC-2017-0363R01-GroupTimeOutForAggregatingMessages

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

#### 7.4.13.1 Introduction

The <group> resource represents a group of resources of the same or mixed types. The <group> resource can be used to do bulk manipulations on the resources represented by the ***memberIDs*** attribute. The <group> resource contains an attribute that represents the members of the group and a virtual resource (the <fanOutPoint>) that allows operations to be applied to the resources represented by those members. The detailed description can be found in clause 9.6.13 in TS-0001 [6].

Table 7.4.13.1‑1: Data type definition of <group> resource

|  |  |  |
| --- | --- | --- |
| Data Type ID | File Name | Note |
| group | CDT-group-v3\_5\_0.xsd |  |

Table 7.4.13.1‑2: Universal/Common Attributes of <group> resource

|  |  |
| --- | --- |
| Attribute Name | Request Optionality  |
| Create | Update |
| @resourceName | O | NP |
| resourceType  | NP | NP |
| resourceID | NP | NP |
| parentID | NP | NP |
| accessControlPolicyIDs | O | O |
| creationTime | NP | NP |
| expirationTime | O | O |
| lastModifiedTime | NP | NP |
| labels | O | O |
| announceTo | O | O |
| announcedAttribute | O | O |
| creator | O | NP |
| *dynamicAuthorizationConsultationIDs* | O | O |

Table 7.4.13.1‑3: Resource Specific Attributes of <group> resource

|  |  |  |  |
| --- | --- | --- | --- |
| Attribute Name | Request Optionality  | Data Type | Default Value and Constraints |
| Create | Update |
| memberType | O | NP | m2m:memberType | Default value is set to 'MIXED' |
| currentNrOfMembers | NP | NP | xs:nonNegativeInteger | No default(This is generated by the Hosting CSE and limited by the *maxNrOfMembers* attribute of the <group> resource) |
| maxNrOfMembers | M | O | xs:positiveInteger | No default |
| memberIDs | M | O | list of xs:anyURI | No defaultThis list may contain no members |
| membersAccessControlPolicyIDs | O | O | m2m:listOfURIs | No default |
| memberTypeValidated | NP | NP | xs:boolean | No default(This is generated by the Hosting CSE) |
| consistencyStrategy | O | NP | m2m:consistencyStrategy | Default value is set to 'ABANDON\_MEMBER' |
| groupName | O | O | xs:string | No default |
| semanticSupportIndicator | NP | NP | xs:boolean | No default(This is generated by the Hosting CSE and the value shall be ‘TRUE’ when this attribute is present) |
| notifyAggregation | O | O | m2m:batchNotify | No default |

Table 7.4.13.1‑4: Child resources of <group> resource

|  |  |  |  |
| --- | --- | --- | --- |
| Child Resource Type | Child Resource Name | Multiplicity | Ref. to in Resource Type Definition |
| <subscription> | [variable] | 0..n | Clause 7.4.8 |
| <semanticDescriptor> | [variable] | 0..n | Clause 7.4.34 |
| <fanOutPoint> | fopt | 1 | Clause 7.4.14 |
| <semanticFanOutPoint> | sfop | 0..1 | Clause 7.4.35 |

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

### -----------------------Start of change 2-------------------------------------------

* + 1.
1.
2.

##### Aggregation of member responses

After receiving the member responses from the member hosting CSEs, the group hosting CSE shall respond to the Originator with an aggregated response. To indicate which response is generated by which member resource, the Hosting CSE shall add member resource ID, which is corresponding to the response, into From response parameter in each member response.

If the group Hosting CSE gets no response before the Result Expiration Timestamp expiry, then the Hosting CSE shall return error with the ***Response Status Code*** parameter set as "GROUP\_MEMBERS\_NOT\_RESPONDED".

If ***Response Type*, *Result Expiration Time*** or ***Result Persistence*** were set in the request, these affect the behaviour of the group hosting CSE as follows:

If ***Response Type*** is set to **blockingRequest**, the group hosting CSE shall respond only once with the aggregated response. It shall do this before the time indicated by the ***Result Expiration Time*** is reached. The group hosting CSE shall discard any member responses received after this time.

If ***Response Type*** is set to **nonBlockingRequestSynch**, the group hosting CSE shall create a <request> resource locally and respond the Originator with the address of this <request> resource. Until the ***Result Expirtation Time*** is reached***,*** the group hosting CSE shall aggregate the member responses and include this aggregated response in the *operationResult* of the <request> resource*.*

If ***Response Type*** is set to **nonBlockingRequestAsynch**, the group hosting CSE shall notify the Originator or the notification targets with aggregated responses before the ***Result Expiration Time*** expires. The group hosting CSE may notify the Originator more than once during the period until the ***Result Expiration Time*** expires. Each notification shall contain different member responses.

If ***Response Type*** is set to **flexBlocking**, the group hosting CSE shall keep aggregating the member responses until the group hosting CSE determines that it is time to send a response – this depends on the properties of the group hosting CSE related to the <group> resource (the number of aggregated responses or the time period of the aggregation). By that time, if the aggregated response contains all the member responses, the group hosting CSE shall respond with the aggregated response. However if only some of the member responses have been received , the group hosting CSE shall create a <request> resource from the received request, and respond to the Originator with the reference to the created <request> resource as well as the currently aggregated responses. Until the time specified in ***Result Expiration Time*** is reached, the group hosting CSE shall keep aggregating the remaining member responses and updating the aggregated response in the *operationResult* of the <request> resource. If **notificationTarget** is provided in the request, the group hosting CSE shall notify the Originator with the aggregated response. Each notification shall contain different member responses.

If the group hosting CSE supports <request> resource, in the **nonBlockingRequestAsynch**, **nonBlockingSynch** and **flexBlocking** case, it shall set the *requestStatus* of the <request> resource to PARTIALLY\_COMPLETED if some of the member responses are received.If the group hosting CSE has aggregated all the member responses, it shall set the *operationResult* to COMPLETED.

In any of the cases above, member responses received after the ***Result Expiration Time*** shall be discarded. After the time specified in ***Result Persistence***, the aggregated response shall not be retrievable.

If any of the parameter mentioned above are missing from the request, the group hosting CSE shall determine the time to respond using its local Policy.

When aggregating notifications the group hosting CSE, upon receiving the first notification, shall wait until the number of notification specified *in notifyAggregation.number* is received or until *notifyAggregation.duration* time has elapsed, which ever comes first, and send the notifications in an m2m:aggregatedNotification message. If *notifyAggregation* is not specified then the group hosting CSE shall use the *currentNrOfMembers* attribute of the <group> and a duration specified by the M2M Service Provider.

### -----------------------End of change 2-------------------------------------------

### -----------------------Start of change 3-------------------------------------------

### -----------------------End of change 3-------------------------------------------

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.?