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| CHANGE REQUEST |
| Meeting:\* | TP24 |
| Source:\* | InterDigital |
| Date:\* | 2016-07-11 |
| Contact:\* | Dale Seed (dale.seed@interdital.com)Bob Flynn (bob.flynn@interdigital.com) |
| Reason for Change/s:\* | Corrections identified during test purpose development |
| CR against: Release\* | Rel-1 |
| CR against: WI\* | [ ]  Active <Work Item number> [x]  MNT Maintenace / < Work Item number(optional)>[ ]  STE Small Technical Enhancements / < Work Item number (optional)>Only ONE of the above shall be ticked |
| CR against: TS/TR\* | TS-0001-V1.13.5 |
| Clauses/Sub Clauses\* |  |
| Type of change: \* | [ ]  Editorial change[x]  Bug Fix or Correction[ ]  Change to existing feature or functionality[ ]  New feature or functionalityOnly ONE of the above shall be ticked |
| Post Freeze checking:\* | This CR contains only essential changes and corrections? YES [x]  NO [ ] This CR is a mirror CR? YES [ ]  NO [x]  if YES, please indicate the document number of the original CR: <Document Number)<CR Number of the original CR to the current Release> |
| Template Version:23 February 2015 (Dot not modify) |

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1. **Introduction**

This contribution document consist of editorial changes identified during test purposes development for group fanoutPoint requests.

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

#### 10.2.7.7 Create *<fanOutPoint>*

This procedure shall be used for creating the content of all members resources belonging to an existing <group> resource.

**Table 10.2.7.7-1: <fanOutPoint> CREATE**

|  |
| --- |
| *<fanOutPoint>* CREATE |
| Associated Reference Point | Mca, Mcc and Mcc' |
| Information in Request message | ***From:*** Identifier of the AE or the CSE that initiates the Request***To:*** The address of the *<fanOutPoint>* virtual resource***Content:*** The representation of the resource the Originator intends to create***Group Request Identifier:*** The group request identifier |
| Processing at Originator before sending Request | The Originator shall request to create the resource that have the same content in allmembers resources belonging to an existing *<group>* resource by using a CREATEoperation. The Request may address the virtual child resource *<fanOutPoint>* of thespecific *<group>* resource of a group Hosting CSE. The request may also address theaddress that results from appending a relative address to the *<fanOutPoint>* address inorder to create the resources that have the same content under the correspondingchild resources represented by the relative address with respect to all membersresources. The Originator may be an AE or CSE |
| Processing at GroupHosting CSE | For the CREATE procedure, the Group Hosting CSE shall:* Check if the Originator has CREATE privilege in the *<accessControlPolicy>*

 resource referenced by the members *AccessControlPolicyIDs* in the *<group>* resource. In the case members *membersAccessControlPolicyIDs* is not provided the access control policy defined for the *<group>* resource shall be used* Upon successful validation, obtain the IDs of all members resources from the

 attribute *membersIDs* of the addressed *<group>* resource* Generate fan out requests addressing the obtained address (appended with

 the relative address if any) to the member hosting CSEs as indicated in figure 10.2.7.6-1.The ***From*** parameter in the request is set to ID of the Originator from the request from the original Originator* In the case that a member resource is a *<group>* resource and the request to

 be fanned out does not contain a group request identifier already, generate a unique group request identifier, include the group request identifier in all the requests to be fanned out and locally store the group request identifier* If the group Hosting CSE determines that multiple members resources belong

 to one CSE according to the IDs of the members resources, it may converge the requests accordingly before sending out. This may be accomplished by the group Hosting CSE creating a *<group>* resource on the members Hosting CSE to collect all the members on that members Hosting CSE* After receiving the responses from the members hosting CSEs, respond to

 the Originator with the aggregated results and the associated members list |
| Processing at MemberHosting CSE | For the CREATE procedure, the Member Hosting CSE shall:* Check if the request has a group request identifier. Check if the group request

identifier is contained in the requested identifiers stored locally. If match isfound, ignore the current request and respond an error. If no match is found,locally store the group request identifier until the expiration of the request expiration time or local policy* Check if the original Originator has the CREATE permission on the addressed

resource. Upon successful validation, perform the create procedures for thecorresponding type of addressed resource as described in other sub-clausesof clause 10.2* Send the corresponding response to the Group Hosting CSE
 |
| Information in Response message | Converged responses from members hosting CSEs |
| Processing at Originator after receiving Response | None |
| Exceptions | * Same request with identical group request identifier received
* Originator does not have the CREATE permission to access the

*<fanOutPoint>* resource |

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

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

#### 10.2.7.8 Retrieve *<fanOutPoint>*

This procedure shall be used for retrieving the content of all member resources belonging to an existing <group> resource.

 **Table 10.2.7.8-1: <fanOutPoint> RETRIEVE**

|  |
| --- |
| *<fanOutPoint>* RETRIEVE |
| Associated Reference Point | Mca, Mcc and Mcc' |
| Information in Request message | ***From:*** Identifier of the AE or the CSE that initiates the Request***To:*** The address of the *<fanOutPoint>* virtual resource***Content:*** The representation of the resource the Originator intends to retrieve***Group Request Identifier:*** The group request identifier  |
| Processing at Originator before sending Request | The Originator shall request to obtain the resource or specific attributes of all memberresources belonging to an existing *<group>* resource by using a RETRIEVE operation.The request may address the virtual child resource *<fanOutPoint>* of the specific*<group>* resource of a group Hosting CSE. The request may also address the addressthat results from appending a relative address to the *<fanOutPoint>* address in order toretrieve the corresponding attributes or child resources represented by the relativeaddress with respect to all members resources. The Originator may be an AE or CSE |
| Processing at GroupHosting CSE | For the RETRIEVE procedure, the Group Hosting CSE shall:* Check if the Originator has RETRIEVE permission in the

 *<accessControlPolicy>* resource referenced by the *membersAccessControlPolicyIDs* in the addressed *<group>* resource. In the case *membersAccessControlPolicyIDs* is not provided, the access control policy defined for the group resource shall be used* Upon successful validation, obtain the IDs of all members resources from the

 *membersIDs* attribute of the addressed *<group>* resource* Generate fan out requests addressing the obtained address (appended with

 the relative address if any) to the members hosting CSEs as indicated in figure 10.2.7.6-1.The ***From*** parameter in the request is set to ID of the Originator from the request from the original Originator* In the case that a member resource is a *<group>* resource, generate a unique

 group request identifier and the request to be fanned out does not contain a group request identifier already, include the group request identifier in all the requests to be fanned out and locally store the group request identifier* If the group hosting CSE determines that multiple members resources belong

 to one CSE according to the IDs of the members resources, it may converge the requests accordingly before sending out. This may be accomplished by the group Hosting CSE creating a *<group>* resource on the members Hosting CSE to collect all the members on that members Hosting CSE* After receiving the responses from the members hosting CSEs, respond to

 the Originator with the aggregated results and the associated member list |
| Processing at MemberHosting CSE | For the RETRIEVE procedure, the Member Hosting CSE shall:* Check if the request has a group request identifier. Check if the group request

 identifier is contained in the requested identifier stored locally. If match is found, ignore the current request and respond an error. If no match is found, locally store the request identifier until the expiration of the request expiration time or local policy* Check if the original Originator has the RETRIEVE permission on the

 addressed resource. Upon successful validation, perform the retrieve procedures for the corresponding type of addressed resource as described in other sub-clauses of clause 10.2* Send the corresponding response to the group Hosting CSE
 |
| Information in Response message | Converged responses from members hosting CSEs |
| Processing at Originator after receiving Response | None |
| Exceptions | * Same request with identical group request identifier received
* Originator does not have RETRIEVE permission to access the *<fanOutPoint>*

 resource |

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

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

#### 10.2.7.9 Update *<fanOutPoint>*

This procedure shall be used for updating the content of all member resources belonging to an existing *<group>* resource.

 **Table 10.2.7.9-1: <fanOutPoint> UPDATE**

|  |
| --- |
| *<fanOutPoint>* UPDATE |
| Associated Reference Point | Mca, Mcc and Mcc' |
| Information in Request message | ***From:*** Identifier of the AE or the CSE that initiates the Request***To:*** The address of the *<group>* resource***Content:*** The representation of the resource the Originator intend to Update***Group Request Identifier:*** The group request identifier |
| Processing at Originator before sending Request | The Originator shall request to update all member resources belonging to an existing*<group>* resource with the same data by using a UPDATE operation. The request mayaddress the virtual child resource *<fanOutPoint>* of the specific *<group>* resource of agroup Hosting CSE. The request may also address the address that results fromappending a relative address to the *<fanOutPoint>* in order to update thecorresponding child resources represented by the relative address with respect to all*<members>* resources. The Originator may be an AE or CSE |
| Processing at GroupHosting CSE | For the UPDATE procedure, the Group Hosting CSE shall:* Check if the Originator has UPDATE permission in the *<accessControlPolicy>*

resource referenced by the *membersAccessControlPolicyIDs* in the groupresource. In the case members *membersAccessControlPolicyIDs* is notprovided the access control policy defined for the group resource shall beused* Upon successful validation, obtain the IDs of all member resources from the

attribute *membersIDs* of the addressed *<group>* resource* Generate fan out requests addressing the obtained address (appended with

the relative address if any) to the members hosting CSEs as indicated infigure 10.2.7.6-1.The ***From*** parameter in the request is set to ID of theOriginator from the request from the original Originator* In the case that a member resource is a *<group>* resource and the request to

be fanned out does not contain a group request identifier already, generate aunique group request identifier, include it in all the requests to be fanned outand locally store the group request identifier* If the group Hosting CSE determines that multiple members resources belong

to one CSE according to the IDs of the member resources, it may convergethe requests accordingly before sending out. This may be accomplished bythe group Hosting CSE creating a *<group>* resource on the member HostingCSE to collect all the members on that members Hosting CSE* After receiving the responses from the member hosting CSEs, respond to the Originator with the aggregated results and the associated members list
 |
| Processing at MemberHosting CSE | For the UPDATE procedure, the Member Hosting CSE shall:* Check if the request has a group request identifier. Check if the request

identifier is contained in the requested identifier stored locally. If match isfound, ignore the current request and respond an error. If no match is found,locally store the request identifier until the expiration of the request expiration time or local policy* Check if the original Originator has the UPDATE permission on the addressed

resource. Upon successful validation, perform the update procedures for thecorresponding type of addressed resource as described in other sub-clausesof clause 10.2* Send the corresponding response to the group Hosting CSE
 |
| Information in Response message | Converged responses from members hosting CSEs |
| Processing at Originator after receiving Response | None |
| Exceptions | * Same request with identical group request identifier received
* Originator does not have UPDATE permission to access the *<fanOutPoint>*

 resource |

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

## ----------------------- Start of change 4-----------------------

#### 10.2.7.10 Delete *<fanOutPoint>*

This procedure shall be used for deleting the content of all members resources belonging to an existing *<group>* resource.

 **Table 10.2.7.10-1: <fanOutPoint> DELETE**

|  |
| --- |
| *<fanOutPoint>* DELETE |
| Associated Reference Point | Mca, Mcc and Mcc' |
| Information in Request message | ***From:*** Identifier of the AE or the CSE that initiates the Request***To:*** The address of the *<fanOutPoint>* virtual resource***Content:*** The representation of the resource the Originator intends to delete***Group Request Identifier:*** The group request identifier |
| Processing at Originator before sending Request | The Originator shall request to delete all members resources belonging to an existing*<gro*u*p>* resource by using a DELETE operation. The request may address the virtualchild resource *<fanOutPoint>* of the specific *<group>* resource of a group HostingCSE. The request may also address the address that results from appending a relativeaddress to the *<fanOutPoint>* in order to delete the corresponding child resourcesrepresented by the relative address with respect to all member resources. TheOriginator may be an AE or a CSE |
| Processing at GroupHosting CSE | For the DELETE procedure, the *<group>* Hosting CSE shall:* Check if the Originator has DELETE permission in the *<accessControlPolicy>*

resource referenced by the *membersAccessControlPoliciIDs* in the *<group>*resource. In the case *membersAccessControlPolicyIDs* is not provided theaccess control policy defined for the group resource shall be used* Upon successful validation, obtain the IDs of all member resources from the

attribute *membersIDs* of the addressed *<group>* resource* Generate fan out requests addressing the obtained address (appended with

the relative address if any) to the member hosting CSEs as indicated in figure10.2.7.6-1. ***From*** parameter in the request is set to ID of the Originator fromthe request from the original Originator* In the case that the members resources is a *<group>* resource and the

request to be fanned out does not contain a group request identifier already,generate a unique group request identifier, include the group requestidentifier in all the requests to be fanned out and locally store the grouprequest identifier* If the *<group>* Hosting CSE determines that multiple members resources

belong to one CSE according to the IDs of the members resources, it mayconverge the requests accordingly before sending out. This may beaccomplished by the group Hosting CSE creating a *<group>* resource on themember Hosting CSE to collect all the members on that member HostingCSE* After receiving the responses from the members hosting CSEs, respond to

the Originator with the aggregated results and the associated member list |
| Processing at MemberHosting CSE | For the DELETE procedure, the Members Hosting CSE shall:* Check if the request has a group request identifier. Check if the group request

identifier is contained in the requested identifier stored locally. If match isfound, ignore the current request and respond an error. If no match is found,locally store the group request identifier until the expiration of the request expiration time or local policy* Check if the original Originator has the DELETE permission on the addressed

resource. Upon successful validation, perform the delete procedures for thecorresponding type of addressed resource as described in other sub-clausesof clause 10.2* Send the corresponding response to the Group Hosting CSE
 |
| Information in Response message | Converged responses from members hosting CSEs |
| Processing at Originator after receiving Response | None |
| Exceptions | * Same request with identical group request identifier received
* Originator does not have DELETE permission to access the *<fanOutPoint>*

 resource |

## ----------------------- End of change 4----------------------

## ----------------------- Start of change 5-----------------------

#### 10.2.7.11 Subscribe and Un-Subscribe *<fanOutPoint>* of a group

This procedure shall be used for receiving information about modifications of all member resources belonging to an existing *<group>* resource.

 **Table 10.2.7.11-1: <fanOutPoint> Subscribe**

|  |
| --- |
|  *<fanOutPoint>* Subscribe |
| Associated Reference Point | Mca, Mcc and Mcc' |
| Information in Request message | ***From:*** Identifier of the AE or CSE that initiates the request***To:*** The address of the <fanOutPoint> resource appended with the ID of the*<subscription>* resource to be created***Group Request Identifier:*** The group request identifier |
| Processing at Originator before sending Request | The Originator shall request to create a subscription resource under all memberresources belonging to an existing *<group>* resource by using a CREATE operation.The request may address the virtualchild resource *<fanOutPoint>* of the specific *<group>* resource of a group HostingCSE. The request may also address the address that results from appending a relativeaddress to the *<fanOutPoint>* in order to create the corresponding subscription to the resource represented by the relative address with respect to all member resources. In both cases the targeted resource shall the parent of the newly created <subscription> resource(s). The requestshall include *notificationForwardingURI* attribute if the Originator wants the groupHosting CSE to aggregate the notifications. The request shall include the requiredinformation and may include the optional information as described in subscriptionmanagement clause 10.2.11. The Originator may be an AE or a CSE |
| Processing at GroupHosting CSE | The *<group>* Hosting CSE shall:* Check if the Originator has CREATE privilege in the *<accessControlPolicy>*

resource referenced by the *membersAccessControlPolicyIDs* in the groupresource. In the case *membersAccessControlPolicyIDs* is not provided theaccess control policy defined for the group resource shall be used* If the subscription resource in the request contains an

*notificationForwardingURI* attribute, assign a URI to replace the*notificationURI* of the subscription resource which will be used to receivenotifications from member hosting CSEs. The ID of the *<group>* resourceshall be set to the *groupID* attribute of the *<subscription>* resource. The groupHosting CSE shall maintain the mapping of the generated *notificationURI* andthe former *notificationURI** Upon successful validation, obtain the IDs of all member resources from the

attribute *membersIDs* of the addressed *<group>* resource* Generate fan out requests addressing the obtained address (appended with

the relative address if any) to the member hosting CSEs as indicated in figure10.2.7.6-1. ***From*** parameter in the request is set to ID of the Originator fromthe request from the original Originator* If the group Hosting CSE determines that multiple members resources belong

to one CSE according to the IDs of the member resources, it may convergethe requests accordingly before sending out. This may be accomplished bythe *<group>* Hosting CSE creating a *<group>* resource on the membersHosting CSE to collect all the members on that members Hosting CSE* After receiving the responses from the member hosting CSEs, respond to the Originator with the aggregated results and the associated members list
 |
| Processing at MemberHosting CSE | For the subscribe procedure, the Members Hosting CSE shall treat therequest received from the group Hosting CSE as a normal SUBSCRIBE request on theaddressed member resource as if it comes from the original Originator. Therefore themembers Hosting CSE shall:* Check if the request has a group request identifier. Check if the group request

identifier is contained in the requested identifier stored locally. If match isfound, ignore the current request and respond an error. If no match is found,locally store the group request identifier until the expiration of the request expiration time or local policy* Check if the original Originator has the READ permission on the members

Resource. Upon successful validation, perform the subscribe procedures for thecorresponding type of member resource as described in clause 10.2.12* Send the corresponding response to the group Hosting CSE
 |
| Information in Response message | Converged responses from members hosting CSEs |
| Processing at Originator after receiving Response | None |
| Exceptions | * Same request with identical group request identifier received
* Originator does not have the access control privilege to access the

*<fanOutPoint>* resource |

Un-subscribing to the members of a <group> resource uses the “Delete <fanOutPoint>” procedure defined in 10.2.7.10.

## ----------------------- End of change 5----------------------