**3GPP TSG-SA WG6 Meeting #41-e S6-210256**

**e-meeting, 18th – 26th January 2021 (revision of S6-210096)**

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| --- |
| *CR-Form-v12.0* |
| **CHANGE REQUEST** |
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|  | **23.282** | **CR** |  | **rev** |  | **Current version:** |  |  |
|  |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME | **X** | Radio Access Network |  | Core Network | **X** |

|  |
| --- |
|  |
| ***Title:***  | Corrections to FD using media plane |
|  |  |
| ***Source to WG:*** | at&t |
| ***Source to TSG:*** | S6 |
|  |  |
| ***Work item code:*** | eMCData3 |  | ***Date:*** | 2021-01-10 |
|  |  |  |  |  |
| ***Category:*** | **F** |  | ***Release:*** | Rel-17 |
|  | *Use one of the following categories:****F*** *(correction)****A*** *(mirror corresponding to a change in an earlier release)****B*** *(addition of feature),* ***C*** *(functional modification of feature)****D*** *(editorial modification)*Detailed explanations of the above categories canbe found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | *Use one of the following releases:Rel-8 (Release 8)Rel-9 (Release 9)Rel-10 (Release 10)Rel-11 (Release 11)Rel-12 (Release 12)**Rel-13 (Release 13)Rel-14 (Release 14)Rel-15 (Release 15)Rel-16 (Release 16)* |
|  |  |
| ***Reason for change:*** | There are errors in some FD using media plane procedures that need to be corrected:1. The MCData FD using media request procedures is misleading about the file metadata in the current description. The SDP is part of the mandatory IE of the request message and therefore the file metadata.
2. There are “Content reference” IEs defined in the offline FD using media plane infromation tables that shouldn’t be there. The “Content reference IE” is defined specifically for FD HTTP messages to carry the URL of the file being distributed and stored in the Content server.
 |
|  |  |
| ***Summary of change:*** | 1. Add a new NOTE to relevant SDP offer IE to clarify that the file metadata is included.
2. Revise the text in relevant procedures describing the file metadata is included in the SDP offer of the request messages.
3. Remove the “Content reference” IE from the offline FD information tables.
4. Correct the editorial errors in NOTE 2/step 4 in 7.5.2.5.2.
 |
|  |  |
| ***Consequences if not approved:*** | The guidance to stage 3 development will be wrong. |
|  |  |
| ***Clauses affected:*** | 7.5.2.1.8, 7.5.1.12, 7.5.2.5.2, 7.5.2.7.2, 7.5.3.2.1, 7.5.3.2.4, 7.5.3.3.2, 7.5.3.4.2 |
|  |  |
|  | **Y** | **N** |  |  |
| ***Other specs*** |  | **X** |  Other core specifications  | TS/TR ... CR ...  |
| ***affected:*** |  | **X** |  Test specifications | TS/TR ... CR ...  |
| ***(show related CRs)*** |  | **X** |  O&M Specifications | TS/TR ... CR ...  |
|  |  |
| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\* \* \* First Change \* \* \* \*

##### 7.5.2.1.8 MCData FD request (using media plane)

Table 7.5.2.1.8-1 describes the information flow for the MCData FD request (in subclause 7.5.2.5.2) sent from the MCData client to the MCData server and from the MCData server to another MCData client.

Table 7.5.2.1.8-1: MCData FD request (using media plane/MCData client to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending file |
| Functional alias | O | The functional alias associated with MCData user sending the file. |
| MCData ID (see NOTE 1) | O | The identity of the MCData user receiving file |
| Functional alias (see NOTE) | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed reported is expected or not |
| Download indication | O | Indicates mandatory download. (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE 2) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| Emergency indicator | O | Indicates that the data request is for MCData emergency communication |
| NOTE 1: Either the MCData ID or the functional alias must be present.NOTE 2: Includes file metadata. |

Table 7.5.2.1.8-2: MCData FD request (using media plane/MCData server to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending file |
| Functional alias | O | The associated functional alias of the MCData user identity sending the file. |
| MCData ID | M | The identity of the MCData user receiving file |
| Functional alias | O | The associated functional alias of the MCData user identity towards which the data is sent. |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed reported is expected or not |
| Download indication | O | Indicates mandatory download. (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| NOTE: Includes file metadata. |

Table 7.5.2.1.8-3: MCData FD request (using media plane/MCData server to MCData client)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending file |
| Functional alias | O | The associated functional alias of the MCData user identity sending the file. |
| MCData ID | M | The identity of the MCData user receiving file |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed reported is expected or not |
| Download indication | O | Indicates mandatory download. (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| NOTE: Includes file metadata. |

\* \* \* Next Change \* \* \* \*

##### 7.5.2.1.12 MCData group standalone FD request (using media plane)

Table 7.5.2.1.12-1 describes the information flow for the MCData group standalone FD request (in subclause 7.5.2.7.2) sent from the MCData client to the MCData server and from the MCData server to another MCData client.

Table 7.5.2.1.12-1: MCData group standalone FD request (using media plane/MCData client to MCData server)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending file |
| Functional alias | O | The functional alias associated with MCData user sending the file. |
| MCData group ID | M | The MCData group ID to which the data is to be sent |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed reported is expected or not |
| Download indication | O | Indicates mandatory download. (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE 3) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| Emergency indicator (see NOTE 1) | O | Indicates that the data request is for MCData emergency communication |
| Alert indicator (see NOTE 2) | O | Indicates whether an emergency alert is to be sent |
| Imminent peril indicator (see NOTE 1) | O | Indicates that the data request is for MCData imminent peril communication |
| NOTE 1: If used, only one of these information elements shall be present.NOTE 2: This information element may be present only when Emergency indicator is present.NOTE 3: Includes file metadata. |

Table 7.5.2.1.12-2: MCData group standalone FD request (using media plane/MCData server to MCData client)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending file |
| Functional alias | O | The functional alias associated with MCData user sending the file. |
| MCData group ID | M | The MCData group ID to which the data is to be sent |
| MCData ID | M | The identity of the MCData user receiving file |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed reported is expected or not |
| Download indication | O | Indicates mandatory download. (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE 3) | M | Media parameters offered |
| Requested priority | O | Application priority level requested for this communication session |
| Emergency indicator (see NOTE 1) | O | Indicates that the data request is for MCData emergency communication |
| Alert indicator (see NOTE 2) | O | Indicates whether an emergency alert is to be sent |
| Imminent peril indicator (see NOTE 1) | O | Indicates that the data request is for MCData imminent peril communication |
| NOTE 1: If used, only one of these information elements shall be present.NOTE 2: This information element may be present only when Emergency indicator is present.NOTE 3: Includes file metadata. |

\* \* \* Next Change \* \* \* \*

##### 7.5.2.5.2 Procedure

The procedure in figure 7.5.2.5.2-1 describes the case where an MCData user is initiating one-to-one data communication for sending file to the other MCData user, with or without download completed report request.

Pre-conditions:

1. The MCData users on the MCData client 1 and the MCData client 2 are already registered for receiving MCData service.

2. Optionally, the MCData client may have an activated functional alias to be used.

3. The MCData server has subscribed to the MCData functional alias controlling server within the MC system for functional alias activation/de-activation updates.



Figure 7.5.2.5.2-1: One-to-one file distribution using media plane

1. The user at the MCData client 1 initiates a file distribution request to the chosen MCData user.

2. MCData client 1 sends a MCData FD request towards the MCData server. File metadata information is included in the SDP. The MCData FD request contains one MCData user for one-to-one data communication as selected by the user at MCData client 1. The MCData FD request contains conversation identifier for message thread indication. The MCData FD request may include additional implementation specific information in the application metadata container. MCData FD request may contain mandatory download indication. The MCData FD request may contain download completed report indication if selected by the user at MCData client 1. MCData user at MCData client 1 may include a functional alias within the FD data transfer and may address the target MCData client 2 using a functional alias.

a) If the MCData user at the MCData client 1 initiates an MCData emergency file distribution communication or MCData emergency state is already set for the MCData client 1 (due to previously triggered MCData emergency alert):

i) The MCData FD request shall contain emergency indicator; and

ii) If MCData emergency state is not set already, MCData client 1 sets its MCData emergency state. The MCData emergency state of MCData client 1 is retained until explicitly cancelled by the user of MCData client 1.

NOTE 1: While MCData client 1 is in the emergency state, all types of MCData one-to-one and group communications initiated by MCData client 1 are initiated as MCData emergency communications.

3. MCData server checks whether the MCData user at MCData client 1 is authorized to send MCData FD request. MCData server verifies whether the provided functional alias of MCData client 1, if present, can be used and has been activated for the user. If functional alias is used to address that target MCData user, the MCData server resolves the functional alias to the corresponding MCData ID(s) for which the functional alias is active and proceed with step 4 otherwise proceed with step 6.

NOTE 2: If the MCData server detects that the functional alias used as the target of the MCData FD request is simultaneously active for multiple MCData users, then the MCData server can proceed by selecting an appropriate MCData ID based on some selection criteria. The selection of an appropriate MCData ID is left to implementation. These selection criteria can include rejection of the MCData FD request, if no suitable MCData ID is selected.

4. The MCData server responds back to MCData client 1 with a functional alias resolution response message that contains the resolved MCData ID.

5. If the MCData server replies with a MCData functional alias resolution response message, the MCData client 1 sends a new MCData SDS transfer request towards the resolved MCData ID.

6. The MCData server also applies transmission and reception control and the necessary policy to ensure that appropriate data is transmitted between the MCData UEs.

7. MCData server initiates the MCData FD request towards the MCData users determined. The MCData FD request towards the MCData user contains the emergency indicator if it is present in the received MCData FD request from MCData client 1.

NOTE 3: MCData client 2 does not set its emergency state as a result of receiving the MCData FD request containing the emergency indicator.

8. The receiving MCData client 2 notifies the user about the incoming MCData FD request which may be either accepted or rejected or ignored. If the request includes mandatory download indication in the MCData FD request an accepted response is assumed.

9. If the target MCData user 2 provides a response (accept or reject) to the notification, then MCData client 2 sends the MCData FD response to the MCData server. MCData client 2 automatically sends accepted MCData FD response when the incoming request included mandatory download indication.

10. MCData server forwards the MCData FD response from MCData client 2 back to MCData client 1.

11. MCData client 1 distributes the file over the established media plane to MCData server.

12. MCData server distributes the file received from MCData client 1 to MCData client 2 over the established media plane. File download report is shared by the MCData client 2, if requested by the user at MCData client 1. After file transaction is completed, the media plane is released. The MCData client 2 records file download completed and notifies MCData user 2.

NOTE 4: MCData server is not required to wait for the complete download of file from MCData client 1 prior to initiating file distribution to MCData client 2.

13. MCData client 2 initiates a MCData download completed report for reporting file download completed, if requested by the user at MCData client 1.

14. The MCData file download completed report from MCData client may be stored by the MCData server for download history interrogation from the authorized MCData users. MCData download completed report is sent by the MCData server to the user at MCData client 1.

\* \* \* Next Change \* \* \* \*

##### 7.5.2.7.2 Procedure

The procedure in figure 7.5.2.7.2-1 describes the case where an MCData user is initiating group standalone data communication for sending file to multiple MCData users, with or without download completed report request.

Pre-conditions:

1. The MCData users on the MCData client 1 to n belong to the same group and are already registered for receiving MCData service and affiliated.

2. Optionally, the MCData client may have an activated functional alias to be used.

3. The MCData server has subscribed to the MCData functional alias controlling server within the MC system for functional alias activation/de-activation updates.



Figure 7.5.2.7.2-1: Group standalone FD using media plane

1. The user at the MCData client 1 initiates a file distribution request to multiple MCData users selecting a pre-configured group (identified by MCData group ID) and optionally particular members from that group.

2. MCData client 1 sends a MCData group standalone FD request towards the MCData server. File metadata information is included in the SDP. The MCData group standalone data request contains target recipient(s) as selected by the user at MCData client 1. The MCData group standalone FD request contains conversation identifier for message thread indication. The MCData group standalone FD request may include additional implementation specific information in the application metadata container. MCData group standalone FD request may contain mandatory download indication. The MCData group standalone FD request may contain download completed report indication if selected by the user at MCData client 1. MCData user at MCData client 1 may include a functional alias within the FD data transfer.

If the MCData user at MCData client 1 initiates an MCData emergency file distribution communication or the MCData emergency state is already set for the MCData client 1 (due to a previously triggered MCData emergency alert):

i) the MCData group standalone FD request shall contain an emergency indicator;

ii) the MCData group standalone FD request shall set an alert indicator if configured to send an MCData emergency alert while initiating an MCData group standalone FD request for the emergency file distribution service communication; and

iii) if the MCData emergency state is not set already, MCData client 1 sets its MCData emergency state. The MCData emergency state is retained until explicitly cancelled.

NOTE 1: While MCData client 1 is in the emergency state, all types of MCData one-to-one and group communications initiated by MCData client 1 are initiated as MCData emergency communications.

If the MCData user at MCData client 1 initiates an MCData imminent peril file distribution communication:

i) the MCData group standalone FD request shall contain imminent peril indicator.

2a. If either emergency indicator or imminent peril indicator is present in the received MCData group standalone data request, the MCData server implicitly affiliates MCData client 1 to the MCData group if the client is not already affiliated.

3. MCData server checks whether the MCData user at MCData client 1 is authorized to send MCData group standalone FD request. MCData server verifies whether the provided functional alias, if present, can be used and has been activated for the user. The MCData server resolves the MCData group ID to determine the members of that group and their affiliation status, based on the information from the group management server.

i) If an emergency indicator is present in the received MCData group standalone FD request and if the MCData group is not in the in-progress emergency state, the MCData group is considered to be in the in-progress emergency state until cancelled;

NOTE 2: While the MCData group is in the in-progress emergency state, all types of MCData communications within the group are processed as emergency group communications by the MCData server. MCData group members that are not in the emergency state do not indicate emergency in group communication requests.

ii) If an imminent peril indicator is present in the received MCData group standalone FD request and if the MCData group is not in the in-progress imminent peril state, the MCData group is considered to be in the in-progress imminent peril state until cancelled;

4. The MCData server also applies transmission and reception control and the necessary policy to ensure that appropriate data is transmitted between the MCData UEs.

5. MCData server initiates the MCData group standalone FD request towards each MCData user determined in step 3. The MCData group standalone data request towards each MCData client contains:

i) an emergency indicator if it is present in the received MCData group standalone FD request from the MCData client 1;

ii) an imminent peril indicator if it is present in the received MCData group standalone FD request from the MCData client 1; and

iii) an alert indicator if requested to initiate an emergency alert in the received MCData group standalone FD request from the MCData client 1.

6. The receiving MCData clients 2 to n notifies the user about the incoming MCData group standalone FD request which may be either accepted or rejected or ignored. If the request includes mandatory download indication in the MCData group standalone FD request an accepted response is assumed.

7. If the target MCData user on MCData clients 2 to n provides a response (accept or reject) to the notification, then the respective MCData client sends the MCData group standalone FD response to the MCData server. MCData client 2 to n automatically sends accepted MCData group standalone FD response when the incoming request included mandatory download indication.

8. MCData server forwards the MCData group standalone FD response to the MCData client 1.

NOTE 3: Step 8 can occur at any time following step 5, and prior to step 9 depending on the conditions to proceed with the file transmission.

9. MCData client 1 and MCData server have successfully established media plane for file transmission and the MCData client 1 transmits the file data.

10. MCData server distributes the file received from MCData client 1 to MCData clients 2 to n over the established media plane. Distribution of file can be via unicast or via MBMS bearer(s). For distribution via MBMS bearer(s), the procedure described in subclause 7.3 Use of MBMS transmission (on-network) is executed. File download report is shared by the receiving MCData clients, if requested by the user at MCData client 1. After file transaction is completed, the media plane is released.

NOTE 4: MCData server is not required to wait for the complete download of file from MCData client 1 prior to initiating file distribution to MCData client 2.

11. The MCData clients successfully receiving the file, records file download completed and notifies MCData user.

12. MCData client 2 initiates a MCData download completed report for reporting file download completed, if requested by the user at MCData client 1.

13. The MCData file download completed report from MCData client(s) may be stored by the MCData server for download history interrogation from the authorized MCData users. The MCData file download completed report from each MCData user may be aggregated.

14. Aggregated or individual MCData file download completed report is sent to the disposition requesting user at MCData client 1.

\* \* \* Next Change \* \* \* \*

##### 7.5.3.2.1 MCData FD request (using media plane)

Table 7.5.3.2.1-1 describes the information flow for the MCData FD request sent from the MCData client to another MCData client.

Table 7.5.3.2.1-1: MCData FD request (using media plane)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending file |
| MCData ID | M | The identity of the MCData user receiving file |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed reported is expected or not |
| Download indication | O | Indicates mandatory download. (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE) | M | Media parameters offered |
|  |  |  |
| NOTE: Includes file metadata. |

\* \* \* Next Change \* \* \* \*

##### 7.5.3.2.4 MCData group standalone FD request (using media plane)

Table 7.5.3.2.4-1 describes the information flow for the MCData group standalone FD request sent from the MCData client to another MCData client.

Table 7.5.3.2.4-1: MCData group standalone FD request (using media plane)

|  |  |  |
| --- | --- | --- |
| Information element | Status | Description |
| MCData ID | M | The identity of the MCData user sending file |
| MCData group ID | M | The MCData group ID to which the data is to be sent |
| Conversation Identifier | M | Identifies the conversation |
| Transaction Identifier | M | Identifies the MCData transaction |
| Reply Identifier | O | Identifies the original MCData transaction to which the current transaction is a reply to |
| Disposition indication | O | Indicates whether file download completed reported is expected or not |
| Download indication | O | Indicates mandatory download. (i.e. auto accept this media plane setup request) |
| Application metadata container | O | Implementation specific information that is communicated to the recipient |
| SDP offer (see NOTE) | M | Media parameters offered |
|  |  |  |
| NOTE: Includes file metadata. |

\* \* \* Next Change \* \* \* \*

##### 7.5.3.3.2 Procedure

Figure 7.5.3.3.2-1 describes procedures for an off-network MCData client 1 initiating one-to-one MCData data communication for sending standalone FD data to other MCData client, with or without download completed report request.

Pre-conditions:

1. MCData user 1 has initiated communication for sending standalone FD data to other MCData user 2.

2. MCData client 1 and MCData client 2 are members of the same ProSe Discovery group and are ProSe 1:1 direct communication capable.

3. MCData client 1 has discovered MCData client 2 in proximity, associated with MCData user 2, using ProSe Discovery procedures.



Figure 7.5.3.3.2-1: One-to-one standalone file distribution using media plane

1. MCData client 1 sends a MCData FD request towards the MCData client 2. File metadata information is included in the SDP. The MCData FD request contains one MCData user for one-to-one data communication as selected by the user at MCData client 1. The MCData FD request contains conversation identifier for message thread indication. The MCData FD request may include additional implementation specific information in the application metadata container. MCData FD request may contain mandatory download indication. The MCData FD request may contain download completed report indication if selected by the user at MCData client 1.

2. On receiving a MCData FD request, the MCData client 2 checks whether any policy is to be asserted to limit certain types of message or content to certain members, for example, due to location or user privilege.

3. The receiving MCData client 2 notifies the user about the incoming MCData FD request which may be either accepted or rejected or ignored. MCData user may not be sought consent if the request includes mandatory download indication in the MCData FD request and instead only notify the MCData user about file downloading.

4. If the target MCData user 2 provides a response (accept or reject) to the notification, then the MCData client 2 sends the MCData FD response to the MCData client 1. MCData client 2 automatically sends accepted MCData FD response when the incoming request included mandatory download indication.

5. MCData client 1 distributes the file over the established media plane to MCData client 2.

6. The MCData client 2 records file download completed and notifies MCData user 2. MCData client 2 initiates a MCData download completed report for reporting file download completed, if requested by the user at MCData client 1.

\* \* \* Next Change \* \* \* \*

##### 7.5.3.4.2 Procedure

Figure 7.5.3.4.2-1 describes procedures for an off-network MCData client 1 initiating group MCData data communication for sending FD data to a MCData group, with or without download completed report request.

Pre-conditions:

1. MCData user 1 has initiated group communication for sending FD data to the MCData group.

2. Information for ProSe direct communications corresponding to the MCData group and its mapping to ProSe Layer-2 Group ID are pre-configured in MCData client 1.

3. MCData client 1 to MCData client N are members of the same MCData group.



Figure 7.5.3.4.2-1: Group standalone file distribution using media plane

1. MCData client 1 sends a MCData FD request towards the MCData group. File metadata information is included in the SDP. The MCData group standalone data request contains MCData group ID as selected by the user at MCData client 1. The MCData group standalone FD request contains conversation identifier for message thread indication. The MCData group standalone FD request may include additional implementation specific information in the application metadata container. MCData group standalone FD request may contain mandatory download indication. The MCData group standalone FD request may contain download completed report indication if selected by the user at MCData client 1.

2. On receiving a MCData FD request, the MCData clients check whether any policy is to be asserted to limit certain types of message or content to certain members, for example, due to location or user privilege.

3. If the policy assertion is positive, the receiving MCData clients 2 to n notifies the user about the incoming MCData group standalone FD request which may be either accepted or rejected or ignored. MCData user may not be sought consent if the request includes mandatory download indication in the MCData group standalone FD request and instead only notify the MCData user about file downloading.

4. If the target MCData user on MCData clients 2 to n provides a response (accept or reject) to the notification, then the respective MCData client sends the MCData group standalone FD response to the MCData client 1. MCData client 2 to n automatically sends accepted MCData group standalone FD response when the incoming request included mandatory download indication.

5. MCData client 1 and MCData client 2 to n have successfully established media plane for file transmission and the MCData client 1 transmits the file data.

6. The MCData client 2 to n successfully receiving the file, records file download completed and notifies MCData users.

7. MCData client 2 to n initiate a MCData download completed report for reporting file download completed, if requested by the user at MCData client 1.