**3GPP TSG-CT WG1 Meeting #123-e C1-202xxx**

**Electronic meeting, 16-24 April 2020 was C1-202654**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.282** | **CR** | **0133** | **rev** | **2** | **Current version:** | **16.3.0** |  |
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| *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** |

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| ***Title:*** | Corrections to file upload-download procedure as per stage 2 architecture changes | | | | | | | | | |
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| ***Source to WG:*** | Samsung | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eMCData2 | | | | |  | ***Date:*** | | | 2020-04-02 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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 can be 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)* | |
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| ***Reason for change:*** | | 1) In subclause 10.2.2.1, 10.2.2.2, 10.2.3.1 and 10.2.3.2, The referenced media storage function is moved out of MCData server to MCData content server in stage 2.  2) In subclause 10.2.2.2 and 10.2.3.2, No corresponding procedures available in stage 2 for transmission and reception control ploicies at MCData content server | | | | | | | | |
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| ***Summary of change:*** | | 1) In subclause 10.2.2.1, 10.2.2.2, 10.2.3.1 and 10.2.3.2 – All the reference to the MCData server are replaced with MCData content server and included the MCData client for the media storage client reference text.  2) In subclause 10.2.2.2 and 10.2.3.2 – The editor’s note added – Shall be implimented in future once the stage 2 defines the procedure for determining and applying of transmission and reception control policies. | | | | | | | | |
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| ***Consequences if not approved:*** | | In complete procedure and mislead to implimentation | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.2.2.1, 10.2.2.2, 10.2.3.1, 10.2.3.2 | | | | | | | | |
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|  | | **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:*** | |  | | | | | | | | |
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| ***This CR's revision history:*** | | Rev 1: CR No updated in both the occurnaces of Editor's Note  Rev 2:   * In subclause 10.2.2.1: Reverted insertion of ‘on the MCData client’ text to “media storage client” string. * In subclause 10.2.3.1: Removed ‘on the MCData client’ text from all the reference string “media storage client on the MCData client” | | | | | | | | |

\* \* \* \* \* \* \* FIRST CHANGE \* \* \* \* \* \* \*

### 10.2.2 File upload using HTTP

#### 10.2.2.1 Media storage client procedures

The media storage client shall determine the value of the absolute URI associated with the media storage function of the MCData content server from the <MCDataContentServerURI> element of the MCPTT user profile document (see the MCPTT user profile document in 3GPP TS 24.484 [50]).

The media storage client shall send HTTP requests over a TLS connection as specified for the HTTP client in the UE in annex A of 3GPP TS 24.482 [24].

NOTE 1: The HTTP client encodes the MCData ID in the bearer access token of the Authorization header field of an HTTP request as specified in 3GPP TS 24.482 [24].

NOTE 2: The HTTP client always sends the HTTP requests to an HTTP proxy. Annex A of 3GPP TS 24.482 [24] indicates how the HTTP proxy forwards the HTTP request to the HTTP server.

To upload a file to media storage function on the MCData content server, the media storage client:

1) shall generate an HTTP POST request as specified in IETF RFC 7230 [22] and IETF RFC 7231 [23];

2) shall set the Request-URI to the absolute URI identifying the resource on a media storage function;

3) shall set the Host header field to a hostname identifying the media storage function;

4) shall set the Content-Type header field to multipart/mixed and with a boundary delimiter parameter set to any chosen value;

5) if the file upload is for one-to-one file distribution, shall insert an application/vnd.3gpp.mcdata-info+xml MIME body with:

a) the <request-type> element set to a value of "one-to-one-fd"; and

b) the <mcdata-calling-user-id> element set to the originating MCData ID;

6) if the file upload is for group file distribution, shall insert an application/vnd.3gpp.mcdata-info+xml MIME body with:

a) the <request-type> element set to a value of "group-fd";

b) the <mcdata-request-uri> element set to the MCData group identity; and

c) the <mcdata-calling-user-id> element set to the originating MCData ID;

7) if end-to-end security is required for a one-to-one communication, the MCData client protects the binary data representing the file and prefixes the protected binary data with security parameters as described in 3GPP TS 33.180 [26];

8) if

i) end-to-end security is not required for a one-to-one communication, or

ii) the file upload is for group file distribution;

shall include the binary data representing the file with Content-Type field set to application/octet-stream and Content-Length field set to the file size; and

9) shall send the HTTP POST request towards the media storage function.

On receipt of a HTTP 201 Created containing a Location header field with a URL identifying the location of the resource where the file has been stored on the media storage function, then the media storage client shall store this information.

#### 10.2.2.2 Media storage function procedures

The media storage function on the MCData content server shall act as an HTTP server as defined in annex A of 3GPP TS 24.482 [24].

NOTE: The HTTP server validates the MCData ID in the bearer access token of the Authorization header field of an HTTP request as specified in 3GPP TS 24.482 [24].

On receipt of an HTTP POST request with a Request-URI identifying a resource on the media storage function, the media storage function:

1) shall decode the contents of application/vnd.3gpp.mcdata-info+xml MIME body:

a) if the user indicated by <mcdata-calling-user-id> element is not allowed to upload files due to transmission control policy, shall return a HTTP 403 Forbidden response and not continue with the remaining steps in this subclause;

b) If the <request-type> element is set to:

a) "one-to-one-fd" and the Content-Length header under application/octet-stream MIME is greater than <max-data-size-fd-bytes> element present in the service configuration document as specified in 3GPP TS 24.484 [12], shall generate and send a HTTP 413 Payload Too Large response and not continue with the remaing steps in this subclause;

b) "group-fd":

i) shall retrieve the group document associated with the group identity indicated in the <mcdata-request-uri> element by following the procedures in subclause 6.3.3, and shall continue with the remaining steps if the procedures in subclause 6.3.3 were successful;

ii) if the Content-Length header under application/octet-stream MIME is greater than <mcdata-on-network-max-data-size-for-FD> element present in the group document retrieved in step i), shall generate and send a HTTP 413 Payload Too Large response and not continue with the remaing steps in this subclause;

Editor's Note: [CR 0133, WI eMCData2] it is FFS to determine how the MCData content server will apply transmission control policy by accessing the configuration documents (e.g service configuration and group configuration) from the MCData server.

2) shall process the HTTP POST request by following the procedures in IETF RFC 7230 [22] and IETF RFC 7231 [23] with the following clarifications:

a) shall store the file in the resource location as identified by the Request-URI; and

b) shall generate and send a HTTP 201 Created response containing a Location header field with a URL identifying the location of the stored file.

### 10.2.3 File download using HTTP

#### 10.2.3.1 Media storage client procedures

The media storage client shall send HTTP requests over a TLS connection as specified for the HTTP client in the UE, in annex A of 3GPP TS 24.482 [24].

NOTE 1: The HTTP client encodes the MCData ID in the bearer access token of the Authorization header field of an HTTP request as specified in 3GPP TS 24.482 [24].

NOTE 2: The HTTP client always sends the HTTP requests to an HTTP proxy. Annex A of 3GPP TS 24.482 [24] indicates how the HTTP proxy forwards the HTTP request to the HTTP server.

To download a file from the media storage function on the MCData content server, the media storage client:

1) shall generate an HTTP GET request as specified in IETF RFC 7230 [22] and IETF RFC 7231 [23] with a Request-URI set to an absolute URI identifying the URL of the file being requested from the media storage function on the MCData content server; and

2) shall send the HTTP GET request towards the media storage function on the MCData content server.

On receipt of a HTTP 200 OK response containing the requested file, the MCData client shall notify the user or application that the file has been successfully downloaded.

#### 10.2.3.2 Media storage function procedures

The media storage function on the MCData content server shall act as an HTTP server as defined in annex A of 3GPP TS 24.482 [24].

NOTE 1: The HTTP server validates the MCData ID in the bearer access token of the Authorization header field of an HTTP request as specified in 3GPP TS 24.482 [24].

On receipt of an HTTP GET request with a Request-URI identifying a file, the media storage function on the MCData content server:

1) if the MCData user is not allowed to download files due to reception control policy, shall return an HTTP 403 Forbidden response;

2) shall process the HTTP GET request by following the procedures in IETF RFC 7230 [22] and IETF RFC 7231 [23], and shall return a HTTP 200 OK response containing the requested file.

Editor's Note: [CR 0133, WI eMCData2] it is FFS to determine how the MCData content server will apply reception control policy by accessing the configuration documents (e.g service configuration and group configuration) from the MCData server.

\* \* \* \* \* \* \* END CHANGES \* \* \* \* \* \* \*