**3GPP TSG-CT WG1 Meeting #133-bis-eC1-22abcd**

**E-meeting, 17-21 January 2022 *was* C1-220424**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **24.484** | **CR** | **0208** | **rev** | **1** | **Current version:** | **17.4.0** |  |
|  | | | | | | | | |
| *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:*** | The hostname of the MCData notification server(s) configured in the MCData service configuration | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Samsung, AT&T | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | eMCData3 | | | | |  | ***Date:*** | | | 2022-01-10 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***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 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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | To resolve the following ENs in subcaluse 21.1 of TS 24.282:  “Editor's note: [eMCData3, CR 0254, C1-215635] How the MCData client is aware of the hostname of the MCData message store and the MCData norification server is FFS.” | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The hostname of the notification server configuration is included in the the MCData service configuration. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Won’t be able to support the newly introduced notification server without the hostname | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.4.2.1, 10.4.2.3, 10.4.2.7 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \* \* \* \*

#### 10.4.2.1 Structure

The MCData service configuration document structure is specified in this clause.

The <service configuration> document:

1) shall include a "domain" attribute;

2) may include a <common> element;

3) may include an <on-network> element;

4) may include an <off-network> element; and

5) may include any other attribute for the purposes of extensibility.

The <common> element:

1) may include a <tx-and-rx-control> element containing:

a) a <time-temp-data-waiting> element.

The <on-network> element:

1) may include a <tx-and-rx-control> element containing:

a) a <max-data-size-sds-bytes> element;

b) a <max-payload-size-sds-cplane-bytes> element;

c) a <max-data-size-fd-bytes> element;

d) a <max-data-size-auto-recv-bytes> element;

e) a <default-file-availability> element; and

f) a <max-file-availability> element.

2) may contain a <signalling-protection> element containing:

a) a <confidentiality-protection> element; and

b) an <integrity-protection> element;

3) may contain a <protection-between-mcdata-servers> element containing:

a) an <allow-signalling-protection> element;

Editor's Note: Mechanisms for signaling protection and media protection are yet to be agreed by SA3. It is expected that configuration for security protection will need to be added. P2P signalling protection would cover signalling content in XML (e.g. group-id) and MCData signalling content. Media protection is E2E between clients.

4) may contain an <anyExt> element containing:

a) one <emergency-resource-priority> element containing:

i) one <resource-priority-namespace> string element containing a namespace defined in IETF RFC 8101 [20]; and

ii) one <resource-priority-priority> string element element containing a priority level in the range specified in IETF RFC 8101 [20];

b) one <imminent-peril-resource-priority> element containing:

i) one <resource-priority-namespace> string element containing a namespace defined in IETF RFC 8101 [20]; and

ii) one <resource-priority-priority> string element element containing a priority level in the range specified in IETF RFC 8101 [20];

c) one <normal-resource-priority> element containing:

i) one <resource-priority-namespace> string element containing a namespace defined in IETF RFC 8101 [20]; and

ii) one <resource-priority-priority> string element element containing a priority level in the range specified in IETF RFC 8101 [20];

d) a <max-simultaneous-authorizations> element;

e) a <functional-alias-list> element containing one or more <functional-alias-entry> elements each containing:

i) a <functional-alias> element;

ii) a <max-simultaneous-activations> element;

iii) an <allow-takeover> element;

iv) an <mcdata-user-list> element; and

v) a <functional-alias-priority> element; and

f) a <notificationserver-hostname-list> element containing:

i) one or more <ns-entry> string element.

The <off-network> element:

1) may contain a <default-prose-per-packet-priority> element containing:

a) an <mcdata-one-to-one-call-signalling> element; and

b) an <mcdata-one-to-one-call-media> element.

\* \* \* \* \* \* \* NEXT CHANGE \* \* \* \* \* \* \*

#### 10.4.2.3 XML Schema

<?xml version="1.0" encoding="UTF-8"?>

<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"

xmlns:xs="http://www.w3.org/2001/XMLSchema"

targetNamespace="urn:3gpp:ns:mcdataServiceConfig:1.0"

xmlns:mcdatasc="urn:3gpp:ns:mcdataServiceConfig:1.0">

<xs:import namespace="http://www.w3.org/XML/1998/namespace"

schemaLocation="http://www.w3.org/2001/xml.xsd"/>

<!-- the root element -->

<xs:element name="service-configuration-info" type="mcdatasc:service-configuration-info-Type"/>

<!-- the root type -->

<!-- this is refined with one or more sub-types -->

<xs:complexType name="service-configuration-info-Type">

<xs:sequence>

<xs:element name="service-configuration-params" type="mcdatasc:service-configuration-params-Type" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<!-- definition of the service-configuration-params-Type subtype-->

<xs:complexType name="service-configuration-params-Type">

<xs:sequence>

<xs:element name="common" type="mcdatasc:commonType" minOccurs="0" maxOccurs="unbounded"/>

<xs:element name="on-network" type="mcdatasc:on-networkType" minOccurs="0" maxOccurs="unbounded"/>

<xs:element name="off-network" type="mcdatasc:off-networkType" minOccurs="0" maxOccurs="unbounded"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:attribute name="domain" type="xs:anyURI" use="required"/>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="commonType">

<xs:sequence>

<xs:element name="tx-and-rx-control" type="mcdatasc:common-tx-and-rx-controlType" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="on-networkType">

<xs:sequence>

<xs:element name="tx-and-rx-control" type="mcdatasc:on-network-tx-and-rx-controlType" minOccurs="0"/>

<xs:element name="signalling-protection" type="mcdatasc:signalling-protectionType" minOccurs="0"/>

<xs:element name="protection-between-mcdata-servers" type="mcdatasc:server-protectionType" minOccurs="0"/>

<xs:element name="file-availability" type="mcdatasc:on-network-file-availabilityType"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:element name="emergency-resource-priority" type="mcdatasc:resource-priorityType"/>

<xs:element name="imminent-peril-resource-priority" type="mcdatasc:resource-priorityType"/>

<xs:element name="normal-resource-priority" type="mcdatasc:resource-priorityType"/>

<xs:complexType name="off-networkType">

<xs:sequence>

<xs:element name="default-prose-per-packet-priority" type="mcdatasc:default-prose-per-packet-priorityType" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="default-prose-per-packet-priorityType">

<xs:sequence>

<xs:element name="mcdata-one-to-one-call-signalling" type="xs:unsignedShort" minOccurs="0"/>

<xs:element name="mcdata-one-to-one-call-media" type="xs:unsignedShort" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="common-tx-and-rx-controlType">

<xs:sequence>

<xs:element name="time-temp-data-waiting" type="xs:duration" minOccurs="0"/>

<xs:element name="time-periodic-announcement" type="xs:duration" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="signalling-protectionType">

<xs:sequence>

<xs:element name="confidentiality-protection" type="xs:boolean" minOccurs="0" default="true"/>

<xs:element name="integrity-protection" type="xs:boolean" minOccurs="0" default="true"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="server-protectionType">

<xs:sequence>

<xs:element name="allow-signalling-protection" type="xs:boolean" minOccurs="0" default="true"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="on-network-tx-and-rx-controlType">

<xs:sequence>

<xs:element name="max-data-size-sds-bytes" type="xs:unsignedInt" minOccurs="0"/>

<xs:element name="max-payload-size-sds-cplane-bytes" type="xs:unsignedInt" minOccurs="0"/>

<xs:element name="max-data-size-fd-bytes" type="xs:unsignedInt" minOccurs="0"/>

<xs:element name="max-data-size-auto-recv-bytes" type="xs:unsignedInt" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="on-network-file-availabilityType">

<xs:sequence>

<xs:element name="default-file-availability" type="xs:unsignedInt"/>

<xs:element name="max-file-availability" type="xs:unsignedInt" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="resource-priorityType">

<xs:sequence>

<xs:element name="resource-priority-namespace" type="xs:string"/>

<xs:element name="resource-priority-priority" type="xs:string"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:element name="functional-alias-list" type="mcdatasc:functional-alias-listType"/>

<!-- definition of the functional-alias-listType subtype-->

<xs:complexType name="functional-alias-listType">

<xs:sequence>

<xs:element name="functional-alias-entry" type="mcdatasc:functional-alias-entryType" minOccurs="0" maxOccurs="unbounded"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<!-- definition of the functional-aliasType subtype-->

<xs:complexType name="functional-alias-entryType">

<xs:sequence>

<xs:element name="functional-alias" type="xs:anyURI"/>

<xs:element name="max-simultaneous-activations" type="xs:positiveInteger"/>

<xs:element name="allow-takeover" type="xs:boolean"/>

<xs:element name="mcdata-user-list" type="mcdatasc:ListEntryType"/>

<xs:element name="functional-alias-priority" type="xs:positiveInteger"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:element name="max-simultaneous-authorizations" type="xs:positiveInteger"/>

<xs:element name="notificationserver-hostname-list" type="mcdatasc:notificationserver-hostname-listType"/>

<!-- definition of the notificationserver-hostname-listType subtype-->

<xs:complexType name="notificationserver-hostname-listType">

<xs:choice minOccurs="0" maxOccurs="unbounded">

<xs:element name="ns-entry" type="xs:string" minOccurs="0" maxOccurs="unbounded"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:choice>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="ListEntryType">

<xs:choice minOccurs="0" maxOccurs="unbounded">

<xs:element name="entry" type="mcdatasc:EntryType"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:choice>

<xs:attribute ref="xml:lang"/>

<xs:attributeGroup ref="mcdatasc:IndexType"/>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:complexType name="EntryType">

<xs:sequence>

<xs:element name="uri-entry" type="xs:anyURI"/>

<xs:element name="display-name" type="mcdatasc:DisplayNameElementType" minOccurs="0"/>

<xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>

<xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

<xs:attributeGroup ref="mcdatasc:IndexType"/>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:complexType>

<xs:attributeGroup name="IndexType">

<xs:attribute name="index" type="xs:token"/>

</xs:attributeGroup>

<xs:complexType name="DisplayNameElementType">

<xs:simpleContent>

<xs:extension base="xs:string">

<xs:attribute ref="xml:lang"/>

<xs:anyAttribute namespace="##any" processContents="lax"/>

</xs:extension>

</xs:simpleContent>

</xs:complexType>

<xs:complexType name="anyExtType">

<xs:sequence>

<xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>

</xs:sequence>

</xs:complexType>

</xs:schema>

\* \* \* \* \* \* \* NEXT CHANGE \* \* \* \* \* \* \*

#### 10.4.2.7 Data Semantics

The "domain" attribute of the <service-configuration-params> element contains the domain name of the mission critical organization.

The <common> element contains service configuration data common to both on and off network service.

The <on-network> element contains service configuration data for on-network service only.

The <off-network> element contains service configuration data for off-network service only.

In the <common> element:

1) the <time-temp-data-waiting> element of the <tx-and-rx-control> element contains the time limit for the temporarily stored data that is waiting to be delivered to a receiving user which corresponds to the "TimeTempDataWaiting" element as specified in clause 11.2.7 of 3GPP TS 24.483 [4]; and

2) the <time-periodic-announcement> element of the <tx-and-rx-control> element contains the timer for the periodic announcement which contains a list of available recently invited data group communications which corresponds to the "TimePeriodicAnnouncement" element as specified in clause 11.2.8 of 3GPP TS 24.483 [4].

In the <on-network> element:

1) the <max-data-size-sds-bytes> element of the <tx-and-rx-control> element contains the maximum data that the originating client can send in an SDS message;

2) the <max-payload-size-sds-cplane-bytes> element of the <tx-and-rx-control> element contains the maximum payload data that the originating client can send in an SDS message over C-plane;

3) the <max-data-size-fd-bytes> element of the <tx-and-rx-control> element contains the maximum data that the originating client can send in an FD message;

4) the <max-data-size-auto-recv-bytes> element of the <tx-and-rx-control> element contains the maximum data that the server can send to the terminating client without requesting the user to indicate a present need for the data;

5) the <default-file-availability> element of the <file-availability> element contains the default time for which a file is available on the server for download, if a explicit time period is not requested by the originating client;

6) the <max-file-availability> element of the <file-availability> element contains the maximum time for which a file can be made available on the server for download.

7) the <confidentiality-protection> element of the <signalling-protection> element contains a boolean indicating whether confidentiality protection of MCData signalling is enabled or disabled between the MCData client and MCData server;

8) the <integrity-protection> element of the <signalling-protection> element contains a boolean indicating whether integrity protection of MCData signalling is enabled or disabled between the MCData client and MCData server;

9) The <emergency-resource-priority> element of the <anyExt> element is of type "resource-priorityType" and indicates how a Resource-Priority header field is to be populated for MCData emergency communications;

10) The <imminent-peril-resource-priority> element of the <anyExt> element is of type "resource-priorityType" and indicates how a Resource-Priority header field is to be populated for MCData Imminent Peril communications;

11) The <normal-resource-priority> element of the <anyExt> element is of type "resource-priorityType" and indicates how a Resource-Priority header field is to be populated when downgrading to normal priority from an MCData emergency communication or MCData imminent peril communication;

12) the <allow-signalling-protection> element of the <protection-between-mcdata-servers> element contains a boolean indicating whether protection of MCData signalling is enabled between MCData servers;

13) the <max-simultaneous-authorizations> element of the <anyExt> element is of type "positiveInteger" and indicates the maximum allowed number of simultaneous service authorizations for an MCData user.

NOTE 1: The default values of the <confidentiality-protection> element, the <integrity-protection> element, the <allow-signalling-protection> element and the <allow-floor-control-protection> element are "true";

14) the <functional-alias> element of the <functional-alias-entry> element of the <functional-alias-list> element is of type "anyURI" and contains the identity of a functional alias;

15) the <max-simultaneous-activations> element of the <functional-alias-entry> element of the <functional-alias> element of the <functional-alias-list> element is of type "positiveInteger" and contains the allowed number of concurrent activations that are allowed for the functional alias contained in the corresponding <functional-alias> element;

16) the <allow-takeover> element of the <functional-alias-entry> element of the <functional-alias-list> element is of type "boolean" and indicates whether take over by another MCData user is allowed for a currently activated functional alias contained in the corresponding <functional-alias> element;

17) the <entry> element of the <mcdata-user-list> element of the <functional-alias-entry> element of the <functional-alias-list> element is of type "entryType" and contains the MCData ID of an MCData user that is allowed to activate the functional alias contained in the corresponding <functional-alias> element;

18) the <functional-alias-priority> element of the <functional-alias-entry> element of the <functional-alias-list> element is of type "positiveInteger" and indicates the relative priority level of the functional alias contained in the corresponding <functional-alias> element; and

NOTE 2: The usage of this parameter by the MCData server is up to implementation.

19) the <ns-entry> element of the <notificationservers> element contains the hostname of the notification server, and corresponds to the leaf node of the "NotificationServer" element of clause 11.2.16 in 3GPP TS 24.483 [4].

In the <off-network> element:

1) the <default-prose-per-packet-priority> element contains priority values for off-network calls, for each of the following constituent elements:

a) <mcdata-one-to-one-call-signalling> element, which corresponds to the "MCDataOneToOneSignalling" element as specified in clause 11.2.11 of 3GPP TS 24.483 [4]; and

b) <mcdata-one-to-one-call-media> element, which corresponds to the "MCDataOneToOneMedia" element as specified in clause 11.2.12 of 3GPP TS 24.483 [4].

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