**3GPP TSG- Meeting #**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  |  | **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 |  | Radio Access Network |  | Core Network | **X** |

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|  |
| ***Title:***  |  |
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| ***Source to WG:*** |  |
| ***Source to TSG:*** |  |
|  |  |
| ***Work item code:*** |  |  | ***Date:*** |  |
|  |  |  |  |  |
| ***Category:*** |  |  | ***Release:*** |  |
|  | *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-16 (Release 16)Rel-17 (Release 17)Rel-18 (Release 18)Rel-19 (Release 19)* |
|  |  |
| ***Reason for change:*** | While new Registrations and RCS Sessions are reported, RCS registrations and sessions that are currently established when an intercept is activated are not reported. This contribution adds a solution for reporting those registrations and sessions. |
|  |  |
| ***Summary of change:*** | Addition of new records. |
|  |  |
| ***Consequences if not approved:*** | RCS sessions and registrations that exist when intercept is started will not be reported. |
|  |  |
| ***Clauses affected:*** | 2, 7.13.3.6 (new) , 7.13.4, M.1.2.3 |
|  |  |
|  | **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 is associated with the following changes in the Forge:Merge request: [!248](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/248)Commit hash: [ad42c8dbdf8b06f89f7d617e266f5e6a0f901f99](https://forge.3gpp.org/rep/sa3/li/-/merge_requests/248/diffs?commit_id=ad42c8dbdf8b06f89f7d617e266f5e6a0f901f99) |
|  |  |
| ***This CR's revision history:*** | s3i240019 |

## \*\*\*\* START OF FIRST CHANGE (MAIN DOCUMENT) \*\*\*

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 23.501: "System Architecture for the 5G System".

[3] 3GPP TS 33.126: "Lawful Interception Requirements".

[4] 3GPP TS 23.502: "Procedures for the 5G System; Stage 2".

[5] 3GPP TS 33.127: "Lawful Interception (LI) Architecture and Functions".

[6] ETSI TS 103 120: "Lawful Interception (LI); Interface for warrant information".

[7] ETSI TS 103 221-1: "Lawful Interception (LI); Internal Network Interfaces; Part 1: X1".

[8] ETSI TS 103 221-2: "Lawful Interception (LI); Internal Network Interfaces; Part 2: X2/X3".

 [9] ETSI TS 102 232-1: "Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 1: Handover specification for IP delivery".

[10] ETSI TS 102 232-7: "Lawful Interception (LI); Handover Interface and Service-Specific Details (SSD) for IP delivery; Part 7: Service-specific details for Mobile Services".

[11] 3GPP TS 33.501: "Security Architecture and Procedures for the 5G System".

[12] 3GPP TS 33.108: "3G security; Handover interface for Lawful Interception (LI)".

[13] 3GPP TS 24.501: "Non-Access-Stratum (NAS) protocol for 5G System (5GS)".

[14] 3GPP TS 24.007: "Mobile radio interface signalling layer 3; General Aspects".

[15] 3GPP TS 29.244: "Interface between the Control Plane and the User Plane nodes".

[16] 3GPP TS 29.502: "5G System; Session Management Services; Stage 3".

[17] 3GPP TS 29.571: "5G System; Common Data Types for Service Based Interfaces; Stage 3".

[18] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".

[19] 3GPP TS 23.003: "Numbering, addressing and identification ".

[20] OMA-TS-MLP-V3\_5-20181211-C: "Open Mobile Alliance; Mobile Location Protocol, Candidate Version 3.5", <https://www.openmobilealliance.org/release/MLS/V1_4-20181211-C/OMA-TS-MLP-V3_5-20181211-C.pdf>.

[21] 3GPP TS 29.540: "5G System; SMS Services; Stage 3".

[22] 3GPP TS 29.518: "5G System; Access and Mobility Management Services; Stage 3".

[23] 3GPP TS 38.413: "NG Application Protocol (NGAP)".

[24] 3GPP TS 29.572: "Location Management Services; Stage 3".

[25] 3GPP TS 29.503: "5G System; Unified Data Management Services".

[26] IETF RFC 815: "IP datagram reassembly algorithms".

[27] IETF RFC 2460: "Internet Protocol, Version 6 (IPv6) Specification".

[28] IETF RFC 793: "Transmission Control Protocol".

[29] IETF RFC 768: "User Datagram Protocol".

[30] IETF RFC 4340: "Datagram Congestion Control Protocol (DCCP)".

[31] IETF RFC 4960: "Stream Control Transmission Protocol".

[32] IANA (www.iana.org): Assigned Internet Protocol Numbers, "Protocol Numbers".

[33] IETF RFC 6437: "IPv6 Flow Label Specification".

[34] IETF RFC 791: "Internet Protocol".

[35] Open Geospatial Consortium OGC 05-010: "URNs of definitions in ogc namespace".

[36] 3GPP TS 33.107: "3G security; Lawful interception architecture and functions".

[37] 3GPP TS 37.340: "Evolved Universal Radio Access (E-UTRA) and NR-Multi-connectivity; Stage 2".

[38] 3GPP TS 36.413: "S1 Application Protocol (S1AP)".

[39] OMA-TS-MMS\_ENC-V1\_3-20110913-A: "Multimedia Messaging Service Encapsulation Protocol".

[40] 3GPP TS 23.140: "Multimedia Messaging Protocol. Functional Description. Stage 2".

[41] 3GPP TS 38.415: "NG-RAN; PDU Session User Plane Protocol".

[42] 3GPP TS 23.273: "5G System (5GS) Location Services (LCS); Stage 2".

[43] IETF RFC 4566: "SDP: Session Description Protocol".

[44] 3GPP TS 24.193: "Stage 3: Access Traffic Steering, Switching and Splitting (ATSSS)".

[45] 3GPP TS 29.509: "5G System; Authentication Server Services; Stage 3".

[46] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".

[47] 3GPP TS 29.002: "Mobile Application Part (MAP) specification".

[48] 3GPP TS 29.504: "5G System; Unified Data Repository Services; Stage 3".

[49] 3GPP TS 29.505: "5G System; Usage of the Unified Data Repository services for Subscription Data; Stage 3".

[50] 3GPP TS 23.401 "General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access".

[51] 3GPP TS 24.301 "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS), Stage 3".

[52] 3GPP TS 23.271 "Functional stage 2 description of Location Services (LCS)".

[53] 3GPP TS 29.172 "Evolved Packet Core (EPC) LCS Protocol (ELP) between the Gateway Mobile Location Centre (GMLC) and the Mobile Management Entity (MME); SLg interface".

[54] 3GPP TS 29.171 "LCS Application Protocol (LCS-AP) between the Mobile Management Entity (MME) and Evolved Serving Mobile Location Centre (E-SMLC); SLs interface".

[55] 3GPP TS 24.379: "Mission Critical Push to Talk (MCPTT) call control; protocol specification".

[56] OMA-TS-PoC-System\_Description-V2\_1-20110802-A: "OMA PoC System Description".

[57] 3GPP TS 29.541: "5G System; Network Exposure (NE) function services for Non-IP Data Delivery (NIDD); Stage 3".

[58] 3GPP TS 29.522: "5G System; Network Exposure Function Northbound APIs; Stage 3".

[59] 3GPP TS 29.338: "Diameter based protocols to support Short Message Service (SMS) capable Mobile Management Entities (MMEs); Stage 3".

[60] 3GPP TS 29.337: "Diameter-based T4 interface for communications with packet data networks and applications".

[61] 3GPP TS 24.250: "Protocol for Reliable Data Service; Stage 3".

[62] 3GPP TS 29.128: "Mobility Management Entity (MME) and Serving GPRS Support Node (SGSN) interfaces for interworking with packet data networks and applications".

[63] 3GPP TS 29.122: "T8 reference point for Northbound APIs".

[64] 3GPP TS 29.598: "5G System; Unstructured Data Storage Services; Stage3".

[65] 3GPP TS 33.535: "Authentication and Key Management for Applications (AKMA) based on 3GPP credentials in the 5G System (5GS)".

[66] IETF RFC 5246: "The Transport Layer Security (TLS) Protocol Version 1.2".

[67] GSMA IR.88: "IR.88 LTE and EPC Roaming Guidelines".

[68] GSMA NG.114 "IMS Profile for Voice, Video and Messaging over 5GS".

[69] IETF RFC 8225: "PASSporT: Personal Assertion Token".

[70] IETF RFC 8224: "Authenticated Identity Management in the Session Initiation Protocol (SIP)".

[71] IETF RFC 8588: "Personal Assertion Token (PaSSporT) Extension for Signature-based Handling of Asserted information using toKENs (SHAKEN)".

[72] 3GPP TS 24.196: "Enhanced Calling Name (eCNAM)".

[73] IETF draft-ietf-stir-passport-rcd-17: "PASSporT Extension for Rich Call Data".

NOTE: The above document cannot be formally referenced until it is published as an RFC.

[74] 3GPP TS 24.229: "IP multimedia call control protocol based on Session Initiation Protocol (SIP)and Session Description Protocol (SDP); Stage 3".

[75] IANA Session Initiation Protocol (SIP) Parameters: <https://www.iana.org/assignments/sip-parameters/sip-parameters.xhtml>

[76] IETF RFC 8946: "Personal Assertion Token (PASSporT) Extension for Diverted Calls".

[77] 3GPP TS 23.204: "3rd Generation Partnership Project; Technical Specification Group Services and System Aspects; Support of Short Message Service (SMS) over generic 3GPP Internet Protocol (IP) access; Stage 2".

[78] GSMA RCC.07: "Rich Communication Suite – Advanced Communications Services and Client Specification".

[79] IETF RFC 4975: "The Message Session Relay Protocol (MSRP)".

[80] IETF RFC 3862: "Common Presence and Instant Messaging (CPIM): Message Format".

[81] IETF RFC 5438: "Instant Message Disposition Notification (IMDN)".

[82] OMA-TS-CPM\_System\_Description-V2\_2-20170926-C: "OMA Converged IP Messaging System Description".

[83] Void.

[84] 3GPP TS 36.455: "Evolved Universal Terrestrial Radio Access (E-UTRA); LTE Positioning Protocol A (LPPa) ".

[85] 3GPP TS 37.355: "LTE Positioning Protocol (LPP)".

[86] 3GPP TS 38.455: "NG-RAN; NR Positioning Protocol A (NRPPa)".

[87] 3GPP TS 29.274: "3GPP Evolved Packet System (EPS); Evolved General Packet Radio Service (GPRS) Tunnelling Protocol for Control plane (GTPv2-C); Stage 3".

[88] 3GPP TS 29.513: "5G System; Policy and Charging Control signalling flows and QoS parameter mapping".

[89] 3GPP TS 29.512: "5G System; Session Management Policy Control Service; Stage 3".

[90] 3GPP TS 29.508: "5G System; Session Management Event Exposure Service; Stage 3".

[91] 3GPP TS 29.514: "5G System; Policy Authorization Service; Stage 3".

[92] 3GPP TS 29.214: "Policy and Charging Control over Rx reference point".

[93] 3GPP TS 24.558: "Enabling Edge Applications; Protocol specification".

[94] 3GPP TS 29.558: "Enabling Edge Applications; Application Programming Interface (API) specification".

[95] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core network protocols; Stage 3".

[96] 3GPP TS 29.551: "5G System; Packet Flow Description Management Service; Stage 3".

[97] ETSI TS 103 280: "Lawful Interception (LI); Dictionary for common parameters".

[98] 3GPP TS 26.512: "5G Media Streaming (5GMS); Protocols".

[99] 3GPP TS 26.247: "Transparent end-to-end Packet-switched Streaming Service (PSS); Progressive Download and Dynamic Adaptive Streaming over HTTP (3GP-DASH)".

[100] 3GPP TS 29.563: "5G System; Home Subscriber Server (HSS) services for interworking with Unified Data Management (UDM); Stage 3".

[101] 3GPP TS 29.562: "5G System; Home Subscriber Server (HSS) Services; Stage 3".

[102] 3GPP TS 24.341 "Support of SMS over IP networks, Stage 3".

[103] 3GPP TS 38.473 "NG-RAN;F1 application protocol (F1AP)".

[104] 3GPP TS 23.032: "Universal Geographical Area Description (GAD)".

[105] ITU-T Recommendation Q.763 (1999): "Specifications of Signalling System No.7; Formats and codes".

[106] 3GPP TS 29.272: "Mobility Management Entity (MME) and Serving GPRS Support Node (SGSN) related interfaces based on Diameter protocol".

[107] IETF RFC 6442: "Location Conveyance for the Session Initiation Protocol".

[108] Void.

[109] OMA-TS-CPM\_Conv\_Function: "OMA CPM Conversation Functions".

[110] IETF RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies".

[111] 3GPP TS 32.299: " Telecommunication management; Charging management; Diameter charging applications".

[112] 3GPP TS 32.423: "Telecommunication management; Subscriber and equipment trace; Trace data definition and management".

[113] 3GPP TS 38.414: "NG-RAN; NG data transport".

[114] IETF RFC 2045: "Multipurpose Internet Mail Extensions (MIME) Part One: Format of Internet Message Bodies".

[115] IETF RFC 5322: "Internet Message Format".

[116] IETF RFC 4975: "The Message Session Relay Protocol (MSRP)".

[117] IETF RFC 6901: "JavaScript Object Notation (JSON) Pointer".

[118] IETF RFC 3261: "SIP: Session Initiation Protocol".

[119] W3C Recommendation: "XML Path Language (XPath)".

[120] IETF RFC 2046: "Multipurpose Internet Mail Extensions (MIME) Part Two: Media Types".

[121] 3GPP TR 33.928: "ADMF Logic for Provisioning Lawful Interception (LI) ".

[122] 3GPP TS 23.316: "Wireless and wireline convergence access support for the 5G System".

[123] 3GPP TS 23.038: "Alphabets and language-specific information".

[124] ITU-T Recommendation X.680 (2021): "Information technology—Abstract Syntax Notation One (ASN.1): Specification of basic notation".

[125] IETF RFC 4282: "The Network Access Identifier".

[126] IETF RFC 7042: "IANA Considerations and IETF Protocol and Documentation Usage for IEEE 802 Parameters".

[127] IEEE "Guidelines for Use of Extended Unique Identifier (EUI), Organizationally Unique Identifier (OUI), and Company ID (CID)", <https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/tutorials/eui.pdf>

[128] 3GPP TS 24.502: "Access to the 3GPP 5G Core Network (5GCN) via Non-3GPP Access Networks (N3AN)".

[Re1] 3GPP TS 29.228: "IP Multimedia (IM) Subsystem Cx and Dx Interfaces; Signalling flows and message contents".

[Re2] 3GPP TS 24.174: " Support of multi-device and multi-identity in the IP Multimedia Subsystem (IMS)".

[Re3] OMA-TS-CPM\_Message\_Storage: "OMA CPM Message Storage".

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*

###### 7.13.3.1.2.1 Simple types

Table 7.13.3.1.2.1-1: Simple Types for LI reporting of RCS

|  |  |  |
| --- | --- | --- |
| Type name | Type definition | Description |
| RCSGroupChatSessionID | SIPURI | Shall contain the SIPURI that uniquely identifies the CPM Group Session for an RCS Group Chat. See OMA-TS-CPM\_System\_Description-V2 [82] clause 5.1.1.5. |
| RCSConversationID | UUID | CPM Conversation Identity associated with a CPM Standalone Message, CPM File Transfer, or CPM Session.See OMA-TS-CPM\_Conversation\_Function [109] clause 5.3. |
| RCSContributionID | UUID | CPM Contribution Identity of an individual CPM Standalone Message, CPM File Transfer, or CPM Session (see OMA-TS-CPM\_Conversation\_Function [109] clause 5.3). |
| IMDNMessageID | UTF8String | Sender includes an IMDNMessageIDin the RCSMessage for which he wishes to receive an Instant Message Disposition Notification (IMDN). |
| RCSServerURI | UTF8String | The identity of the RCS Server serving the user. Shall contain a SIP URI or tel URI for the RCS Server. |
| SIPEndpoint | UTF8String | The SIP instance identifying a specific endpoint. Shall contain the contents of the the Contact header. |

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*

#### 7.13.3.6 RCS reported at the start of intercept

##### 7.13.3.6.1 Records

###### 7.13.3.6.1.1 General

The IRI-POI in the RCS Server shall generate the xIRI records in the following clauses when the IRI-POI in the RCS Server detects that interception has been activated for a user who is already registered as an RCS User. A user is considered registered for RCS when the RCS Server has an active context for the user.

###### 7.13.3.6.1.2 StartOfInterceptForRegisteredRCSUser record

Table 7.13.3.6.1.2-1: Payload for StartOfInterceptForRegisteredRCSUser record

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field name** | **Type** | **Cardinality** | **Description** | **M/C/O** |
| rCSTargetIdentities | SEQUENCE OF RCSIdentity | 1..MAX | RCS target identities. All identities associated to the target known at the POI shall be included. | M |
| rCSRegistrationInformation | SEQUENCE OF RCSRegistrationInformation | 1..MAX | Shall contain the registration information known at the RCS Server. If more than one set of registration information is present, the POI shall populate one instance of the .*RCSRegistrationInformation* type per set of information. | M |
| userOnline | BOOLEAN | 1 | Shall be set to TRUE if at least one endpoint is currently online for the user. Shall be set to FALSE if no endpoints are currently online for the user. | M |
| location | Location | 0..1 | Shall include the location of the primary endpoint registered to the target RCS user when reporting of the target’s location information is authorized and available. | C |
| additionalInstanceLocation | SEQUENCE OF AdditonalInstanceLocation | 0..MAX | Shall include locations of any additional endpoints registered to the target RCS user when reporting of the target’s location information is authorized and available. | C |

###### 7.13.3.6.1.3 StartOfInterceptWithEstablishedRCSSession record

The IRI-POI in the RCS Server shall send one StartOfInterceptWithEstablishedRCSSession record for each session that is currently active for the user. The IRI-POI shall consider the session to be active if at least one leg of the session is open.

Table 7.13.3.6.1.3-1: Payload for StartOfInterceptWithEstablishedRCSSession record

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field name** | **Type** | **Cardinality** | **Description** | **M/C/O** |
| rCSTargetIdentities | SEQUENCE OF RCSIdentity | 1..MAX | RCS target identities. All identities associated to the target known at the POI shall be included. | M |
| participants | SEQUENCE OF RCSDestinations | 1..MAX | Shall identify the participants of the session. | M |
| conversationID | RCSConversationID | 1 | Set to the value of the current Conversion-ID header for the session. | M |
| contributionID | RCSContributionID | 1 | Set to the value of the current Contribution-ID header for the session. | M |
| rCSSessionType | RCSSessionType | 1 | Indicates the type of RCS Session. | M |
| rCSSessionEndpoints | RCSSessionEndpoints | 1 | Indicates whether the session continues through the server or is terminated at the server. | M |
| rCSSessionLegs | SEQUENCE OF RCSSIPSessionExchange | 0..MAX | Contains a list of the active legs for the session. Shall be populated with the last SIP INVITE request received at and SIP INVITE response sent by the RCS Server for the leg being reported. Shall be included if the RCS Server maintains a history of the SIP invites for sessions. | C |
| rCSSessionInformation | SEQUENCE OF RCSSessionContext | 1..MAX | Contains the context for the session. | M |
| location | Location | 0..1 | Shall include the location of the primary endpoint registered to the target RCS user when reporting of the target’s location information is authorized and available. | C |
| additionalInstanceLocation | SEQUENCE OF AdditonalInstanceLocation | 0..MAX | Shall include locations of any additional endpoints registered to the target RCS user when reporting of the target’s location information is authorized and available. | C |

##### 7.13.3.6.2 Parameters

###### 7.13.3.6.2.1 Type: RCSRegistrationInformation

Table 7.13.3.6.2.1-1 contains details for the RCSRegistrationInformation type.

Table 7.13.3.6.2.1-1: Choices for RCSRegistrationInformation parameter

|  |  |  |
| --- | --- | --- |
| Choice name | Type | Description |
| sIPRegistration | RCSSIPRegistrationExchange | Contains the last SIP REGISTER request received at and SIP REGISTER response sent by the RCS Server. Shall be chosen if the RCS Server maintains a history of the SIP registration messages. |
| userProfile | XMLType | Contains the IMS user profile for the RCS user as described in TS 29.228 [Re1] clause 7.7. Shall be present if the RCS Server maintains context for the user in the format described in TS 29.228 [Re1]. As there is no namespace defined for the userProfile schema defined in 29.228, the *.XMLType.namespace* parameter shall be populated with the string "TS29.228\_CxData\_Type\_Rel17.xsd". |
| multiDevice | XMLType | Contains the multi-device profile for the individual instance of the RCS User being reported. Shall be present if the RCS Server contains a multi-device context for the user in the format described in TS 24.174 [Re2]. The *.XMLType.namespace* parameter shall be populated with "http://uri.etsi.org/ngn/params/xml/simservs/xcap". |
| presenceDocument | XMLType | Contains the presence information for the RCS user in the format of a PIDF as described in GSMA RCC.07 [78]. The *.XMLType.namespace* parameter shall be populated with "urn:ietf:params:xml:ns:pidf". |

###### 7.13.3.6.2.2 Type: RCSSessionLegContext

Table 7.13.3.6.2.2-1 contains details for the RCSSessionLegContext type.

Table 7.13.3.6.2.2-1: Choices for RCSSessionLegContext parameter

|  |  |  |
| --- | --- | --- |
| Choice name | Type | Description |
| cPMSessionInfo | MIMEEntity | Contains the CPM Session context as described in OMA-TS-CPM\_Message-Storage [Re3] clause 5.2.1. Shall be present if the RCS Server maintains context for the user's sessions in the format described in OMA-TS-CPM\_Message-Storage [Re3]. The *.MIMEEntity.contentType* parameter shall be populated with "Application/X-CPM-Session". |

###### 7.13.3.6.2.3 Type: RCSSIPRegistrationExchange

Table 7.13.3.6.2.3-1 contains details for the RCSSIPRegistrationExchange type.

Table 7.13.3.2.3-1: Payload for RCSSIPRegistrationExchange parameter

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Field name | Type | Cardinality | Description | M/C/O |
| rCSRegistrationUpdateRequest | IMSPayload | 1 | SIP REGISTER request related to target IMS Registration, Reregistration or Deregistration. | M |
| rCSRegistrationUpdateResponse | IMSPayload | 1 | SIP REGISTER response related to target IMS Registration, Reregistration or Deregistration. | M |

###### 7.13.3.6.2.4 Type: RCSSIPSessionExchange

Table 7.13.3.6.2.4-1: Payload for RCSSIPSessionExchange parameter

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field name** | **Type** | **Cardinality** | **Description** | **M/C/O** |
| sessionLeg | RCSSessionLeg | 1 | Identifies the leg of the RCS session. | M |
| sIPRequest | IMSPayload | 1 | Contains the request sent or received. | M |
| sIPResponse | IMSPayload | 1 | Contains the response received or sent. | M |

###### 7.13.3.6.2.5 Type: AdditionalInstanceLocation

Table 7.13.3.6.2.5-1: Payload for AdditionalInstanceLocation parameter

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field name** | **Type** | **Cardinality** | **Description** | **M/C/O** |
| instance | SIPEndpoint | 1 | Identifies the endpoint for which the location applies. | M |
| location | Location | 1 | Shall include locations of the additional endpoints registered to the target RCS user. | M |

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*

#### 7.13.4 Generation of IRI over LI\_HI2

When an xIRI is received over LI\_X2 from the IRI-POI in the RCS server, the MDF2 shall send the IRI message over LI\_HI2 without undue delay. The IRI message shall contain a copy of the relevant record received from LI\_X2. The record may be enriched by other information available at the MDF (e.g. additional location information).

The timestamp field of the ETSI TS 102 232-1 [9] PSHeader structure shall be set to the time at which the RCS server event was observed (i.e. the timestamp field of the xIRI).

Tables 7.13.4-1 shows the IRI type (see ETSI TS 102 232-1 [9] clause 5.2.10) to be used for each record type.

Table 7.13.4-1: IRI type for messages

|  |  |
| --- | --- |
| Record type | IRI Type |
| RCSRegistration | REPORT |
| RCSCapabilityDiscovery | REPORT |
| RCSMessage | REPORT |
| RCSSessionEstablishmentAttempt | REPORT |
| RCSSessionModification | REPORT |
| RCSSessionRelease | REPORT |
| StartOfInterceptForRegisteredRCSUser | REPORT |
| StartOfInterceptWithEstablishedRCSSession | REPORT |

## \*\*\*\* START OF NEXT CHANGE (MAIN DOCUMENT) \*\*\*

### M.1.2.3 Type: XMLType

Table M.1.2.3-1: Structure of the XMLType type

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Field name** | **Type** | **Cardinality** | **Description** | **M/C/O** |
| xMLNamespace | XMLNamespace | 1 | XML namespace that indicates the schema definition for the reported XMLValue. When using the XMLType as a parameter within a record, the value of the XML namespace shall be clearly indicated if known in the associated description field of the table describing the record. When there is no XML namespace defined for the document, this parameter shall be populated with a string that unambiguously identifies the schema or a document describing the XML structure. | M |
| xMLValue | XMLValue | 1 | The contents of the XML document being reported. Shall be sent as an XML document that matches the schema indicated by the xMLNamespace. | M |

## \*\*\*\* END OF ALL CHANGES (MAIN DOCUMENT) \*\*\*

## \*\*\*\* START OF FIRST CHANGE (ATTACHMENTS) \*\*\*

---a/33128/r18/TS33128Payloads.asn
+++b/33128/r18/TS33128Payloads.asn

@@ -251,7 +251,11 @@ XIRIEvent ::= CHOICE

251 251 ePSRANHandoverCommand [148] EPSRANHandoverCommand,

252 252 ePSRANHandoverRequest [149] EPSRANHandoverRequest,

253 253 mMERANTraceReport [150] MMERANTraceReport,

254 - mMEUEServiceAccept [151] MMEUEServiceAccept

 254 + mMEUEServiceAccept [151] MMEUEServiceAccept,

 255 +

 256 + -- RCS events, see clause 7.13.3, continued from tag 145

 257 + startOfInterceptForRegisteredRCSUser [152] StartOfInterceptForRegisteredRCSUser,

 258 + startOfInterceptWithEstablisedRCSSession [153] StartOfInterceptWithEstablisedRCSSession

255 259 }

256 260

257 261 -- ==============

@@ -495,7 +499,11 @@ IRIEvent ::= CHOICE

495 499 ePSRANHandoverCommand [148] EPSRANHandoverCommand,

496 500 ePSRANHandoverRequest [149] EPSRANHandoverRequest,

497 501 mMERANTraceReport [150] MMERANTraceReport,

498 - mMEUEServiceAccept [151] MMEUEServiceAccept

 502 + mMEUEServiceAccept [151] MMEUEServiceAccept,

 503 +

 504 + -- RCS events, see clause 7.13.3, continued from tag 145

 505 + startOfInterceptForRegisteredRCSUser [152] StartOfInterceptForRegisteredRCSUser,

 506 + startOfInterceptWithEstablisedRCSSession [153] StartOfInterceptWithEstablisedRCSSession

499 507 }

500 508

501 509 IRITargetIdentifier ::= SEQUENCE

@@ -4441,11 +4449,41 @@ RCSCapabilityDiscovery ::= SEQUENCE

4441 4449 location [5] Location OPTIONAL

4442 4450 }

4443 4451

 4452 + -- See clause 7.13.3.6.1.2 for details of this structure

 4453 + StartOfInterceptForRegisteredRCSUser ::= SEQUENCE

 4454 + {

 4455 + rCSTargetIdentities [1] SEQUENCE SIZE (1..MAX) OF RCSIdentity,

 4456 + rCSRegistrationInformation [2] SEQUENCE SIZE (1..MAX) OF RCSRegistrationInformation,

 4457 + userOnline [3] BOOLEAN,

 4458 + location [4] Location OPTIONAL,

 4459 + additionalInstanceLocation [5] SEQUENCE SIZE (1..MAX) OF AdditionalInstanceLocation OPTIONAL

 4460 + }

 4461 +

 4462 + -- See clause 7.13.3.6.1.3 for details of this structure

 4463 + StartOfInterceptWithEstablisedRCSSession ::= SEQUENCE

 4464 + {

 4465 + rCSTargetIdentities [1] SEQUENCE SIZE (1..MAX) OF RCSIdentity,

 4466 + participants [2] SEQUENCE SIZE (1..MAX) OF RCSDestinations,

 4467 + conversationID [3] RCSConversationID,

 4468 + contributionID [4] RCSContributionID,

 4469 + rCSSessionType [5] RCSSessionType,

 4470 + rCSSessionEndpoints [6] RCSSessionEndpoints,

 4471 + rCSSessionLegs [7] SEQUENCE SIZE (1..MAX) OF RCSSIPSessionExchange OPTIONAL,

 4472 + rCSSessionInformation [8] SEQUENCE SIZE (1..MAX) OF RCSSessionContext,

 4473 + location [9] Location OPTIONAL,

 4474 + additionalInstanceLocation [10] SEQUENCE SIZE (1..MAX) OF AdditionalInstanceLocation OPTIONAL

 4475 + }

4444 4476

4445 4477 -- ==============

4446 4478 -- RCS Parameters

4447 4479 -- ==============

4448 4480

 4481 + AdditionalInstanceLocation ::= SEQUENCE

 4482 + {

 4483 + instance [1] SIPEndpoint,

 4484 + location [2] Location

 4485 + }

 4486 +

4449 4487 IMDNMessageID ::= UTF8String

4450 4488

4451 4489 RCSConversationID ::= UUID

@@ -4473,6 +4511,14 @@ RCSMessageType ::= ENUMERATED

4473 4511 iMDNNotification(4)

4474 4512 }

4475 4513

 4514 + RCSRegistrationInformation ::= CHOICE

 4515 + {

 4516 + sIPRegistration [1] RCSSIPRegistrationExchange,

 4517 + userProfile [2] XMLType,

 4518 + multiDevice [3] XMLType,

 4519 + presenceDocument [4] XMLType

 4520 + }

 4521 +

4476 4522 RCSRegistrationType ::= ENUMERATED

4477 4523 {

4478 4524 registration(1),

@@ -4486,7 +4532,7 @@ RCSServerURI ::= UTF8String

4486 4532 RCSSessionEndpoints ::= ENUMERATED

4487 4533 {

4488 4534 remoteOnly(1),

4489 - locatlOnly(2),

 4535 + localOnly(2),

4490 4536 localAndRemote(3)

4491 4537 }

4492 4538

@@ -4496,12 +4542,30 @@ RCSSessionLeg ::= ENUMERATED

4496 4542 localLeg(2)

4497 4543 }

4498 4544

 4545 + RCSSessionContext ::= CHOICE

 4546 + {

 4547 + cPMSessionInfo [1] MIMEEntity

 4548 + }

 4549 +

4499 4550 RCSSessionType ::= ENUMERATED

4500 4551 {

4501 4552 largeMessageStandalone(1),

4502 4553 oneTo1Chat(2)

4503 4554 }

4504 4555

 4556 + RCSSIPRegistrationExchange ::= SEQUENCE

 4557 + {

 4558 + rCSRegistrationUpdateRequest [1] IMSPayload,

 4559 + rCSRegistrationUpdateResponse [2] IMSPayload

 4560 + }

 4561 +

 4562 + RCSSIPSessionExchange ::= SEQUENCE

 4563 + {

 4564 + sessionLeg [1] RCSSessionLeg,

 4565 + sIPRequest [2] IMSPayload,

 4566 + sIPResponse [3] IMSPayload

 4567 + }

 4568 +

4505 4569 RCSSIPSessionMessage ::= SEQUENCE

4506 4570 {

4507 4571 sessionLeg [1] RCSSessionLeg,

@@ -4519,6 +4583,8 @@ RCSSessionResult ::= ENUMERATED

4519 4583 legRemovalComplete(6)

4520 4584 }

4521 4585

 4586 + SIPEndpoint ::= UTF8String

 4587 +

4522 4588 -- =================

4523 4589 -- EES definitions

4524 4590 -- =================

## \*\*\*\* END OF ALL CHANGES \*\*\*