**3GPP TSG-CT WG1 Meeting #125-eC1-20wxyz**

**Electronic meeting, 20-28 August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **24.174** | **CR** | **000n** | **rev** | **-** | **Current version:** | **16.1.0** |  |
|  | | | | | | | | |
| *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:*** | Activation/deactivation of a user's identities | | | | | | | | | |
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| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | MuDe | | | | |  | ***Date:*** | | | 2020-07-27 |
|  |  | | | |  | |  | | |  |
| ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17)* | |
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| ***Reason for change:*** | | SA1 has defined the new requirement in TS 22.173: "The 3GPP System shall support a mechanism for a user to set user preferences to indicate which identities are active.". Hence, a mechanism which allows a user to activate and deactivate any of its available identities needs to be specified. | | | | | | | | |
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| ***Summary of change:*** | | A new media feature tag g.3gpp.active-identities is defined. The media feature tag contains the identities the user wants to activate.  After service activation, if the user wants to deactivate, or subsequently reactivate any of the available identities, the user should perform re-registration. The UE shall include a g.3gpp.active-identities media feature tag in a Contact header field of a SIP REGISTER request. The g.3gpp.active-identities media feature tag contains identities the UE is prepared to use for communication i.e. only active identities.  The AS shall use only user' identities which are marked as activated. | | | | | | | | |
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| ***Consequences if not approved:*** | | User will not be able to temporary activate and deactivate any of its available identities. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 2, 4.5.2, 4.5.2.1 (new), 4.5.2.2 (new), 4.5.2.2.1 (new), 4.5..2.2.2 (new, 4.5.3.5, annex X (new), X.1 (new), X.2 (new) | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \*\*\*

# 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 22.173: "IP Multimedia Core Network Subsystem (IMS) Multimedia Telephony Service and supplementary services; Stage 1".

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

[4] 3GPP TS 24.607: "Originating Identification Presentation (OIP) and Originating Identification Restriction (OIR) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[5] IETF RFC 3323: "A Privacy Mechanism for the Session Initiation Protocol (SIP)".

[6] IETF RFC 3325: "Private Extensions to the Session Initiation Protocol (SIP) for Network Asserted Identity within Trusted Networks".

[7] 3GPP TS 24.623: "Extensible Markup Language (XML) Configuration Access Protocol (XCAP) over the Ut interface for Manipulating Supplementary Services".

[8] IETF draft-ietf-stir-passport-divert-08 (March  2020): "PASSporT Extension for Diverted Calls".

Editor's note: The above document cannot be formally referenced until it is published as an RFC.

[9] OMA-TS-CPM\_Message\_Storage\_Using\_RESTFul\_API-V1\_0-20181025-D: "CPM Message Store using RESTFul API, Draft Version 1.0 – 25 Oct 2018",  
<http://member.openmobilealliance.org/ftp/Public_documents/COM/COM-CPM/Permanent_documents/OMA-TS-Message_Storage_Using_RESTFul_API-V1_0-20181025-D.zip>.

[10] OMA-TS-REST\_NetAPI\_NMS-V1\_0-20190528-C: "RESTful Network API for Network Message Storage, Candidate Version 1.0 – 28 May 2019",  
<http://member.openmobilealliance.org/ftp/Public_documents/ARCH/Permanent_documents/OMA-TS-REST_NetAPI_NMS-V1_0-20190528-C.zip>.

[11] 3GPP TS 24.629: "Explicit Communication Transfer (ECT) using IP Multimedia (IM) Core Network (CN) subsystem; Protocol specification".

[12] 3GPP TS 24.147: "Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3".

[13] 3GPP TS 24.175: "Management Object (MO) for Multi-Device and Multi-Identity in IMS; Stage 3".

[14] 3GPP TS 23.003: "Numbering, addressing and identification".

[n1] IETF RFC 3840: "Indicating User Agent Capabilities in the Session Initiation Protocol (SIP)".

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

### 4.5.2 Activation/deactivation

#### 4.5.2.1 General

The MuD and MiD services are activated at provisioning and deactivated at withdrawal or at the user’s request.

The user of MiD service decides which of its identities are active and can be used for incoming and outgoing calls by changing the "Activated" attribute in the <Shared-identity> or <Delagated-user> elements in the service configuration data.

The user decides if it permits another user to use its native identity.

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

#### 4.5.2.2 Activation of a user's identities

##### 4.5.2.2.1 Action at the UE

A UE can indicate to the network during registration which of the identities are active at the UE by including the g.3gpp.active-identities media feature tag containg the active identities.

If a user wants to temporarily deactivate or reactivate any of its available identities, the UE needs to perform a user-initiated reregistration as specified in TS 24.229 [3] clause 5.1.1.4 and shall include in the Contact header field of the SIP REGISTER request a g.3gpp.active-identities media feature tag, as defined in clause X.2.

The UE shall not include in the g.3gpp.active-identities media feature tag identities the user wants to deactivate i.e. the g.3gpp.active-identities media feature tag shall contain only active identities.

If the user wants to reactivate an identity that was previously deactivated the UE shall add that identity in the g.3gpp.active-identities media feature tag.

Not including the g.3gpp.active-identities media feature tag in a Contact header field of a SIP REGISTER request means that all identities the UE is allowed to use are active.

##### 4.5.2.2.2 Action at the AS serving user

When the AS receives a REGISTER request and the Contact header field of the REGISTER request included in the "message/sip" MIME body includes a g.3gpp.active-identities media feature tag the AS shall mark all of the user's available identities which are not included in the g.3gpp.active-identities media feature tag as deactivated. If any of the user's available identities which the AS had previously marked as deactivated, is included in the g.3gpp.active-identities media feature tag the AS shall change the status of that identity to activated.

Upon reception of a SIP REGISTER request included in the "message/sip" MIME body with the Contact header field which does not contain the g.3gpp.active-identities media feature tag the AS shall mark all of the user's available identities as activated.

The AS shall only consider the user's identities which are marked as activated as allowed to use for user A.

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

#### 4.5.3.5 Actions at the AS serving user B

Upon receiving an INVITE or MESSAGE request containing an Additional-Identity header field and if the terminating user subscribed to the MuD service, the AS may refrain from the invocation of other MMTel services serving the native identity.

For the MuD service, the AS shall only distribute a terminating request to UEs that have activated the identity in the Additional-Identity header field.

If the AS updates the Call Log as specified in OMA-TS-CPM\_Message\_Storage\_Using\_RESTFul\_API [9] the AS shall populate the "To" attribute of the call log object with the value in the Additional-Identity header field, provided the user is authorized to use this identity.

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

Annex X (normative):  
Media feature tags defined within the present document

Editor's note: [WI: MuDe, CR#xxxx] as per RFC 2506 an IETF expert review is needed in order to obtain the IANA registration of this media feature tag.

# X.1 General

This subclause describes the media feature tag definitions that are applicable for the 3GPP IM CN subsystem for the realisation of the MiD and MuD services.

# X.2 Definition of media feature tag g.3gpp.active-identities

Media feature tag name: g.3gpp.active-identities

ASN.1 Identifier: 1.3.6.1.8.2.x

Summary of the media feature indicated by this media feature tag: This media feature tag, when included in a Contact header field of a SIP REGISTER request, indicates which identities the UE is prepared to use for communication.

Media feature tag specification reference: 3GPP TS 24.174: "Support of multi-device and multi-identity in the IP Multimedia Subsystem (IMS); Stage 3".

Values appropriate for use with this media feature tag:

String with an equality relationship. The value contains active UE identities and follows the syntax described in table X.2-1 for g-3gpp-active-identities.

Table X.2-1: ABNF syntax of values of the g.3gpp.active-identities media feature tag

g-3gpp-active-identities = "<"active-id \*(COMMA active-id)">"

active-id = name-addr \*(SEMI (id-param))

id-param = generic-param

The media feature tag is intended primarily for use in the following applications, protocols, services, or negotiation mechanisms: This media feature tag is used to indicate that UE supports activation and deactivation of its available identities.

Examples of typical use: The UE includes this media feature tag in a REGISTER request to deactivate or activate any of the available identities. An AS uses this media feature tag to identify which identities the UE is prepared to use for communication.

Security Considerations: Security considerations for this media feature-tag are discussed in clause 11.1 of RFC 3840 [n1].

\*\*\* End of Changes \*\*\*