**3GPP TSG-CT WG1 Meeting #137-eC1-22xxxx**

**E-Meeting, 18th – 26th Aug 2022 (was C1-224710)**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **27.007** | **CR** | **0787** | **rev** | **1** | **Current version:** | **17.6.0** |  |
|  | | | | | | | | |
| *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 |  |

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| ***Title:*** | Addition of DN authentication in +CGAUTH | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Apple | | | | | | | | | |
| ***Source to TSG:*** | C1 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GProtoc17 | | | | |  | ***Date:*** | | | 2022-08-19 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **C** |  | | | | | ***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:*** | | In 5G EAP for PDU session authentication and authorization procedure is introduced. It is proposed to enhance the +CGAUTH command to support the configuration of the DN-specific identity which is encoded in the SM PDU DN request container IE.  The term “range” is proposed to be changed to “length” for the parameters <userid> and <password> as it provides the length of the string the UE is capable to store. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | The +CGAUTH command is enhance the to support the configuration of the DN-specific identity which is encoded in the SM PDU DN request container IE.  The term “range” is proposed to be changed to “length” for the parameters <userid> and <password>. | | | | | | | | |
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| ***Consequences if not approved:*** | | EAP for PDU session authentication and authorization procedure can’t be configured by AT command. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 10.1.31 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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 \* \* \* \*

### 10.1.31 Define PDP context authentication parameters +CGAUTH

Table 10.1.31-1: +CGAUTH parameter command syntax

|  |  |
| --- | --- |
| Command | Possible response(s) |
| +CGAUTH=<cid>[,<auth\_prot>[,<userid>[,<password>]]] | *+CME ERROR:* *<err>* |
| +CGAUTH? | [+CGAUTH: <cid>,<auth\_prot>[,<userid>,<password>],[<DN\_id>]  [<CR><LF>+CGAUTH: <cid>,<auth\_prot>,<userid>,<password>],[<DN\_id>]  [...]]] |
| +CGAUTH=? | +CGAUTH: (range of supported <cid>s),(list of supported <auth\_prot>s),(length of supported <userid>s),(length of supported <password>s) |

**Description**

Set command allows the TE to specify authentication parameters for a PDP context identified by the (local) context identification parameter <cid> used during the PDP context activation and the PDP context modification procedures. Since the <cid> is the same parameter that is used in the +CGDCONT and +CGDSCONT commands, +CGAUTH is effectively as an extension to these commands. Refer clause 9.2 for possible <err> values.

A special form of the set command, +CGAUTH=<cid> causes the authentication parameters for context number <cid> to become undefined.

The read command returns the current settings for each defined context.

The test command returns values supported as compound values.

**Defined values**

<cid>: integer type. Specifies a particular PDP context definition (see the +CGDCONT and +CGDSCONT commands).

<auth\_prot>: integer type. Authentication protocol used for this PDP context.

0 None. Used to indicate that no authentication protocol is used for this PDP context. Username and password are removed if previously specified.

1 PAP

2 CHAP

3 DN authentication (EAP authentication)

<userid>: String type. User name for access to the IP network.

<password>: String type. Password for access to the IP network.

<DN\_id>: string type in UTF-8, indicates a DN-specific identity of the UE in the network access identifier (NAI) format according to IETF RFC 7542 [37], encoded as UTF-8 string, see 3GPP TS 24.501 [161], section 9.11.4.15.

**Implementation**

Optional.

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