**3GPP TSG-SA3 Meeting #119 S3-245361**

**Orlando, US, 11 -15 November 2024**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **33.514** | **CR** | **0002** | **rev** | **-** | **Current version:** | **18.3.0** |  |
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| *For* ***HE******LP*** *on using this form: comprehensive instructions can be found at  http://www.3gpp.org/Change-Requests.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network |  |

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| ***Title:*** | Updating test case about authentication status of UE by UDM | | | | | | | | | |
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| ***Source to WG:*** | BSI (DE) | | | | | | | | | |
| ***Source to TSG:*** | S3 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | SCAS\_5G\_Maint | | | | |  | ***Date:*** | | | 2024-07-23 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **F** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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. | | | | | | | | *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)* | |
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| ***Reason for change:*** | | In its current form, the test case defined in clause 4.2.2.2 Storage of authentication status of UE by UDM seems unnecessarily complex and does not focus on the security functionally of the UDM. Instead, the test case tests the correct functionality of the UE, AMF and AUSF. This may lead to a situation where it is not possible to test the security functionality of the UDM correctly because one of the other components is not implemented correctly. Therefore, we suggest that you focus on the correct functionality of the UDM and test its proper functionality. The correct functionally of the AMF and AUSF which is also test in current test case description, shall be part of the SCAS documents of those network functions. | | | | | | | | |
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| ***Summary of change:*** | | - Remove all tests parts that do not have a focus on the UDM.  - Remove the N12 references, that focus on the AMF-AUSF interface.  - Fix the authentication status to successful, as otherwise, the authentication status shall not be stored in the UDM. | | | | | | | | |
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| ***Consequences if not approved:*** | | There is a risk that the test cases might be not correctly executed and the UDM does not correctly implement the storage of the UE authentication status. | | | | | | | | |
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| ***Clauses affected:*** | | 4.2.2.2 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

\*\*\*\*\*\*\*\*\*\* START OF 1st CHANGE \*\*\*\*\*\*\*\*\*\*

4.2.2.2 Storing of authentication status of UE by UDM

*Requirement Name:* Storing of authentication status of UE by UDM.

*Requirement Reference:* TS 33.501 [2], clause 6.1.4.1a

*Requirement Description:* The UDM stores the authentication status of the UE (SUPI, authentication result, time stamp, and the serving network name) after authentication as specified in TS 33.501 [2], clause 6.1.4.1a.

*Threat References*: TR 33.926 [4], clause E.2.2.3, Failure to store of authentication status.

**TEST CASE:**

**Test Name:** TC\_AUTH\_STATUS\_STORE\_UDM

**Purpose:**

Verify that the UDM under test stores the authentication status of UE.

**Procedure and execution steps:**

**Pre-Condition:**

- This test does not apply, if the UDM network product is collocated with an AUSF and the N13 interface is not exposed.

- UDM network product is connected with an AUSF in simulated/real network environment.

- The tester shall have access to the UDM under test.

- The tester has access to the UE credentials

**Execution Steps:**

1. The tester shall send an Nudm\_UEAuthentication\_Get Request message to the UDM with the UE credentials and a selected serving network name.

2. The tester shall receive a successful Nudm\_UEAuthentication\_Get Response from the UDM.

3. The tester shall simulate the successful authentication by sending the Nudm\_UEAuthentication\_ResultConfirmation Request message with a selected timestamp to the UDM.

4. The tester shall receive a successful Nudm\_UEAuthentication\_ResultConfirmation Response message from the UDM.

. The tester shall compare the serving network name stored in the UDM against the serving network name sent in the Nudm\_UEAuthentication\_Get Request message and the serving network name retrieved from the Nudm\_UEAuthentication\_ResultConfirmation Response message.

. The tester shall compare the SUPI stored in the UDM (retrieved from the Nudm\_UEAuthentication\_ResultConfirmation Response message) against the SUPI retrieved from the Nudm\_UEAuthentication\_Get Response message.

97. The tester shall compare the timestamp stored in the UDM against the time of authentication procedure retrieved from the Nudm\_UEAuthentication\_ResultConfirmation Request message.

**Expected Results:**

The storing of authentication status (SUPI, timestamp, and the serving network name) of UE at the UDM is verified.

**Expected format of evidence:**

vidence suitable for the interface, e.g., evidence can be presented in the form of packet capture or screenshot/screen-capture.