**3GPP TSG-CT WG1 Meeting #138-eC1-225997r1**

**E-Meeting, 10th – 14th October 2022**

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| *CR-Form-v12.2* |
| **CHANGE REQUEST** |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
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| *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:***  | 24.547 terms alignment and some editorial changes |
|  |  |
| ***Source to WG:*** | China Mobile |
| ***Source to TSG:*** | CT1 |
|  |  |
| ***Work item code:*** | eSEAL |  | ***Date:*** | 2022-09-26 |
|  |  |  |  |  |
| ***Category:*** | F |  | ***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 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)* |
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| ***Reason for change:*** | Several different terms with the same meaning are used in TS24.547, e.g. SEAL identity management client and SEAL Identity Management Client. This CR is proposed to solve this issue. “Identity Management Client” and “Identity Management Server” is used for the SIM-C and SIM-S respectively; and “identity management client”/“identity management server” is used for the related capability/functionality.Some editorial changes are also proposed. |
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| ***Summary of change:*** | 24.547 terms alignmentBackwards compatibility analysis:The change doesn’t impact the behaviors or signallings. Thus there is no backwards compatible issue based on the change of this CR. |
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| ***Consequences if not approved:*** | Different terms with the same meaning are used in TS24.547. |
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| ***Clauses affected:*** | 3.2, 6.2.2.1.2, 6.2.2.2.2, 6.2.3.4, 6.2.4.4, 6.2.5.4 |
|  |  |
|  | **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 ...  |
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| ***Other comments:*** |  |
|  |  |
| ***This CR's revision history:*** |  |

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 1\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

## 3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

ACE Authentication and Authorization for Constrained Environments

SEAL Service Enabler Architecture Layer for Verticals

SIM-C SEAL Identity Management Client

SIM-S SEAL Identity Management Server

VAL Vertical Application Layer

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 2\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

##### 6.2.2.1.2 CoAP based procedure

Upon receiving a request from VAL user to initiate authentication for VAL services, the SIM-C:

a) may establish a (D)TLS tunnel to the token endpoint of the SIM-S as specified in 3GPP TS 33.434 [7] using the URL of token endpoint of the SIM-S as provided by the specific VAL service; and

b) shall send an ACE-OAUTH Token Request message with client credentials grant type as specified in Internet draft ACE-OAUTH [19] using an CoAP POST request towards the SIM-S. The SIM-C shall use the "application/ace+cbor" format and:

a) shall include grant type parameter;

b) shall include scope parameter;

c) may include req\_cnf parameter; and

d) may include ace\_profile parameter,

 in the message payload as specified in Internet draft ACE-OAUTH [19].

Upon receiving a CoAP 2.01 (Created) response from the SIM-S, the SIM-C shall:

a) validate the access token as specified in the Internet draft ACE-OAUTH [19]; and

b) provide the access token in the received ACE-OAUTH Token Response message to the VAL user.

The SIM-C may repeat the entire procedure in this clause as needed to obtain the necessary access tokens for the VAL service clients, depending on the scope parameter in the Token Request message as specified in 3GPP TS 33.434 [7].

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 3\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

##### 6.2.2.2.2 CoAP based procedure

Upon receiving an ACE-OAUTH Token Request message with client credentials grant type as specified in the Internet draft ACE-OAUTH [19] optionally via a secure (D)TLS tunnel between the SIM-C and the token endpoint of the SIM-S, the SIM-S shall:

a) validate the ACE-OAuth Token Request message and if valid shall generate an ACE-OAuth Token Response message as specified in Internet draft ACE-OAUTH [19] with the following clarifications:

1) shall generate a COAP 2.01 (Created) response according to Internet draft ACE-OAUTH [19];

2) based on the received client credentials, shall determine the VAL user ID, VAL service ID of the VAL service user;

3) shall include parameters:

- access\_token;

- expires\_in;

- ace\_profile; and

- rs\_cnf; and

4) shall include the other required parameters as specified in Internet draft ACE-OAUTH [19]; and

b) shall send the CoAP 2.01 (Created) response towards the SIM-C.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 4\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 6.2.3.4 SCM server CoAP procedure

Upon reception of a CoAP GET request where the CoAP URI of the request identifies UE Configurations resource as described in Annex C.3.1.2.2.3.1, the SCM-S:

a) shall determine the identity of the sender of the received CoAP GET request as specified in clause 6.2.1.2, and:

1) if the sender is not authorized to fetch the requested UE configuration document(s), shall respond with a CoAP 4.03 (Forbidden) response to the CoAP GET request and skip rest of the steps;

b) shall support handling a CoAP GET request from a SCM-C according to procedures specified in IETF RFC 7252 [12];

c) shall check if the resource exists for the given VAL service, and:

1) if the resource does not exist, shall return a 4.04 (Not found) response and skip rest of the steps; and

d) shall return a 2.05 (Content) response including all the UE configuration documents found for the given values of the query parameters defined in table C.3.1.2.2.3.1-1.

Upon reception of a CoAP GET request where the CoAP URI of the request identifies Individual UE Configuration resource as described in Annex C.3.1.2.3.3.1, the SCM-S:

a) shall determine the identity of the sender of the received CoAP GET request as specified in clause 6.2.1.2, and:

1) if the sender is not authorized to fetch the requested UE configuration document, shall respond with a CoAP 4.03 (Forbidden) response to the CoAP GET request and skip rest of the steps;

b) shall support handling a CoAP GET request from a SCM-C according to procedures specified in IETF RFC 7252 [12]; and

c) shall check if the resource pointed at by the CoAP URI exists and:

1) if it exists, shall return the UE configuration document in a 2.05 (Content) response; or

2) otherwise, shall return a 4.04 (Not found) response.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 5\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 6.2.4.4 SCM server CoAP procedure

Upon reception of a CoAP GET request where the CoAP URI of the request identifies User Profiles resource as described in Annex C.2.1.2.2.3.1, the SCM-S:

a) shall determine the identity of the sender of the received CoAP GET request as specified in clause 6.2.1.2, and:

1) if the identity of the sender of the received CoAP GET request is not authorized to fetch requested user profile document(s), shall respond with a CoAP 4.03 (Forbidden) response to the CoAP GET request and skip rest of the steps;

b) shall support handling a CoAP GET request from a SCM-C according to procedures specified in IETF RFC 7252 [12]; and

c) shall check if the resource exists for the given VAL service, and:

1) if the resource does not exist, shall return a 4.04 (Not found) response and skip rest of the steps;

d) shall return a 2.05 (Content) response including all the user profile documents found for the given VAL user or VAL UE given in the query parameter.

Upon reception of a CoAP GET request where the CoAP URI of the request identifies Individual User Profile resource as described in Annex C.2.1.2.3.3.1, the SCM-S:

a) shall determine the identity of the sender of the received CoAP GET request as specified in clause 6.2.1.2, and:

1) if the identity of the sender of the received CoAP GET request is not authorized to fetch requested user profile document, shall respond with a CoAP 4.03 (Forbidden) response to the CoAP GET request and skip rest of the steps;

b) shall support handling a CoAP GET request from a SCM-C according to procedures specified in IETF RFC 7252 [12]; and

c) shall check if the resource pointed at by the CoAP URI exists and:

1) if it exists, shall return the user profile document in the 2.05 (Content) response; or

2) otherwise, shall return a 4.04 (Not found) response.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Change 6\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

#### 6.2.5.4 SCM server CoAP procedure

Upon reception of a CoAP PUT request where the CoAP URI of the request identifies Individual User Profile resource as described in Annex C.2.1.2.3.3.2, the SCM-S:

a) shall determine the identity of the sender of the received CoAP PUT request as specified in clause 6.2.1.2, and:

1) if the identity of the sender of the received CoAP PUT request is not authorized to update requested user profile document(s), shall respond with a CoAP 4.03 (Forbidden) response to the CoAP PUT request and skip rest of the steps;

b) shall support handling an CoAP PUT request from a SCM-C according to procedures specified in IETF RFC 7252  [12]; and

c) shall replace the user profile documents pointed at by the CoAP URI with the "ProfileDoc" received in the request.