**3GPP TSG-SA5 Meeting #132e *S5-2044436rev1***

**e-meeting 17th-28th August 2020**

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| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **32.158** | **CR** | **0015** | **rev** | **-** | **Current version:** | **16.0.0** |  |
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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 |  | Radio Access Network | **X** | Core Network | **X** |

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| ***Title:*** | Update the URI structure definition | | | | | | | | | |
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| ***Source to WG:*** | Huawei, Nokia | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
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| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2020-08-12 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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)* | |
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| ***Reason for change:*** | | 1.URI structure for resources not representing managed object instances is defined as follows:  {scheme}://{authority}/{root}/{MnSName}/{MnSVersion}/{MnSResourcePath}  The following abbreviated URI structure is given for the sake of brevity, where  the URI template {MnSRoot} is introduced that includes the scheme component, the two slash characters ("//") and the authority component.  {MnSRoot}/{MnSName}/{MnSVersion}/{MnSResourcePath}  Compared the full URI structure and the abbreviated URI, the {root} component is missing in the abbreviated URI.  2. The following description for {scheme}, only “http” and “https” are allowed, however, in TS 28.532, the allowed value for {protocal} (same as {scheme}) can be “http”, “https” and “wss”.  {scheme} Scheme component "http" or "https"  In addition to these changes the concept of MnsRoot is introduced in clause 4.4.2. | | | | | | | | |
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| ***Summary of change:*** | | 1. Update the description for {MnSRoot} 2. Add allowed value “wss” for {scheme} component. 3. Add concept of MnsRoot to clause 4.4.2 | | | | | | | | |
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| ***Consequences if not approved:*** | | The abbreviated URI structure is not same as full URI structure. | | | | | | | | |
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| ***Clauses affected:*** | | 4.4.2, 4.4.3 | | | | | | | | |
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|  | | **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:*** | |  | | | | | | | | |

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| **1st Change** |

### 4.4.2 URI structure for resources representing managed object instances

URIs identifying resources representing managed object instances shall follow a structure given by

{scheme}://{URI-DN-prefix}/{root}/{MnSName}/{MnSVersion}/{URI-LDN}

with:

{scheme} Scheme component "http" or "https"

{URI-DN-prefix} Authority component (host identifier and optional TCP port), the host name is constructed from the DN prefix as defined in clause 4.2.3.

{root} Part of the path component, allows specifying optional path segments for structuring the resource hierarchy on a HTTP server.

{MnSName} Part of the path component, allows specifying an optional MnS name in a single path segment.

{MnSVersion} Part of the path component, allows specifying an optional MnS version in a single path segment.

{URI-LDN} Part of the path component, constructed from the LDN as defined in clause 4.2.3, one or more path segments.

As seen above, to construct the URI from a DN, it is necessary to map the "DNPrefixPlusRDNSeparator" as defined in clause 7.3 of [3], the “LocalDN” as defined in clause 7.3 of [3], and to add the additional optional path segments "/{root}/{MnSName}/{MnSVersion}".

To allow for a predictive mapping from a URI to the original DN it is necessary to specify "/{MnSName}/{MnSVersion}" in such a way that the beginning of the "LocalDN" can be unambigously identified.

Note it may be required when specifying a MnS to clearly identify the last RDN of "{URI-LDN}" and to use the following instead of "{URI-LDN}"

{URI-LDN-first-part}/{RDN}

or

{URI-LDN-first-part}/{className}={id}.

For the sake of brevity, "MnSRoot" is introduced that includes the "{scheme}" part, the two slash characters ("//"), the "{authority}" part, a single slash character ("/") and the "{root}" part. When using "{MnSRoot}" the abbreviated URI structure is given by

{MnSRoot}/{MnSName}/{MnSVersion}/{URI-LDN}

or

{MnSRoot}/{MnSName}/{MnSVersion}/{URI-LDN-first-part}/{className}={id}

It is recommended to use this abbreviated version of the URI structure when defining Management Services.

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| **Next Change** |

### 4.4.3 URI structure for resources not representing managed object instances

URIs identifying other resources shall follow a structure given by

{scheme}://{authority}/{root}/{MnSName}/{MnSVersion}/{MnSResourcePath}

with:

{scheme} Scheme component "http" or "https" or "wss"

{authority} Authority component (host identifier and optional TCP port)

{root} Part of the path component, allows specifying optional path segments for structuring the resource hierarchy on a HTTP server.

{MnSName} Part of the path component, specifies the mandatory MnS name in a single path segment.

{MnSVersion} Part of the path component, specifies the mandatory MnS version in a single path segment.

{MnSResourcePath} Part of the path component, one or more path segments, specifies a resource of the MnS

For the sake of brevity, {MnSRoot} is introduced that includes the "{scheme}" part, the two slash characters ("//"), the "{authority}" part, a single slash character ("/") and the "{root}" part. When using "{MnSRoot}" the abbreviated URI structure is given by

{MnSRoot}/{MnSName}/{MnSVersion}/{MnSResourcePath}

It is recommended to use this abbreviated version of the URI structure when defining Management Services.

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| **End of Change** |