3GPP TSG SA WG5 Meeting 137-e TDoc <TDocNumber>

electronic meeting, online, 10 - 19 May 2021

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.622** | **CR** | **-** | **rev** |  | **Current version:** | **16.6.0** |  |
|  | | | | | | | | |
| *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 |  | Radio Access Network | **x** | Core Network | **x** |

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|  | | | | | | | | | | |
| ***Title:*** | Add IOC for discovery of management services | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | S5 | | | | | | | | | |
| ***Source to TSG:*** | Huawei | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | 5GDMS | | | | |  | ***Date:*** | | | 2021-05-10 |
|  |  | | | |  | |  | | |  |
| ***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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | xxx. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | xxx. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | xxx. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | xxx | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  |  | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  |  | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  |  | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **1st change**  **(only new fragment is shown)** |

<<InformationObjectClass>>

SubNetwork

<<InformationObjectClass>>

MNSRegistry

<<names>>

1

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Figure 4.2.1-x: MnS Registry NRM fragment

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| **2nd change** |

### 4.3.x MNSRegistry

#### 4.3.x.1 Definition

This IOC contains a list of available Management Services (MnS). It is name-contained by SubNetwork.

Consumers access the registry to retrieve information to facilitate MnS instance discovery.

Entries are provided per MnS as defined in 28.532 [Ref x].

The registry is defined in the NRM, and maintained by the service provider via generic provisioning operations.

Authorized consumers can create, read, update, and delete entries in the registry.

#### 4.3.x.2 Attributes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Support Qualifier | isReadable | isWritable | isInvariant | isNotifyable |
| mnsList | M | T | T | F | T |

#### 4.3.x.3 Constraints

None.

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| **3rd change** |

### 4.3.y ManagementService <<dataType>>

#### 4.3.y.1 Definition

This datatype represents available Management Service (MnS) and provides the data required to support its discovery.

MnS Data as defined in 28.533 [Ref x] clause 4.7 are provided. This information is used by the consumer to discover and derive the addresses of specific Management Services.

The entries are not intended to be used for detailed runtime information on specific Management Services.

#### 4.3.y.2 Attributes

The ManagementService type includes following attributes:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Attribute name | Support Qualifier | isReadable | isWritable | isInvariant | isNotifyable |
| mnsName | M | T | T | F | T |
| mnsType | M | T | T | F | T |
| mnsVersion | M | T | T | F | T |
| serviceOperationsURL | O | T | T | F | T |
| nrmPath | O | T | T | F | T |

#### 4.3.y.3 Constraints

None.

#### 4.3.y.4 Notifications

The common notifications defined in clause 4.5 are valid for this IOC, without exceptions or additions

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| **4th change**  **(only new attributes are shown)** |

## 4.4 Attribute definitions

### 4.4.1 Attribute properties

The following table defines the properties of attributes specified in the present document.

*Only new attributes are shown*

| Attribute Name | Documentation and Allowed Values | Properties |
| --- | --- | --- |
| mnsList | List of ManagementService. | type: ManagementService  multiplicity: 0..\*  isOrdered: False  isUnique: True  defaultValue: None  isNullable: False |
| mnsName | Human-readable name of management service. | type: String  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| mnsType | Type of management service.  allowedValues: For OpenAPI-based services, this should be equal to the parameter “title”.  For NETCONF-based services, this should be equal to the module-set name. | type: String  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| mnsVersion | Version of management service.  allowedValues: For OpenAPI-based services, this should be equal to the parameter “MnSVersion”.  Not relevant for NETCONF-based services. | type: String  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| serviceOperationsURL | Root URL for Management Service operations.  allowedValues: For OpenAPI-based services, this should be equal to the parameter “MnSRoot”.  For NETCONF-based services, this should identify the host and port in the format “netconf://{host}[:{port}]. | type: String  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |
| nrmPath | NRM path for Management Service IOCs.  allowedValues: For OpenAPI-based services, this should be equal to the parameter “URI-LDN-first-part”. | type: String  multiplicity: 1  isOrdered: N/A  isUnique: N/A  defaultValue: None  isNullable: False |

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| **End of changes** |