**3GPP TSG-CT WG4 Meeting #105-eC4-214abc**

**E-Meeting, 17th – 27th August 2021 *was* C4-214469**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **29.505** | **CR** | **0380** | **rev** | **1** | **Current version:** | **17.3.0** |  |
|  | | | | | | | | |
| *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 |  | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Get the PP data of mutiple AFs | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Huawei | | | | | | | | | |
| ***Source to TSG:*** | C4 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI17, 5G\_CIoT | | | | |  | ***Date:*** | | | 2021-08-09 |
|  |  | | | |  | |  | | |  |
| ***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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | When the UDM received multiple Network Configuration requests, the UDM is the aggregator of the values of the same Network Configuration parameters, we can read the details in 29.503 clause 4.15.6.3a, I excerpt part of them as below,  *If the UDM received multiple Network Configuration requests, the UDM shall accept the request as long as the Maximum Latency (if received) and/or the Maximum Response Time (if received) are within the range defined by operator policies. The UDM shall use the minimum value of Maximum Latency(s) to derive the subscribed periodic registration timer and use the maximum value of Maximum Response Time(s) to derive the subscribed Active Time as specified in step 2 of clause 4.15.3.2.3b. If the newly derived value is changed comparing to the one last time sent to the AMF, the UDM notify the AMF of the updated value via …*  And when there is a deletion of Network Configuration request, the UDM re-calculates the values.  And when the Validity Time associated with any of the Network Configuration parameters expires, the associated Network Configuration parameter(s) should be deleted, and this also trigger the UDM re-calculates the values.  When every recalculation happens, the UDM shall the get all the valid values of the same type of Network Configuration parameters and calculate the proper value based on them. In the existing definition, only resource (i.e. ProvisionedParamenterDataEntry) to get one entry of the provision parameter was defined, the UDM needs to send multiple messages to obtain all the valid values of multiple entries, it is not good for signal efficiency. A resource to get multiple entries at one signal is necessary. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Defines a new resource and Get method on this resource to support get all the valid entries of Network Configuration parameters. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The existing defintion of obtaining mutiple entries of the Network Configuration parameters is not efficient. It will cause multiple times of the signals in order to obtain all the entries of Network Configuration parameters | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.2.1, 5.4.1, 5.2.14x(new), 5.4.2.xx(new), A.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 introduces backward compatibile new feature to the OpenAPI specification files of TS29505\_Subscription\_Data.yaml. | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | | Rev1:   1. Corrected typos: entrys should read entries (3 occurrences) 2. Replace SupportedFeatures with PpDataEntryList in the yalm. | | | | | | | | |

\* \* \* Begin of Changes \* \* \* \*

### 5.2.1 Overview



Figure 5.2.1-1: Resource URI sub-level structure for subscription data



Figure 5.2.1-2: Resource URI sub-level structure for subscription data (cont.)



Figure 5.2.1-3: Resource URI sub-level structure for subscription data (cont.)

Table 5.2.1-1 provides an overview of the resources and applicable HTTP methods.

Table 5.2.1-1: Resources and methods overview

|  |  |  |  |
| --- | --- | --- | --- |
| Resource name | Resource URI | HTTP method | Description |
| AuthenticationSubscription | /subscription-data/{ueId}/authentication-data/authentication-subscription | GET | Retrieve a UE's authentication subscription data |
| PATCH | Update a UE's authentication subscription data  Updates shall be limited to the sequenceNumber attribute. Attempts to patch any other attribute shall be rejected by the UDR. |
| AuthenticationSoR | /subscription-data/{ueId}/ue-update-confirmation-data/sor-data | PUT | Store UE's SOR acknowledgement information (SoR-XMAC-IUE) |
| GET | Retrieve UE's SoR acknowledgement information |
| AuthenticationUPU | /subscription-data/{ueId}/ue-update-confirmation-data/upu-data | PUT | Store UE Parameter Update acknowledgement information (UPU-XMAC-IUE) |
| GET | Retrieve UE Parameter Update acknowledgement information |
| SubscribedSNSSAIs | /subscription-data/{ueId}/ue-update-confirmation-data/subscribed-snssais | PUT | Store UE-acknowledgement info for change of subscribed S-NSSAIs |
| GET | Retrieve UE-acknowledgement info for change of subscribed S-NSSAIs |
| SubscribedCAG | /subscription-data/{ueId}/ue-update-confirmation-data/subscribed-cag | PUT | Store UE-acknowledgement info for change of subscribed CAG |
| GET | Retrieve UE-acknowledgement info for change of subscribed CAG |
| AuthenticationStatus | /subscription-data/{ueId}/authentication-data/authentication-status | PUT | Store a UE's authentication status |
| GET | Retrieve a UE's authentication status |
| DELETE | Delete a UE's authentication status |
| IndividualAuthenticationStatus | /subscription-data/{ueId}/authentication-data/authentication-status/{servingNetworkName} | PUT | When the feature "PerUePerSnAuthStatus" is supported, store a UE's Individual authentication status |
| GET | When the feature "PerUePerSnAuthStatus" is supported, retrieve a UE's Individual authentication status |
| DELETE | When the feature "PerUePerSnAuthStatus" is supported, delete a UE's Individual authentication status |
| ProvisionedData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data | GET | Retrieve the UE's subscribed Provisioned Data |
| AccessAndMobilitySubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/am-data | GET | Retrieve the UE's subscribed Access and Mobility Data |
| SmfSelectionSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/smf-selection-subscription-data | GET | Retrieve the UE's subscribed SMF Selection Data |
| SessionManagementSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/sm-data | GET | Retrieve the UE's subscribed SM Subscription Data |
| ContextData | /subscription-data/{ueId}/context-data | GET | Retrieve the UE's context Data |
| Amf3GppAccessRegistration | /subscription-data/{ueId}/context-data/amf-3gpp-access | PUT | Create and Update the AMF registration for 3GPP access |
| PATCH | Modify the AMF registration for 3GPP access |
| GET | Retrieve the AMF registration information for 3GPP access |
| AmfNon3GppAccessRegistration | /subscription-data/{ueId}/context-data/amf-non-3gpp-access | PUT | Update the AMF registration for non 3GPP access |
| PATCH | Modify the AMF registration for non 3GPP access |
| GET | Retrieve the AMF registration information for non 3GPP access |
| SmfRegistrations | /subscription-data/{ueId}/context-data/smf-registrations | GET | Retrieve the list of the SMF registrations |
| IndividualSmfRegistration | /subscription-data/{ueId}/context-data /smf-registrations/{pduSessionId} | PUT | Store an individual SMF registration identified by PDU Session Id |
| DELETE | Delete an individual SMF registration |
| GET | Retrieve individual SMF registration |
| OperatorSpecificData | /subscription-data/{ueId}/operator-specific-data | GET | retrieve the operator specific subscription data of a UE |
| PATCH | modify the operator specific subscription data of a UE |
| OperatorDeterminedBarringData | /subscription-data/{ueId}/operator-determined-barring-data | GET | Retrieve the UE's Operator Determined Barring |
| SMSManagementSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/sms-mng-data | GET | Retrieve the UE's subscribed SMS management subscription data. |
| Smsf3GppAccessRegistration | /subscription-data/{ueId}/context-data /smsf-3gpp-access | PUT | Create or Update the SMSF registration |
| DELETE | Delete the SMSF registration for 3GPP access |
| GET | Retrieve the SMSF registration information |
| SmsfNon3GppAccessRegistration | /subscription-data/{ueId}/context-data /smsf-non-3gpp-access | PUT | Create or Update the SMSF registration for non 3GPP access |
| DELETE | Delete the SMSF registration for non 3GPP access |
| GET | Retrieve the SMSF registration information for non 3GPP access |
| IpSmGwRegistration | /subscription-data/{ueId}/context-data/ip-sm-gw | PUT | Create or Update the IP-SM-GW registration |
| DELETE | Delete the IP-SM-GW registration |
| PATCH | Modify the IP-SM-GW registration |
| GET | Retrieve the IP-SM-GW registration information |
| MessageWaitingData | /subscription-data/{ueId}/context-data/mwd | PUT | Create or Update the SMS Message Waiting Data |
| DELETE | Delete the SMS Message Waiting Data |
| PATCH | Modify the SMS Message Waiting Data |
| GET | Retrieve the SMS Message Waiting Data |
| SdmSubscriptions | /subscription-data/{ueId}/context-data/sdm-subscriptions | GET | Retrieve SDM subscriptions |
| POST | Create an individual SDM subscription |
| IndividualSdmSubscription | /subscription-data/{ueId}/context-data/sdm-subscriptions/{subsId} | PUT | Update an individual SDM subscription |
| DELETE | Delete an individual SDM subscription |
| PATCH | Update an individual SDM Subscription |
| GET | Retrieve an individual SDM subscription |
| EeSubscriptions | /subscription-data/{ueId}/context-data/ee-subscriptions | GET | Retrieve EE subscriptions |
| POST | Create an EE subscription |
| IndividualEeSubscription | /subscription-data/{ueId}/context-data/ee-subscriptions/{subsId} | PUT | Update an individual EE subscription |
| DELETE | Delete an individual EE subscription |
| PATCH | Update an individual EE subscription |
| GET | Retrieve an individual EE subscription |
| AmfSubscriptionInfo | /subscription-data/{ueId}/context-data/ee-subscriptions/{subsId}/amf-subscriptions | PUT | Store information related to the Amf-EE-Subscription response |
| DELETE | Delete the Amf-EE-subscriptions |
| GET | Retrieve AMF-subscriptions |
| PATCH | Update AMF-subscriptions |
| SmfSubscriptionInfo | /subscription-data/{ueId}/context-data/ee-subscriptions/{subsId}/smf-subscriptions | PUT | Store information related the a received Smf-EE-Subscription response |
| DELETE | Delete the Smf-EE-subscriptions |
| GET | Retrieve SMF-subscriptions |
| PATCH | Update SMF-subscriptions |
| HssSubscriptionInfo | /subscription-data/{ueId}/context-data/ee-subscriptions/{subsId}/hss-subscriptions | PUT | Store information related to the Hss-EE-Subscriptions |
| DELETE | Delete the Hss-EE-subscriptions |
| GET | Retrieve Hss-EE-subscriptions |
| PATCH | Update Hss-EE-subscriptions |
| EeProfileData | /subscription-data/{ueId}/ee-profile-data | GET | Retrieve the UE's subscribed EE profile data. |
| ProvisionedParamenterData | /subscription-data/{ueId}/pp-data | PATCH | Update of provisioned parameters. |
| GET | Retrieves the UE's provisioned parameters. |
| PpProfileData | /subscription-data/{ueId}/pp-profile-data | GET | Retrieve the UE's subscribed PP profile data. |
| ProvisionedParameterDataEntries | /subscription-data/{ueId}/pp-data-store | GET | Retrieve a Provisioned Parameter Data of multiple Entries |
| ProvisionedParamenterDataEntry | /subscription-data/{ueId}/pp-data-store/{afInstanceId} | PUT | Create a Provisioned Parameter Data Entry |
| DELETE | Delete a Provisioned Parameter Data Entry |
| GET | Retrieve a Provisioned Parameter Data Entry |
| SMSSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/sms-data | GET | Retrieve the UE's subscribed SMS subscription data. |
| SubscriptionDataSubscriptions | /subscription-data/subs-to-notify | GET | Retrieve existing subscriptions |
| POST | Create a subscription, i.e. subscribe a node to receive notification for change of data |
| DELETE | Deletes multiple subscriptions for a given UE. |
| IndividualSubscriptionDataSubscription | /subscription-data/subs-to-notify/{subsId} | DELETE | Delete the subscription identified by {subsId}, i.e. unsubscribe a node to receive notification for change of data |
| PATCH | Update an individual Subscription to notification |
| GET | Retrieve an individual Subscription to notification |
| EeGroupSubscriptions | /subscription-data/group-data/{ueGroupId}/ee-subscriptions | GET | Retrieve EE subscriptions for groups of UEs |
| POST | Create an EE subscription for groups of UEs |
| IndividualEeGroupSubscription | /subscription-data/group-data/{ueGroupId}/ee-subscriptions/{subsId} | PUT | Update an individual EE subscription for a group of UEs |
| DELETE | Delete an individual EE subscription for a group of UEs |
| PATCH | Update an individual EE subscription for a group of UEs |
| GET | Retrieve an individual EE subscription for a group of UEs |
| EeGroupProfileData | /subscription-data/group-data/{ueGroupId}/ee-profile-data | GET | Retrieve the subscribed EE profile data for a group of UEs. |
| TraceData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/trace-data | GET | Retrieve the UE's trace configuration data |
| IdentityData | /subscription-data/{ueId}/identity-data | GET | Retrieve identity data that corresponds to the provided ueId |
| SharedData (Collection) | /subscription-data/shared-data | GET | Retrieve shared data |
| GroupIdentifiers | /subscription-data/group-data/group-identifiers | GET | Retrieve group identifiers and the UE identifiers belong to the group identifiers. |
| 5GVnGroups | /subscription-data/group-data/5g-vn-groups | GET | Retrieve 5G VN Groups |
| Individual5GVnGroup | /subscription-data/group-data/5g-vn-groups/{externalGroupId} | PUT | Create a 5G VN Group |
| PATCH | Update a 5G VN Group |
| DELETE | Delete a 5G VN Group |
| GET | Retrieve a 5G VN Group |
| 5GVnGroupsInternal | /subscription-data/group-data/5g-vn-groups/internal | GET | Retrieve 5G VN Group Data based on Internal Group Identifier(s) |
| Pp5gVnGroupProfileData | /subscription-data/group-data/5g-vn-groups/pp-profile-data | GET | Retrieve the UE's subscribed PP profile data for accessing 5G VN Groups service operations. |
| LcsPrivacySubscriptionData | /subscription-data/{ueId}/lcs-privacy-data | GET | Retrieve the UE's subscribed LCS privacy Subscription Data |
| LcsMobileOriginatedSubscriptionData | /subscription-data/{ueId}/lcs-mo-data | GET | Retrieve the UE's subscribed LCS Mobile Originated Subscription Data |
| NiddAuthorizationData | /subscription-data/{ueId}/nidd-authorization-data | GET | Retrieve the UE's NIDD Authorization Data |
| CoverageRestrictionData | /subscription-data/{ueId}/coverage-restriction-data | GET | Retrieve the UE's subscribed enhanced Coverage Restriction Data |
| Location | /subscription-data/{ueId}/context-data/location | GET | Retrieve the UE's Location Information |
| V2xSubscriptionData | /subscription-data/{ueId}/v2x-data | GET | Retrieve the UE's subscribed V2X Data |
| ProseSubscriptionData | /subscription-data/{ueId}/prose-data | GET | Retrieve the UE's subscribed ProSe Service Data |
| LcsBroadcastAssistanceSubscriptionData | /subscription-data/{ueId}/{servingPlmnId}/provisioned-data/lcs-bca-data | GET | Retrieve the UE's subscribed LCS Broadcast Assistance subscription data |

\* \* \* Next Change \* \* \* \*

### 5.4.1 General

This clause specifies the application data model supported by the API.

Table 5.4.1-1 specifies the data types defined for the Nudr service based interface protocol.

Table 5.4.1-1: Nudr Subscriber Data specific Data Types

|  |  |  |
| --- | --- | --- |
| Data type | Clause defined | Description |
| AuthenticationSubscription | 5.4.2.2 | A UE's authentication data |
| OperatorSpecificDataContainer | 5.4.2.3 | Container for operator specific data |
| SmfRegList | 5.4.2.4 | The list of all the SMF registrations of a UE |
| SubscriptionDataSubscriptions | 5.4.2.5 | A subscription to notifications. |
| DataChangeNotify | 5.4.2.6 | Container for data which have changed and notification was requested when changed. |
| IdentityData | 5.4.2.7 | Identity data corresponds to the provided ueId |
| ProvisionedDataSets | 5.4.2.8 | Contains the provisioned data sets |
| SorData | 5.4.2.9 | Used to store the status of the latest SOR data update |
| UpuData | 5.4.2.9A | Used to store the status of the latest UPU data update |
| NssaiAckData | 5.4.2.9B | Used to store the status of the latest NSSAI data update |
| CagAckData | 5.4.2.9C | Used to store the status of the latest CAG data update |
| AmfSubscriptionInfo | 5.4.2.19 | Information the UDR stores and retrieves related to active subscriptions at the AMF(s) |
| EeProfileData | 5.4.2.20 | Event Exposure Profile Data |
| ContextDataSets | 5.4.2.22 | Contains the context data sets |
| SequenceNumber | 5.4.2.23 | Contains the SQN |
| MessageWaitingData | 5.4.2.24 | Message Waiting Data list |
| SmscData | 5.4.2.25 | Addresses of SM-Service Center entities with SMS wating to be delivered to the UE |
| SmfSubscriptionInfo | 5.4.2.26 | Information the UDR stores and retrieves related to active subscriptions at the SMF(s) |
| SmfSubscriptionItem | 5.4.2.27 | Contains info about a single SMF event subscription |
| MtcProvider | 5.4.2.28 | MTC provider information |
| HssSubscriptionInfo | 5.4.2.29 | Information the UDR stores related to active subscriptions at the HSS(s) |
| HssSubscriptionItem | 5.4.2.30 | Contains info about a single HSS event subscription |
| EeGroupProfileData | 5.4.2.31 | The Event Exposure Profile Data for a group of UEs |
| Pp5gVnGroupProfileData | 5.4.2.32 | The Paramter Provision Profile Data for 5G VN groups |
| PpProfileData | 5.4.2.33 | The Paramter Provision Profile Data |
| AllowedMtcProviderInfo | 5.4.2.34 | Allowed MTC Providers or AFs Information to provision parameters for UE. |
| AuthMethod | 5.4.3.3 | Contains the Authentication Method |
| DataSetName | 5.4.3.4 | The name of data set |
| ContextDataSetName | 5.4.3.6 | The name of context data set |
| SqnScheme | 5.4.3.7 | Scheme for generation of Sequence Numbers |
| Sign | 5.4.3.8 | Sign of the DIF value |
| UeUpdateStatus | 5.4.3.9 | Status of the procedure |
| PpDataType | 5.4.3.10 |  |
| PpDataEntryList | 5.4.3.xx | A list of the Provisioned Parameters entries. |

Table 5.4.1-2 specifies data types re-used by the Nudr service based interface protocol from other specifications, including a reference to their respective specifications and when needed, a short description of their use within the Nudr service based interface.

Table 5.4.1-2: Nudr re-used Data Types

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Data type | | Reference | | Comments | |
| AccessAndMobilitySubscriptionData | | 3GPP TS 29.503 [6] | | Access and Mobility Subscription Data | |
| SmfSelectionSubscriptionData | | 3GPP TS 29.503 [6] | | SMF Selection Subscription Data | |
| SessionManagementSubscriptionData | | 3GPP TS 29.503 [6] | | Session Management Subscription Data | |
| Amf3GppAccessRegistration | | 3GPP TS 29.503 [6] | |  | |
| AmfNon3GppAccessRegistration | | 3GPP TS 29.503 [6] | | The complete set of information relevant to the AMF where the UE has registered via non 3GPP access. | |
| SmfRegistration | | 3GPP TS 29.503 [6] | |  | |
| SmsfRegistration | | 3GPP TS 29.503 [6] | |  | |
| SmsManagementSubscriptionData | | 3GPP TS 29.503 [6] | |  | |
| SupportedFeatures | | 3GPP TS 29.571 [3] | | Used to negotiate the applicability of the optional features | |
| ProblemDetails | | 3GPP TS 29.571 [3] | | Detailed information about the status code. | |
| PpData | | 3GPP TS 29.503 [6] | |  | |
| PpDataEntry | | 3GPP TS 29.503 [6] | | Provisioned Parameter Data Entry | |
| SmsSubscriptionData | | 3GPP TS 29.503 [6] | |  | |
| PatchItem | | 3GPP TS 29.571 [3] | | Data structure used for JSON patch. | |
| SdmSubscription | | 3GPP TS 29.503 [6] | |  | |
| EeSubscription | | 3GPP TS 29.503 [6] | |  | |
| Uri | | 3GPP TS 29.571 [3] | |  | |
| TraceData | | 3GPP TS 29.571 [3] | |  | |
| Dnn | | 3GPP TS 29.571 [3] | | Data Network Name | |
| Snssai | | 3GPP TS 29.571 [3] | | Single NSSAI | |
| VarUeId | | 3GPP TS 29.571 [3] | | String represents the SUPI or GPSI. | |
| NfInstanceId | | 3GPP TS 29.571 [3] | |  | |
| NotifyItem | | 3GPP TS 29.571 [3] | | Common data type used for data change notification. | |
| OdbData | | 3GPP TS 29.571 [3] | | Operator Determined Barring Data | |
| EventType | | 3GPP TS 29.503 [6] | |  | |
| ExtGroupId | | 3GPP TS 29.503 [6] | | External Group Identifier | |
| PduSessionId | | 3GPP TS 29.571 [3] | |  | |
| DateTime | | 3GPP TS 29.571 [3] | |  | |
| UpuMac | | 3GPP TS 29.509 [15] | |  | |
| 5GVnGroupConfiguration | | 3GPP TS 29.503 [6] | |  | |
| PatchResult | | 3GPP TS 29.571 [3] | |  | |
| SupportedFeatures | | 3GPP TS 29.571 [3] | |  | |
| AppPortId | | 3GPP TS 29.503 [6] | |  | |
| LcsPrivacyData | | 3GPP TS 29.503 [6] | | LCS Privacy Subscription Data | |
| LcsMoData | | 3GPP TS 29.503 [6] | | LCS Mobile Originated Subscription Data | |
| MtcProviderInformation | | 3GPP TS 29.571 [3] | |  | |
| AuthorizationData | | 3GPP TS 29.503 [6] | |  | |
| EnhancedCoverageRestrictionData | | 3GPP TS 29.503 [6] | |  | |
| LocationInfo | | 3GPP TS 29.503 [6] | |  | |
| V2xSubscriptionData | | 3GPP TS 29.503 [6] | | V2X Subscription Data | |
| E164Number | | 3GPP TS 29.503 [6] | |  | |
| NetworkNodeDiameterAddress | | 3GPP TS 29.503 [6] | |  | |
| IpSmGwRegistration | | 3GPP TS 29.503 [6] | |  | |
| LcsBroadcastAssistanceTypesData | | 3GPP TS 29.503 [6] | | LCS Broadcast Assistance Data Types | |
| ContextInfo | | 3GPP TS 29.503 [6] | |  | |
| NfGroupId | | 3GPP TS 29.571 [3] | |  | |
| ProseSubscriptionData | | 3GPP TS 29.503 [6] | | ProSe Service Subscription Data | |
| PlmnId | | 3GPP TS 29.571 [3] | | PLMN ID | |
| GroupIdentifiers | | 3GPP TS 29.503 [6] | | External or Internal Group Identifier with a list of group members | |

\* \* \* Next Change \* \* \* \*

### 5.2.14x Resource: ProvisionedParameterDataEntries

#### 5.2.14x.1 Description

This resource represents all the Entries under the Provisioned Parameter Data store for a UE. It is invoked by the UDM to obtain all or multiple Entries under the Provisioned Parameter Data store for a UE.

This resource is modelled with the Document resource archetype (see clause C.1 of 3GPP TS 29.501 [7]).

#### 5.2.14x.2 Resource Definition

Resource URI: {apiRoot}/nudr-dr/<apiVersion>/subscription-data/{ueId}/pp-data-store

This resource shall support the resource URI variables defined in table 5.2.14x.2-1.

Table 5.2.14x.2-1: Resource URI variables for this resource

|  |  |
| --- | --- |
| Name | Definition |
| apiRoot | See 3GPP TS 29.504 [2] clause 6.1.1 |
| ueId | Represents the Subscription Identifier SUPI, GPSI or Group Id (see 3GPP TS 23.501 [4] clause 5.9.2)  pattern: See pattern of type VarUeId 3GPP TS 29.571 [3] |

##### 5.2.14x.3.1 GET

This method retrieves the provisioned data of a given UE.

This method shall support the URI query parameters specified in table 5.2.14x.3.1-1.

Table 5.2.14x.3.1-1: URI query parameters supported by the GET method on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Data type | P | Cardinality | Description |
| supported-features | SupportedFeatures | O | 0..1 | see 3GPP TS 29.500 [8] clause 6.6 |

This method shall support the request data structures specified in table 5.2.14x.4.1-2 and the response data structures and response codes specified in table 5.2.14x.4.1-3.

Table 5.2.14x.3.1-2: Data structures supported by the GET Request Body on this resource

|  |  |  |  |
| --- | --- | --- | --- |
| Data type | P | Cardinality | Description |
| N/A |  |  |  |

Table 5.2.14x.3.1-3: Data structures supported by the GET Response Body on this resource

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Data type | P | Cardinality | Response  codes | Description |
| PpDataEntryList | M | 1 | 200 OK | Upon success, a response body is returned containing the provisioned data entry of the UE. |

\* \* \* Next Change \* \* \* \*

#### 5.4.2.xx Type: PpDataEntryList

Table 5.4.2.xx-1: Definition of type PpDataEntryList

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Attribute name | Data type | P | Cardinality | Description |
| ppDataEntryList | array(PpDataEntry) | O | 0..N | List of the Entries under the Provisioned Parameter Data store for a UE. |
| supportedFeatures | SupportedFeatures | O | 0..1 | Contains SupportedFeatures. |

\* \* \* Next Change \* \* \* \*

## A.2 Nudr\_DataRepository API for Subscription Data

For the purpose of referencing entities in the Open API file defined in this Annex, it shall be assumed that this Open API file is contained in a physical file named "TS29505\_Subscription\_Data.yaml".

openapi: 3.0.0

***(… text not shown for clarity …)***

/subscription-data/{ueId}/pp-data-store/{afInstanceId}:

put:

summary: create a Provisioning Parameter Data Entry

operationId: Create PP Data Entry

tags:

- ProvisionedParameterDataEntry (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:subscription-data

parameters:

- name: ueId

in: path

description: Identifier of the UE

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: afInstanceId

in: path

description: Application Function Instance Identifier

required: true

schema:

type: string

requestBody:

content:

application/json:

schema:

$ref: 'TS29503\_Nudm\_PP.yaml#/components/schemas/PpDataEntry'

required: true

responses:

'201':

description: Indicating a successful creation of the resource.

content:

application/json:

schema:

$ref: 'TS29503\_Nudm\_PP.yaml#/components/schemas/PpDataEntry'

'204':

description: Indicating a successful creation of the resource.

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

description: Unexpected error

delete:

summary: Delete a Provisioning Parameter Data Entry

operationId: Delete PP Data Entry

tags:

- ProvisionedParameterDataEntry (Document)

security:

- {}

- oAuth2ClientCredentials:

- nudr-dr

- oAuth2ClientCredentials:

- nudr-dr

- nudr-dr:subscription-data

parameters:

- name: ueId

in: path

description: Identifier of the UE

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: afInstanceId

in: path

description: Application Function Instance Identifier

required: true

schema:

type: string

responses:

'204':

description: Expected response to a valid request

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

description: Unexpected error

get:

summary: get a Parameter Provisioning Data Entry

operationId: Get PP Data Entry

tags:

- ProvisionedParameterDataEntry (Document)

parameters:

- name: ueId

in: path

description: Identifier of the UE

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: afInstanceId

in: path

description: Application Function Instance Identifier

required: true

schema:

type: string

- name: supported-features

in: query

description: Features required to be supported by the target NF

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: 'TS29503\_Nudm\_PP.yaml#/components/schemas/PpDataEntry'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

description: Unexpected error

/subscription-data/{ueId}/pp-data-store:

get:

summary: get a list of Parameter Provisioning Data Entries

operationId: Get Multiple PP Data Entries

tags:

- ProvisionedParameterDataEntries (Collection)

parameters:

- name: ueId

in: path

description: Identifier of the UE

required: true

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/VarUeId'

- name: supported-features

in: query

description: Features required to be supported by the target NF

schema:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

responses:

'200':

description: Expected response to a valid request

content:

application/json:

schema:

$ref: '#/components/schemas/PpDataEntryList'

'400':

$ref: 'TS29571\_CommonData.yaml#/components/responses/400'

'403':

$ref: 'TS29571\_CommonData.yaml#/components/responses/403'

'404':

$ref: 'TS29571\_CommonData.yaml#/components/responses/404'

'500':

$ref: 'TS29571\_CommonData.yaml#/components/responses/500'

'503':

$ref: 'TS29571\_CommonData.yaml#/components/responses/503'

default:

description: Unexpected error

***(… text not shown for clarity …)***

PpDataEntryList:

description: Contains a list of the Provisioned Parameters entries

type: object

properties:

ppDataEntryList:

type: array

items:

$ref: 'TS29503\_Nudm\_PP.yaml#/components/schemas/PpDataEntry'

supportedFeatures:

$ref: 'TS29571\_CommonData.yaml#/components/schemas/SupportedFeatures'

***(… text not shown for clarity …)***

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