

ETSI TS 129 505 V15.6.0 (2020-01)



**5G;
5G System;
Usage of the Unified Data Repository services for subscription
Data;
Stage 3
(3GPP TS 29.505 version 15.6.0 Release 15)**



ReferenceRTS/TSGC-0429505vf60

Keywords

5G

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
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Contents

Intellectual Property Rights	2
Legal Notice	2
Modal verbs terminology.....	2
Foreword.....	8
1 Scope	9
2 References	9
3 Definitions and abbreviations.....	10
3.1 Definitions	10
3.2 Abbreviations	10
4 Overview	10
5 Usage of Nudr_DataRepository Service	10
5.1 Introduction	10
5.2 Resources	11
5.2.1 Overview	11
5.2.2 Resource: AuthenticationSubscription.....	16
5.2.2.1 Description	16
5.2.2.2 Resource Definition	16
5.2.2.3 Resource Standard Methods.....	16
5.2.2.3.1 GET	16
5.2.2.3.2 PATCH.....	17
5.2.3 Resource: AccessAndMobilitySubscriptionData	17
5.2.3.1 Description	17
5.2.3.2 Resource Definition	17
5.2.3.3 Resource Standard Methods.....	18
5.2.3.3.1 GET	18
5.2.4 Resource: SmfSelectionSubscriptionData	18
5.2.4.1 Description	18
5.2.4.2 Resource Definition	18
5.2.4.3 Resource Standard Methods.....	19
5.2.4.3.1 GET	19
5.2.5 Resource: SessionManagementSubscriptionData	19
5.2.5.1 Description	19
5.2.5.2 Resource Definition	19
5.2.5.3 Resource Standard Methods.....	20
5.2.5.3.1 GET	20
5.2.6 Resource: Amf3GppAccessRegistration.....	20
5.2.6.1 Description	20
5.2.6.2 Resource Definition	20
5.2.6.3 Resource Standard Methods.....	21
5.2.6.3.1 PUT	21
5.2.6.3.2 PATCH.....	21
5.2.6.3.3 GET	22
5.2.7 Resource: AmfNon3GppAccessRegistration	22
5.2.7.1 Description	22
5.2.7.2 Resource Definition	22
5.2.7.3 Resource Standard Methods.....	23
5.2.7.3.1 PUT	23
5.2.7.3.2 PATCH.....	23
5.2.7.3.3 GET	24
5.2.8 Resource: SmfRegistrations	24
5.2.8.1 Description	24
5.2.8.2 Resource Definition	24
5.2.8.3 Resource Standard Methods.....	25

5.2.8.3.1	GET	25
5.2.9	Resource: IndividualSmfRegistration	25
5.2.9.1	Description	25
5.2.9.2	Resource Definition	25
5.2.9.3	Resource Standard Methods	26
5.2.9.3.1	PUT	26
5.2.9.3.2	DELETE	26
5.2.9.3.3	GET	26
5.2.10	Resource: OperatorSpecificData	27
5.2.10.1	Description	27
5.2.10.2	Resource Definition	27
5.2.10.3	Resource Standard Methods	27
5.2.10.3.1	GET	27
5.2.10.3.2	PATCH	28
5.2.11	Resource: Smsf3GppAccessRegistration	29
5.2.11.1	Description	29
5.2.11.2	Resource Definition	29
5.2.11.3	Resource Standard Methods	29
5.2.11.3.1	PUT	29
5.2.11.3.2	DELETE	30
5.2.11.3.4	GET	30
5.2.12	Resource: SmsfNon3GppAccessRegistration	31
5.2.12.1	Description	31
5.2.12.2	Resource Definition	31
5.2.12.3	Resource Standard Methods	31
5.2.12.3.1	PUT	31
5.2.12.3.2	DELETE	32
5.2.12.3.4	GET	32
5.2.13	Resource: SMSManagementSubscriptionData	33
5.2.13.1	Description	33
5.2.13.2	Resource Definition	33
5.2.13.3	Resource Standard Methods	33
5.2.13.3.1	GET	33
5.2.14	Resource: ProvisionedParameterData	34
5.2.14.1	Description	34
5.2.14.2	Resource Definition	34
5.2.14.3	Resource Standard Methods	34
5.2.14.3.1	GET	34
5.2.14.3.2	PATCH	34
5.2.15	Resource: SMSSubscriptionData	35
5.2.15.1	Description	35
5.2.15.2	Resource Definition	35
5.2.15.3	Resource Standard Methods	35
5.2.15.3.1	GET	35
5.2.16	Resource: SdmSubscriptions	36
5.2.16.1	Description	36
5.2.16.2	Resource Definition	36
5.2.16.3	Resource Standard Methods	36
5.2.16.3.1	GET	36
5.2.16.3.2	POST	37
5.2.17	Resource: IndividualSdmSubscription	37
5.2.17.1	Description	37
5.2.17.2	Resource Definition	37
5.2.17.3	Resource Standard Methods	38
5.2.17.3.1	PUT	38
5.2.17.3.2	DELETE	38
5.2.17.3.3	PATCH	39
5.2.18	Resource: EeSubscriptions	39
5.2.18.1	Description	39
5.2.18.2	Resource Definition	39
5.2.18.3	Resource Standard Methods	40

5.2.18.3.1	GET	40
5.2.18.3.2	POST	40
5.2.19	Resource: IndividualEeSubscription	41
5.2.19.1	Description	41
5.2.19.2	Resource Definition	41
5.2.19.3	Resource Standard Methods	41
5.2.19.3.1	PUT	41
5.2.19.3.2	DELETE	42
5.2.19.3.3	PATCH	42
5.2.19A	Resource: IndividualEeGroupSubscription	43
5.2.19A.1	Description	43
5.2.19A.2	Resource Definition	43
5.2.19A.3	Resource Standard Methods	43
5.2.19A.3.1	PUT	43
5.2.19A.3.2	DELETE	44
5.2.19A.3.3	PATCH	44
5.2.20	Resource: SubscriptionDataSubscriptions	45
5.2.20.1	Description	45
5.2.20.2	Resource Definition	45
5.2.20.3	Resource Standard Methods	45
5.2.20.3.1	POST	45
5.2.20.3.2	GET	46
5.2.20.3.3	DELETE	46
5.2.21	Resource: IndividualSubscriptionDataSubscription	47
5.2.21.1	Description	47
5.2.21.2	Resource Definition	47
5.2.21.3	Resource Standard Methods	48
5.2.21.3.1	DELETE	48
5.2.21.3.2	PATCH	48
5.2.22	Resource: TraceData	49
5.2.22.1	Description	49
5.2.22.2	Resource Definition	49
5.2.22.3	Resource Standard Methods	49
5.2.23.1	GET	49
5.2.23	Resource: IdentityData	50
5.2.23.1	Description	50
5.2.23.2	Resource Definition	50
5.2.23.3	Resource Standard Methods	50
5.2.23.3.1	GET	50
5.2.24	Resource: AuthenticationStatus	51
5.2.24.1	Description	51
5.2.24.2	Resource Definition	51
5.2.24.3	Resource Standard Methods	51
5.2.24.3.1	PUT	51
5.2.24.3.2	GET	52
5.2.25	Resource: AuthenticationSoR	52
5.2.25.1	Description	52
5.2.25.2	Resource Definition	52
5.2.25.3	Resource Standard Methods	52
5.2.25.3.1	PUT	52
5.2.25.3.2	GET	53
5.2.25A	Resource: AuthenticationUPU	53
5.2.25A.1	Description	53
5.2.25A.2	Resource Definition	53
5.2.25A.3	Resource Standard Methods	54
5.2.25A.3.1	PUT	54
5.2.25A.3.2	GET	54
5.2.26	Resource: ProvisionedData	55
5.2.26.1	Description	55
5.2.26.2	Resource Definition	55
5.2.26.3	Resource Standard Methods	55

5.2.26.3.1	GET	55
5.2.27	Resource: OperatorDeterminedBarringData	56
5.2.27.1	Description	56
5.2.27.2	Resource Definition	56
5.2.27.3	Resource Standard Methods	56
5.2.27.3.1	GET	56
5.2.28	Resource: EeProfileData	57
5.2.28.1	Description	57
5.2.28.2	Resource Definition	57
5.2.28.3	Resource Standard Methods	57
5.2.28.3.1	GET	57
5.2.29	Resource: EeGroupSubscriptions	57
5.2.29.1	Description	57
5.2.29.2	Resource Definition	58
5.2.29.3	Resource Standard Methods	58
5.2.29.3.1	GET	58
5.2.29.3.2	POST	58
5.2.30	Resource: SharedData	59
5.2.30.1	Description	59
5.2.30.2	Resource Definition	59
5.2.30.3	Resource Standard Methods	59
5.2.30.3.1	GET	59
5.2.31	Resource: AmfSubscriptionInfo	60
5.2.31.1	Description	60
5.2.31.2	Resource Definition	60
5.2.31.3	Resource Standard Methods	60
5.2.31.3.1	PUT	60
5.2.31.3.2	DELETE	61
5.2.31.3.3	GET	61
5.2.31.3.4	PATCH	62
5.2.32	Resource: ContextData	62
5.2.32.1	Description	62
5.2.32.2	Resource Definition	62
5.2.32.3	Resource Standard Methods	63
5.2.32.3.1	GET	63
5.2.33	Resource: GroupIdentifiers	63
5.2.33.1	Description	63
5.2.33.2	Resource Definition	63
5.2.33.3	Resource Standard Methods	63
5.2.33.3.1	GET	63
5.3	Notifications	64
5.3.1	General	64
5.3.2	Data Change Notification	64
5.4	Data Model	65
5.4.1	General	65
5.4.2	Structured data types	66
5.4.2.1	Introduction	66
5.4.2.2	Type: AuthenticationSubscription	67
5.4.2.3	Type: OperatorSpecificDataContainer	67
5.4.2.4	Type: SmfRegList	68
5.4.2.5	Type: SubscriptionDataSubscriptions	68
5.4.2.6	Type: DataChangeNotify	69
5.4.2.7	Type: IdentityData	69
5.4.2.8	Type: ProvisionedDataSets	69
5.4.2.9	Type: SorData	70
5.4.2.9A	Type: UpuData	70
5.4.2.10	Void	70
5.4.2.11	Void	70
5.4.2.12	Void	70
5.4.2.13	Void	70
5.4.2.14	Void	70

5.4.2.15	Void.....	70
5.4.2.16	Void.....	70
5.4.2.17	Void.....	71
5.4.2.18	Void.....	71
5.4.2.19	Type: AmfSubscriptionInfo	71
5.4.2.20	Type: EeProfileData.....	71
5.4.2.21	Void.....	71
5.4.2.22	Type: ContextDataSets.....	71
5.4.2.23	Type: SequenceNumber	72
5.4.3	Simple data types and enumerations	72
5.4.3.1	Introduction	72
5.4.3.2	Simple data types	72
5.4.3.3	Enumeration: AuthMethod.....	73
5.4.3.4	Enumeration: DataSetName	73
5.4.3.5	Void.....	73
5.4.3.6	Enumeration: ContextDataSetName	73
5.4.3.7	Enumeration: SqnScheme	73
5.4.3.8	Enumeration: Sign.....	74
5.4.3.9	Enumeration: UeUpdateStatus	74
5.4.4	Binary data.....	74
5.5	Error handling	74
5.6	Feature negotiation	74
Annex A (normative):	OpenAPI specification.....	75
A.1	General	75
A.2	Nudr_DataRepository API for Subscription Data.....	75
Annex B (informative):	Change history	112
History		115

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1 Scope

The present document specifies the usage of the Unified Data Repository services for subscription data. It provides the resource definition and data model for subscription data used over the Nudr Service Based Interface. The protocol definition for Nudr Service Based Interface which is specific to subscription data is also specified in the present document.

The stage 3 protocol definition for Nudr Service Based Interface which is common for subscription data, policy data, structure data and application data for exposure is specified in 3GPP TS 29.504 [2].

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 29.504: "5G System; Unified Data Repository Services; Stage 3".
- [3] 3GPP TS 29.571: "5G System; Common Data Types for Service Based Interfaces Stage 3".
- [4] 3GPP TS 23.501: "System Architecture for the 5G System; Stage 2".
- [5] 3GPP TS 23.003: "Numbering, addressing and identification".
- [6] 3GPP TS 29.503: "Unified Data Management Services".
- [7] 3GPP TS 29.501: "5G System; Principles and Guidelines for Services Definition; Stage 3".
- [8] 3GPP TS 29.500: "5G System; Technical Realization of Service Based Architecture; Stage 3".
- [9] 3GPP TS 33.501: "Security architecture and procedures for 5G system".
- [10] 3GPP TS 33.102: "3G Security; Security architecture".
- [11] 3GPP TS 35.206: "An example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 2: Algorithm specification".
- [12] 3GPP TS 35.231: "A second example algorithm set for the 3GPP authentication and key generation functions f1, f1*, f2, f3, f4, f5 and f5*; Document 1: Algorithm specification".
- [13] 3GPP TS 29.518: "5G System; Access and Mobility Management Services; Stage 3".
- [14] 3GPP TR 21.900: "Technical Specification Group working methods".
- [15] 3GPP TS 29.509: "Authentication Server Services; Stage 3".
- [16] IETF RFC 3986: "Uniform Resource Identifier (URI): Generic Syntax".

3 Definitions and abbreviations

3.1 Definitions

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

pointer of attribute: The pointer of the attribute identifies the location of the attribute in the JSON object. The pointer of the attribute is a string with one or more segments, each segment is the name of an attribute within that JSON object, different segments are separated with a "/".

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].

5GC	5G Core
AMF	Access and Mobility Management Function
DNN	Data Network Name
GPSI	Generic Public Subscription Identifier
JSON	Javascript Object Notation
SMF	Session Management Function
SMS	Short Message Service
SMSF	SMS Function
SUPI	Subscription Permanent Identifier
UDM	Unified Data Management
UDR	Unified Data Repository

4 Overview

The resources, data model and usage defined in the present document are used by the 5GC NFs (e.g. UDM) to access the subscription data via the Unified Data Repository services specified in 3GPP TS 29.504 [2].

5 Usage of Nudr_DataRepository Service

5.1 Introduction

The following clauses specify the usage of Nudr_DataRepository service for subscription data. The principles specified in 3GPP TS 29.504 [2] are followed unless explicitly specified otherwise in the following clauses.

5.2 Resources

5.2.1 Overview

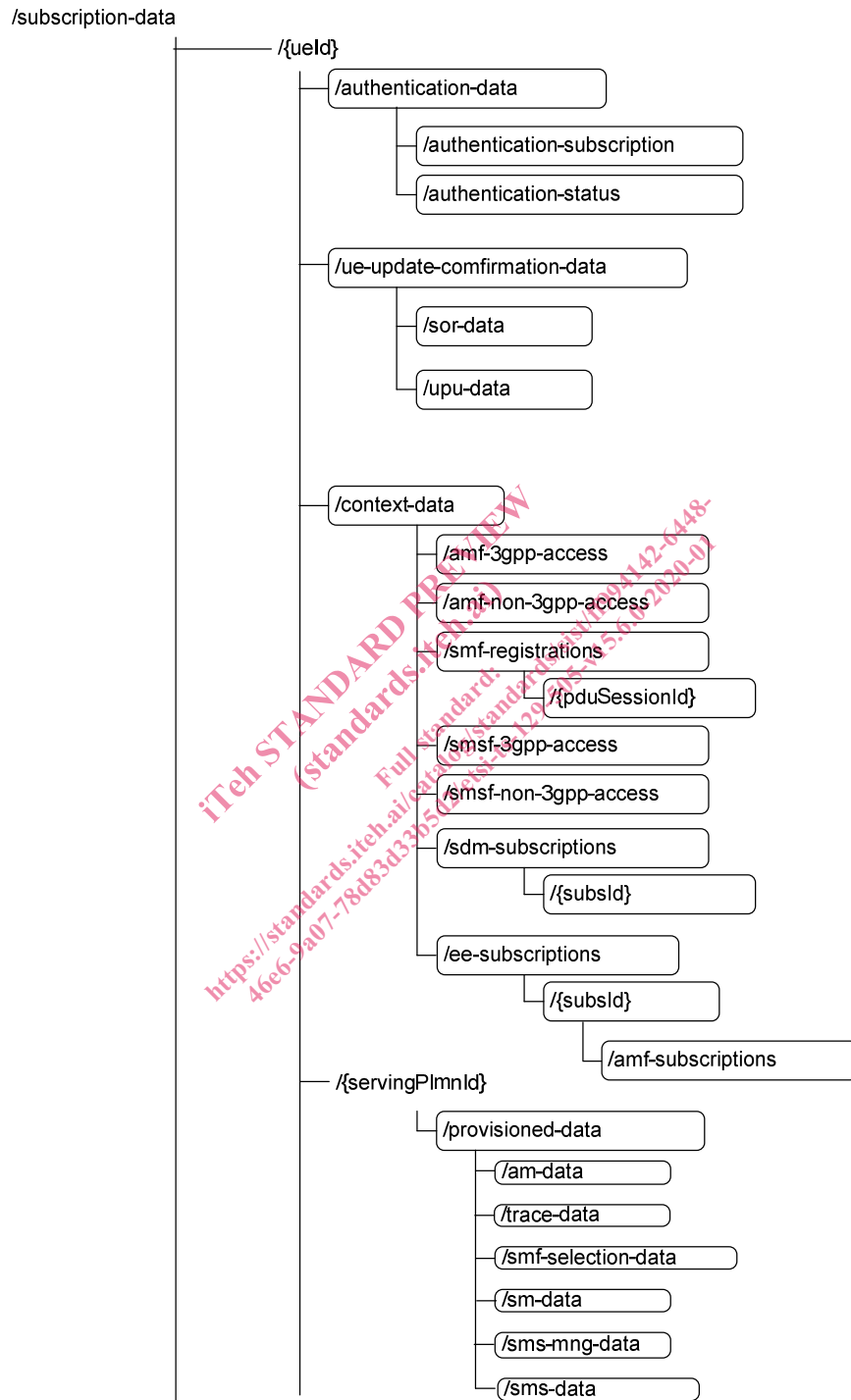


Figure 5.2.1-1: Resource URI sub-level structure for subscription data

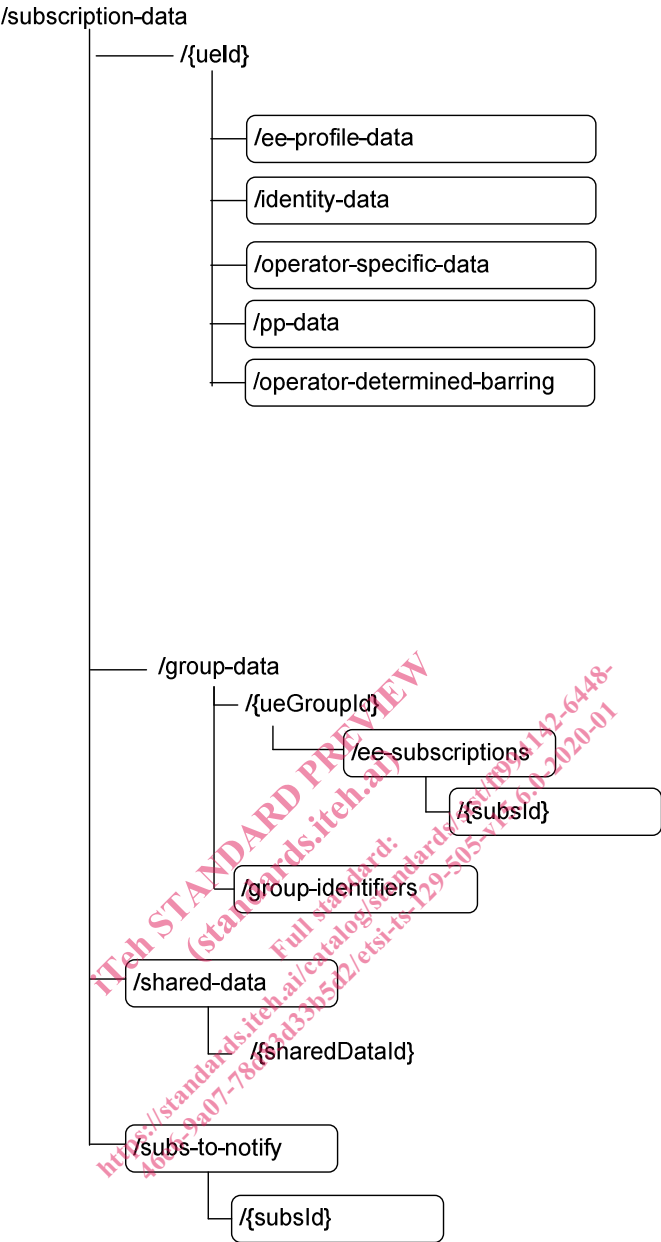


Figure 5.2.1-2: Resource URI sub-level structure for subscription data (cont.)

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