



Common Data

Common data types are applicable to several 5GC SBI API specifications as defined in 3GPP TS 29.571 [5] and should be referenced from individual 5GC SBI API specifications.

- [OpenAPI, on page 1](#)
- [info, on page 1](#)
- [externalDocs, on page 1](#)
- [paths, on page 1](#)
- [components, on page 2](#)

OpenAPI

OpenAPI Version: 3.0.0

info

Version: '1.0.0'

Title: 'Common Data Types'

Description: 'Common Data Types for Service Based Interfaces '

externalDocs

Description: 3GPP TS 29.571 Common Data Types for Service Based Interfaces, version 15.2.0

URL: 'http://www.3gpp.org/ftp/Specs/archive/29_series/29.571/'

paths

{}

components

schemas

```
# Common Data Types for Generic usage definitions as defined in subclause 5.2  
# COMMON SIMPLE DATA TYPES
```

Binary

```
format: binary  
Type: string
```

BinaryRm

```
format: binary  
Type: string  
nullable: true
```

Bytes

```
format: byte  
Type: string
```

BytesRm

```
format: byte  
Type: string  
nullable: true
```

Date

```
format: date  
Type: string
```

DateRm

```
format: date  
Type: string  
nullable: true
```

DateTime

```
format: date-time  
Type: string
```

DateTimeRm

format: date-time

Type: string

nullable: true

DiameterIdentity

Type: string

Pattern: '^[A-Za-z0-9]+(-[A-Za-z0-9]+)+[a-z]{2,}\$'

DiameterIdentityRm

Type: string

Pattern: '^[A-Za-z0-9]+(-[A-Za-z0-9]+)+[a-z]{2,}\$'

nullable: true

Double

format: double

Type: number

DoubleRm

format: double

Type: number

nullable: true

DurationSec

Type: integer

DurationSecRm

Type: integer

nullable: true

Float

format: float

Type: number

FloatRm

format: float

Type: number

nullable: true

Int32**format:** int32**Type:** integer**Int32Rm****format:** int32**Type:** integer**nullable:** true**Int64****Type:** integer**format:** int64**Int64Rm****format:** int64**Type:** integer**nullable:** true**Ipv4Addr****Type:** string**Pattern:**`'^(((0-9)[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\}{3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$'`**example:** '198.51.100.1'**Ipv4AddrRm****Type:** string**Pattern:**`'^(((0-9)[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])\.)\}{3}([0-9]|[1-9][0-9]|1[0-9][0-9]|2[0-4][0-9]|25[0-5])$'`**example:** '198.51.100.1'**nullable:** true**Ipv6Addr****Type:** string**allOf:**`- pattern: '^((:|(0?|[1-9a-f][0-9a-f]{0,3})):)((0?|[1-9a-f][0-9a-f]{0,3})):){0,6}(:|(0?|[1-9a-f][0-9a-f]{0,3})))$'``- pattern: '^(((^[^:]+:){7}([^[^:]+))(((^[^:]+)*[^[^:]+)?::((^[^:]+)*[^[^:]+)?))$'`**example:** '2001:db8:85a3::8a2e:370:7334'

Ipv6AddrRm

Type: string

allOf:

- pattern: '^((?:([1-9a-f][0-9a-f]{0,3}))*)(?:([1-9a-f][0-9a-f]{0,3}))*{0,6}:(?:([1-9a-f][0-9a-f]{0,3}))*\$'
 - pattern: '^(((?:[^\:]+){7}([^\:]+))|(((?:[^\:]+)*[^\:]+)?::((?:[^\:]+)*[^\:]+)?))\$'

example: '2001:db8:85a3::8a2e:370:7334'

nullable: true

Ipv6Prefix

Type: string

allOf:

- pattern: '^((?:([1-9a-f][0-9a-f]{0,3}))*)(?:([1-9a-f][0-9a-f]{0,3}))*{0,6}:(?:([1-9a-f][0-9a-f]{0,3}))*\v{((?:[0-9]{1,2})|(?:[0-1][0-9])(?:[0-8]))}\$'
 - pattern: '^(((?:[^\:]+){7}([^\:]+))|(((?:[^\:]+)*[^\:]+)?::((?:[^\:]+)*[^\:]+)?))(v.+)\$'

example: '2001:db8:abcd:12::0/64'

Ipv6PrefixRm

Type: string

allOf:

- pattern: '^((?:([1-9a-f][0-9a-f]{0,3}))*)(?:([1-9a-f][0-9a-f]{0,3}))*{0,6}:(?:([1-9a-f][0-9a-f]{0,3}))*\v{((?:[0-9]{1,2})|(?:[0-1][0-9])(?:[0-8]))}\$'
 - pattern: '^(((?:[^\:]+){7}([^\:]+))|(((?:[^\:]+)*[^\:]+)?::((?:[^\:]+)*[^\:]+)?))(v.+)\$'

nullable: true

MacAddr48

Type: string

Pattern: '^([0-9a-fA-F]{2})(-([0-9a-fA-F]{2})){5}\$'

MacAddr48Rm

Type: string

Pattern: '^([0-9a-fA-F]{2})(-([0-9a-fA-F]{2})){5}\$'

nullable: true

SupportedFeatures

Type: string

Pattern: '^[A-Fa-f0-9]*\$'

Uinteger

Type: integer

Minimum: 0

UintegerRm

Type: integer

Minimum: 0

nullable: true

Uint16

Type: integer

Minimum: 0

Maximum: 65535

Uint16Rm

Type: integer

Minimum: 0

Maximum: 65535

nullable: true

Uint32

format: int32

Type: integer

Minimum: 0

Uint32Rm

format: int32

Type: integer

Minimum: 0

nullable: true

Uint64

format: int64

Type: integer

Minimum: 0

Uint64Rm

format: int64
Type: integer
Minimum: 0
nullable: true

Uri

Type: string

UriRm

Type: string
nullable: true

VarUeld

Type: string
Pattern: '^(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^\@]+\@[^\@]+|.+)S'

VarUeldRm

Type: string
Pattern: '^(imsi-[0-9]{5,15}|nai-.+|msisdn-[0-9]{5,15}|extid-[^\@]+\@[^\@]+|.+)S'
nullable: true

TimeZone

Type: string

TimeZoneRm

Type: string
nullable: true

COMMON ENUMERATED DATA TYPES

PatchOperation

anyOf:
- type: string
enum:
- add
- copy
- move

- remove
- replace
- test
- type: string

UriScheme

anyOf:

- type: string

enum:

- http
- https
- type: string

ChangeType

anyOf:

- type: string

enum:

- ADD
- MOVE
- REMOVE
- REPLACE
- type: string

COMMON STRUCTURED DATA TYPES

ProblemDetails

Type: object

Properties:

Type:

Reference: '#/components/schemas/Uri'

title:

Type: string

status:

Type: integer

detail:

Type: string

instance:

Reference: '#/components/schemas/Uri'

cause:

Type: string

invalidParams:

Type: array

Items:

Reference: '#/components/schemas/InvalidParam'

minItems: 1

Link

Type: object

Properties:

href:

Reference: '#/components/schemas/Uri'

LinkRm

Type: object

Properties:

href:

Reference: '#/components/schemas/Uri'

nullable: true

PatchItem

Type: object

Properties:

op:

Reference: '#/components/schemas/PatchOperation'

path:

Type: string

from:

Type: string

value:

nullable: true

Required:

- op
- path

LinksValueSchema

oneOf:

- type: array

Items:

Reference: '#/components/schemas/Link'

minItems: 1

- \$ref: '#/components/schemas/Link'

SelfLink

Type: object

Properties:

self:

Reference: '#/components/schemas/Link'

Required:

- self

InvalidParam

Type: object

Properties:

param:

Type: string

reason:

Type: string

Required:

- param

Changeltem

Type: object

Properties:

op:

Reference: '#/components/schemas/ChangeType'

path:

Type: string

from:

Type: string

origValue: {}

newValue: {}

Required:

- op
- path

NotifyItem

Type: object

Properties:

resourceId:

Reference: '#/components/schemas/Uri'

changes:

Type: array

Items:

Reference: '#/components/schemas/ChangeItem'

minItems: 1

ComplexQuery

oneOf:

- \$ref: '#/components/schemas/Cnf'
- \$ref: '#/components/schemas/Dnf'

Cnf

Type: object

Required:

- cnfUnits

Properties:

cnfUnits:

Type: array

Items:

Reference: '#/components/schemas/CnfUnit'

minItems: 1

Dnf

Type: object

Required:

- dnfUnits

Properties:

dnfUnits:

Type: array

Items:

Reference: '#/components/schemas/DnfUnit'

minItems: 1

CnfUnit

Type: object

Required:

- cnfUnit

Properties:

cnfUnit:

Type: array

Items:

Reference: '#/components/schemas/Atom'

minItems: 1

DnfUnit

Type: object

Required:

- dnfUnit

Properties:

dnfUnit:

Type: array

Items:

Reference: '#/components/schemas/Atom'

minItems: 1

Atom

Type: object

Required:

- attr

- value

Properties:

attr:**Type:** string**value:** {}**negative:****Type:** boolean

Data Types related to Subscription, Identification and Numbering as defined in subclause 5.3

SIMPLE DATA TYPES

Dnn

Type: string

DnnRm

Type: string**nullable:** true

Gpsi

Type: string**Pattern:** '^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+.+)\$'

GpsiRm

Type: string**Pattern:** '^(msisdn-[0-9]{5,15}|extid-[^@]+@[^@]+.+)\$'**nullable:** true

GroupId

Type: string**Pattern:** '^[A-Fa-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Fa-f0-9][A-Fa-f0-9]){1,10}\$'

GroupIdRm

Type: string**Pattern:** '^[A-Fa-f0-9]{8}-[0-9]{3}-[0-9]{2,3}-([A-Fa-f0-9][A-Fa-f0-9]){1,10}\$'**nullable:** true

Pei

Type: string**Pattern:** '^(imei-[0-9]{15}|imeisv-[0-9]{16}|.+)\$'

PeiRm**Type:** string**Pattern:** '^(imei-[0-9]{15}|imeisv-[0-9]{16}|.+)\$'**nullable:** true**Supi****Type:** string**Pattern:** '^(imsi-[0-9]{5,15}|nai-.+|.+)\$'**SupiRm****Type:** string**Pattern:** '^(imsi-[0-9]{5,15}|nai-.+|.+)\$'**nullable:** true**NfInstanceId****Type:** string**format:** uuid**Amfld****Type:** string**Pattern:** '^[A-Fa-f0-9]{6}\$'**RfspIndex****Type:** integer**Minimum:** 1**Maximum:** 256**RfspIndexRm****Type:** integer**Minimum:** 1**Maximum:** 256**nullable:** true**NfGroupId****Type:** string

STRUCTURED DATA TYPES

Guami

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

amfId:

Reference: '#/components/schemas/AmfId'

Required:

- plmnId

- amfId

GuamiRm

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

amfId:

Reference: '#/components/schemas/AmfId'

Required:

- plmnId

- amfId

nullable: true

NetworkId

Type: object

Properties:

mnc:

Reference: '#/components/schemas/Mnc'

mcc:

Reference: '#/components/schemas/Mcc'

Data Types related to 5G Network as defined in subclause 5.4

SIMPLE DATA TYPES

ApplicationId

Type: string

ApplicationIdRm

Type: string
nullable: true

PduSessionId

Type: integer
Minimum: 0
Maximum: 255

Mcc

Type: string
Pattern: '^d{3}\$'

MccRm

Type: string
Pattern: '^d{3}\$'
nullable: true

Mnc

Type: string
Pattern: '^d{2,3}\$'

MncRm

Type: string
Pattern: '^d{2,3}\$'
nullable: true

Tac

Type: string
Pattern: '([A-Fa-f0-9]{4}\$)([A-Fa-f0-9]{6}\$)'

TacRm

Type: string
Pattern: '([A-Fa-f0-9]{4}\$)([A-Fa-f0-9]{6}\$)'
nullable: true

EutraCellId

Type: string

Pattern: '^[A-Fa-f0-9]{7}\$'

EutraCellIdRm

Type: string

Pattern: '^[A-Fa-f0-9]{7}\$'

nullable: true

NrCellId

Type: string

Pattern: '^[A-Fa-f0-9]{9}\$'

NrCellIdRm

Type: string

Pattern: '^[A-Fa-f0-9]{9}\$'

nullable: true

Dnai

Type: string

DnaiRm

Type: string

nullable: true

5GMmCause

Reference: '#/components/schemas/UInteger'

AmfName

Type: string

AreaCode

Type: string

AreaCodeRm

Type: string

nullable: true

N3IwflD

Type: string

NgeNblId

Type: string

Pattern: '^(MacroNGeNB-[A-Fa-f0-9]{5}|LMacroNGeNB-[A-Fa-f0-9]{6}|SMacroNGeNB-[A-Fa-f0-9]{5})\$'

ENUMERATED DATA TYPES

AccessType

Type: string

enum:

- 3GPP_ACCESS
- NON_3GPP_ACCESS

AccessTypeRm

Type: string

enum:

- 3GPP_ACCESS
- NON_3GPP_ACCESS

nullable: true

RatType

anyOf:

- type: string

enum:

- NR
- EUTRA
- WLAN
- VIRTUAL
- type: string

RatTypeRm

anyOf:

- type: string

enum:

- NR
- EUTRA
- WLAN
- VIRTUAL

- type: string
nullable: true

PduSessionType

anyOf:
- type: string
enum:
- IPV4
- IPV6
- IPV4V6
- UNSTRUCTURED
- ETHERNET
- type: string

PduSessionTypeRm

anyOf:
- type: string
enum:
- IPV4
- IPV6
- IPV4V6
- UNSTRUCTURED
- ETHERNET
- type: string
nullable: true

UplIntegrity

anyOf:
- type: string
enum:
- REQUIRED
- PREFERRED
- NOT_NEEDED
- type: string

UpIntegrityRm

anyOf:

- type: string

enum:

- REQUIRED

- PREFERRED

- NOT_NEEDED

- type: string

nullable: true

UpConfidentiality

anyOf:

- type: string

enum:

- REQUIRED

- PREFERRED

- NOT_NEEDED

- type: string

UpConfidentialityRm

anyOf:

- type: string

enum:

- REQUIRED

- PREFERRED

- NOT_NEEDED

- type: string

nullable: true

SscMode

anyOf:

- type: string

enum:

- SSC_MODE_1

- SSC_MODE_2

- SSC_MODE_3
- type: string

SscModeRm

anyOf:

- type: string

enum:

- SSC_MODE_1
 - SSC_MODE_2
 - SSC_MODE_3
 - type: string
- nullable:** true

DnaiChangeType

anyOf:

- type: string

This string provides forward-compatibility with future extensions to the enumeration but is not used to encode content defined in the present version of this API.

Possible values are

- EARLY: Early notification of UP path reconfiguration.
- EARLY_LATE: Early and late notification of UP path reconfiguration. This value shall only be present in the subscription to the DNAI change event.
- LATE: Late notification of UP path reconfiguration.

DnaiChangeTypeRm

anyOf:

- type: string

enum:

- EARLY
 - EARLY_LATE
 - LATE
 - type: string
- nullable:** true

RestrictionType

anyOf:

- type: string

enum:

- ALLOWED_AREAS

- NOT_ALLOWED_AREAS

- type: string

RestrictionTypeRm

anyOf:

- type: string

enum:

- ALLOWED_AREAS

- NOT_ALLOWED_AREAS

- type: string

nullable: true

CoreNetworkType

anyOf:

- type: string

enum:

- 5GC

- EPC

- type: string

CoreNetworkTypeRm

anyOf:

- type: string

enum:

- 5GC

- EPC

- type: string

nullable: true

PresenceState

anyOf:

```

- type: string
enum:
- IN_AREA
- OUT_OF_AREA
- UNKNOWN
- INACTIVE
- type: string
# STRUCTURED DATA TYPES

```

Snssai

```

Type: object
Properties:
sst:
Type: integer
Minimum: 0
Maximum: 255
sd:
Type: string
Pattern: '^[A-Za-f0-9]{6}$'
Required:
- sst

```

PImnId

```

Type: object
Properties:
mcc:
Reference: '#/components/schemas/Mcc'
mnc:
Reference: '#/components/schemas/Mnc'
Required:
- mcc
- mnc

```

PImnIdRm

```

Type: object
Properties:

```

mcc:

Reference: '#/components/schemas/Mcc'

mnc:

Reference: '#/components/schemas/Mnc'

Required:

- mcc

- mnc

nullable: true

Tai

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

tac:

Reference: '#/components/schemas/Tac'

Required:

- plmnId

- tac

TaiRm

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

tac:

Reference: '#/components/schemas/Tac'

Required:

- plmnId

- tac

nullable: true

Ecgi

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

PLMN Identity

eutraCellId:

Reference: '#/components/schemas/EutraCellId'

Required:

- plmnId

- eutraCellId

EcgiRm

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

PLMN Identity

eutraCellId:

Reference: '#/components/schemas/EutraCellId'

Required:

- plmnId

- eutraCellId

nullable: true

Ncgi

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

nrCellId:

Reference: '#/components/schemas/NrCellId'

Required:

- plmnId

- nrCellId

NcgiRm

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

nrCellId:

Reference: '#/components/schemas/NrCellId'

Required:

- plmnId

- nrCellId

nullable: true

UserLocation

Type: object

Properties:

eutraLocation:

Reference: '#/components/schemas/EutraLocation'

nrLocation:

Reference: '#/components/schemas/NrLocation'

n3gaLocation:

Reference: '#/components/schemas/N3gaLocation'

EutraLocation

Type: object

Properties:

tai:

Reference: '#/components/schemas/Tai'

ecgi:

Reference: '#/components/schemas/Ecgi'

ageOfLocationInformation:

Type: integer

Minimum: 0

Maximum: 32767

ueLocationTimestamp:

Reference: '#/components/schemas/DateTime'

geographicalInformation:

Type: string

Pattern: '^[0-9A-F]{16}\$'

geodeticInformation:

Type: string

Pattern: '^[0-9A-F]{20}\$'

globalNgenbId:

Reference: '#/components/schemas/GlobalRanNodeId'

Required:

- tai

- ecgi

EutraLocationRm

Type: object

Properties:

tai:

Reference: '#/components/schemas/Tai'

ecgi:

Reference: '#/components/schemas/Ecgi'

ageOfLocationInformation:

Type: integer

Minimum: 0

Maximum: 32767

ueLocationTimestamp:

Reference: '#/components/schemas/DateTime'

geographicalInformation:

Type: string

Pattern: '^[0-9A-F]{16}\$'

geodeticInformation:

Type: string

Pattern: '^[0-9A-F]{20}\$'

globalNgenbId:

Reference: '#/components/schemas/GlobalRanNodeId'

Required:

- tai

- ecgi

nullable: true

NrLocation

Type: object

Properties:

tai:

Reference: '#/components/schemas/Tai'

ncgi:

Reference: '#/components/schemas/Ncgi'

ageOfLocationInformation:

Type: integer

Minimum: 0

Maximum: 32767

ueLocationTimestamp:

Reference: '#/components/schemas/DateTime'

geographicalInformation:

Type: string

Pattern: '^[0-9A-F]{16}\$'

geodeticInformation:

Type: string

Pattern: '^[0-9A-F]{20}\$'

globalGnbId:

Reference: '#/components/schemas/GlobalRanNodeId'

Required:

- tai

- ncgi

NrLocationRm

Type: object

Properties:

tai:

Reference: '#/components/schemas/Tai'

ncgi:

Reference: '#/components/schemas/Ncgi'

ageOfLocationInformation:

Type: integer

Minimum: 0

Maximum: 32767

ueLocationTimestamp:

Reference: '#/components/schemas/DateTime'

geographicalInformation:

Type: string

Pattern: '^[0-9A-F]{16}\$'

geodeticInformation:

Type: string

Pattern: '^[0-9A-F]{20}\$'

globalGnbId:

Reference: '#/components/schemas/GlobalRanNodeId'

Required:

- tai

- ncgi

nullable: true

N3gaLocation

Type: object

Properties:

n3gppTai:

Reference: '#/components/schemas/Tai'

n3IwfId:

Type: string

Pattern: '^[A-Fa-f0-9]+\$'

ueIpv4Addr:

Reference: '#/components/schemas/Ipv4Addr'

ueIpv6Addr:

Reference: '#/components/schemas/Ipv6Addr'

portNumber:

Reference: '#/components/schemas/UInteger'

UpSecurity

Type: object

Properties:

upIntegr:**Reference:** '#/components/schemas/UpIntegrity'**upConfid:****Reference:** '#/components/schemas/UpConfidentiality'**Required:**

- upIntegr
- upConfid

UpSecurityRm**Type:** object**Properties:****upIntegr:****Reference:** '#/components/schemas/UpIntegrity'**upConfid:****Reference:** '#/components/schemas/UpConfidentiality'**Required:**

- upIntegr
- upConfid

nullable: true**NgApCause****Type:** object**Properties:****group:****Reference:** '#/components/schemas/Uinteger'**value:****Reference:** '#/components/schemas/Uinteger'**Required:**

- group
- value

BackupAmfInfo**Type:** object**Properties:****backupAmf:****Reference:** '#/components/schemas/AmfName'

guamiList:
Type: array
Items:
Reference: '#/components/schemas/Guami'
minItems: 1
Required:
- backupAmf

RefToBinaryData

Type: object
Properties:
contentId:
Type: string
Required:
- contentId

RefToBinaryDataRm

Type: object
Properties:
contentId:
Type: string
Required:
- contentId
nullable: true

RouteToLocation

Type: object
Properties:
dnai:
Reference: '#/components/schemas/Dnai'
routeInfo:
Reference: '#/components/schemas/RouteInformation'
routeProfId:
Type: string
nullable: true
Required:

- dnai

nullable: true

RouteInformation

Type: object

Properties:

ipv4Addr:

Reference: '#/components/schemas/Ipv4Addr'

ipv6Addr:

Reference: '#/components/schemas/Ipv6Addr'

portNumber:

Reference: '#/components/schemas/UInteger'

Required:

- portNumber

nullable: true

SubscribedDefaultQos

Type: object

Required:

- 5qi

- arp

Properties:

5qi:

Reference: '#/components/schemas/5Qi'

arp:

Reference: '#/components/schemas/Arp'

priorityLevel:

Reference: '#/components/schemas/5QiPriorityLevel'

Area

Type: object

oneOf:

- required:

- tacs

- required:

- areaCode

Properties:**tacs:****Type:** array**Items:****Reference:** '#/components/schemas/Tac'**minItems:** 1**areaCodes:****Reference:** '#/components/schemas/AreaCode'**ServiceAreaRestriction****Type:** object**Properties:****restrictionType:****Reference:** '#/components/schemas/RestrictionType'**areas:****Type:** array**Items:****Reference:** '#/components/schemas/Area'**maxNumOfTAs:****Reference:** '#/components/schemas/UInteger'**allOf:**

#

1st condition: restrictionType and areas attributes shall be either both absent

or both present

#

- oneOf:

- not:

Required: [restrictionType]

- required: [areas]

#

2nd condition: if restrictionType takes value NOT_ALLOWED_AREAS,

then maxNumOfTAs shall be absent

#

- anyOf:

- not:

Required: [restrictionType]

Properties:

restrictionType:

Type: string

enum: [NOT_ALLOWED_AREAS]

- not:

Required: [maxNumOfTAs]

PresenceInfo

Type: object

Properties:

praId:

Type: string

presenceState:

Reference: '#/components/schemas/PresenceState'

trackingAreaList:

Type: array

Items:

Reference: '#/components/schemas/Tai'

minItems: 1

ecgiList:

Type: array

Items:

Reference: '#/components/schemas/Ecgi'

minItems: 1

ncgiList:

Type: array

Items:

Reference: '#/components/schemas/Ncgi'

minItems: 1

globalRanNodeIdList:

Type: array

Items:

Reference: '#/components/schemas/GlobalRanNodeId'

minItems: 1

PresenceInfoRm

Type: object

Properties:

praId:

Type: string

presenceState:

Reference: '#/components/schemas/PresenceState'

trackingAreaList:

Type: array

Items:

Reference: '#/components/schemas/Tai'

minItems: 0

ecgiList:

Type: array

Items:

Reference: '#/components/schemas/Ecgi'

minItems: 0

ncgiList:

Type: array

Items:

Reference: '#/components/schemas/Ncgi'

minItems: 0

globalRanNodeIdList:

Type: array

Items:

Reference: '#/components/schemas/GlobalRanNodeId'

nullable: true

GlobalRanNodeId

Type: object

Properties:

plmnId:

Reference: '#/components/schemas/PlmnId'

n3IwfId:

Reference: '#/components/schemas/N3IwfId'

gNbId:

Reference: '#/components/schemas/GNbId'

ngeNbId:

Reference: '#/components/schemas/NgeNbId'

oneOf:

- required: [n3IwfId]

- required: [gNbId]

- required: [ngeNbId]

Required:

- plmnId

GNbId

Type: object

Properties:

bitLength:

Type: integer

Minimum: 22

Maximum: 32

gNBValue:

Type: string

Pattern: '^[A-Fa-f0-9]{6,8}\$'

Required:

- bitLength

- gNBValue

Data Types related to 5G QoS as defined in subclause 5.5

SIMPLE DATA TYPES

Qfi

Type: integer

Minimum: 0

Maximum: 63

QfiRm

Type: integer

Minimum: 0

Maximum: 63
nullable: true

5Qi

Type: integer
Minimum: 0
Maximum: 255

5QiRm

Type: integer
Minimum: 0
Maximum: 255
nullable: true

BitRate

Type: string
Pattern: '^d+(\.d+)? (bps|Kbps|Mbps|Gbps|Tbps)\$'

BitRateRm

Type: string
Pattern: '^d+(\.d+)? (bps|Kbps|Mbps|Gbps|Tbps)\$'
nullable: true

ArpPriorityLevel

Type: integer
Minimum: 1
Maximum: 15
nullable: true

5QiPriorityLevel

Type: integer
Minimum: 1
Maximum: 127

5QiPriorityLevelRm

Type: integer
Minimum: 1

Maximum: 127

nullable: true

PacketDelBudget

Type: integer

Minimum: 1

PacketDelBudgetRm

Type: integer

Minimum: 1

nullable: true

PacketErrRate

Type: string

Pattern: '^([0-9]E-[0-9])\$'

PacketErrRateRm

Type: string

Pattern: '^([0-9]E-[0-9])\$'

nullable: true

PacketLossRate

Type: integer

Minimum: 0

Maximum: 1000

PacketLossRateRm

Type: integer

Minimum: 0

Maximum: 1000

nullable: true

AverWindow

Type: integer

Minimum: 1

Maximum: 4095

Default: 2000

AverWindowRm

Type: integer
Maximum: 4095
Default: 2000
Minimum: 1
nullable: true

MaxDataBurstVol

Type: integer
Minimum: 1
Maximum: 4095

MaxDataBurstVolRm

Type: integer
Minimum: 1
Maximum: 4095
nullable: true
ENUMERATED DATA TYPES

PreemptionCapability

anyOf:
- type: string
enum:
- NOT_PREEMPT
- MAY_PREEMPT
- type: string

PreemptionCapabilityRm

anyOf:
- type: string
enum:
- NOT_PREEMPT
- MAY_PREEMPT
- type: string
nullable: true

PreemptionVulnerability

anyOf:

- type: string

enum:

- NOT_PREEMPTABLE

- PREEMPTABLE

- type: string

PreemptionVulnerabilityRm

anyOf:

- type: string

enum:

- NOT_PREEMPTABLE

- PREEMPTABLE

- type: string

nullable: true

ReflectiveQoSAttribute

anyOf:

- type: string

enum:

- RQOS

- NO_RQOS

- type: string

ReflectiveQoSAttributeRm

anyOf:

- type: string

enum:

- RQOS

- NO_RQOS

- type: string

nullable: true

NotificationControl

anyOf:

- type: string
- enum:**
- REQUESTED
- NOT_REQUESTED
- type: string

NotificationControlRm

- anyOf:**
- type: string
- enum:**
- REQUESTED
- NOT_REQUESTED
- type: string
- nullable:** true

QosResourceType

- anyOf:**
- type: string
- enum:**
- NON_GBR
- NON_CRITICAL_GBR
- CRITICAL_GBR
- type: string

QosResourceTypeRm

- anyOf:**
- type: string
- enum:**
- NON_GBR
- NON_CRITICAL_GBR
- CRITICAL_GBR
- type: string
- nullable:** true

AdditionalQosFlowInfo

- anyOf:**

- type: string
enum:
 - MORE_LIKELY
 - type: string
nullable: true
 # STRUCTURED DATA TYPES

Arp

Type: object
Properties:
priorityLevel:
Reference: '#/components/schemas/ArpPriorityLevel'
preemptCap:
Reference: '#/components/schemas/PreemptionCapability'
preemptVuln:
Reference: '#/components/schemas/PreemptionVulnerability'
Required:
 - priorityLevel
 - preemptCap
 - preemptVuln

ArpRm

Type: object
Properties:
priorityLevel:
Reference: '#/components/schemas/ArpPriorityLevel'
preemptCap:
Reference: '#/components/schemas/PreemptionCapability'
preemptVuln:
Reference: '#/components/schemas/PreemptionVulnerability'
Required:
 - priorityLevel
 - preemptCap
 - preemptVuln
nullable: true

Ambr

Type: object

Properties:

uplink:

Reference: '#/components/schemas/BitRate'

downlink:

Reference: '#/components/schemas/BitRate'

Required:

- uplink
- downlink

AmbrRm

Type: object

Properties:

uplink:

Reference: '#/components/schemas/BitRate'

downlink:

Reference: '#/components/schemas/BitRate'

Required:

- uplink
- downlink

nullable: true

Dynamic5Qi

Type: object

Properties:

resourceType:

Reference: '#/components/schemas/QosResourceType'

priorityLevel:

Reference: '#/components/schemas/5QiPriorityLevel'

packetDelayBudget:

Reference: '#/components/schemas/PacketDelBudget'

packetErrRate:

Reference: '#/components/schemas/PacketErrRate'

averWindow:

Reference: '#/components/schemas/AverWindow'

maxDataBurstVol:

Reference: '#/components/schemas/MaxDataBurstVol'

Required:

- resourceType
- priorityLevel
- packetDelayBudget
- packetErrRate

NonDynamic5Qi

Type: object

Properties:

priorityLevel:

Reference: '#/components/schemas/5QiPriorityLevel'

averWindow:

Reference: '#/components/schemas/AverWindow'

maxDataBurstVol:

Reference: '#/components/schemas/MaxDataBurstVol'

minProperties: 0

Data Types related to 5G Trace as defined in subclause 5.6

SIMPLE DATA TYPES

Enumerations

TraceDepth

anyOf:

- type: string

enum:

- MINIMUM
- MEDIUM
- MAXIMUM
- MINIMUM_WO_VENDOR_EXTENSION
- MEDIUM_WO_VENDOR_EXTENSION
- MAXIMUM_WO_VENDOR_EXTENSION
- type: string

TraceDepthRm

anyOf:

- type: string

enum:

- MINIMUM

- MEDIUM

- MAXIMUM

- MINIMUM_WO_VENDOR_EXTENSION

- MEDIUM_WO_VENDOR_EXTENSION

- MAXIMUM_WO_VENDOR_EXTENSION

- type: string

nullable: true

STRUCTURED DATA TYPES

TraceData

Type: object

nullable: true

Properties:

traceRef:

Type: string

Pattern: '^[0-9]{3}[0-9]{2,3}-[A-Fa-f0-9]{6}\$'

traceDepth:

Reference: '#/components/schemas/TraceDepth'

neTypeList:

Type: string

Pattern: '^[A-Fa-f0-9]+\$'

eventList:

Type: string

Pattern: '^[A-Fa-f0-9]+\$'

collectionEntityIpv4Addr:

Reference: '#/components/schemas/Ipv4Addr'

collectionEntityIpv6Addr:

Reference: '#/components/schemas/Ipv6Addr'

interfaceList:

Type: string

Pattern: '^[A-Fa-f0-9]+\$'

Required:

- traceRef
- traceDepth
- neTypeList
- eventList

Data Types related to 5G ODB as defined in subclause 5.7

SIMPLE DATA TYPES

Enumerations

RoamingOdb

anyOf:

- type: string

enum:

- OUTSIDE_HOME_PLMN
- OUTSIDE_HOME_PLMN_COUNTRY
- type: string

OdbPacketServices

anyOf:

- type: string

enum:

- ALL_PACKET_SERVICES
- ROAMER_ACCESS_HPLMN_AP
- ROAMER_ACCESS_VPLMN_AP
- type: string

nullable: true

STRUCTURED DATA TYPES

OdbData

Type: object

Properties:

roamingOdb:

Reference: '#/components/schemas/RoamingOdb'

odbPacketServices:

Reference: '#/components/schemas/OdbPacketServices'

Data Types related to Charging as defined in subclause 5.8
SIMPLE DATA TYPES

ChargingId

Reference: '#/components/schemas/Uint32'

RatingGroup

Reference: '#/components/schemas/Uint32'

ServiceId

Reference: '#/components/schemas/Uint32'

Enumerations

STRUCTURED DATA TYPES

SecondaryRatUsageReport

Type: object

Properties:

secondaryRatType:

Reference: '#/components/schemas/RatType'

qosFlowsUsageData:

Type: array

Items:

Reference: '#/components/schemas/QosFlowUsageReport'

minItems: 1

Required:

- secondaryRatType

- qosFlowsUsageData

QosFlowUsageReport

Type: object

Properties:

qfi:

Reference: '#/components/schemas/Qfi'

startTimeStamp:

Reference: '#/components/schemas/DateTime'

endTimeStamp:

Reference: '#/components/schemas/DateTime'

downlinkVolume:

Reference: '#/components/schemas/Int64'

uplinkVolume:

Reference: '#/components/schemas/Int64'

Required:

- qfi
 - startTimeStamp
 - endTimeStamp
 - downlinkVolume
 - uplinkVolume
- # HTTP responses

responses

'400'

Description: Bad request

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'401'

Description: Unauthorized

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'403'

Description: Forbidden

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'404'**Description:** Not Found**content:**

application/problem+json:

schema:**Reference:** '#/components/schemas/ProblemDetails'**'405'****Description:** Method Not Allowed**'408'****Description:** Request Timeout**content:**

application/problem+json:

schema:**Reference:** '#/components/schemas/ProblemDetails'**'406'****Description:** 406 Not Acceptable**'409'****Description:** Conflict**content:**

application/problem+json:

schema:**Reference:** '#/components/schemas/ProblemDetails'**'410'****Description:** Gone**content:**

application/problem+json:

schema:**Reference:** '#/components/schemas/ProblemDetails'**'411'****Description:** Length Required**content:**

'412'

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'412'

Description: Precondition Failed

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'413'

Description: Payload Too Large

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'414'

Description: URI Too Long

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'415'

Description: Unsupported Media Type

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'429'

Description: Too Many Requests

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'500'

Description: Internal Server Error

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'501'

Description: Not Implemented

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'503'

Description: Service Unavailable

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

'504'

Description: Gateway Timeout

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'

default

Description: Generic Error

content:

application/problem+json:

schema:

Reference: '#/components/schemas/ProblemDetails'