

S6a INTERFACE LIBRARY DOCUMENTATION

(this documentation is not finished yet. Check the header file 'ssix_interface.h' found in 'inc' directory for details about the APIs defined in this library until this documetation is finished.)

1. INTRODUCTION

This implementation of the 3gpp defined S6a interface is meant to be used as a shared library. It contains a lot of APIs that are useful to implement the S6a interface. It is based on the freediameter (www.freediameter.net) software libraries 'linfdproto' and 'libfdcore' which contains the implementation for the diameter basic protocol and other basic functionalities need for this implementation to work. And it also requires the extensions 'dict_dcca', 'dict_dcca_3gpp' and 'dict_nasreq' found in freediameter to be loaded for this implementation to work.

2.1. NO_STATE_MAINTAINED

VALUE : 1

DESCRIPTION :

2.2. VENDOR_ID_3GPP

VALUE : 10415

DESCRIPTION :

2.3. SSIX_APPLICATION_ID

VALUE : 16777251

DESCRIPTION :

2.4. DIAMETER_ERROR_USER_UNKNOWN

VALUE : 5001

DESCRIPTION :

2.5. DIAMETER_ERROR_RAT_NOT_ALLOWED

VALUE : 5421

DESCRIPTION :

2.6. DIAMETER_ERROR_ROAMING_NOT_ALLOWED

VALUE : 5004

DESCRIPTION :

3.1. ENUMERATIONS

This library defines values of AVPs that are of type Enumerated.

The enumerated datatypes of the AVPs is persented in this document in such a way that the name of the AVP is used as a subsection title and it's corresponding enumerated data type is defined under the subsection in same way it is defined in C language.

3.1. UE-SRVCC-Capability AVP

```
enum ue_srvcc_capability{
    UE_SRVCC_NOT_SUPPORTED = 0,
    UE_SRVCC_SUPPORTED

};
```

3.2. Homogeneous-Support-of-IMS-Voice-Over-PS-Sessions AVP

```
enum homogeneous_support_ims_voice_over_ps_sessions{
    NOT_SUPPORTED = 0,
    SUPPORTED

};
```

3.3. Rat-Type AVP

```
enum rat_type{
    WLAN = 0,
    VIRTUAL = 1,
    UTRAN = 1000,
    GERAN = 1001,
    GAN = 1002,
    HSPA_EVOLUTION = 1003,
    EUTRAN = 1004,
    CDMA2000_1X = 2000,
    HRPD = 2001,
    UMB = 2002,
    EHRPD = 2003

};
```

3.4. SMS-Register-Request AVP

```
enum sms_register_request{
    SMS_REGISTRATION_REQUIRED = 0,
    SMS_REGISTRATION_NOT_PREFERRED,
    NO_PREFERENCE

};
```

3.5. Error-Diagnostic AVP

```
enum error_diagnostic{
    PRS_DATA_SUBSCRIBED = 0,
    NO_GPRS_DATA_SUBSCRIBED,
    ODB_ALL_APN,
    ODB_HPLMN_APN,
    ODB_VPLMN_APN
};
```

3.6. Subscriber Status AVP

```
enum subscriber_status{
    SERVICE_GRANTED = 0,
    OPERATOR_DETERMINED_BARRING
};
```

3.7. ICS-Indicator AVP

```
enum ics_indicator{
    False = 0,
    True
};
```

3.8. Network-Access-Mode AVP

```
enum network_access_mode{
    PACKET_AND_CIRCUIT = 0,
    Reserved,
    ONLY_PACKET
};
```

3.9. Notification-To-UE-User AVP

```
enum notification_to_ue_user{
    NOTIFY_LOCATION_ALLOWED = 0,
    NOTIFYANDVERIFY_LOCATION_ALLOWED_IF_NO_RESPONSE,
    NOTIFYANDVERIFY_LOCATION_NOT_ALLOWED_IF_NO_RESPONSE,
    LOCATION_NOT_ALLOWED
};
```

3.10. GMLC-Restriction AVP

```
enum gmlc_restriction{
    GMLC_LIST = 0,
    HOME_COUNTRY
};
```

3.11. PLMN-Client AVP

```
enum plmn_client{
    BROADCAST_SERVICE = 0,
    O_AND_M_HPLMN,
    O_AND_M_VPLMN,
    ANONYMOUS_LOCATION,
    TARGET_UE_SUBSCRIBED_SERVICE
};
```

3.12. All-APN-Configurations-Included-Indicator AVP

```
enum all_apn_configuration_included_indicator{
    All_APN_CONFIGURATIONS_INCLUDED = 0,
    MODIFIED_ADDED_APN_CONFIGURATIONS_INCLUDED
};
```

3.13. PDN-Type AVP values

```
enum pdn_type{
    IPv4 = 0,
    IPv6,
    IPv4v6,
    IPv4_OR_IPv6
};
```

3.14. QoS-Class-Identifier AVP values

```
enum qos_class_identifier{
    QCI_1 = 1,
    QCI_2,
    QCI_3,
    QCI_4,
    QCI_5,
    QCI_6,
    QCI_7,
    QCI_8,
    QCI_9,
    QCI_65 = 65,
    QCI_66 = 66,
    QCI_69 = 69,
    QCI_70 = 70
};
```

3.16. Pre-emption-Capability AVP

```
enum pre_emption_capability{
    PRE_EMPTION_CAPABILITY_ENABLED = 0,
    PRE_EMPTION_CAPABILITY_DISABLED
};
```

};