**Origination Date:** 01/21/16

**Originator:** iconectiv

### Change Order Number: NANC 481

**Description:** GDMO Behavior Doc-Only Clarifications

**Functional Backwards Compatible:** Yes

**IMPACT/CHANGE ASSESSMENT**

|  |  |  |
| --- | --- | --- |
| DOC | FRS | IIS |
| N | N |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CMIP | GDMO | ASN.1 | **NPAC** | SOA | LSMS |
| Y | N | N | N | N |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| XML | XIS | XSD | **NPAC** | SOA | LSMS |
| N | N | N | N | N |

**Business Need**

Documentation updates.

**Description of Change:**

Changes detailed below.

Requirements:

GDMO Behavior (changed text in yellow highlights)

-- 12.0 LNP NPAC SMS Managed Object Class

[snip]

lnpNPAC-SMS-Behavior BEHAVIOUR

DEFINED AS !

NPAC SMS Managed Object for the SOA to NPAC SMS and the Local SMS

to NPAC SMS interface.

[snip]

A SOA or LSMS may implement an Application Level Heartbeat

functionality. With this functionality the NPAC SMS will send a

periodic Heartbeat message when a quiet period between the SOA/LSMS

and the NPAC SMS exceeds the tunable value. If a SOA/LSMS fails to

respond to the Heartbeat message within a timeout period, the

association will be aborted by the NPAC SMS. If a SOA/LSMS

implements the Heartbeat message, it should be used on every

association.

!;

-- 25.0 LNP Service Provider Filter NPA-NXX Managed Object Class

[snip]

lsmsFilterNPA-NXX-Definition BEHAVIOUR

DEFINED AS !

The lsmsFilterNPA-NXX class is the managed object

used to identify the NPA-NXX values for which a service provider

does not want to be informed of subscription version broadcasts,

~~network downloads~~, NPA-NXX broadcasts, NPA-NXX-X broadcasts, Number Pool Block broadcasts,or SOA notifications.

!;

-- 31.0 Service Provider NPA-NXX-X Data Managed Object Class

serviceProvNPA-NXX-X-Behavior BEHAVIOUR

[snip]

The serviceProvNPA-NXX-X-ModifiedTimeStamp is set to the current

date and time of when the object is created on the NPAC SMS or when the NPAC SMS last modified the object.

-- 8.0 LNP Audit Discrepancy Version Id

auditDiscrepancyVersionId ATTRIBUTE

WITH ATTRIBUTE SYNTAX LNP-ASN1.SubscriptionVersionId;

MATCHES FOR EQUALITY;

BEHAVIOUR auditDiscrepancyVersionId-Behavior;

REGISTERED AS {LNP-OIDS.lnp-attribute 8};

auditDiscrepancyVersionId-Behavior BEHAVIOUR

DEFINED AS !

This attribute is used to store the version id for the TN for

which the discrepancy was found in an audit discrepancy

notification in a log record.

The NPAC SMS uses a 32-bit signed integer for the Naming ID Value. ID

value interpretation is based on the way an LNP system treats binary

integer numbers. Signed interpretation will see negative numbers when

the 32nd bit is used. Unsigned interpretation will always see

positive numbers.

Binary Signed Unsigned

Numbers Numbers Numbers

00000000000000000000000000000001 1 1

00000000000000000000000000000010 2 2

00000000000000000000000000000011 3 3

(cont') (cont') (cont')

01111111111111111111111111111110 2147483646 2147483646

01111111111111111111111111111111 2147483647 2147483647

Rollover

10000000000000000000000000000000 -2147483648 2147483648

10000000000000000000000000000001 -2147483647 2147483649

10000000000000000000000000000010 -2147483646 2147483650

10000000000000000000000000000011 -2147483645 2147483651

(cont') (cont') (cont')

Change below from Microsoft Word quote signs to straight ascii quote signs. Same change in several more places in GDMO behavior.

Rollover will take place when the ID exhausts the 32-bit values (or

prior to for operational considerations). Using a signed

interpretation, a “sign” rollover occurs when the ID increments from

31-bit to 32-bit.

-- 35.0 LNP Service Provider Name

serviceProvName ATTRIBUTE

WITH ATTRIBUTE SYNTAX LNP-ASN1.ServiceProvName;

MATCHES FOR EQUALITY, ORDERING;

BEHAVIOUR serviceProvNameBehavior;

REGISTERED AS {LNP-OIDS.lnp-attribute 35};

serviceProvNameBehavior BEHAVIOUR

DEFINED AS !

This attribute is the English name for the service provider (including slash indicator, 38 +~~2~~’\’ and 1 digit).

!;

-- 138.0 LNP Service Provider NPA-NXX-X Modified Timestamp

[snip]

serviceProvNPA-NXX-X-ModifiedTimeStampBehavior BEHAVIOUR

DEFINED AS !

This attribute provides the date and time the

serviceProvNPA-NXX-X object was last modified on the NPAC SMS or when the object is created on the NPAC SMS.

!;

-- 159.0 LNP Service Provider NPA-NXX Modification Time Stamp

[snip]

serviceProvNPA-NXX-ModifiedTimeStampBehavior BEHAVIOUR

DEFINED AS !

This attribute provides the date and time the serviceProvNPA-NXX

object was last modified on the NPAC SMS (either the subscriptionVersionNewNPA-NXX notification is sent or the serviceProvNPA-NXX-EffectiveTimeStamp is updated). It is initially null when the serviceProvNPA-NXX object is created.

!;

-- 1.0 LNP Download Action

[snip]

lnpDownloadBehavior BEHAVIOUR

DEFINED AS !

Preconditions: This action is issued from an lnpSubscriptions

or an lnpNetwork object and all objects to be downloaded

are specified in the action request.

[snip]

The SOA or LSMS is capable of recovering data based on the

association functions. The SOA recovers service provider data and

network data using the data download association function

(dataDownload). The SOA recovers notification data using the

~~network data management association function (networkDataMgmt).~~

soa management association function (soaMgmt).

The LSMS recovers service provider data and network data,

subscription data,and number pool block using the data download

association function (dataDownload) and recovers notification data

using the network data management association function

(networkDataMgmt). If a SOA supports a separate SOA channel, the SOA

recovers notification data using the notification download

association function (notificationDownload).

-- 6.0 LNP Subscription Version Local SMS Create Action

[snip]

subscriptionVersionLocalSMS-CreateBehavior BEHAVIOUR

    DEFINED AS !

        [snip]

        For Release 1.4 Number Pooling Support:

        There will be no need on the part of the LSMS to validate

        the TN-range.  The LSMS will use the subscriptionVersionObjects

        to create the subscription versions for the TN range in the LSMS.

        This is done to insure that the subscription version ids used

        in the NPAC SMS and the Local SMS are the same.  With the

        implementation by all LSMSs to EDR, the TN-range attribute is

        no longer used.

        !;