**NANC 285**

**SOA/LSMS Requested Subscription Version Query Max Size**

**Origination Date :**05/12/1999

**Originator:**LNPA-WG

**Description:**

A SOA/LSMS request for a Subscription Version query that exceeds the maximum size tunable (“Maximum Subscriber Query”), returns an error message to the SOA.

Similar to the processing in NANC 273, it has been requested the NPAC return SVs up to the max tunable amount instead.  The SOA/LSMS would accept this message, then use it’s contents to send another query to the NPAC, starting with the next TN, and so on until all SVs are returned to the SOA/LSMS.

It will be up to the SOA/LSMS to manage the data returned from the NPAC and determine the next request to send to the NPAC in order to get the next set of SVs.

The NPAC will continue to return SVs that meet the selection criteria.  However, the NPAC will not return a “count” to the SOA/LSMS for number of records that match the selection criteria.

This solution will resolve the problem described in NANC 279 (SOA Resynchronization for Large Ranges), where a problem exists for recovering the SOA for large ranges, because the SV time stamp that the NPAC users for recovery is the same for large ranges.

The example used for NANC 279 was, if all the TNs in the range contain the same time stamp (e.g., 17 minutes and 20 seconds after 3p, 15:17:20), and the number of TNs in the range exceeds the tunable allowed for queries, the SOA cannot recover since the NPAC, for any time range, will respond with an error for maximum TN query reached.

**Final Resolution:**

Func Backwards Compatible:  NO

June LNPAWG (San Ramon), discussed in conjunction with NANC 279.  Group decided to close out 279, and merge the requested functionality into this change order, since this is query functionality issue, and not just a recovery issue.

Jim Rooks will provide additional information on a proposed solution given the inclusion of NANC 279 into this change order.

Jim’s response is shown below:

This change order requests the 'more' capability that will be supported by queries in the LTI.  This implementation requires 2 changes.

#1, the NPAC must be modified to always return the first n (tunable) records on the SV query.  Currently, the NPAC determines that the query will return more than n records and returns an error.

#2, the service providers should modify their systems to support the following SV query operations to the NPAC:

a.    When data is returned from an SV Query and there are exactly n (tunable) records returned, the SP must assume that they didn't get all the data from their query.

b.    After processing the first n records, they should send a new query that picks up where the data from the prior query ended.

c.    The SV data returned from the NPAC for SV queries will be sorted by TN and then by SVID so a filter can be created to pick up where the prior query ended.

d.    For example, if a SOA query to the NPAC returns exactly 150 records and the last SV returned was TN '303-555-0150' with SVID of 1234.  The filter used on the next query would be:

All SVs where ((TN > 303-555-0150) OR (TN = 303-555-0150 AND SVID > 1234).

The NPAC does support OR filters.

e.    Once the results from the NPAC returns less than 150 records, the SP can assume they received all records in the requested query.

**01/02/02** – NPAC R4.0 as submitted to the LLC in 2000 is not going forward.  This change order has been moved back into the “accepted” section of this document.

Implemented in FRs 3.3.0a, IIS 3.3.0a and GDMO 3.3.0.

**Related Release:**

Implemented in FRs 3.3.0a, IIS 3.3.0a and GDMO 3.3.0.

**Status:** Implemented