

NLS - Number Lookup Server

The Sansay NLS (Number Lookup Server) is part of the ROME product family and provides telecom service providers with a copy of local number portability (LNP) databases.

Routing with accurate LNP data is increasingly important; especially as 40% or more of US bound calls are directed to ported numbers.

Deploying the NLS brings service providers the following benefits:

- Reduce termination costs as much as 30%
- Reduce per dip charges vs. lookup services
- Reduce costly billing issues and disputes
- Speed network-wide call performance
- Speed call setup and reduce post-dial delay

Functional Overview

The NLS is a high capacity, stateless database server. Session controllers or softswitches query the NLS using the SIP protocol.

The NLS sends back a 3xx Redirect with corrected destination call parameters for calls where the original dialed number was ported. Routing system can use the corrected destination parameters to make optimal routing determinations.

The NLS integrates seamlessly with Sansay VSXi session controllers, third party SBCs, and softswitches.

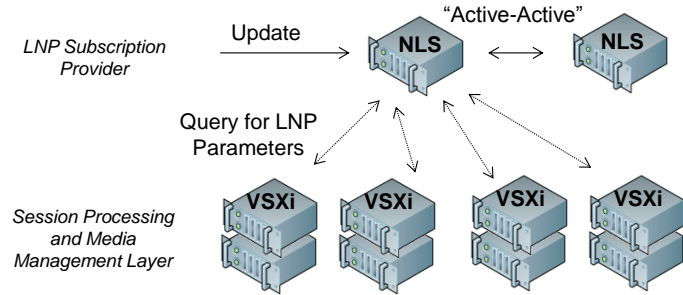
Leading Subscription Services Supported

The NLS downloads local number portability information on a scheduled basis from leading subscription providers such as the Neustar SIP-IX.

Through regular updates, the NLS provides a near real-time representation of ported number information, assuring telecom service providers of the most accurate routing information possible.

Hardware

The system is delivered as an appliance on Sansay-configured hardware, the RXP4 with 24 core CPU and 96 G of RAM and RAID 1TB HDD.



Above: Sansay NLS Provides LNP Parameters for Routing Session Control Nodes

System Performance

The NLS can improve network-wide call switching performance and reduce post-dial delay (PDD). Queries to the NLS via managed connectivity returns 3xx Redirects more quickly than “dips” to subscription databases outside the operator’s network.

The NLS supports the most challenging call processing environments with ground-breaking performance:

- 20,000 queries per second
- 300 million LNP records

The NLS achieves these high performance metrics by maintaining lookup data in system RAM, making information more quickly accessible.

System Redundancy

The NLS uses a cluster-based redundancy scheme, providing both high availability and the option for geographic redundancy.

Servers are deployed in an “Active-Active” relationship with primary systems typically deployed at a carrier’s Super-POP or core network hub. Load-balancing between systems can be setup across redundant sites.

Summary

The NLS enables telecom service providers to achieve termination cost savings, operational cost savings, and improve network-wide performance.

Contact Sansay at sales@sansay.com today for a consultation with Sansay engineering staff to understand the capabilities of NLS and how it can benefit telecom service providers.