

API Reference Guide

LIDB/CNAM Provisioning Service

Contents

Contents 2

Summary of Revisions 4

LIDB/CNAM Provisioning Service 5

 Overview 5

 LIDB/CNAM Provisioning WSDL Operations 5

 Data Types 7

 CNAM Elements 8

 LIDB Elements 9

 BNA Elements 11

 Device/Plan Elements 16

 Responses 18

Copyright © 2017 Neustar, Inc. All rights reserved.

The information in this document belongs to Neustar. It may not be used, reproduced or disclosed without the written approval of Neustar.

DISCLAIMER AND LIMITATION OF LIABILITY

Neustar has made efforts to check the accuracy and completeness of the information in this document. However, Neustar makes no warranties of any kind (whether express, implied or statutory) with respect to the information contained herein. Neustar assumes no liability to any party for any loss or damage (whether direct or indirect) caused by any errors, omissions, or statements of any kind contained in this document.

Further, Neustar assumes no liability arising from the application or use of the product or service described herein and specifically disclaims any representation that the products or services described herein do not infringe upon any existing or future intellectual property rights. Nothing herein grants the reader any license to make, use, or sell equipment or products constructed in accordance with this document. Finally, all rights and privileges related to any intellectual property right described herein are vested in the patent, trademark, or service mark owner, and no other person may exercise such rights without express permission, authority, or license secured from the patent, trademark, or service mark owner. Neustar reserves the right to make changes to any information herein without further notice.

Trademarks

The Neustar logo and other trademarks, service marks, and designs are registered or unregistered trademarks of Neustar, Inc. and its subsidiaries in the United States and in foreign countries. All other trademarks are property of their respective owners.

This document may describe features and/or functionality that are not present in your software or your service agreement. Contact your account representative to learn more about what is available with this Neustar product. If you need help using this product, contact customersupport.

communications@neustar.biz 1-844-638-7778

Publication date: September 2017

Summary of Revisions

The following changes were made to this document since the last version

Revision Date	Description
July 2014	Initial draft.
September 2014	<p>Edits from TS review:</p> <p>For Device/Plan: Removed “Single quote” as an invalid character for all data elements.</p> <p>For BNA: Changed first name and last name max record length to 28 (was 29).</p> <p>Removed “comma” as invalid character for all data elements other than first name and last name.</p> <p>Added backslash as an invalid character for all data elements. Changed service StartDate format to included dashes: YYYY-MM-DD.</p>
Feb. 2016	<p>Converted to Word.</p> <p>Response Code table added (needs review by Development)</p>
July 2017	<p>Removed reference to VPN.</p> <p>Removed link to w3schools.</p> <p>Removed Navigating this Document section</p> <p>Removed CNAM from first paragraph on page 8</p> <p>Removed LIDB from first paragraph on page 10</p> <p>Updated Response Code table – Removed Response Codes 08, 10, 11, 14, 17, 20, 21, 28, 32, 35, 36, CA, CD. Added response codes 24, 25, 29, 37.</p> <p>CNAM Field Codes: Added CT and 00; Deleted 24; Changed 21, 22, 23.</p> <p>Device Plan Codes: Added D1; Changed D3, DG and DH</p>
September 2017	<p>The following revisions were made:</p> <p>For BNA: Changed first name and last name max record length to 29 (was 28).</p> <p>For all elements: Changed “_DELETE_” to “DELETE” for all enumerated lists that include the delete option.</p> <p>Added the response data type as a complex type, comprised of responseCode and responseCodeDescription.</p> <p>Changed the lidbRequestInfo to remove the Class of Service Indicator element.</p> <p>Corrected links in the document.</p>

LIDB/CNAM Provisioning Service

This API Reference Guide describes the operations and data types of the LIDB/CNAM Provisioning Service API.

Overview

The LIDB/CNAM Provisioning Service API is a Web service which provides customers the ability to store, query, and update data stored in the Neustar database.

The API supports a sessionless connection with the user credentials being part of each transaction record.

Connectivity and System Access

Upon request, the Neustar Service Deployment team will set-up connectivity.

Access to the system is authenticated by credentials submitted as a part of each message sent to the Neustar system.

Related Resources

More information about the Neustar LIDB/CNAM service can be found in the *Database Services User Guide*, available from the NeustarConnect Product Documentation portal. Customers can obtain access to the guide by contacting Customer Support or their account manager.

LIDB/CNAM Provisioning WSDL Operations

The WSDL file defines three operations which provide the ability to send requests to the Neustar system to either add, change, delete, or query LIDB/CNAM data residing in the Neustar system:

- **activate** - add or update a TN
- **deActivate** - delete a TN
- **query** - request TN information

activateRequest

The **activateRequest** operation adds or updates TN information in the Neustar database. The **companyId**, **userName**, and **password** are used together to provide authentication for secure system access.

TN information is *added* to the database when the submitted request contains a TN that does not

currently exist in the Neustar system.

TN information is *updated* when the submitted request contains a TN that already exists in the Neustar system. Any data elements that are populated will replace those values currently in the Neustar database. If a data element is left empty for an update request, the existing value in the database is retained.

Element	Type	Brief Description
companyId	companyId	Required. The Neustar-assigned company ID.
userName	userName	Required. The Neustar-assigned userName of the user accessing the system.
password	password	Required. The Neustar-assigned password for accessing the system.
TN	TN	Required. The telephone number.
OCN	OCN	Required. The OCN.
clientTransactionId	clientTransactionId	Required. An identifier for the transaction, created on the client side.
versionId	versionId	Required. The software version.
cnamRequestInfo	cnamRequestInfo	Optional. CNAM data elements.
lidxRequestInfo	lidxRequestInfo	Optional. LIDB data elements.
bnarequestInfo	bnarequestInfo	Optional. BNA data elements.
devicePlanRequestInfo	devicePlanRequestInfo	Optional. Device/Plan data elements.

deActivateRequest

The **deActivateRequest** operation removes a telephone number from the Neustar database.

Element	Type	Brief Description
companyId	companyId	Required. The Neustar-assigned company ID.
userName	userName	Required. The Neustar-assigned userName of the user accessing the system.
password	password	Required. The Neustar-assigned password for accessing the system.
TN	TN	Required. The telephone number to remove.

clientTransactionId	clientTransactionId	Required. An identifier for the transaction, created on the client side.
---------------------	-------------------------------------	--

queryRequest

The **queryRequest** operation sends a request to the Neustar system to return information stored in the Neustar system for a specified telephone number.

Element	Type	Brief Description
companyId	companyId	Required. The Neustar-assigned company ID.
userName	userName	Required. The Neustar-assigned userName of the user accessing the system.
password	password	Required. The Neustar-assigned password for accessing the system.
TN	TN	Required. The telephone number.
clientTransactionId	clientTransactionId	Required. An identifier for the transaction, created on the client side.

Data Types

The LIDBCNAM Provisioning API contains the data types described in the following sections.

Element	Type	Description
companyId	token (4-8)	Assigned by Neustar to identify the company.
userName	token (3-50)	Assigned by Neustar. Identifies the user accessing the system.
password	token (8-20)	Assigned by Neustar. A unique password to provide secure access to the Neustar system.
TN	token (10)	Required. The 10-digit telephone number. The first number must be between 2 and 9. If the TN is missing, the transaction is rejected.
OCN	token (4)	Required. The Operating Company Number of the owner of the telephone number.
clientTransactionId	token (1-16)	Required. Submitted by the client. Uniquely identifies the request. It is returned unchanged in the resulting response.
versionId	token (1)	Neustar-assigned version ID of the release of the service.

CNAM Elements

cnamRequestInfo

The information used for the **cnamRequestInfo** type. The following table summarizes the data elements. See the sections following the table for details on each data element.

Element	Type	Brief Description
CNAM	CNAM	The calling name string
cnamPrivacyIndicator	cnamPrivacyIndicator	Indicates if the caller name is displayed or not. Required if CNAM is used.
extendedCNAMFirst Name	extendedCNAMFirstName	The first name for the extended calling name string
extendedCNAMLastName	extendedCNAMLastName	The last name for the extended calling name string
extendedCnam BusinessName	extendedCNAMBusinessName	The business name for the extended calling name string

Data Element Details

Element	Type	Description
CNAM	normalized string (0-15)	<p>Required. Indicates the CNAM string to be displayed; up to 15 characters. At least one character must be alpha. The TN cannot be used as the calling name.</p> <p>The Calling Name String cannot contain a double quotation mark, pipe, or unprintable characters (ascii < 32), and cannot begin with an asterisk or space.</p> <p>Refer to the <i>User Guide</i> for further guidance regarding the Calling Name string.</p>
cnamPrivacyIndicator	token (1)	<p>Required. Indicates whether to allow or restrict the CNAM value. Values are:</p> <ul style="list-style-type: none"> A = Allow name to be displayed R = Restrict name from display
extendedCNAMFirstName	token (0-30)	<p>Optional. 30-character extended CNAM string for first name.</p> <p>Must not contain a double quote, pipe, or a leading space.</p>
extendedCNAMLastName	token (0-30)	<p>Optional. 30-character extended CNAM string for last name.</p> <p>Must not contain a double quote, pipe, or a leading space.</p>

Element	Type	Description
extendedCNAMBusinessName	token (0-60)	Optional. 60-character extended CNAM string for the business name. Must not contain a double quote, pipe, or a leading space.

LIDB Elements

lidbRequestInfo

The information used for the **LIDBrequestInfo** type. The following table summarizes the data elements. See the sections following the table for details on each data element.

Element	Type	Description
classOfService	Class of Service	Optional. Indicates the service class. A default value is configurable by request. See the following table for the values. Typically, BUS, RES, CEL are most commonly used.
BNS	BNS	Optional. Billed Number Screening indicator
RAO	RAO	Optional. Revenue Accounting Office code

Table 1-1 Class of Service Codes

Code	Telcordia Technologies Description	Code	Telcordia Technologies Description
	Blank is valid	AQN	Auto quote-without tax
SBN	Special billing number	AQT	Auto quote-with tax
BUS	BUS Plain old telephone service (POTS) line-business	DML	Dormitory line
RES	Plain old telephone service (POTS) line-residential	CXL	Centrex line
PBC	LEC public-standard interface-postpay overtime	PBX	PBX line
PLR	POTS line-residential-message rate 1	PIP	Prison (IPP)
PRM	POTS line-residential-message rate 2	WAT	WATS line
SPC	LEC semi-public	CEL	Cellular
PBF	POTS line-business-flat rate	PGR	Pager
PBM	POTS line-business-message rate 1	PCS	Personal Communication Service (PCS)
PBN	Coinless (non-IPP)	FGA	Feature Group A
YIP	Coinless (IPP)	MOB	Mobile

Code	Telcordia Technologies Description	Code	Telcordia Technologies Description
PTC	LEC prepaid telecommunications card station	SBB	LEC public special billing-postpay overtime
PLB	POTS line-business-message rate 2	SBA	LEC public special billing-prepay overtime
LPS	LEC public-standard interface-prepay overtime	INI	Public-incompatible network interface
DAI	LEC public-alternate interface	CLO	Cellular-rate 1
ICS	IC public-standard interface	CLT	Cellular-rate 2
ICA	IC public-alternate interface	ONE	POTS line-business-single line
PRF	POTS line-residential-flat rate	MUL	POTS line-business-multi-line
VQN	Voice quote-without tax	PPY	Public-postpay
VQT	Voice quote-with tax	HOS	Hospital
ISI	IPP-standard interface	PSN	Prison (non-IPP)
IAI	IPP-alternate interface	DELETE	Use to remove this value on an update

Element	Type	Description
BNS	enumerated list	Optional. Billed Number Screening indicator. If not provided, the default value will be used. (A default value is configurable by request.) Values are: <ul style="list-style-type: none"> ▪ A = Block both third and collect ▪ B = Block third-number only ▪ C = Block collect only ▪ D = Allow both third and collect calls. ▪ DELETE= Remove the existing value
RAO	token (0-3)	Optional. The Revenue Accounting Office code: Neustar will populate the field with the Telcordia-assigned RAO, per industry standards. If populated with alphanumeric data, Neustar populates the BSP (Billing Service Provider) field (visible on the LIDB audit) and the default RAO applies, per industry guidelines. Cannot be 000.

BNA Elements

bnarequestinfo

The billing name and address information used for the **bnarequestinfo** type. The following table summarizes the data elements. See the sections following the table for details on each data element.

Element	Type	Brief Description
firstName	firstName	First name of subscriber; always combined with lastName for a total of 28 characters.
lastName	lastName	Last name of subscriber; always combined with firstName for a total of 28 characters.
businessName	businessName	Business name, if applicable.
address	address	Billing address; street number and name.
addressTwo	addressTwo	Additional billing address line; suite or apt. number for example.
city	city	City of billing address.
state	state	2-character state abbreviation.
zip	zip	ZIP code of billing address.
companyType	companyType	The type of carrier.
lineTechnologyType	lineTechnologyType	The type of line.
serviceStartDate	serviceStartDate	The date of service initiation.
thirdPartyBillBlock	thirdPartyBillBlock	Whether to block third party calls.

Data Element Details

Element	Type	Description
firstName	token (0-29)	Invalid characters are: comma, double quote, backslash, pipe, or a leading space. DELETE= Remove the value
lastName	token (0-29)	Invalid characters are: comma, double quote, backslash, pipe, or a leading space. DELETE= Remove the value
businessName	token (0-30)	Optional. The name of the business if applicable. Invalid characters are: double quote, backslash, pipe, or a leading space. DELETE= Remove the value

Element	Type	Description
address	token (0-30)	Optional. Address of the subscriber. Invalid characters are: double quote, backslash, pipe, or a leading space. DELETE= Remove the value
addressTwo	token (0-30)	Optional. Second address line, if needed. Invalid characters are: double quote, backslash, pipe, or a leading space. DELETE= Remove the value
city	token (0-28)	Optional. City of the subscriber's address. Invalid characters are: double quote, backslash, pipe, or a leading space. DELETE= Remove the value
state	enumerated list	Optional. State of the subscriber's address. An enumeration with valid values as shown in the Abbreviation columns in Table 1-2. Invalid characters are: double quote, backslash, pipe, or a leading space. DELETE= Remove the value
zip	token (0-9)	Optional. The ZIP code of the subscriber's address. Must be either a 5-digit or 9-digit ZIP code. DELETE= Remove the value
companyType	enumerated list	Optional. The type of carrier associated with the TN. Values are: 001 = LEC 002 = Independent 003 = Unbundler 004 = Reseller 005 = UNE-P 006 = Wireless 007 = VoIP 008 = MVNO 009 = Cable 010 = Power 011 = Satellite DELETE= Remove the value

Element	Type	Description
lineTechnologyType	enumerated list	Optional. The line technology associated with the TN. Values are: <ul style="list-style-type: none"> • 001 = PSTN • 002 = Wireless • 003 = Landline VoIP • 004 = Wireless VoIP • 005 = Hybrid • 006 = Other • DELETE = Remove the value
serviceStartDate	token (10)	Optional. YYYY-MM-DD format DELETE= Remove the value
thirdPartyBillBlock	enumerated list	Optional. Indicates whether to allow or block bill to third party calls. Values are: <ul style="list-style-type: none"> ▪ 001 = Allow ▪ 002 = Block ▪ 003 = Allow communications charges only ▪ DELETE = Remove the value

Table 1-2 Valid State Values

State/Possession	Abbreviation	State/Possession	Abbreviation
ARMED FORCES: AMERICAS	AA	MISSOURI	MO
ARMED FORCES: AFRICA, CANADA, EUROPE, MIDDLE EAST	AE	Northern Mariana Islands	MP
ARMED FORCES: PACIFIC	AP	MISSISSIPPI	MS
ALABAMA	AL	MONTANA	MT
ALASKA	AK	NEBRASKA	NE
AMERICAN SAMOA	AS	NEVADA	NV
ARIZONA	AZ	NEW HAMPSHIRE	NH
ARKANSAS	AR	NEW JERSEY	NJ

ALAND ISLANDS	AX	NEW MEXICO	NM
CALIFORNIA	CA	NEW YORK	NY
COLORADO	CO	NORTH CAROLINA	NC
CONNECTICUT	CT	NORTH DAKOTA	ND
DELAWARE	DE	OHIO	OH
DISTRICT OF COLUMBIA	DC	OKLAHOMA	OK
FEDERATED STATES OF MICRONESIA	FM	OREGON	OR
FLORIDA	FL	PALAU	PW
GEORGIA	GA	PENNSYLVANIA	PA
GUAM	GU	PUERTO RICO	PR
HAWAII	HI	RHODE ISLAND	RI
IDAHO	ID	SOUTH CAROLINA	SC
ILLINOIS	IL	SOUTH DAKOTA	SD
INDIANA	IN	TENNESSEE	TN
IOWA	IA	TEXAS	TX
KANSAS	KS	UTAH	UT
KENTUCKY	KY	VERMONT	VT
LOUISIANA	LA	VIRGIN ISLANDS	VI
MAINE	ME	VIRGINIA	VA
MARSHALL ISLANDS	MH	WASHINGTON	WA

MARYLAND	MD	WEST VIRGINIA	WV
MASSACHUSETTS	MA	WISCONSIN	WI
MICHIGAN	MI	WYOMING	WY
MINNESOTA	MN	Remove state value	DELETE

Device/Plan Elements

The device and subscriber plan information used for the **devicePlanRequestInfo** type. The following table summarizes the data elements. See the sections following the table for details on each data element.

devicePlanRequestInfo

The device type and service provider plan type.

Element	Type	Description
callingPlan	callingPlan	The type of calling plan.
subscriptionType	subscriptionType	The type of subscription.
deviceSerialNo	deviceSerialNo	Serial number of the device (handset, phone).
deviceOem	deviceOem	Original Equipment Manufacturer of the device (handset, phone).
deviceModel	deviceMode	Model of the device (handset, phone).
customData	customData	Array of 15 elements. Reserved for future use.

Data Element Details

Element	Type	Description
callingPlan	enumerated list	<p>Optional. The type of calling plan for the account associated with the TN.</p> <ul style="list-style-type: none"> ▪ 1 = Individual ▪ 2 = Family Plan (primary line*) ▪ 3 = Family Plan (other line*) ▪ 4 = Business ▪ DELETE = Remove the value Blank is ignored. <p>*Note: On a Family Plan, the primary account holder is typically the primary line. The “other” lines are simply the other members of the family share plan.</p>

Element	Type	Description
subscriptionType	enumerated list	<p>Optional. The type of subscription for the account associated with the TN.</p> <ul style="list-style-type: none"> ▪ 1 = Contract (post-paid) ▪ 2 = Non-contract (pre-paid) ▪ 3 = Lifeline ▪ 4 = Free ▪ DELETE= Remove the value Blank is ignored. <p>Note: An example of a "free" subscription would be an Internet telephony service that provides its users free calling services.</p>
deviceSerialNo	token (0-20)	<p>Optional. The globally unique number identifying the mobile phone.</p> <p>Note: This is the International Mobile Equipment Identity (IMEI), Mobile Equipment Identifier (MEID) or Electronic Serial Number (ESN).</p> <p>Double quote, pipe, back slash, unprintable characters (ascii < 32), or a leading space are invalid values.</p>
deviceOem	token (0-20)	<p>Optional. The Original Equipment Manufacturer of the device. For example, Motorola, LG, Samsung, etc.</p> <p>Double quote, pipe, back slash, unprintable characters (ascii < 32), or a leading space are invalid values.</p>
deviceModel	token (0-20)	<p>Optional. The model of the device.</p> <p>Double quote, pipe, back slash, unprintable characters (ascii < 32), or a leading space are invalid values.</p>
customData	token (0-25)	<p>For future use only.</p> <p>An array of up to 15 string elements with a maximum length of 25.</p>

Responses

activateResponse

The information returned by the Neustar system in response to the **activate** request.

Element	Type	Description
response	response	Status of the request.
TN	TN	Echoed from the request.
clientTransactionId	clientTransactionId	Echoed from the request.

deActivateResponse

The information returned by the Neustar system in response to the **deActivate** request.

Element	Type	Description
response	response	Status of the request.
TN	TN	Echoed from the request.
clientTransactionId	clientTransactionId	Echoed from the request.

queryResponse

The information returned by the Neustar system in response to the **query** request.

Element	Type	Description
response	response	Status of the request.
TN	TN	Echoed from the request.
clientTransactionId	clientTransactionId	Echoed from the request.
OCN	OCN	Echoed from the request.
cnamRequestInfo	cnamRequestInfo	The returned CNAM data.
lidbRequestInfo	lidbRequestInfo	The returned LIDB data.
bnarequestInfo	bnarequestInfo	The returned BNA data.
devicePlanRequestInfo	devicePlanRequestInfo	The returned Device/Plan data.

Data Element Details

response

The response is comprised of the responseCode and responseCodeDescription.

Element	Type	Description
responseCode	token	An alphanumeric code for the response as defined in the table in the following section.
responseCodeDescription	token (0-100)	A text description of the response as defined in the table in the following section.

Response Codes and Descriptions

The following table lists the possible codes and descriptions returned in the response.

Table 1-3 Response Codes

Code	Description
00	Query Successful, data follows.
01	Query Successful, no data found.
02	Insert successful.
03	Insert successful, processed as update.
04	Update successful.
05	Update successful, processed as insert.
06	Delete Successful.
07	Transaction successful, no change necessary.
10	Sorry. An unexpected error has occurred.
11	Invalid Request Format.
14	Company is inactive.
15	Username or password is invalid.
16	Account is locked
20	Company does not have rights to this line number.
21	Company does not have rights to this number.
22	Company does not have rights to this number.
23	Company does not have rights to this number.
25	Industry record not found for this TN/NPA-NXX.
26	Missing or Invalid TN
27	Missing or invalid OCN.

Code	Description
29	One or more packages must be designated for insert and update actions.
30	Invalid Company ID.
33	Invalid OCN, must be virtual.
CNAM field Codes	Description
C1_	Invalid CNAM, Extended Caller First Name must contain at least one alpha value
CB_	Invalid CNAM, Presentation Indicator is invalid.
CC_	Invalid CNAM, Caller name is missing.
CE_	Invalid CNAM, Invalid characters in Caller Name string.
CF_	Invalid CNAM, Caller Name must contain at least one alpha value
CG_	Invalid CNAM, Caller Name failed profanity screening.
CH_	Invalid CNAM, Extended Caller First Name exceeds length
CI_	Invalid CNAM, Invalid characters in Extended Caller First Name string
CJ_	Invalid CNAM, Extended Caller First Name must contain at least one alpha value
CK_	Invalid CNAM, Extended Caller First Name failed profanity screening
CL_	Invalid CNAM, Extended Caller Last Name exceeds length
CM_	Invalid CNAM, Invalid characters in Extended Caller Last name string
CN_	Invalid CNAM, Extended Caller Last Name must contain at least one alpha value
CO_	Invalid CNAM, Extended Caller Last Name failed profanity screening
CP_	Invalid CNAM, Extended Caller Business Name exceeds length
CQ_	Invalid CNAM, Invalid characters in Extended Caller Business Name string
CR_	Invalid CNAM, Extended Caller Business Name failed profanity screening
CS_	Invalid CNAM, Extended Caller Business Name cannot be the same as the phone number
BNA Codes	
BA	Invalid BNA, Last Name exceeds Length.
BB	Invalid BNA, Invalid characters in Last Name string.
BC	Invalid BNA, Last Name required when First name is provided.
BD	Invalid BNA, First Name exceeds length.
BE	Invalid BNA, Invalid characters in First Name string.
BF	Invalid BNA, First Name is required when Last Name is provided.

Code	Description
BG	Invalid BNA, Combined First and Last names exceeds length.
BH	Invalid BNA, Business name exceeds length.
BI	Invalid BNA, Invalid characters in Business Name string.
BJ	Invalid BNA, Address exceeds length.
BK	Invalid BNA, Invalid characters in Address string.
BL	Invalid BNA, Address2 exceeds length.
BM	Invalid BNA, Invalid characters in Address2 string.
BN	Invalid BNA, City exceeds length.
BO	Invalid BNA, Invalid characters in City string
BP	Invalid BNA, State is invalid
BQ	Invalid BNA, Zip does not meet length requirements
BR	Invalid BNA, Invalid characters in Zip string
BS	Invalid BNA, Service Start Date is invalid
BT	Invalid BNA, Invalid characters in Service Start Date
BU	Invalid BNA, Company Type is invalid
BV	Invalid BNA, Invalid characters in Company Type string
BW	Invalid BNA, Line Technology Type is invalid
BX	Invalid BNA, Invalid characters in Line Technology Type string
BY	Invalid BNA, Third-Party Bill Block Indicator is invalid
BZ	Invalid BNA, Invalid characters in Third-Party Bill Block string
LIDB Codes	Description
LA	Invalid LIDB, BNS is invalid.
LB	Invalid LIDB, Class of Service indicator is invalid
LC	Invalid LIDB, Revenue Accounting Office string does not meet length requirements
LD	Invalid LIDB, Invalid characters in Revenue Accounting Office string
LE	Invalid LIDB, Revenue Accounting Office string is invalid
LF	Invalid LIDB, PIN String is invalid.
LG	Invalid LIDB, PIN Action is invalid.

Code	Description
LH	Invalid LIDB, PIN Action requires Card Type.
LI	Invalid LIDB, Card Type is missing or invalid.
LJ	Invalid LIDB, LSCNB indicator is invalid.
LK	Invalid LIDB, Usage Category is invalid.
LL	Invalid LIDB, Service Denial Indicator is invalid.
LM	Invalid LIDB, Collect Bill Indicator is invalid.
LV	Invalid LIDB, IC Indicator/IC combination is invalid.
LW	Invalid LIDB, INC Indicator/INC combination is invalid.
LW_	Invalid LIDB, PIN1 Type is required
LX	Invalid LIDB, Treatment Indicator is invalid.
LY	Invalid LIDB, Foreign Language ID is invalid.
LZ	Invalid LIDB, ILP Indicator is invalid.
L1	Invalid LIDB, ILP Indicator and Code mismatched.
L2	Invalid LIDB, Additional Originating Credit Card Indicator is invalid.
L3	Invalid LIDB, Additional Originating, 3rd Number Bill Indicator is invalid.
L4	Invalid LIDB, Additional Originating Spec BNS Indicator is invalid.
L5	Invalid LIDB, Additional Originating Sent Paid Indicator is invalid.
L6	Invalid LIDB, Additional Originating Bill SVC Indicator is invalid.
L7	Invalid LIDB, Xensblk is invalid.
Device Plan Codes	Description
DA	Invalid Device Plan, Calling Plan is invalid.
DB	Invalid Device Plan, Subscription Type is invalid.
DC	Invalid Device Plan, Serial Number exceeds length.
DD	Invalid Device Plan, Invalid characters in Serial Number string.
DF	Invalid Device Plan, OEM exceeds length.
DG	Invalid Device Plan, Invalid characters in OEM string.
DH	Invalid Device Plan, Model exceeds length.
DI	Invalid Device Plan, invalid characters in Model string.

Table 1-4 Error Messages

Level	Code	Error Message	Possible cause
TOP LEVEL	11_	Invalid Request Format	-Record is blank or null -Record contains null characters -Record type or subtype is invalid
	30_	Missing or invalid TN	-Line number must contain numeric characters only -NPA-NXX is not valid If format is NOT in the following: [2-9][0-9]{2}[2-9][0-9]{6}
	31_	Missing or invalid OCN	OCN is missing
	28_ 29_	Industry record not found for this TN/NPA-NXX	NPA-NXX is not valid If format is in the following: [2-9][0-9]{2}[2-9][0-9]{6}, but not found in industry tables
	22_	Company does not have rights to this line number	-Neustar cannot validate that your company owns the line number -OCN not valid, use LERG-assigned OCN -TN ownership cannot be validated or the line number was auto-deleted
	LE_	Invalid LIDB, Revenue Accounting Office string is invalid	RAO must be all spaces or all alphanumeric
	32_	Invalid or missing Transaction Code	Action code must be I, C, or D
	14_	Company is inactive	New Error Message at Top Level
	33_	One or more packages must be designated for insert and update actions	New Error Message at Top Level
LIDB	LU_	Invalid LIDB, PIN1 Key must correspond to Card Type	PIN key must correspond to card type
	LT_	Invalid LIDB, PIN1 Key is invalid	PIN key must be 0, 1, or 2
	LI_	Invalid LIDB, first position value in PIN1 is invalid	PIN String cannot contain 0 or 1 as first character
	LH_	Invalid LIDB, PIN1 is invalid	PIN String is invalid
	LF_	Invalid LIDB, PIN1 action is invalid	PIN Action must be I, C, D, R, S, or space

Level	Code	Error Message	Possible cause
	LJ_	Invalid LIDB, PIN1 Action of C or I requires PIN String	PIN Action of C or I requires PIN String
	LW_	Invalid LIDB, PIN1 Type is required	PIN Action requires Card Type
	LK_	Invalid LIDB, PIN1 Type is invalid	Card Type must be U, D, C, R, or space
	LA_	Invalid LIDB, BNS is invalid	Invalid BNS code
	LB_	Invalid LIDB, Class of Service indicator is invalid	Class of Service is invalid
	LM_	Invalid LIDB, PIN1 Usage Category is invalid	Usage Category is invalid
	LV_	Invalid LIDB, PIN1 Usage Category requires PIN Type	Usage category requires have PIN Type
	LL_	Invalid LIDB, PIN1 Service Denial is invalid	Service denial Indicator must be N, P, or space
	LC_	Invalid LIDB, Revenue Accounting Office string does not meet length requirements	
	LE_	Invalid LIDB, Revenue Accounting Office string is invalid	value = "000"
	LG_	Invalid LIDB, PIN1 does not meet length requirements	
	LX_	Invalid LIDB, PIN1 and PIN2 values cannot be the same	
CNAM	CB_	Invalid CNAM, Presentation Indicator is invalid	Presentation indicator must be A, R, or space
	CG_	Invalid CNAM, Caller Name failed profanity screening	Calling name cannot contain profanity
	CC_	Invalid CNAM, Caller name is missing	Blank CNAM name with privacy indicator
	CF_	Invalid CNAM, Caller Name must contain at least one alpha value	Caller name cannot equal asterisk
	CF_	Invalid CNAM, Caller Name must contain at least one alpha value	Caller name cannot be same as phone number
	41_	Tag Name is invalid	Verification Data tag name is invalid
	CE_	Invalid CNAM, Invalid characters in Caller Name string	

Level	Code	Error Message	Possible cause
	CA_	Invalid CNAM, Presentation Indicator is missing	
	CP_	Invalid CNAM, Extended Caller Business Name exceeds length	
	CQ_	Invalid CNAM, Invalid characters in Extended Caller Business Name	
	CR_	Invalid CNAM, Extended Caller Business Name failed profanity screening	
	CS_	Invalid CNAM, Extended Caller Business Name cannot be the same as the phone number	
	C1_	Invalid CNAM, Extended Presentation Indicator is invalid	
OLNS	LB_	Invalid LIDB, Class of Service indicator is invalid	Class of Service is invalid
	LA_	Invalid LIDB, BNS is invalid	Invalid BNS code
		NOT APPLCABLE	Invalid LSCNB indicator
	OD_	Invalid OLNS, Originating Collect Billing indicator is invalid	Invalid collect bill indicator
	OE_	Invalid OLNS, Originating 3rd Number Billing indicator is invalid	Invalid third number indicator
	OF_	Invalid OLNS, Originating Non-Toll Call indicator is invalid	Invalid local nontoll indicator
	OG_	Invalid OLNS, Originating Credit Card indicator is invalid	Invalid credit card indicator
	OH_	Invalid OLNS, Originating Free Directory Assistance indicator is invalid	Invalid free DA indicator
	OI_	Invalid OLNS, Originating Special Billed Number Screening indicator is invalid	Invalid special BNS indicator
	OJ_	Invalid OLNS, Originating Sent Paid indicator is invalid	Invalid sent PD indicator
	OL_	Invalid OLNS, Originating Directory Assistance Call Completion indicator is invalid	Invalid DACC indicator
	ON_	Invalid OLNS, Originating Interexchange Carrier is invalid	Invalid IC ind/IC combination

Level	Code	Error Message	Possible cause
	OP_	Invalid OLNS, Originating International Carrier is invalid	Invalid INC ind/INC combination
	OR_	Invalid OLNS, Treatment indicator is invalid	Invalid treatment indicator
	OQ_	Invalid OLNS, Foreign Language ID is invalid	Invalid foreign language ID
		REPEAT OF CNAM ERROR CODE	Calling name cannot contain profanity
	CU_	Invalid CNAM, Action code and CNAM action does not match	Mismatched action code and CNAM action
		REPEAT OF CNAM ERROR CODE	Blank CNAM name with privacy indicator
	OY_	Invalid OLNS, Intra-LATA Pre-Subscription indicator is invalid	ILP indicator is not N, I, D, E, T, or space
	OZ_	Invalid OLNS, Intra-LATA Pre-Subscription Code is invalid	ILP code is not 4 digits
	OZ_	Invalid OLNS, Intra-LATA Pre-Subscription Code is invalid	ILP indicator and code mismatch
	OS_	Invalid OLNS, Additional Originating Credit Card indicator is invalid	Invalid addl orig credit card indicator
	OT_	Invalid OLNS, Additional Originating 3rd Number indicator is invalid	Invalid addl orig 3rd num bill indicator
	OU_	Invalid OLNS, Additional Originating Special Billed Number Screening indicator is invalid	Invalid addl orig spec BNS indicator
	OV_	Invalid OLNS, Additional Originating Sent Paid indicator is invalid	Invalid addl orig sent paid indicator
	OW_	Invalid OLNS, Additional Originating Billing Services/Spare indicator is invalid	Invalid addl orig bill svc indicator spare
		REPEAT OF CNAM ERROR CODE	Caller name cannot equal asterisk
	OX_	Invalid OLNS, Xensblk is invalid	Invalid xensblk
		REPEAT OF CNAM ERROR CODE	Caller name cannot be same as phone number
	OM_	Invalid OLNS, Originating Interexchange Carrier indicator is invalid	

Level	Code	Error Message	Possible cause
	OO_	Invalid OLNS, Originating International Carrier indicator is invalid	
BNA	41_	Tag Name is invalid	Verification Data tag name is invalid
	BA_	Invalid BNA, Last Name exceeds Length	Verification Data field too long
	BD_	Invalid BNA, First Name exceeds length	Verification Data field too long
	BH_	Invalid BNA, Business name exceeds length	Verification Data field too long
	BL_	Invalid BNA, Address2 exceeds length	Verification Data field too long
	BN_	Invalid BNA, City exceeds length	Verification Data field too long
	BB_	Invalid BNA, invalid characters in Last Name string	Verification Data contains invalid character
	BE_	Invalid BNA, invalid characters in First Name string	Verification Data contains invalid character
	BI_	Invalid BNA, invalid characters in Business Name string	Verification Data contains invalid character
	BK_	Invalid BNA, invalid characters in Address string	Verification Data contains invalid character
	BM_	Invalid BNA, invalid characters in Address2 string	Verification Data contains invalid character
	BO_	Invalid BNA, invalid characters in City string	Verification Data contains invalid character
	BR_	Invalid BNA, invalid characters in Zip string	Verification Data contains invalid character
	BT_	Invalid BNA, invalid characters in Service Start Date	Verification Data contains invalid character
	BV_	Invalid BNA, invalid characters in Company Type string	Verification Data contains invalid character
	BX_	Invalid BNA, invalid characters in Line Technology Type string	Verification Data contains invalid character
	BZ_	Invalid BNA, invalid characters in Third-Party Bill Block string	Verification Data contains invalid character
	BP_	Invalid BNA, State is invalid	Verification Data contains invalid value

Level	Code	Error Message	Possible cause
	BS_	Invalid BNA, Service Start Date is invalid	Verification Data contains invalid value
	BU_	Invalid BNA, Company Type is invalid	Verification Data contains invalid value
	BW_	Invalid BNA, Line Technology Type is invalid	Verification Data contains invalid value
	BY_	Invalid BNA, Third-Party Bill Block Indicator is invalid	Verification Data contains invalid value
	B1_	Invalid BNA, lastname Tag Value is missing	Verification Data tag has no corresponding value
	B2_	Invalid BNA, firstname Tag Value is missing	Verification Data tag has no corresponding value
	B3_	Invalid BNA, busname Tag Value is missing	Verification Data tag has no corresponding value
	B4_	Invalid BNA, straddress Tag Value is missing	Verification Data tag has no corresponding value
	B5_	Invalid BNA, address2 Tag Value is missing	Verification Data tag has no corresponding value
	B6_	Invalid BNA, city Tag Value is missing	Verification Data tag has no corresponding value
	B7_	Invalid BNA, state Tag Value is missing	Verification Data tag has no corresponding value
	B8_	Invalid BNA, zip Tag Value is missing	Verification Data tag has no corresponding value
	B9_	Invalid BNA, servicedate Tag Value is missing	Verification Data tag has no corresponding value
	B10	Invalid BNA, type Tag Value is missing	Verification Data tag has no corresponding value
	B11	Invalid BNA, linetype Tag Value is missing	Verification Data tag has no corresponding value
	B12	Invalid BNA, billblock Tag Value is missing	Verification Data tag has no corresponding value
	BC_	Invalid BNA, Last Name required when First name is provided	
	BF_	Invalid BNA, First Name is required when Last Name is provided	
	BG_	Invalid BNA, Combined First and Last names exceeds length	
	BJ_	Invalid BNA, Address exceeds length	

Level	Code	Error Message	Possible cause
	BQ_	Invalid BNA, Zip does not meet length requirements	
DEV/ PLAN	DA_	Invalid Device Plan, Calling Plan is invalid	
	DB_	Invalid Device Plan, Subscription Type is invalid	
	DC_	Invalid Device Plan, Serial Number exceeds length	
	DD_	Invalid Device Plan, invalid characters in Serial Number string	
	DE_	Invalid Device Plan, Serial Number is not unique	
	DF_	Invalid Device Plan, OEM exceeds length	
	DG_	Invalid Device Plan, invalid characters in OEM string	
	DH_	Invalid Device Plan, Model exceeds length	
	DI_	Invalid Device Plan, invalid characters in Model string	
	DJ_	Invalid Device Plan, callingplan Tag Value is missing	
	DK_	Invalid Device Plan, subscriptiontype Tag Value is missing	
	DL_	Invalid Device Plan, deviceserialno Tag Value is missing	
	DM_	Invalid Device Plan, deviceoem Tag Value is missing	
	DN_	Invalid Device Plan, devicemodel Tag Value is missing	