



**Loop Qualification System (LQS)
CLEC Pre-Ordering and Ordering Guidelines**

***Loop Qualification System (LQS)
CLEC Pre-Ordering and Ordering Guidelines***

(Version 10, November 15, 2004)



Loop Qualification System (LQS) CLEC Pre-Ordering and Ordering Guidelines

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Loop Qualification System (LQS) CLEC Pre-Ordering and Ordering Guidelines

Chapter 1.0: Introduction

1.1 Purpose and Scope

This Pre-Ordering and Ordering Guide is intended to provide the D/CLEC (Data/Competitive Local Exchange Carrier) facility description and general information specific to processing a request for the service offering described herein. This is an updated version release.

For the remainder of this document, Loop Qualification System will be referred to as LQS. A detailed description of this facility offering will be provided in **Chapter 3.0, Overview**, of this document. The Local Support Manager (LSM) should be contacted regarding questions about the information contained herein.

1.2 Disclaimer Statement

The information contained in this document is subject to change. BellSouth will provide notification of changes through the D/CLEC Notification Process. This guide will be maintained until such time that its content is incorporated into the BellSouth Business Rules – Local Ordering (BBR-LO). The BBR-LO is found at:

<http://www.interconnection.bellsouth.com/guides/html/leo.html>



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1.3 Version History/Control

Any future modifications, enhancements, and/or improvements that are made to this Pre-Ordering and Ordering Guide for LQS will be reflected accordingly in this section of the document.

Section	Date / Version	Description
All	8/27/2002 – Version 3	This document is an original version.
General revision to include instructions for using Address-Based Qualification and enhanced error codes associated with the availability of LQS GUI Version 3.0.	01/16/2003 – Version 4	Updated Version Release
Minor corrections made to entire document, includes conditional Address qualification clarification.	03/19/2003 – Version 5	Updated Version Release
General revision. New service field, reason codes, logic sequence and FAQ's added.	08/25/2003 – Version 6	Updated Version Release
General Revision adding Automatic Forced Refresh of Address Keys, Reminder Message On Address Qualification.	12/01/2003 – Version 7	Updated Version Release
Updated ADSL Speed code chart.	01/27/2004 – Version 8	Updated Version Release
Addition of Sup Field and Address Key, updated ADSL Speed code chart	04/27/2004 – Version 9	Updated Version Release
General Revision. Addition of LQS R16 enhancements.	11/15/2004 – Version 10	Updated Version Release



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Chapter 2.0: Overview

LQS was originally designed as an internal tool utilized by BellSouth and Internet Service Providers (ISPs) reselling BellSouth ADSL (Asymmetric Digital Subscriber Line) Service to determine if a telephone number(s) at a specific service address qualified for BellSouth ADSL Service. Subsequently, LQS access has been made available to any requesting D/CLEC via the Interconnection Agreement. For further specifications on the BellSouth ADSL offering, refer to the BellSouth Access Tariff – FCC (Federal Communications Commission) Number 1. This can be located at the following web address:

<http://cpr.bellsouth.com/pdf/fcc/fcc.htm>

While the information returned via LQS may provide some indication of loop characteristics, it does **not** provide the level of detailed information Mechanized or Manual Loop Makeup (LMU) provides. For more information on BellSouth's Loop Makeup product, refer to the BellSouth LMU CLEC Information Package located at the BellSouth Interconnection Services Web site in the CLEC Products Section at:

<http://www.interconnection.bellsouth.com/guides/html/unes.html>

The Loop Qualification System (LQS) described in this guide is for D/CLECs to utilize when accessing BellSouth's LQS. Additional information can also be obtained by accessing the LQS web site at the following address:

<http://lqs.bellsouth.com>

Note: To access this site, a USER ID and password is required. Information relative to obtaining the User ID and password is contained within this document.

2.1 Telephone Number-Based DSL Loop Qualification

A user can perform an on-line query on up to **five (5)** manually entered telephone numbers simultaneously. The current offering limits a User ID (Identification) to 2,000 qualifications in a 24-hour period. A user can also submit up to 1,000 numbers at once using the **Bulk Submit** utility to submit an ASCII file. The 2,000 number-limitation also apply to bulk submissions.

2.2 Address-Based DSL Loop Qualification

The LQS application can accommodate both Telephone Number-based and Address-based DSL Qualification and therefore replaces any previous version of the LQS Telephone Number-based application.



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Refer to Chapter 4.0 of this document for specific instructions relevant to downloading the desktop GUI (Graphical User Interface) application and the necessary technical notes and API java files.

The information contained in LQS is derived from the Loop Engineering Assignment Data (LEAD) Database and provides a **“best effort”** response regarding a loop’s ability to support BellSouth’s ADSL service.

The LEAD Database is a once-per-month-per-wire-center “snapshot” of the information contained in the Loop Facilities Assignment and Control System (LFACS) Database. 1/30th of all wire centers are updated every day. Currently there is a 98% accuracy rate on returned responses within LQS. LQS **cannot** be guaranteed based solely on the system response. Guaranteed service of BellSouth’s Business Class ADSL does **not** utilize LQS but instead requires a Service Inquiry (SI).



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3.1 Availability

LQS is available within all nine states of the BellSouth region.

3.2 Contract Specific Guidelines

For LQS access to be provided, the D/CLEC must have an Interconnection Agreement that includes the terms and conditions for the service. To establish access to the LQS System, the D/CLEC will contact their CLEC Care Representative. Access to the LQS System will require a minimum of two (2) business days from the date of the request.

If a D/CLEC requests access to LQS and access is **not** already covered by the existing Interconnection Agreement, the Contract Negotiator should be contacted to provide the appropriate amendment.

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Once it has been confirmed that a D/CLEC is authorized via the Local Interconnection Agreement or an amendment has been added to the existing contract to utilize the LQS System, a User Name and Password must be obtained. The sections beginning below list the steps necessary to establish access and utilize the LQS System. Detailed information on the BellSouth LQS application is available at the following web site:

<http://lqs.bellsouth.com/Application.html>

4.1 Establish/Discontinue Access to LQS

The D/CLEC will contact their CLEC Care representative to establish or discontinue access to the LQS System. It is the responsibility of the D/CLEC to provide a User Name. The User Name must consist of eight (8) case-sensitive characters. LQS requires the User ID to reflect the NSP (Network Service Provider) name. In addition to reducing word collision, it is easier to administer because it is more stable than a person's personal name or title. Examples of good User IDs include "abraxis", "dscads1", and "flashcom"; User IDs considered **not** good include "admin", "andrea", and "pguthrie".

A password must be 6 to 12 alpha/numeric characters. For security purposes, it must contain at least one numeric character and one letter. Choose a password that is easy to remember yet difficult for someone else to guess. Passwords **are** case-sensitive.

A "difficult to guess" example could be FoxNBear23; "network", "names of people", "famous places", and "derivatives of the company name are relatively easy to guess.

This information will be furnished to BellSouth at the time the request is initiated. Once the request is initiated, it will take a minimum of two (2) business days to get the access established.

If it becomes necessary to discontinue the password and delete the account in the LQS System, the D/CLEC is responsible for contacting his/her LSM. The User Name on the account to be discontinued must be furnished at the time the request is initiated.

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4.2 Installing the LQS Application and Accessing the System

Instructions on downloading the latest version of the LQS desktop GUI (Graphical User Interface) application and general use information including the necessary technical notes and API java files are available on the LQS website located at the following web address:

<http://lqs.bellsouth.com>

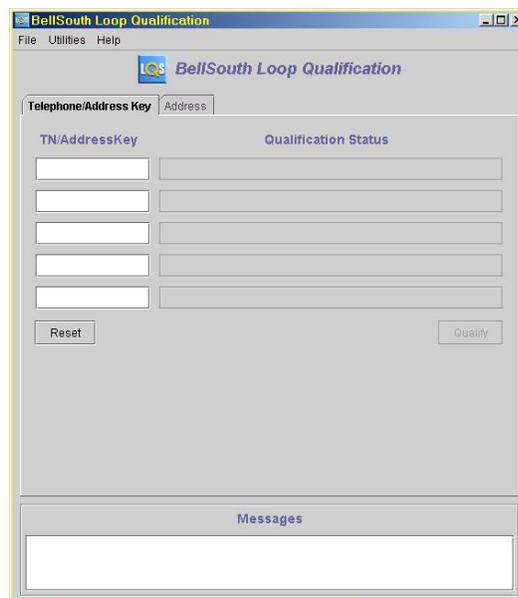
Once access has been established, the following steps will be taken to log into the LQS System:

- Double click the BellSouth Loop Qualification icon on the PC (Personal Computer) Desktop. (The LQS Login box will appear.)
- Enter the User Name and Password.
- When logged in successfully, the main window will be displayed.

NOTE: All of the windows in the LQS GUI are resizable. If the results cannot be seen completely, try resizing the window.

Main Window

The main window has two search and qualification views. Use tabs to select views. The system defaults to the Telephone/Address Key search and qualification view:



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LQS returns the following message on all qualified address queries:

**ATTENTION: Possible service conflict may exist on some lines at this address.
Please perform telephone number qualification.**

To see the Address search and qualification view, click on the "Address" tab. It will look like this:



Once the Status window appears, a Query may be submitted.

When performing loop qualification by Telephone/Address Key, LQS qualifies the loop supporting the telephone number that was specified. When performing loop qualification by address, LQS generically qualifies the living unit. The process used to determine the qualification status is somewhat different based on which input (telephone number or address) is entered. When qualifying by telephone number, both the electrical makeup of the loop and other non-electrical criteria are used to determine the qualification status. LQS checks for incompatible services on the voice loop and incompatible classes of service. Either of these conditions will result in LQS disqualifying a loop when a telephone number is used. Address-based loop provides a **conditional** qualification because it uses only the facilities to determine the loop qualification status. Even though the facilities are determined to be qualified, it may still be possible for the individual loops at that location to be disqualified due to incompatible USOCS, etc. A subsequent telephone-number based qualification should **always** be performed on the actual telephone number that the DSL is to be ordered on. This will be discussed in more detail in the sections that follow.

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4.3 Telephone/Address Key-Based Qualification

To qualify a telephone number (TN) or an Address Key (AK), select the "Telephone/Address Key" tab from the Main Window. Type a telephone number or address key into the first TN/AK field. Press <Tab> to move to the next field and enter another TN or AK. Note: Address Keys (AK) must start with the '@' character. To perform the qualification, click on either the "Qualify" button or press <Enter>. The Qualification Results will appear next to the TN/AK's as shown in the example.



The screenshot shows a window titled "BellSouth Loop Qualification" with a menu bar (File, Utilities, Help) and a toolbar (LQS, BellSouth Loop Qualification). The window has two tabs: "Telephone/Address Key" (selected) and "Address". Below the tabs is a table with two columns: "TN/AddressKey" and "Qualification Status". The table contains three rows of input fields. The first row has "205-987-1010" in the first field and "A,C,L0" in the second. The second row has "205-987-1011" in the first field and "A,C,L0" in the second. The third row has empty fields. Below the table are "Reset" and "Qualify" buttons. At the bottom is a "Messages" section with an empty text area.

TN/AddressKey	Qualification Status
205-987-1010	A,C,L0
205-987-1011	A,C,L0

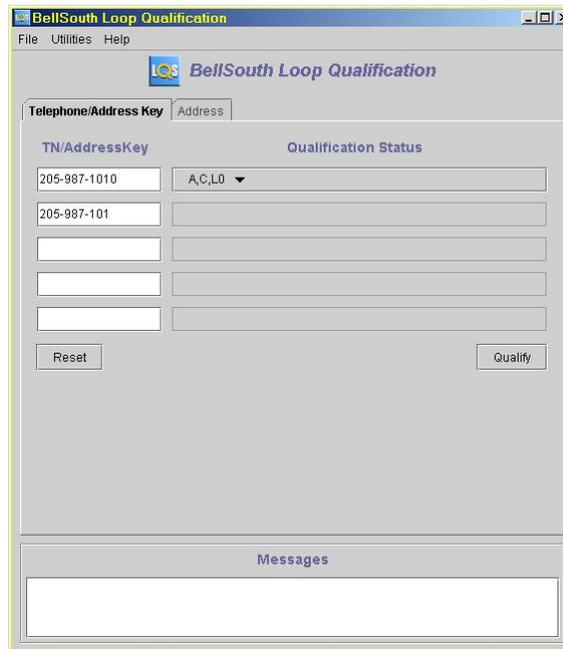
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If the result button includes a “down arrow” symbol, then there is additional information for that result. Click on the result button to view the additional information:



If the text field that contains the second TN/AK is clicked and the user begins to edit that field, the results for that TN/AK will be cleared. This prevents old qualification information from being incorrectly interpreted as belonging to the new TN/AK:

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The result button for the second TN is now empty, because the last digit from the second TN was deleted.

It is possible to qualify multiple TNs, using only the keyboard, by following these steps:

- Enter a single TN in one of the input fields.
- Depress <Enter> to qualify it.

The result will appear. Since the keyboard focus has **not** changed, the <Backspace> may be depressed to edit the current TN. When the TN editing is completed, depress <Enter> again to qualify it. All of the results will be saved in the Transcript. The Transcript screen will be discussed later in this chapter.

It is also possible to qualify multiple TN's using the Bulk Submit Utility.

Note: Information needed to interpret the results of the qualification is included within this chapter.

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The LQS Bulk Submit Utility method may be selected to query qualification results for up to 1,000 telephone numbers at one time. The telephone numbers must be contained in the ASCII file format including one 10-digit telephone number per line excluding hyphens and containing no titles, headers, or footers. From the LQS Main Window, the following steps will be taken:

- Select "Utilities" from the Menu Bar
- Select "Submit Bulk File"
- Select the file containing the telephone numbers

When completed, the "LQS Bulk File Results" Window will display indicating the status for all of the telephone numbers submitted on the bulk form. The user has the option at this point of:

- Selecting the contents and copying them to another file

or

- Saving the contents to another file

Note: Information needed to interpret the results of the qualification is included in this chapter.

4.4 Forced Refresh

The refresh cycle of data from each Central Office may take LQS up to 30 days to reflect the current status of a telephone number. LQS provides the ability to submit a "forced refresh" on the qualification status of telephone numbers in LQS. Within 48 hours, the new loop information will be reflected in LQS. (Depending on load, the update may take up to 72 hours). For all LQS users, if LQS returns N, E6, an automatic refresh is initiated and LQS will return the most recent loop information associated with the telephone number within 48 hours.

If LQS returns "N" (not qualified) with an E2, E3, or E4 **and** the CLEC believes that the end-user recently moved to an ADSL qualified address while keeping the same telephone number **or** that the end-user recently made a change to their local voice service that should qualify their number for ADSL, the CLEC can initiate a "forced refresh" using LQS. A forced refresh is initiated in LQS by inserting a minus sign (or dash) in front of the telephone number and clicking "Qualify". LQS will return "N, R, Refresh Loop Data".

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Automatic Forced Refresh of Address Keys

When LQS is unable to locate any information for a particular living unit/address LQS returns the message: "Adr.1 The Street Address Guide System was unable to supply an address key for this address". The result is the address qualification determination cannot be made until the telephone number is qualified in LQS. If LQS is unable to obtain an Address Key for a given address, LQS will return: "[Adr.3 LQS requires updated data for this address. A refresh has been requested](#)". LQS will automatically initiate a forced refresh of the Address Guide System to obtain the current address information if it exists. After 48 hours of the automatic refresh, the user should attempt another qualification on that address. If the Address Key is found and the address is qualified, LQS will present the Address Key. If the Address Key is found and the address is not qualified, LQS will not display the Address Key and will indicate that the address is not DSL capable. If the Street Address Guide System was still unable to provide an address key after an auto-refresh, LQS will continue to return the message: "Adr.3 LQS requires updated data for this address. A refresh has been requested".

4.5 Address-Based Qualification

The LQS GUI has the ability to search for an address. If a single address can be found, and that address matched to an address key, the address key can be qualified.

Unfortunately, addresses are not as precise as telephone numbers, so some searching may be required before the exact address can be identified.

To search for an address, select the "Address" tab and enter the appropriate information in the text fields. Search on the address at any time by clicking on the "Search" button, or by pressing <Enter>.

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If enough information is not entered, an error message will be displayed in the Messages view, and the focus will be moved to the suggested text field. The label associated with that text field will turn red (and the text field will flash red) to help in identifying the correct field. In this example, only the Street Number and Street Name were entered:

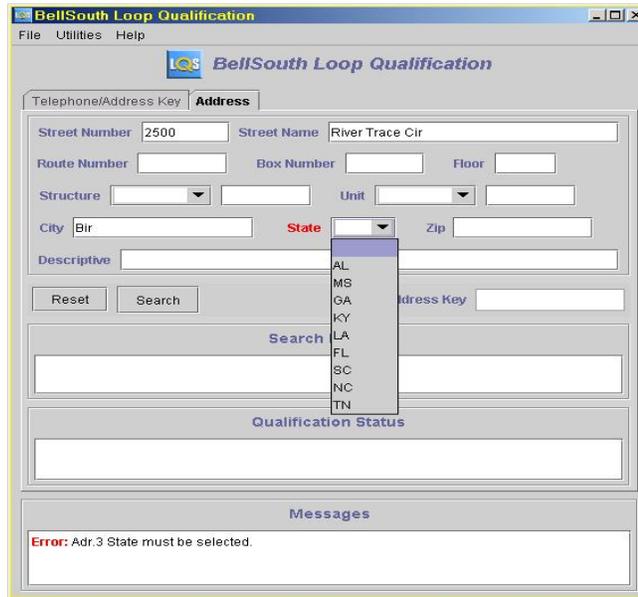


The screenshot shows the 'BellSouth Loop Qualification' application window. The 'Address' tab is selected, and the 'City' field is highlighted in red. The error message in the 'Messages' section reads: 'Error: Adr. 2 City and/or Zipcode field is required.'

The City field has been highlighted in accordance with the error message displayed at the bottom.

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The City field will now have the keyboard focus. In this example, part of a city name was input and pressed <Enter>. An error message appeared indicating that a state needs to be selected.



The State label will turn Red and the State menu will have the keyboard focus. Click on the State pull down menu (or press <Space>) and the State menu will appear:

A state may be selected by clicking on its two-letter abbreviation **or** by using the arrow keys and moving the selection to the correct state and depressing <Space> **or** by depressing the first letter of the state abbreviation and depressing <Space>.

Note: Select a state quickly by typing in the first letter of the state abbreviation without opening the state menu first.

To perform the search, click on the "Search" button or depress <Enter> even when the focus is on the State Menu and whether it is opened or closed.

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If a valid address has been entered, the system will automatically submit the valid address to verify if there is an address key associated with it. There is only one match to that address in the system. If there is an address key, the Address Key field will display it and LQS will automatically try to qualify it. If there is an address key, the Address Key field will display it and LQS will automatically try to qualify it.

The qualification results will appear in the Qualification Status view (and the Transcript). In the above example, when "A" was selected for Alabama and "Search" is clicked, the response shown on the next page will be provided.



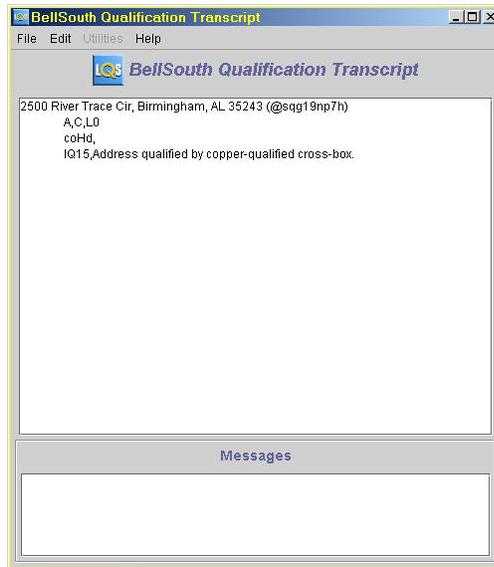
Notice that the city name has been expanded to "Birmingham" (from "Bir") and the zip code has been entered. All of the information does **not** need to be entered to make an exact address match. When a match is made, any missing information will be filled in. However, when more information is entered, there will be a better chance of making an exact match.

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Since a qualification occurred, the results are also displayed in the Transcript. An example of this screen is shown on the next page.

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Notice that the address and the address key are displayed instead of a TN.

4.6 Narrowing The Address Search

If, however, address information is entered and a search does **not** find an exact match, the search must be narrowed. In the example on the previous page, if a street name of "River Trace" had been entered instead of "River Trace Cir", an exact match would **not** have been found.

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A message will appear in the Messages view:



The Search Results list will contain the list of suggested addresses. An address may be selected from that list. When an address is selected, the information from that address will be automatically copied into the text fields. Double clicking on the selected address or depressing <Enter> will perform the search again.

As with the TN qualification, if any of the data in an address search is changed, the results from the previous search will be cleared so they cannot be incorrectly interpreted as belonging to the new address.

Clear all of the information on the screen by clicking the "Reset" button.

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The address system prefers abbreviations for some parts of the street name. Here are some examples:

Street Name	Abbreviation
Boulevard	BLVD
Circle	CIR
Court	CT
Lane	LN
Road	RD
Street	ST
Trace	TR

Abbreviations **MUST** be used to obtain an exact match. The address database does **not** contain data for the non-abbreviated words.

Tips when inputting Addresses (example):

Formatting of Addresses In the BellSouth database,

100 South Main Street would typically be formatted as 100 S Main St

100 First Drive would be formatted as 100 1st Dr

100 Hwy 41 would be formatted as 100 Highway 41

100 Jefferson Highway would be formatted as 100 Jefferson Hwy

Required fields on an address query are:

- Street Number
- Street Name
- Either City or Zip Code (Zip codes typically return more accurate results)

If more than one similar address is returned, use the “scroll bars” if they appear to see other addresses that may not be readily visible in the results window.

Note: Not all addresses have address keys. A search for an address may provide a result without an address key. Unfortunately, there is little that can be done at this point. Addresses **cannot** be qualified that do **not** have an address key.

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4.7 Interpreting Query Results

There will be a Reason Code displayed for each telephone number queried. The Reason Codes include:

- A** (Available) – The loop is currently qualified for ADSL or PC Data.
- P** (Planned) – The loop is currently not qualified but is projected to support ADSL or PC Data. Projected service date will be included with initial feedback.
- N** (Not Qualified) – The loop is not qualified for ADSL or PC Data **or** the loop qualification status cannot be determined with certainty because of missing data or some other error condition.

When an “A” or “P” response is received, the following codes will also be shown immediately following the Reason Code:

- “C” for Copper or an “F” for Fiber
- Speed Code will follow a loop qualified as A,C (Available, Copper)
- “Planned Date” will follow a loop qualified by “P” (“Planned”)
- An external “Reason Code” and description (E*) will follow an “N” (“Not Qualified”) response

Additional information on positive and negative responses is available in Sections 4.4 and 4.5 of this document. Typical response formats include:

A,C,C5

or

P,C,L0,2000.01.01

or

N,E2

(Service not available for this telephone number)

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4.8 Typical LQS Output Screen

The Internal Reason Code and Enhanced LQS GUI (Graphical User Interface) fields are displayed for each telephone number queried and is viewable via the drop down arrow indicated with a + sign which means additional information is available.

Following is an example of a typical output screen provided by the LQS Enhanced GUI:

```
N,E2,Service not available for this phone number.  
l2,Copper loop is loaded.  
dt=,rz=15,cz=9,sc=pots1{ADSL},cap=null,  
Loopbits={isF1CableLoaded,IsRc,hasTnId},wkg  
NpaNxx(205298,hm=brhmalch,{},#p=1,#l=1996)  
WC(brhmalch,10/08/2001,205967,tdl=18.0,cap({ADSL},<no date>),{})  
LivingUnit(1auc6.4,sz=1,cap=null)  
WireCenterProxy(205298,brhmalch,{},#l=1996)  
Taper(111901,{},(14.1+3.9=18.0))  
F1Cable(8,{}),p=136  
DT(r 3827 river view dr,{},cap{<no date>,null,(0,0,0))  
XB(802,{},cap{<no date>},(396,16,0),p=1036
```

Provided below is an explanation of each line item with a copy of the line output from the above example as reference. The general format of this explanation will be:

<Line Number>, <Item Name if multiple item line>, <Explanation>

Note: If a line or line element has the message “**not a network data element**”, this data item is LQS software system oriented and does **not** contain pertinent information relative to the loop qualification; therefore, a definition of this element will not be provided.

4.9 Line-By-Line Explanation of LQS Output Screen

Beginning below is a line-by-line explanation of the data included on the LQS Output Screen.

Line 1 – External Reason Code Qualification Response:

Output: N,E2,Service not available for this phone number.

1, Loop Qual Response/External Reason Code

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Line 2 - Internal Reason Code Qualification Response:

Output: I2,Copper loop is loaded.

I2, Loop Qual Response/Internal Reason Code

Line 3 – Specific Data Associated with the Telephone Number:

Output: dt=,rz=15,cz=9,sc=pots1{ADSL},cap=null,

3, dt = Data Type

min = remote DSLAM fed straight F1 terminal
pcd = IFTL Ethernet based service
fmx =DIFTL (Data over Fiber In The Loop) based service
fax =DIFTL (Data over Fiber In The Loop) based service
null=no data type detected by refresh program

3, rz = Resistance Zone of Customers Serving Terminal

RZ is an indicator of the subscriber loop resistance limits of a particular geographic area. Used for metal facilities (e.g., RZ13=1300 ohms, RZ15=1500 ohms.)

Values typically = null, 13, 15, 18, etc.

3, cz = Carrier Resistance Zone of Customers Serving Terminal

CZ is an indicator of the maximum resistance between the remote terminal cabinet and the customers serving terminal. Used for derived facilities only (e.g., CZ9=900 ohms.)

Values typically = null, 9, or 15

3, sc = Service Category

Service Categories map to 15 Outside Plant Equivalence Code (OEC) parameters that describe the relevant characteristics of the service from an outside plant provisioning perspective. These OEC parameters allow LFACS Center to accurately select the outside plant facilities with the appropriate transmission characteristics.

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3, sc = Service Category (continued)

The OEC parameters include the number of conductors required, the manual assistance indicator, the grade of service (party line or single), class of service, pair gain indicator, non-local indicator, category (i.e., voice grade, digital data, ISDN (Integrated Services Digital Network)), CO (Central Office)-side terminations, quality, signaling, metallic requirement, digital data rate, loop assignment type, loop qualification, and de-specialization.

By matching these parameters, LFACS is able to determine which OEC category a service request falls into and in turn, to know what type of facility to look for. The address tells LFACS where to look.

- POTS (Plain Old Telephone Service) 1 is a 2-Wire, single-party, voice grade loop, "S" type CO terminations with ordinary loss levels, loop start signaling, metallic facilities not required, and any DD rate.
- POTS3B is a 2-Wire, 4 or 8 party voice grade service, "B" type CO terminations, ordinary loss, loop start, no metallic requirement, and any DD rate.
- POTS5 is a 2-Wire, single party, voice grade, "C" type CO terminations, ordinary loss levels, loop start signaling with no metallic requirement and any DD rate.
- DOV 4 is a 2-Wire single party, locally or non-locally switched voice grade, "M" type CO terminations, ordinary loss, loop, ground or battery start that could or could not have a metallic requirement with an "L" digital design rate.

Values typically = pots1, pots3b, pots5, dov4

Note: 3, cap = Line Capability in the software system. This is not a network data element.

Line 4 – Specific Data Associated with the Telephone Number

Output: Loopbits={isF1CableLoaded,IsRc,hasTnId},wkg

IsRc - = System Item Status

This is **not** a network data element.

**Loop Qualification System (LQS)
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Chapter 4.0: Ordering Guidelines (continued)**

Wkg = Pair Evaluation (PE) Status of Telephone Number

wkg = normal line in service with a telephone number

ct = connect through - A loop from the central office to the serving terminal that remains "connected" through the network. This allows the next customer who moves to that location to have dial tone initiated at the central office without cross connects being required in the field.

Valid loop statuses include:

- CT (Connect Through)
- CF or CNF (Connected Facility)
- PCF (Partially Connected Facility)
- WKG (Working)
- RCT - Connect through originating at a switcher
- RCF - Connected facility originating at a switcher
- RWK - Working loop originating at a switcher
- IDLE

Note: Of these, only WKG and RWK are working values.

Values typically = wkg, ct, etc.

Line 5 – System Oriented NPA, NXX

Output: NpaNxx(205298,hm=brhmalch,{},#p=1,#l=1996)

Note: This is not a network element.

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Line 6 – Wire Center Level Data

Output: WC(brhmalch,10/08/2001,205967,tdl=18.0,cap({ADSL},<no date>),{ })

6, <wc cli> = LEIS 8 character wire center CLLI (Common Language Location Identifier) Code

6, mm.dd.yyyy = extract date of current wire center data being used in Loop Qual

6, npanxx = primary npanxx of this wire center

6, tdl = wire center specific taper code dead length. If the taper code exceeds this length, all lines are **disqualified** to minimize false positive qualifications

6, cap = system software parameter indicating ADSL capability and date if planned

Line 7 – Living Unit Data

Output: LivingUnit(1auc6.4,sz=1,cap=null)

The Living Unit ID (LUID) is a value from LFACS for this specific address utilized by the system software. This is not a network data element.

Line 8 – System Oriented Wire Center Proxy Data

Output: WireCenterProxy(205298,brhmalch,{ },#l=1996)

This data has **no** value to a Network user. This is not a network data element.

Line 9 – Taper Code Information

Output: Taper(111901,{ },(14.1+3.9=18.0))

9, <taper code> = the taper code of the customers serving terminal

9, XB = the x-box that LQS associates with this taper code. This data can be ambiguous if there are multiple taper codes associated with an x-box.

9, (f1.f1, f2.f2, tot.tot) = Outside Plant District provided; F1/F2/Total distances for this taper code

F1 = distance from the central office to the x-box for copper fed x-boxes

F2 = maximum distance from x-box to the distribution terminal for that taper code

(Continued on the next page)

**Loop Qualification System (LQS)
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Line 10 – F1 Cable Information

Output: F1Cable(8,{}),p=136

F1 = First Loop Segment for the CO

10, F1 cable = F1 cable assignment

10, F1 pair = F1 pair assignment

Line 11 – Serving Terminal Information

Output: DT(r 3827 river view dr,{}),cap{<no date>,null,(0,0,0))

11, provides serving terminal name in LFACS database

11, cap = system capability for this terminal and date if planned

11, (aaa,bbb,ccc) = working line info for this x-box

aaa = total lines working in this terminal

bbb = **copper** ADSL qualified lines working in this terminal. (Qualified from the CO.)

Note: A remote DSLAM (Digital Sub Line Access Multiplexer) makes this number irrelevant.

ccc = pg lines working in this terminal

**Loop Qualification System (LQS)
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Line 12 – FN/F2 Crossbox Information

Output: FnCrossBox(802,{},cap({},<no date>),(1,0,0),null),p=1036

F2 = Second Loop Segment from the CO.

12, FnCrossBox = the f2 cable name associated with this telephone number
values = null if none, f2 cable name, or mr/ahj name if existing ADSL service

12, cap = system capability for this x-box and date if planned

12, (aaa,bbb,ccc) = working line info for this x-box

aaa = total lines working in this x-box

bbb = **copper** ADSL qualified lines working in this x-box. (Qualified from
the CO.)

Note: A remote DSLAM makes this number irrelevant.

ccc = pg lines working in this x-box

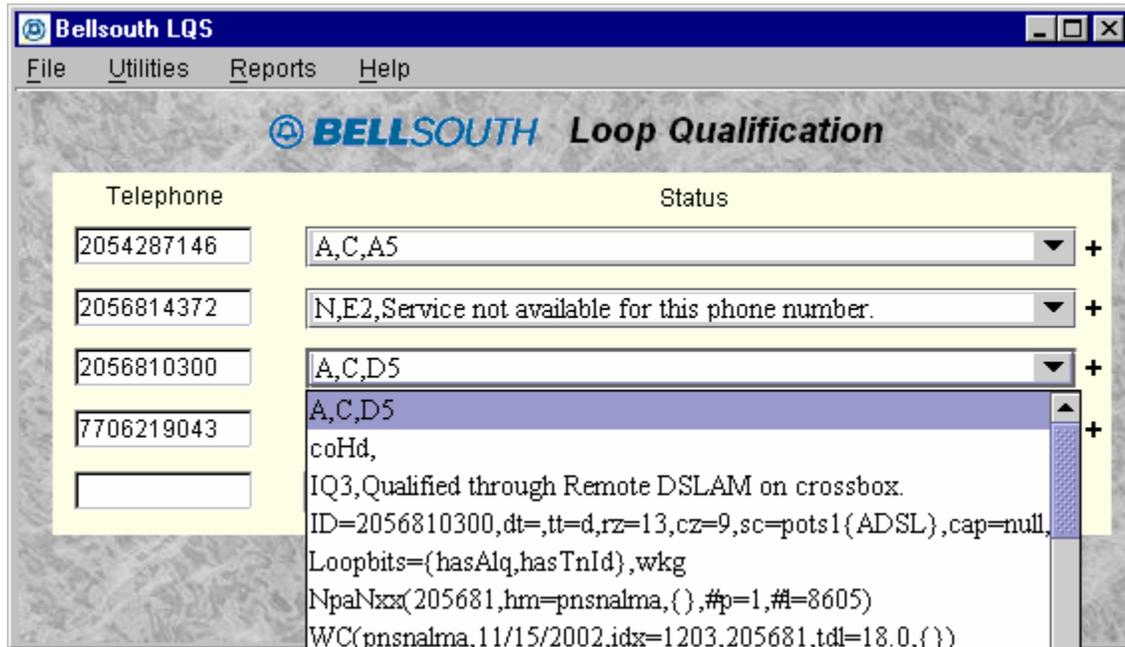
12, pair = F2 pair assignment.

**Loop Qualification System (LQS)
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Chapter 4.0: Ordering Guidelines (continued)**

4.10 Internal Reason Codes (Positive LQS Response)

Internal Reason Codes are provided for **positive** Internal Response Results. In order to properly understand the Internal Response Results, the following information is furnished to provide an explanation of the possible Internal Reason Codes.

When a High Density DSLAM is deployed in the Central Office or Remote Terminal, the LQS web GUI will return a second row of information. If EDSL **can** be supported at the address where the telephone number is working, this information will contain the previously mentioned High Density indicator (i.e., coHD or remote HD). If there is **not** an HD indicator, the regular IQ line will be the 2nd line. An example is of this is shown below:



Loop Qualification System (LQS) CLEC Pre-Ordering and Ordering Guidelines

Chapter 4.0: Ordering Guidelines (continued)

IQ1 = Copper-qualified loop

This copper loop **does** qualify for ADSL service.

IQ2 = Pair Gain loop qualified with copper-qualified cross-box

This customer is currently served via Digital Loop Carrier (DLC) that will **not** support ADSL service. However, records indicate 10 or more qualified copper pairs do exist at the cross-box. A Facility Reservation Number must be obtained by the D/CLEC in order to move the customer to an unloaded copper pair suitable for Line Sharing.

IQ3 = Qualified through Remote DSLAM on cross-box

This response code means BellSouth has an existing remote solution (Remote DSLAM) available in the Remote Terminal (RT) in which this customer receives their voice service.

NOTE: Due to the proactive logic in LQS, this code masks any other codes describing the loop currently serving the customer. The only valid assumption will be that the F2 portion of the customer loop is qualified for a type of ADSL.

IQ4 = Qualified through Straight F1 on distribution terminal

This copper loop **does** qualify for ADSL service and is served by an F1 facility only. (It does **not** pass through a cross-box).

IQ5 = Qualified through CMS Update

BellSouth has an existing or planned Integrated Fiber In The Loop (IFITL) remote solution serving this customer.

IQ6 = F1 Loaded loop qualified by copper-qualified cross-box

This customer is currently served via a loaded copper pair that will **not** support ADSL service. However, records indicate 10 or more qualified unloaded copper pairs do exist at the cross-box. A FRN must be obtained by the D/CLEC in order to move the customer to an unloaded copper pair suitable for Line Sharing.

IQ7 = F1 Loaded qualified by copper qualified distribution terminal

This customer's specific pair will not support ADSL service. However, other pairs in this customer terminal can provide ADSL service and it is allowed to qualify on the assumption the line can be moved to an ADSL capable pair.

**Loop Qualification System (LQS)
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IQ8 = PC Data qualified through LEIS-LEAD update

BellSouth has an existing IFITL remote solution serving this customer that is capable of carrying ADSL service.

IQ9 = Qualified by RZ override

A system override of the stored RZ has been applied. This occurs when the F1+F2 distance < 14.0 KF.

IQ10 = Qualified for ADSL over fiber- MX

BellSouth has an existing or planned Data Over Fiber In The Loop (DFITL) remote solution serving this customer.

IQ11 = Qualified for ADSL over fiber- AX

BellSouth has an existing or planned DFITL remote solution serving this customer.

IQ12 = Force-qualified through remote capability on individual loop.

Loop manually forced to qualify for some reason. Generally, this means there is a field notification of a records problem in LFACS. It is force qualified to insure it will qualify in the system.

IQ13 = Pair Gain qualified by copper-qualified distribution terminal

This customer's specific pair will not support ADSL service. However, other pairs in the customer's terminal can provide ADSL service and it is allowed to qualify on the assumption the line can be moved to an ADSL capable pair. This is the same as IQ7 but on a pair gain rather than a loaded F1 pair.

IQ14 = Conditional qualification; CO DAML

An unqualified DAML line may now be allowed to qualify. In addition, an assessment is made to determine the ability to provision ADSL service. A DAML is an electronic unit that puts two (2) telephone numbers on one copper/pair gain facility. This renders the line unusable for ADSL service and this new qualification requires a review of the facility to provide ADSL service, if possible.

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IQ15 = Address qualified by copper-qualified cross-box

IQ16 = Address qualified by remote capability on crossbox.

IQ17= Address qualified by copper qualified distribution terminal

IQ18 = Address qualified by remote capability on distribution terminal

IQ19 = Forced qualified by manual override.

IQ20 = Conditional qualification. Full PG DAML.

IQ21 = Partial PG DAML

IQ22 = Business line only area. Loop is business USOC

E6 = When the loop data does *not* exist in LQS, the external code E6 is given and repeated in the internal code field>

4.11 Speed Codes

In addition to Internal Reason Codes, Speed Codes are also furnished with “positive” response codes. In order to properly understand the Internal Response Results, the following information is furnished to provide an explanation of the possible Speed Codes.

The table on the next page provides translations for speed codes returned in LQS for loops qualified as A, C. The speed code indicates the conservative maximum BellSouth ADSL service rate that may be purchased for that loop **without** a Service Inquiry.



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LQS RETURN CODES (MAXIMUM SPEED SUPPORTED BY A QUALIFIED LOOP)

Speed Code	Estimated Maximum Distance	Business or Industrial	USOC	Downstream Rate	Upstream Rate
A5	6.5KF	Business Class	ADF51	4-6 Mb/s	640 Kb/s
B5	8.0KF	Business Class	ADF41	2-4 Mb/s	640 Kb/s
C5	9.4KF	Business Class	ADF31	1.5 Mb/s minimum	512 Kb/s minimum
D5	9.5KF	Business Class	ADF61	768 Kb/s minimum	512 Kb/s minimum
E5	12.0KF	Business Class	ADF21 ADF22	384 Kb/s minimum	384 Kb/s minimum
E9 (*)	13.0 KF	Residential Class	ADF91	3.0 Mb/s max	384 Kb/s max
F5	15.5KF	Business Rate	ADF71	192 Kb/s minimum	192 Kb/s minimum
L0 and G5	0.0-18.0KF	Mass Market Consumer rate Residential Class	ADF11, ADF01	1.5 Mb/s max 256 Kb/s max	256 max 128 Kb/s

(*) The 3mbps service indicator in the SVC line is the definitive indication for 3Mbps service for qualification.

Notes:

New E9 code: The 3m x 384k BBG service is dependent on both the loop length and the type of BellSouth DSL equipment serving the customer's area. The E9 speed will be used to indicate that the customer's "loop length" can support the 3meg service, but actual 3meg service availability is also dependent on the serving equipment and is communicated in the SVC field (see below). To summarize:

, A5 through E9 will indicate 3meg availability.

F5, L0, and G5 will indicate that 3meg is not available.

As a rule, you should always check for a SVC indicator of "3Mbps" to confirm 3meg availability.

An NSP must be on the Broadband Gateway platform to order the 3meg service.

Loop Qualification System (LQS) CLEC Pre-Ordering and Ordering Guidelines

Chapter 4.0: Ordering Guidelines (continued)

“SVC” field - As BellSouth’s suite of DSL services expand beyond basic ADSL, these new service capabilities will be displayed in the SVC field. The 3Mbps indicator will be presented beginning 2/27/04. An example of the LQS response follows:

```
A, C, D5  
HD: coHd  
SVC={mpvc, business, 3Mbps}
```

This means that the customer’s loop length can support speeds offerings of D5 (or lower) and the serving equipment is a high-density DSLAM and can support Business Class ADSL, Multi-PVC, and the 3meg service.

Similarly if there is a DSLAM deployment planned for a 03/11/2004 service date, and the proposed DSLAM will support Business Class and Multi-PVC service, the LQS response for the previous example will be formatted as follows:

```
P, C, D5, 03/11/2004  
HD: coHD, 03/11/2004  
SVC={3Mbps =(=03/11/2004),mpvc, business}
```

LQS will display the serving CO CLLI (Common Language Location Identifier) code for any valid or recognized telephone number, address, or address key query. This code is useful in validating the CO serving area that your potential customer resides in. The CO CLLI will be presented on a new “SUP” line.

```
SUP={wc=Irvlgaos} (Note: Irvlgaos is the CO CLLI for the Lawrenceville CO)  
AdrKey:@i1P0LiB (Note: The @ symbol is not part of the Address Key)
```

Finally should LQS ever return a speed code that is not included on the table above, you should qualify that telephone number/address and treat that unrecognized speed code as “L0”. This is particularly important if you have built a web interface to LQS and have programmed your interface to recognize specific speed codes.

G5 code: From a “service availability” perspective, there is no difference between G5 and L0. Both codes indicate that the telephone number or address qualifies for both the residential class 1.5m x 256k service and the 256k x 128k BBG service.

Regarding loop qualification, a “serving area” may be made up of one or more neighborhoods and/or business areas. With the implementation of LQS release 11.0, **G5 will indicate that the serving area for a particular qualified customer contains loop lengths up to 18kf.** Some customers in the serving area may have loops shorter than 18kf, but the maximum loop for any qualified customer in this serving area is 18kf. **L0 will indicate that the loop is qualified for ADSL service, but the maximum loop length for the customer’s telephone number or address is indeterminate.** The remaining speed codes associated with Business Class availability follow the same pattern as G5.

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4.12 Positive Response Results

The following table indicates the format of possible *External* and *Internal* Reason Codes for positive response results received from LQS.

External Reason Code	Internal Reason Code
A, C, Speed Code	IQ1, Copper-qualified loop
	IQ2, Pair Gain loop qualified with copper-qualified cross-box
	IQ3, Qualified through Remote DSLAM on cross-box.
	IQ4, Qualified through Straight F1 on distribution terminal
	IQ6, F1 Loaded loop qualified by copper-qualified cross-box
	IQ9, Qualified by RZ Override
	IQ15, Address qualified by copper qualified cross-box
	IQ16, Address qualified by remote capability on cross-box
	IQ17, Address by copper-qualified distribution terminal
	IQ18, Address qualified by remote capability on distribution terminal

The table continues on the next page.



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External Reason Code	Internal Reason Code
A, F	IQ5, Qualified through CMS update
	IQ8, PC-Data qualified through LEIS-LEAD update
	IQ10, Qualified for ADSL over fiber-MX
	IQ11, Qualified for ADSL over fiber-AX
P, C, Speed Code, Date	Planned for service on Copper
P, F, Date	Planned for Service on Fiber

Note: A, F denotes end-user is in an ALL-FIBER neighborhood, also called IFITL. BellSouth provides broadband to these customers via PC DATA, which is an Ethernet-based architecture. D/CLECs should treat telephone numbers that return A, F in LQS as **unqualified**.

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4.13 Internal/External Reason Codes (Negative LQS Response)

When a negative LQS response is received, as with a positive response, reason codes will be given. The table below shows these reason codes and includes both positive and negative feedback. The external reason codes are actually error codes that will be explained in Section 4.12 of this document.

External Reason Codes	Internal Reason Codes
Null	When paired with certain External Reason Codes, such as E2, this code may be null.
E0 – Request ignored – file size limit	Same
E1 – Syntax error in phone number	Same
E2 – Service not available	I1: Copper loop with RZ>13 I2: Copper loop is loaded I3: Copper loop has Digital Added Main Line (DAML) I4: Pair Gain Loop with no Remote DSLAM- I5: Taper code is a dead zone I6: Not Used I7: FN is loaded I9: Terminal CZ > 9 I10: Existing service category not compatible I11: Phone number is foreign exchange I12: Taper code exceeds distance limit I13: NPA-NXX is not found I14: Not Used I15: PE status not recognized as WKG, CT, or PRU I16: No loops found in NPANXX I17: Forced disqualified loop: SOEG transmission problem with line I18: Not Used

This table continues on the next page.



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Chapter 4.0: Ordering Guidelines (continued)**

External Reason Codes	Internal Reason Codes
E2 (continued)	
	I19: Different Premises Address (DPA)
	I25: Forced Disqualification by manual override.
	I26: Loop has multi line DAML
	I27: Business line only area- loop is not business USOC.
	128: Remote DSLAM is capped
E3 – Currently unqualified. Please try again later.	I1Copper loop with RZ greater than 13
	I4: Pair gain loop with no Remote DSLAM
	I8: Wire center not DSLAM-equipped
	I12: Taper code exceeds distance limit: <limit>
E4 – Existing service type is incompatible	I20: Existing USOC (Universal Service Order Code) is incompatible
E5 – Not used	Same
E6 – No loop information -refresh automatically requested.	Same
E7 – Not used	Same
EA1 – Syntax error in Address Key	I21: Syntax error in address key
EA2 – Address Key not valid	I22: Address Key not found in LQS database
EA3 – Address currently unqualified. Please try again later.	I23: All loops present and address not CO qualified and not supported by remote DSLAM
	I24: All loops disqualified at this location

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4.14 Not Qualified Response Results

This section explains the reason codes (internal and external) that may be received indicating why the loop **cannot** be qualified.

E1 – “Syntax error in phone number”

- Invalid telephone number format or character found

E2 - “Service not available”

Internal Codes I1, I9 I12, and I14

- The loop is too long to support ADSL
- I1: overall loop resistance > 1300
- I9: Carrier Zone > 900
- I12: Taper code exceeds distance limit <Max F1 Distance + Max Fn Distance>. Limit = <Taper Distance Limit>. Example: 13.27+6.1=19.37).

In this example: F1 length is 13.27 KF; maximum length of distribution pair is 6.1 KF; Total is 19.37 KF. This exceeds the 18.0KF maximum.

- I14: Taper code Max F1 Distance = 0.0 KF; in taper code file, if cross-box is entirely PG fed, shows 0.0 KF distance; would only qualify based on remote solution.

Internal Codes I2 and I7

- The loop contains one or more load coils.

Internal Codes I3 and I6

- The phone number is on a DAML.

Internal Code I5

- The customer falls within a known “dead” zone, an area flagged by maintenance personnel where ADSL is known not to work.

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Chapter 4.0: Ordering Guidelines (continued)

Internal Code I10

- The line is not POTS or plain Centrex.
- There may be existing ADSL or Line Sharing on the line

Internal Code I11

- The phone number is a Foreign Exchange/Foreign Central Office (FX/FCO) line.

Internal Code I13 and I16

- The NPA-NXX belongs to one customer (e.g. a University) and all numbers in the range are PBX (Private Branch Exchange) DID (Direct Inward Dialing) or Primary Rate ISDN numbers

OR

- The NPA-NXX belongs to a CLEC

OR

- The NPA/NXX is a BellSouth NPA/NXX but currently has no working loops

Internal Code I15

- The Pair Evaluation (PE) status of the loop must be WKG (Working), CT (Connect Through) or PRU (Pair Restriction Usage) status or the TN (Telephone Number) is incompatible for PE reasons.

Internal Code I17

- Outside plant engineering has determined that this TN is incompatible with ADSL services even though it originally qualified; future qualification is prevented.

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Internal Code I18

- Custom filter established for designated wire centers (This is a filter feature implemented two years ago. It has never been used.)

Internal Code I19

- TN appears in multiple locations, either in same wire center or different wire centers; incompatible with ADSL

Internal Code I20

Existing USOC is incompatible

Internal Code I21

Syntax error in address key

Internal Code I22

Address Key not found in LQS database

Internal Code I23

All loops present and address not CO qualified and not supported by remote DSLAM

Internal Code I24

All loops disqualified at this location

Internal Code I25

Forced disqualification by manual override.

Internal Code I26

Loop has multi line DAML

Internal Code I27

Business Line only area - loop in not business USOC.

E3 - "Currently unqualified. Please try again later"

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Internal Code I4

- The loop is behind a digital loop carrier system and no Remote DSLAM is available.

Internal Code I8

- This central office is not equipped with a BellSouth DSLAM.

E4 – “Existing Service type is Incompatible”

- Service generally available to this location, but loop is not a BellSouth-provided exchange access line as required by the tariff to provision ADSL.

E6 - “No Loop information – refresh automatically requested”

When the loop data does not exist in LQS, external code E6 is given and it is repeated in the internal code field.

- The phone number is on an ISDN line.
- The phone number is newly installed and not yet in LQS.
- The phone number is a DID behind a PBX.
- The phone number is served via Primary Rate ISDN.
- The phone number may belong to a facilities-based CLEC and is outside of BellSouth’s network.

Note: LQS triggers a forced refresh on an E6 response. If this is a valid BellSouth number, the number will be recognized in LQS within 48 hours. It may or may not qualify at that point based upon other existing LQS qualification criteria

4.15 Logic Sequence of LQS ¹

LQS will stop the search and logic routines when the first error condition appears. That error will be reported. It does not continue and find all error codes prior to stopping the search.

¹ The LQS Logic Sequence is considered BellSouth Proprietary and Confidential Information -- Subject to the Proprietary and Confidential Information Section of the BellSouth Interconnection Agreement.

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There are two main search sequences, one for telephone numbers (TN) and one for address keys (AK).

4.15.1 Qualifying a Telephone Number (TN)

When qualifying a TN, LQS searches for the following conditions, and stops searching when the first condition is true.

Error Item	Output Upon Error Identification
Syntax Error in TN	E1
Loop not found	E6
Loop not found (NPA-NNX not found)	E2 I13
Loop not found (NPA-NNX empty)	E2 I16
Loop has line problem (Transmission error)	E2 I17
Loop is DPA	E2 I19
Loop is forced to disqualify	E2 I25
Loop is Non-Locally switched (Foreign Exchange)	E2 I11
Living Unit Taper Code is in Dead Zone	E2 I5
Living Unit is PCData capable by LFACS update (and not UNE-P)	IQ8
Living Unit is PCData capable by CMS update (and not UNE-P)	IQ5
Loop Taper Code is in Dead Zone	E2 I5
Loop has Unknown Pair Evaluation (PE)	E2 I15
Loop is PBX	E2 I10
Loop Service Category not ADSL capable	E2 I10
Loop has Multi-Line DAML	E2 I26

Loop Qualification System (LQS) CLEC Pre-Ordering and Ordering Guidelines Chapter 4.0: Ordering Guidelines (continued)

After LQS has searched the conditions listed above and if none are true, then if the loop has a “remote” solution, the following table is checked:

Error Item	Output Upon Error Identification
Loop is FN loaded	E2 I7
Loop has Remote DAML	E2 I6
Loop Carrier Zone > 900Ω	E2 I9
Loop in Business Only area (and does not have business USOC)	E2 I27
Loop already has ADSL service (and not UNE-P)	IQ23
Cross Box or Distribution Terminal is CAPPED	E3 I28
Wire Center does not have DSL capability	E3
Loop is UNE-P	E4 I20

If the loop does not have a “remote” solution, then this table is checked to see if the loop is “copper qualified”:

Error Item	Output Upon Error Identification
Loop is FN loaded	E2 I7
Loop has Remote DAML	E2 I6
Loop RZ > 13	E3 I1
Taper Code length too long	E3 I12
Pair Gain loop with no Remote DSLAM	I4
Copper Loop is loaded	I2
Wire Center does not have DSL capability	E3
Loop is UNE-P	E4 I20

**Loop Qualification System (LQS)
CLEC Pre-Ordering and Ordering Guidelines
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When qualifying an AK, LQS first checks the living unit for the AK:

Error Item	Output Upon Error Identification
Syntax Error in AK	AE1 I21
Living Unit not found	AE2 I22
Living Unit Taper Code is in Dead Zone	E2 I5
Living Unit is PCData capable (by LFACS update)	IQ8
Living Unit is PCData capable (by CMS update)	IQ5

If the Living Unit does not qualify, then LQS checks the loops associated with the Living Unit (up to a Maximum of 100 loops). If it finds an “available” loop, it returns that result. If it finds “planned” loops, it returns the earliest “planned” loop, else the AK does not qualify.

For each of the loops in the Living Unit, LQS searches the following tables and stops searching when the first condition is true (note, this is NOT the same sequence as qualifying an individual telephone number):

Error Item	Output Upon Error Identification
Loop Taper Code is in Dead Zone	E2 I5
Loop has MultiLine DAML	E2 I26

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After LQS has searched the conditions listed above and if none are true, then if the loop has a “remote” solution, the following table is checked:

Error Item	Output Upon Error Identification
Loop is FN loaded	E2 I7
Loop has Remote DAML	E2 I6
Loop Carrier Zone > 900Ω	E2 I9
Loop in Business Only area (and does not have business USOC)	E2 I27
Cross Box or Distribution Terminal is CAPPED	E3 I28
Wire Center does not have DSL capability	E3

If the loop does not have a “remote” solution, then this table is checked to see if the loop is “copper qualified”:

Error Item	Output Upon Error Identification
Loop is FN loaded	E2 I7
Loop has Remote DAML	E2 I6
Loop RZ > 13	E3 I1
Taper Code length too long	E3 I12
Pair Gain loop with no Remote DSLAM	I4
Copper Loop is loaded	I2
Wire Center does not have DSL capability	E3

Since LQS performs the check for the presence of a BellSouth DSLAM, if LQS shows the error, “The Central Office” is not equipped with ADSL”, the loop can be assumed but not guaranteed to be qualified.

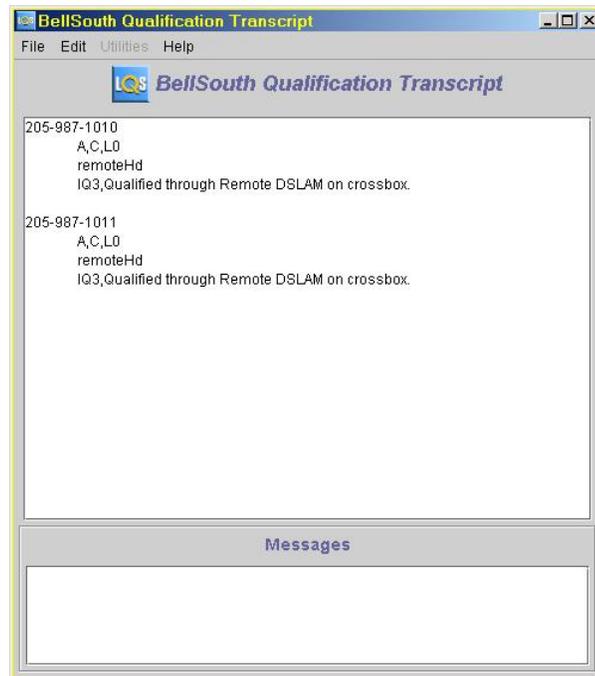
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If LQS finds the existence of a BellSouth Remote Solution, most of the data about the loop is ignored except for F2 qualifications. Therefore, if LQS shows the response "Qualified Through Remote Solution", only the F2 portion of the loop can be assumed to be qualified. Typically, these serving arrangements will not have copper pairs available. A Manual Loop Makeup needs to be requested in these situations to determine if any copper pairs exist at the remote terminal site.

Numbers not having an LFACS cable pair assignment, such as the phone in a Collocation space, will not show up in LQS.

The Transcript:

To view the Transcript, select the "Utilities->Transcript" menu option. This will open the Transcript window.



The Transcript maintains a record of the TN and Address Key qualifications. It does **not** need to be open to record the results. There is a limit, however, on how much information the Transcript can hold. If this limit is reached, the **oldest** qualification results will be lost.

To save the information either copy the contents of the Transcript to the clipboard or turn on the Log Transcript option.

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Results from the Transcript may be copied to the clipboard by selecting "Edit->Select All" and then "Edit->Copy". Portions of the Transcript may be copied to the clipboard by highlighting the text in the Transcript and selecting "Edit->Copy".

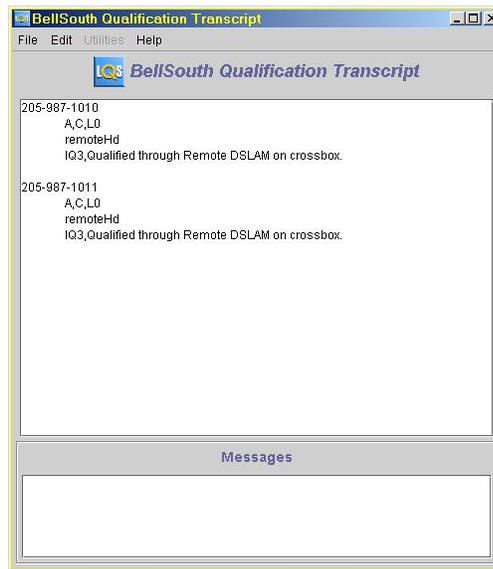
NOTE: As a shortcut, if "Edit->Copy" is selected and no text is highlighted in the Transcript, the whole contents of the Transcript will be copied to the clipboard.

The Messages view at the bottom of the Transcript is used to show any messages from the Bulk File Import.

4.16 Log Transcript:

The Log Transcript feature copies the contents of the Transcript to an external file and adds any new results to the file as they are displayed. The system "logs" any results report to the Transcript to the selected file. This is especially useful for processing a Bulk List (see Bulk Submit) and recording the results.

From the main window, select the "File->Log Transcript" option. A file dialog will appear:



Select the file to use as the log. A file may be reused but it will be overwritten. A warning will be provided and the file may be changed before it does so. Once a file name has been entered, the contents of the Transcript will be copied to that file. This is a safety feature in case "Log Transcript" has not been turned on prior to qualifying TNs.

Now, any results displayed in the Transcript will also be appended to the log file. The file will be closed when the LQS GUI closes.

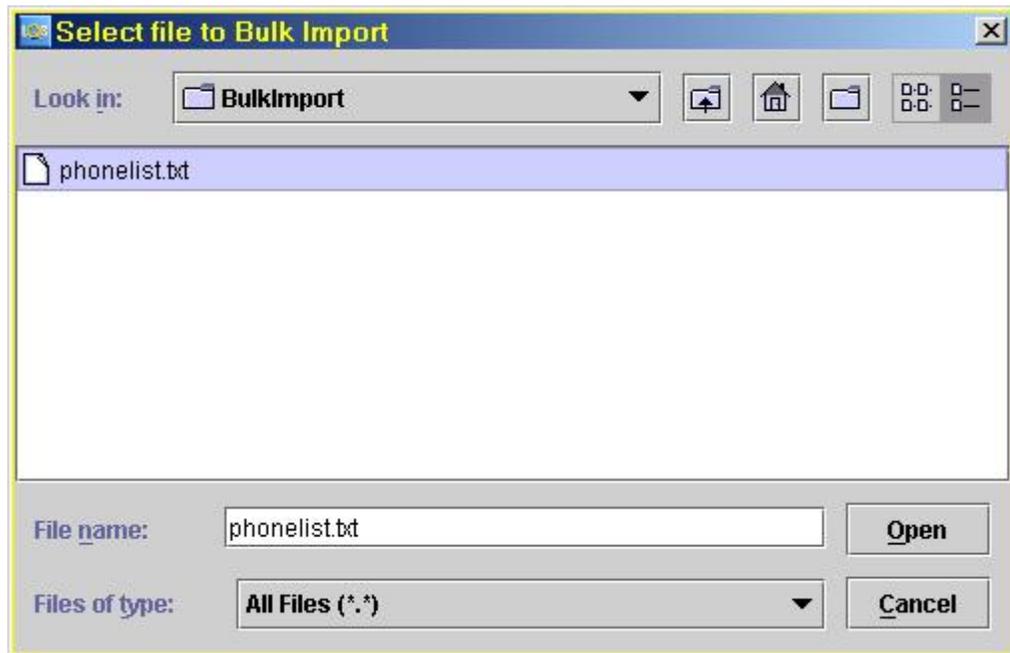
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4.17 Copy to the Clipboard

The LQS GUI allows text to be copied to the system clipboard. Different views provide this functionality in different ways. All text views support the Ctrl-C keyboard shortcut. Any text that is highlighted when Ctrl-C is depressed will be copied to the clipboard. In some cases, a 'beep' may be heard. The beep can be ignored.

Many text views support a context menu. Depress the Right Mouse Button while over the view and a menu will appear. The menu will contain a "Copy" menu option and may contain a "Copy All" menu option.

Text view is displayed when the Results Button is clicked that supports a content menu. The Search Results list also supports a context menu. It will copy the selected address to the clipboard as shown below.

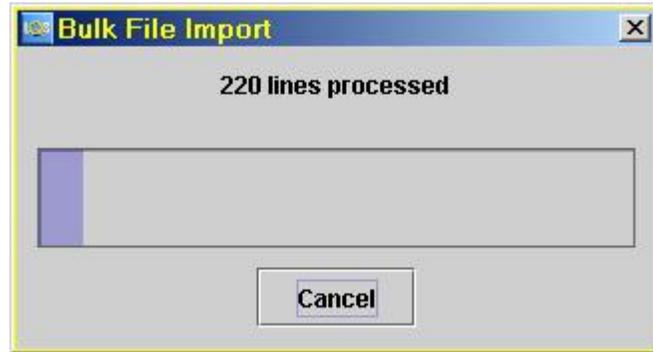


4.18 Bulk Submit Utility:

Use the Bulk Submit utility to process a list of numbers simultaneously. From the main window, select "Utilities->Submit Bulk File" on the menu bar. A file chooser will request the location of a file containing the telephone numbers (one per line). A progress indicator will display after the records are being processed. The import may be cancelled at any time by depressing the "Cancel" button on the progress dialog as shown on the next example:

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A progress indicator will display after the records are being processed. The import may be cancelled at any time by depressing the "Cancel" button on the progress dialog.



When the import is complete **or** canceled, the Transcript window will be opened showing the results. It is recommended that the Log Transcript be turned on prior to doing a bulk submit to save the qualification results to a file.

4.18 Quitting:

To quit the LQSGUI, select "File->Exit" from the main window. A warning will not be given that the application is about to close. The application will be logged off the server and the log file will be closed (if open).

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Chapter 5.0: Frequently Asked Questions (FAQ's) Regarding Address Based Qualification

Since address-based DSL loop qualification was made available on 1/17/03, here are some of the most commonly asked questions.

Q. If I get a qualified response on an address-based qualification, does this mean that ANY telephone number at that address qualifies for DSL?

Answer: No. Address qualification indicates that an address is DSL “capable” and should always be treated as a “Conditional Qualification.” It is conditional in that final DSL qualification is dependent on the end-user having DSL compatible voice service at the address. Existing loops at a DSL capable address may not be qualified due to service incompatibilities. The only reliable way to determine the DSL capability of a specific loop is with a telephone-number-based loop qualification. A subsequent telephone-number based qualification should always be performed on the actual telephone number that the DSL is to be ordered on. Here are some examples why:

Example 1: If there are 5 working telephone numbers at an address and only one of those telephone numbers is DSL compatible, LQS will return a “qualified” response on an address-based qualification, but DSL cannot be ordered on the 4 incompatible telephone numbers that may be ISDN, DID trunks, Unbundled Network Elements (UNEs), etc. A subsequent telephone number-based qualification will indicate if any of the numbers truly do qualify.

Example 2: If an address can be served by DSL, but there are no DSL compatible numbers at an address, LQS will still provide a qualified response to indicate that the “address” is DSL capable. However, the end-user would need to order a DSL compatible voice line before DSL can be ordered on a given telephone number.

Q. Is LQS able to determine DSL qualification of an address if there are currently no working numbers at an address?

Answer: Yes. As long as the address exists in BellSouth’s engineering records, LQS can map the address back to its associated serving facilities to determine DSL capability.

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Chapter 5.0: Frequently Asked Questions (FAQ's) Regarding Addressed Based Qualification (continued)

Q. When should I perform an address-based qualification in LQS?

Answer: Address-based qualification should be performed:

- To determine if DSL can be provided at an address if the end-user ordered a DSL compatible voice service at that address.
- To validate qualification of a telephone number. If an end-user moves a DSL qualified telephone number from an old address to a new address, LQS may continue to return a positive qualification of that telephone number based on the "old" loop information for 1 to 30 days. A subsequent address-based qualification check will help confirm that the number will qualify at the new address - as long as there were no changes made to the voice service that would make it incompatible with DSL.

Q. When I perform an address-based query in LQS, I find it difficult to get an exact address match. Are there any tips when performing an address qualification?

Answer: When performing an address search in LQS, try the following to narrow the list of possible matches:

- Since "City" or "Zip Code" is required (and not both), populate the zip code in your search and leave the "City" field blank. This will minimize the number of invalid choices. Populate city only if you do not know the zip.
- Use abbreviations on "directionals" preceding the main address. As an example, type " 100 N Main St" instead of "100 North Main St".
- Make sure the correct suffix (e.g. St, Dr, Rd, Av, Blvd, Hwy, Ct, Cir, etc) is used.

Q. I cannot get an exact match on an address search. Why?

Answer: Some possible reasons include:

- The address is so new that it does not appear in BellSouth's engineering records yet. DSL capability is indeterminate at this time for this address.
- The local municipality has changed the end-user street address and is not reflected in BellSouth's engineering records.
- The customer address is in a rural route area with a non-standard address.

Q. I get an exact match on the address, but LQS cannot provide an Address Key.

Answer: LQS obtains address information from the BellSouth Street Address Guide (SAG) database. Address Keys are derived from an internal "living unit" identifier received from SAG. The address selected does not currently contain a "living unit" identifier, and address-based DSL qualification cannot be determined at this time.

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ACRONYMS

ADSL	Asymmetric Digital Subscriber Line
API	Application Protocol Interface
BBR-LO	BellSouth Business Rules – Local Ordering
CC	Company Code
CF	Connected Facility
CLEC	Competitive Local Exchange Carrier
CLLI	Common Language Location Identifier
CO	Central Office
CT	Connect Through
DAML	Digital Added Main Line
DFITL	Data Over Fiber In The Loop
DID	Direct Inward Dialing
DLC	Digital Loop Carrier
DLEC	Data Local Exchange Carrier
DPA	Different Premises Address
DSLAM	Digital Subscriber Line Access Multiplexer
FCC	Federal Communications Commission
FCO	Foreign Central Office
FRN	Facility Reservation Number
FX	Foreign Exchange

Loop Qualification System (LQS) CLEC Pre-Ordering and Ordering Guidelines

Chapter 6.0: ACRONYMS (continued)

GUI	Graphical User Interface
ID	Identification
IFITL	Integrated Fiber In The Loop
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
LCM	Local Contract Manager
LEAD	Loop Engineering Assignment Data
LFACS	Loop Facilities Assignment and Control System
LMU	Loop Makeup
LMUSI	Loop Makeup Service Inquiry
LOA	Letter of Authorization
LSM	Local Support Manager
LQS	Loop Qualification System
LQSGUI	Loop Qualification System Graphical User Interface
LSP	Local Service Provider
LUID	Living Unit Identification
NSP	Network Service Provider
OEC	Outside Plant Equivalence Code
PBX	Private Branch Exchange
PC	Personal Computer
PCF	Partially Connected Facility



Loop Qualification System (LQS) CLEC Pre-Ordering and Ordering Guidelines

Chapter 6.0: ACRONYMS (continued)

PE	Pair Evaluation
POTS	Plain Old Telephone Service
PRU	Pair Restriction Usage
RT	Remote Terminal
SI	Service Inquiry
TN	Telephone Number
USOC	Universal Service Order Code
WKG	Working