

NEUSTAR USER GUIDE

Pure Append: User Manual

November 2012

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Section I: Overview

Welcome! Thank you for choosing Neustar's Pure Append as your phone appending solution. You are about to experience the cutting edge in phone appending! You can finally install an application on your computer and run all of your phone appends on your own, without ever sending a file out of the office. Pure Append puts you in control with:

Cutting Edge Tool

- Easy to install thin-client application saved right to your desktop.
- Get all of the same phone appending capabilities that you would normally have without sending your file to a phone appending provider:
 - Phone Appends
 - Reverse Appends
- Gain complete control running appends whenever and wherever you want — 24 hours a day, 7 days a week.

Better Match Logic

- Improve data quality using Pure Append's hierarchical approach that addresses both the quantity of record elements to perform a match and also the quality of them.
- Optimize matching data precision by standardizing the input address when needed.
- Utilize Neustar's unique data elements from the most comprehensive data sources using superior technology for your matching logic.
- Access unique match scoring codes to give you maximum flexibility to create customized rules according to your business process for assessing match quality.

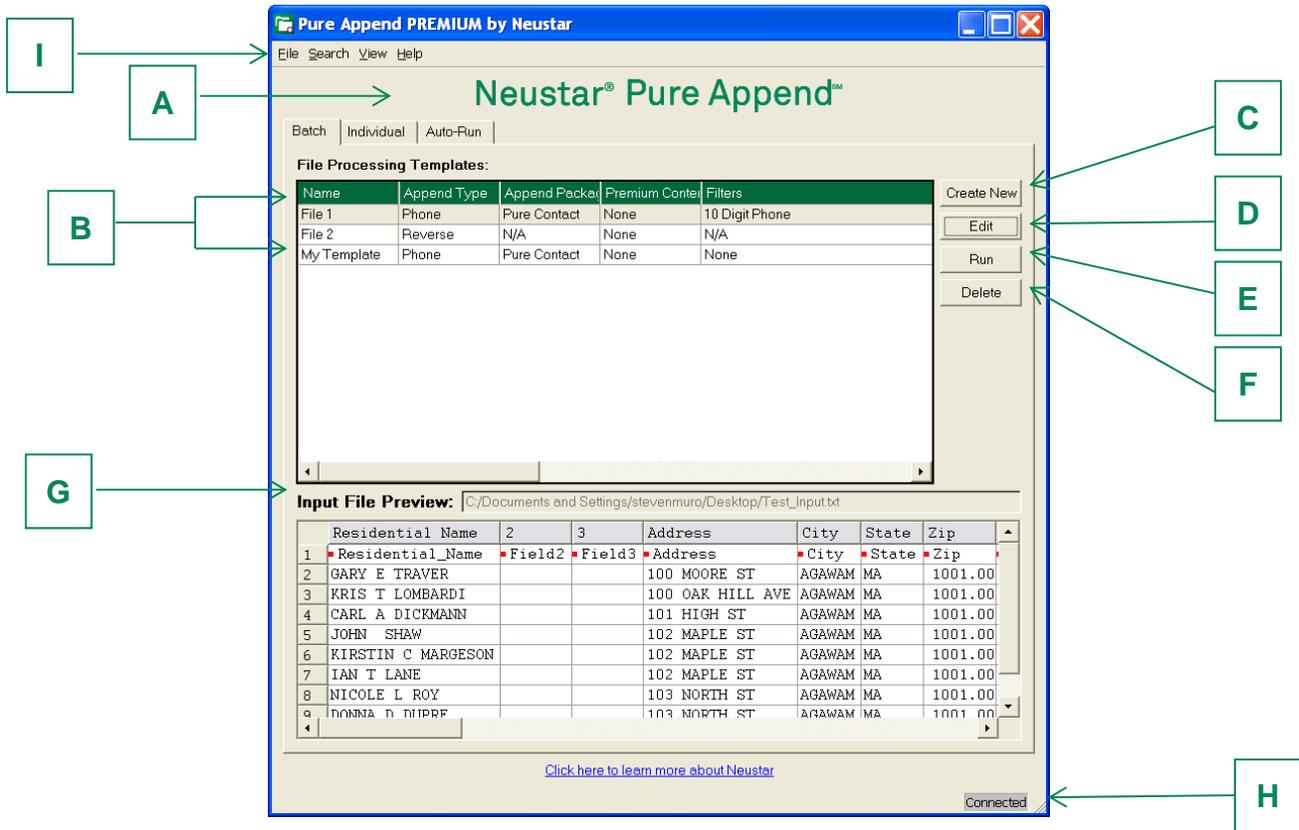
Unrivaled Data

The data behind Pure Append comes from over 240 data sources including nationwide telecommunication service providers, whereas traditional phone append providers use standard direct marketing sources. This ensures that you receive:

- **More Current Data:** Almost every phone transaction (add, change, delete) that occurs is recorded within 30 days of its occurrence. Neustar's Phone Append database is updated every month. Neustar's Reverse Append data repository is a live database, updated multiple times a day.
- **More Accurate Data:** Neustar's database has over 160 million records in it. Over 20 million of these have secondary address elements, and over 30 million records have phone numbers that are not available through other compiled data files.
- **More Data:** As a neutral, third party to nationwide telecommunication service providers, Neustar receives data directly from the carriers so that we can provide you with unique data elements — including connectivity flags and phone type — that others cannot.

Section II: Main Menu

When you launch Pure Append, you will be directed to the Main Menu:



Batch and Individual Queries

Pure Append can perform queries in two different modes: **Batch** and **Individual**. In each mode, a user will be able to run *Phone Appends* as well as *Reverse Appends*. You can toggle between batch and individual mode by clicking on their respective tab (A). Below is a description of each mode:

- **Batch:** Allows you to identify an input file that resides on your desktop or network. Pure Append takes your input file and creates a new file, taking your input records and appending Neustar’s data to those records.
- **Individual:** Allows you to manually input your record into Pure Append and receive back Neustar’s results in real time.

File Processing Templates

Overview

In Pure Append, you have the ability to save your custom job settings so you can easily run reoccurring jobs. These saved settings are referred to as *File Processing Templates*. Upon launching Pure Append

for the first time, there will be no File Processing Templates available. However, once you run a job you will have the option to save a template.

Your saved File Processing Templates are listed in (B). Here you can see the name of your templates, the append type, append package, as well as any premium content or filters you selected. When you highlight a template, you can see the name and location of the input file that was used to create that template in (G). In the window below (G) is a preview of your input file formatted as it was defined for that particular template.

Edit a File Processing Template

To select a saved File Processing Template and modify the input file or any of the settings for that template, select the template you wish to edit and click on (D). This will bring up the File Processing Template confirmation screen. You will have the ability to modify all aspects of your saved template from that screen.

Run a File Processing Template

To run a saved File Processing Template straight from the main menu, highlight the template that you would like to run and click on (E). This will bring up the File Processing Template confirmation screen. You can run the job by clicking the  button.

Delete a File Processing Template

To delete a saved File Processing Template, highlight the template that you wish to delete, and click on (F).

Create a New File Processing Template/Start a New Batch Job

To create a new File Processing Template, click on (C). This will take you to the *Pure Append Batch Wizard*. There you can set up a new job or File Processing Template.

Help Menus

You can access Pure Append Help Menus by clicking on any of the pull down menus in (I). Below is what you can access from each help menu:

File Menu

- **Edit Account Info:** Allows you to change your username and password.
- **Edit Access Key:** Allows you to input a new access key.
- **Switch to HTTPS Mode:** Run Pure Append on public Port 443 instead of on private Port 5201.
Note: Pure Append will run significantly slower when running on Port 443 as opposed to Port 5201. Port 443 is also far less secure than Port 5201. This option is only recommended when Port 5201 is unavailable.
- **Edit Match Summary Report Image:** Allows you to select a new image to display on your Match Summary Report.

Note: To select a new image to display on the Match Summary Report, you must put in the web address of the page that is hosting the image. For example, if you were at www.neustar.biz, and

wanted to get the Neustar logo on your summary report, you would right click on the image on a webpage and select “View Image” or “View Image Source” depending on the web browser you are using. This should open up a Webpage with just the image displayed. Input the address of that webpage into the text box.

Search Menu

- **Batch:** Brings you straight to the Batch tab on the Main Menu.
- **Individual:** Brings you straight to the Individual tab on the Main Menu for Phone Append or Reverse Append.

View

- **History:** View a summary of every job that has ever been run from your current Pure Append install.
- **Access Key Information:** Will show you when various features that you are licensed to use in Pure Append expire.
- **Demo Mode Status:** With demo Pure Append accounts, this will show you how many “demo” records you have remaining until demo mode shuts off. You also have the ability to add additional demo records if you have been provided a demo code.

Help

- **Verify Connection:** Check to see if you have a connection to the port that Pure Append uses, Port 5201.
- **User Manual:** Opens up this user manual.
- **Output Code Reference:** View the output codes and output layouts for Pure Append.
- **About:** Check the version of Pure Append that you are currently running.
- **Contact Us:** Provides the number of technical support.

Running Pure Append Offline

Pure Append can be run when connected to the internet or when offline. When you open the application, the splash screen will indicate if the application is connected to the internet. You can also check your connectivity status anytime by referring to (H). If there is no internet connection available, (H) will indicate that you are offline.

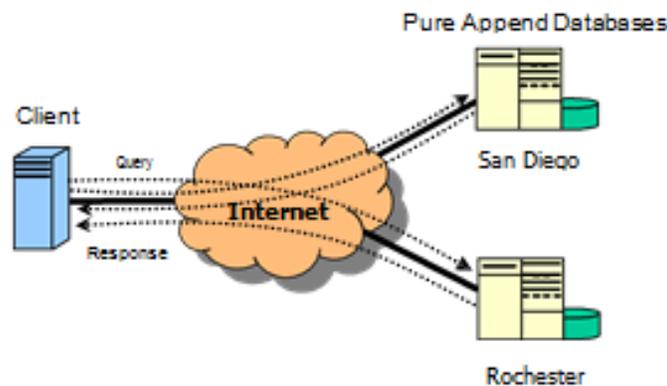
When offline, you will be able to select and edit File Processing Templates as well as set up new jobs and read any documentation.

Section III: Batch Mode Overview

Pure Append's Batch Upload mode allows you to take a consumer or business file that is saved on your desktop or network, and enhance those records by appending to them an assortment of additional data which you can choose from in the application.

The process starts with you specifying in the application where your input file resides on your desktop or network, and where you want your output file to be created. You then choose from an assortment of choices what types of data you want appended to your file.

Pure Append is a secured, easy-to-use application. Your file is never actually transferred from your computer to Neustar's servers. Instead Pure Append takes records from your input file and sends them to Neustar's servers in San Diego, CA and Rochester, NY in random batches of 100. The servers match the records from the input file to those in the Neustar database and sends back the input records with the Neustar's data appended to them to the your desktop. As this process is going on Pure Append is simultaneously creating a file on your computer and populating that file with the records that are being returned from the servers.



Section IV: Batch Mode — Phone Append

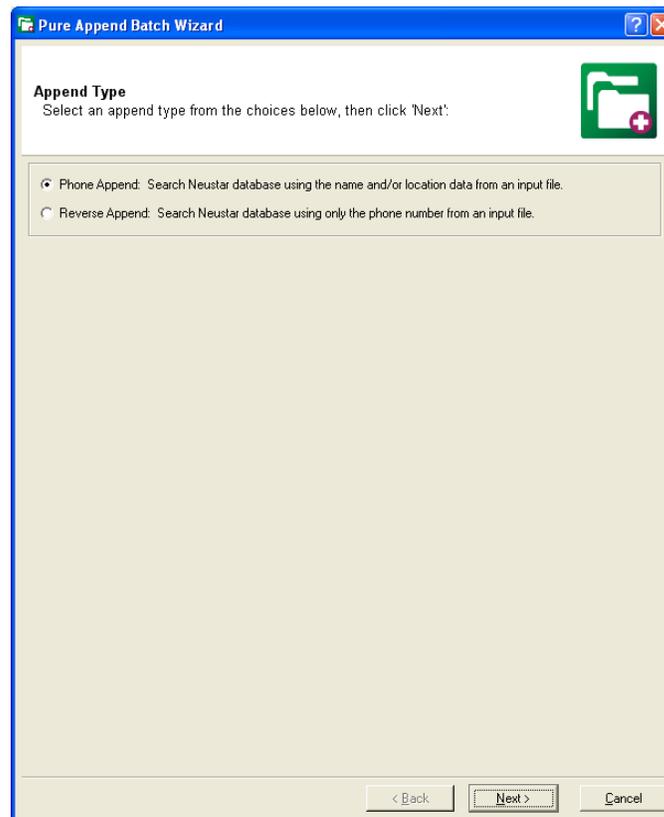
Phone Append Overview

Pure Append allows you to run a *Phone Append* or a *Reverse Append* job. A *Phone Append* batch job requires that your input file contains some combination of name and address data. Pure Append matches the address data in the input file to the data in the Neustar database, and then look at the input name data to identify a match. The minimum an input record must have for Pure Append to attempt a match is:

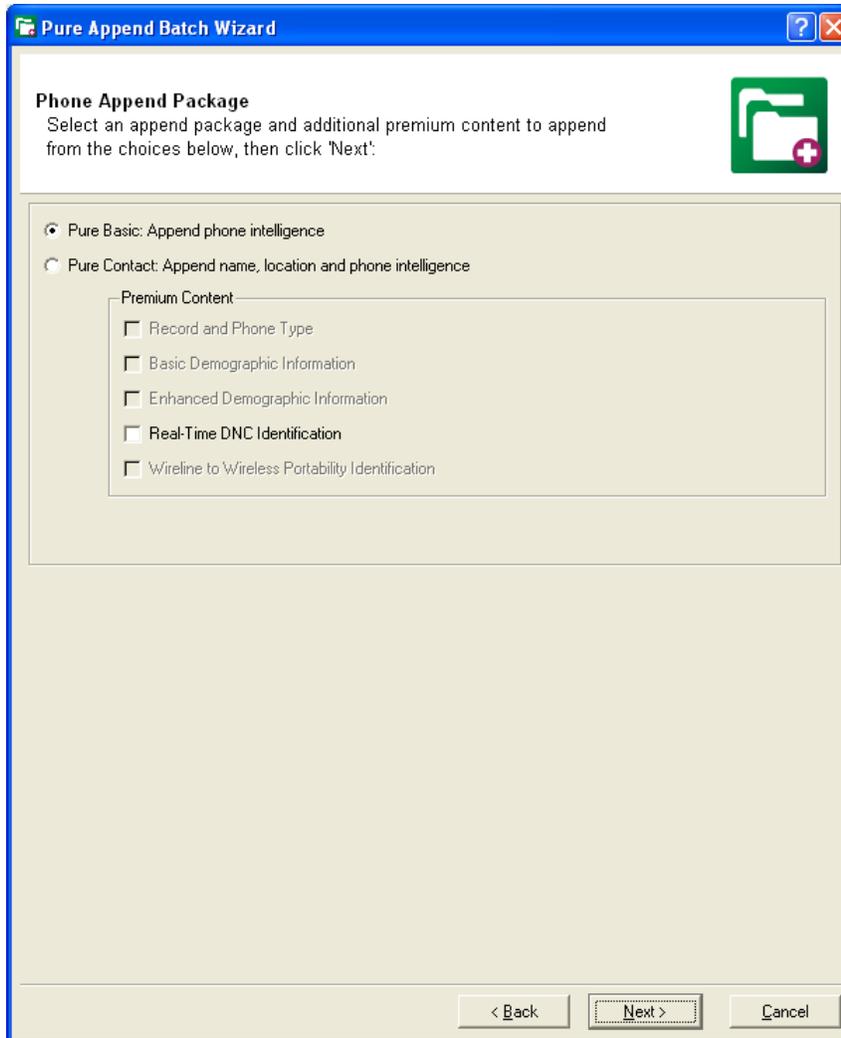
- Surname and zip code
- Full address, city and state (without a surname)
- Surname, city and state

Setting up a Phone Append Batch Job

1. From the main menu select the  button. This will open up the *Pure Append Batch Wizard*.
2. The first screen on the Pure Append Batch Wizard will prompt you to select your append type. Select the radio button next to *Phone Append*, and click .



3. On the next screen you will select what type of phone append package you would like to run.



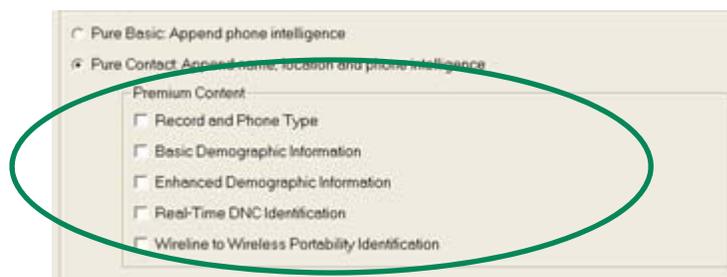
There are two packages in Pure Append:

- **Pure Basic:** This option is selected when you just want to have intelligence on the phone number from your input record appended to the output file. When this option is selected, the following fields will be appended to your output:
 - *Neustar Appended Telephone Number*
 - *Phone Match Type*
 - *Match Composite Score*
 - *Phone Status Code*

- **Pure Contact:** This option is selected when you want intelligence on the phone number, address and name for the records in your input file. Selecting Pure Contact also gives you the ability to select additional premium content that you can append to your output file. When Pure Contact is selected, the following fields will be appended to your output:
 - *Neustar Appended Telephone Number*
 - *Phone Match Type*
 - *Match Composite Score*
 - *Phone Status Code*
 - *Input Address Score*
 - *Input Phone Score*
 - *Name Match Score*
 - *Address Match Score*
 - *Name*
 - *Address Line 1*
 - *Address Line 2*
 - *City*
 - *State*
 - *Zip/DPC*

- 4. If you select **Pure Basic** as your package, you can additionally select to append Real-Time Do Not Call (DNC) Identification information if you are licensed to append it. Make your selection and click .

- 5. If you select **Pure Contact** as your package, you can select additional premium content to append to your output file. If you do not want to select any premium content, click . Otherwise, select which premium content you would like to append then click . The premium content selections are listed under the append packages.



Below is a description of what additional data elements you will have appended to your records with each of the premium content packages that are available in Pure Append.

Note: *There is an additional charge for each premium content element available in Pure Append. By selecting to append any premium content element, you will automatically be billed at the rate that is specified in your Pure Append contract.*

- **Record and Phone Type:** Selecting Record and Phone Type will append the following fields to your output file:
 - *US Postal Service Zip+4 Type*
 - *Phone/Exchange Type*
 - *Record Type*
 - *Household Relationship Code*
 - *Time Zone*
 - *Daylight Savings Time Observed*
- **Basic Demographic Information:** Selecting Basic Demographic Information will append the following fields to your output file:
 - *Marital Status*
 - *Number of Children*
 - *Presence of Children Age 0-2*
 - *Presence of Children Age 3-5*
 - *Presence of Children Age 6-10*
 - *Presence of Children Age 11-15*
 - *Presence of Children Age 16-17*
 - *Presence of Children Age 0-17, Unknown Gender*
 - *Household Type (Family Composition)*
 - *Dwelling Type*
 - *Home Ownership*
 - *Median Home Value*
 - *Length of Residence*
 - *Income Predictor/Household Income*
 - *Miscellaneous Credit Card*
 - *Standard Retail Credit Card*
 - *Standard Specialty Card*
 - *Upscale Retail Card*
 - *Upscale Specialty Card*
 - *Bank Card*
 - *Oil/Gas Card*

- *Finance Company Card*
 - *Travel/Entertainment Card*
 - *Verification Date*
 - *Given Name*
 - *Middle Initial*
 - *Gender*
 - *Age*
- } For up to five additional household members that are over the age of 17
- **Enhanced Demographic Information:** Selecting Enhanced Demographic Information will append the following fields to your output file:
 - *Presence of Adults Unknown Age*
 - *Presence of Adults Age 75+, Specific*
 - *Presence of Adults Age 65-74, Specific*
 - *Presence of Adults Age 55-64, Specific*
 - *Presence of Adults Age 45-54, Specific*
 - *Presence of Adults Age 35-44, Specific*
 - *Presence of Adults Age 25-34, Specific*
 - *Presence of Adults Age 18-24, Specific*
 - *Presence of Adults Age 65+, Inferred*
 - *Presence of Adults Age 45-64, Inferred*
 - *Presence of Adults Age 34-44, Inferred*
 - *Presence of Adults Age Under 35, Inferred*
 - *Narrow Band Income*
 - *Occupation Code*
 - *Household Age Code*
 - *Household Age Indicator*
 - *Nielsen County Size*
 - *DMA Code*
 - *Structure Year*
 - *Number of Persons in Household*
 - *Number of Adults in Household*
 - **Real-Time DNC Identification:** When you select to append Real-Time Do Not Call Identification, you will be provided back a real-time, comprehensive identification of records that reside on all of the major DNC lists currently maintained. This includes the FTC, DMA

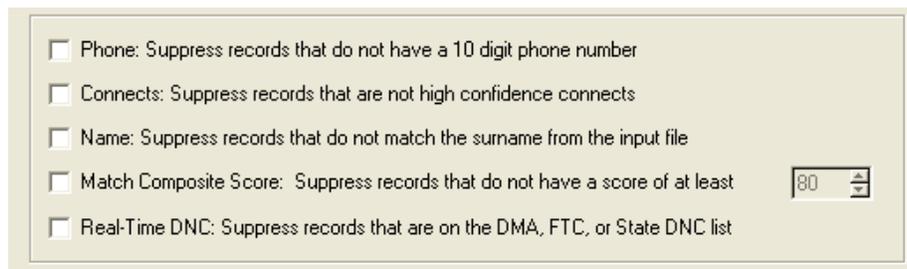
and all of the individual state lists. The FTC and DMA DNC lists are updated multiple times a day and the state DNC lists are updated monthly.

Note: *Appending Real-Time DNC Identification codes requires that the user has a valid SAN number issued to them by the FTC's National Do Not Call Registry. By default this feature is turned off upon installation. Neustar will turn on this feature upon receiving a valid SAN number. Please contact your Neustar account representative for more information about receiving Real-Time DNC.*

- **Wireless to Wireline Portability Identification:** Selecting to append Wireless to Wireline Portability Identification will give you back a code that indicates whether or not the phone number that Neustar appends to your input records has been ported from a wireline number to a wireless number, or vice-versa.

Note: *Wireless to Wireline Portability Identification codes requires that the user has a signed agreement with NeuStar directed to accessing and using these codes, and has paid any applicable fees. By default this feature is turned off upon installation. NeuStar will turn on this feature subsequent to executing that agreement. Please contact your NeuStar account representative for more information about receiving Wireless to Wireline Portability information.*

6. On the next screen you will be asked to select if you would like to apply any optional filters to your Phone Append job. Select which filters you would like to apply to your job (if any), then click



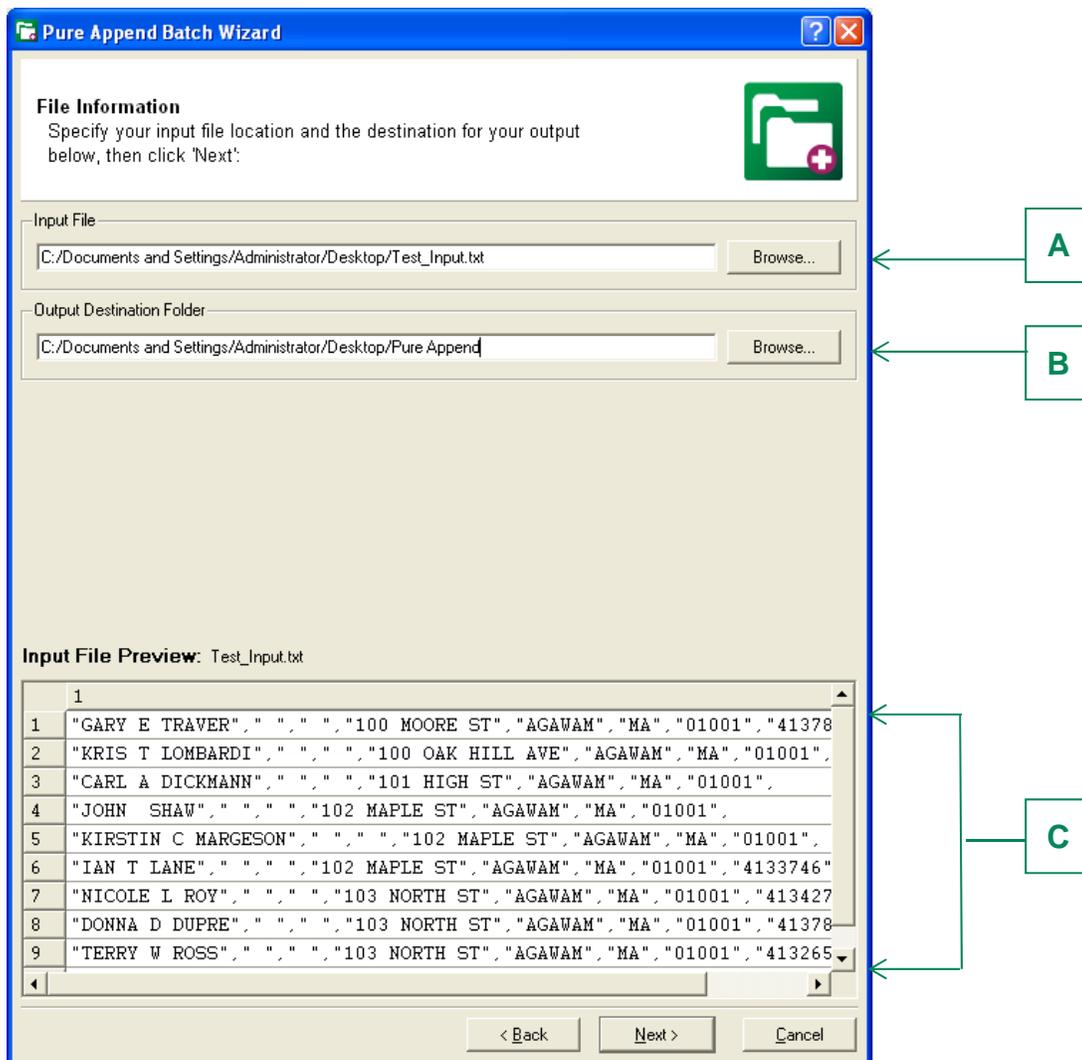
Phone: Suppress records that do not have a 10 digit phone number
 Connects: Suppress records that are not high confidence connects
 Name: Suppress records that do not match the surname from the input file
 Match Composite Score: Suppress records that do not have a score of at least
 Real-Time DNC: Suppress records that are on the DMA, FTC, or State DNC list

The filters that are offered serve as criteria that you can select for records to meet in order for them to be appended to your file. Selecting any of the screens will suppress any records from your file that do not meet the criteria that is defined in the filter that you select. Below is a description of each of the filters that are offered in Pure Append and how they will affect your output file.

Note: *There is an additional charge for applying filters to your Phone Append jobs. Selecting to append any filters will automatically bill you for each filtered record at the rate that is specified in your Pure Append contract.*

- **Phone – Suppress records that do not have a 10-digit phone number:** Since Neustar's data repository is comprised of many records that come from Telco-sources, Neustar has the unique ability to access public records, as well as records that are private (unlisted, unpublished records). Though Neustar can provide you with the full name and address for records that are private, we cannot provide a full 10-digit number. Instead on these records you will have a 7-digit number appended. This number is a great verification source if your input records have the full 10- digit number. If you do not want to have records that have a 7-digit number appended to your output file, select the *Phone* filter and records with 7-digit phone numbers will be suppressed.

- **Connects – Suppress records that are not high confidence connects:** Since Neustar's data repository is comprised of Telco-sourced records, they can provide intelligence on a records phone number that other providers cannot. One of the unique data elements Pure Append provides is a code indicating if the phone number that Pure Append appended to your output file is connected, delisted (disconnected) or if the status is unknown. Approximately 90% of all Neustar's records are populated with a connectivity code. Selecting the *Connects* filter will suppress any records from your output file that have either a delisted or unknown connectivity status.
 - **Name – Suppress records that do not match the surname from the input file:** By default Pure Append matches an input record by address and will return the record for the input address if a name match cannot be found within a reasonable radius of the address. If the *Name* screen is selected, Pure Append will suppress any records from your output file where the last name on the input record does not match the last name for a record with the same address (as on the input) in the Neustar database.
 - **Match Composite Score – Suppress records that do not have a score of at least (XX):** With every match that is made in a Phone Append job, Pure Append appends a unique Match Composite Score to each record. This score serves as a “confidence code” for how accurate of a match Pure Append has made. Selecting this filter allows you to set a minimum level a Match Composite Score must meet for that record to be appended to your output file.
 - **Real-Time DNC – Suppress records that are on the DMA, FTC or state DNC list:** If your Pure Append account authorizes you to append *Real-Time DNC Identification* premium content, and you have selected to append it, selecting this filter will suppress any records from your output file that have a status of being on any of the Do Not Call lists.
7. The next screen you are directed too is where you will define the input file you want to run through Pure Append, as well as the destination for the output file that will be created.



6a. To select the input file you would like to use for your Phone Append job you can manually type in the location of your file, or click on (A). This will open up the input folder that resides in your Pure Append directory. Here you can select from a file that you have stored in that folder, or browse through your desktop/network to select a file. Once you select an input file you will see a preview of it displayed in the Input File Preview pane at the bottom of the screen (C).

6b. By default, Pure Append will create your output file in the *C:/Program Files/Amacai/Pure Append/Output* directory. To select a different destination for Pure Append to create your output file in, you can manually type in the location, or click on (B) to browse your desktop/network and select a new location.

Once you have your input file selected and have defined a destination for your output file, click , this will take you to the *Input File Layout Wizard*.

Section V: Batch Mode — Defining Phone Append Input File Layout

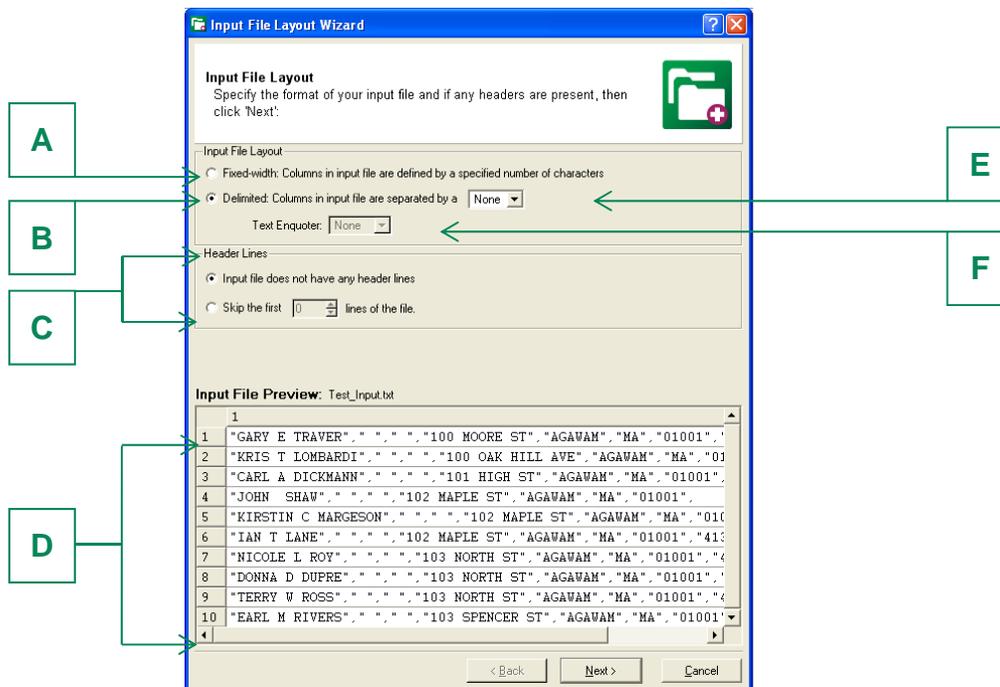
Phone Append Input File Layout Wizard Overview

After you have defined *how* you would like to run your Phone Append job in the Pure Append Batch Wizard, you will be taken to the *Input File Layout Wizard*. Here you will define for Pure Append how to read your input file.

Pure Append gives you the flexibility to use almost any type of input file, no matter how they are laid out. The *Input File Layout Wizard* is where you will define for Pure Append exactly how your input file is laid out, and where specific data fields are in your input file that Pure Append will use to make queries. Not every screen or data element that you are asked to define in this wizard will be applicable to your particular input file. If one of the data element screens does not apply to your particular input file, you can skip the screen by clicking .

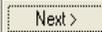
Using the Input File Layout Wizard

1. **Define how your file is laid out:** The first screen of the *Input File Layout Wizard* is where you will define how your input file is laid out. This screen is below:



- **Define your input file layout (fixed-width or delimited):** Pure Append is able to recognize both fixed-width and delimited input files. If your file is fixed-width, click on radio button (A). If your file is delimited, click on radio button (B). You will see a preview of the data in your input file in the input file preview window (D). If you are unsure how your file is formatted, a definition of the two formats is below:

- **Fixed-Width:** If your file is fixed-width then a specified number of characters define all of the columns in your input file. Therefore, you can define the data elements in your input file by defining the start position and length of each particular element.
 - **Delimited:** If your file is delimited then all of the columns in your input file are separated by a specific character (Pure Append can recognize comma, pipe and tab delimiters).
 - **For delimited files only:** Select your delimiter from (E). You can see comma, pipe or tab as your delimiter. When you have selected the correct delimiter, you will see your input file data that is displayed in the Input File Preview window (D) broken up into separate columns based upon the delimiter that you selected. Select if your file has text enquoters. By default, “None” is selected. If your file does have enquoters, select one from the pull down menu (F). You can select from single quotes, double quotes and carets as valid text enquoters. Once you have selected the correct text enquoter you will see the enquoters you chose removed from the Input File Preview window (D), and your input data columns should be parsed correctly.
 - **Define if your input file has any header rows:** If your input data has any rows that you do not want to run through the application (ex: columns headings), you can define them in (C). By default, the radio button for no header lines is selected.
 - **Click**  .
2. **Define the position of your input files data elements:** Next you will define in the application where specific data elements are on your input file. There are six data elements in Phone Append mode that Pure Append can use when performing a query. You will be asked to define the position of all of these data elements in your input file. The data elements are:
- *Residential Names*
 - *Business Name*
 - *Address*
 - *City/State/ZIP Information*
 - *Phone Number*
 - *Record ID*

Note: *It is not required that you have all of the data elements that Pure Append asks for present in your input file. If your input file does not have a particular data element, just skip the screen by clicking*  .

- **Define how your data elements are parsed:** On most of the screens where you are defining the location of the data elements on your input file, you will be asked to define how each data element is laid out in your input file. There are two basic ways to divide data (parse data) on an input file:
 - **Unparsed:** When the entire data element is contained within a single column.

Note: *The example below is unparsed since Doe, John D is all contained in column A.*

	A	B	C
7	Consumer Name		
8	Doe, John, D		
9			

- **Parsed:** When the data element is split up into separate columns.

Note: The example below is parsed since Doe, John D are all contained in separate columns (columns A, B and C).

	A	B	C
7	Consumer Name		
8	Last Name	First Name	Middle Initial
9	Doe	John	D
10			

On each data element screen, select the radio button for the appropriate parsing for each respective data element that is applicable to your input file.

Note: Some data elements allow you to choose additional levels of parsing (e.g. for the “Address” data element, you can choose unparsed, partially parsed and fully parsed). For these, there is a definition on the screen as to what the parsing format entails.

▪ **Defining the position of your input data elements:**

- **Fixed-Width:** If your input file is Fixed Width, then on each data element screen you

Start Position Length: [] []

will see boxes for . In the Start Position field, define for each data element the particular character number that the field starts on. In the Length field, define the length of the entire field.

Note: For every data element in fixed-width file formatting the Start Position is “1” by default, whether the data element is present or not. If you do not have a particular data element present in your file, leave the Start Position as “1” and the Length as “0”.

As you define the Start Position and Length of each fixed-width column you will notice in the Input File Preview Pane that you are creating a defined column for that particular field, with the field heading displayed above the column. Pay attention that the correct headings are being applied to the right data elements.

- **Delimited:** If your input file is delimited, once you select your delimiter on the Input File Layout screen you will see in the Input File Preview screen that the character you selected as the delimiter was removed from your data, and your input data is broken into numbered columns.

	1	2	3	4	5	6	7	8
1	ALDRICH,RICHARD,A			173 WASHINGTON RD	BRIMFIELD	MA	01010	
2	ALLEN,KIMBERLY,A			7 IVY ST	WORCESTER	MA	01604	508791

On each subsequent data element screen you will be defining the column number associated to the position of each particular data element, if that element is present in

Column Position []

your input file. You will define the position in the [] box. As you define

your column positions, you will notice that the name of the data element you are defining will replace the numerical heading over the column position you select.

Example: In the example below, if you were on the Residential Name data element screen, you would set the Column Position field to “1”, since your name data elements are in column number 1.

Input File Layout Wizard

Residential Names
If any residential name field(s) are present on your input file, specify the format and location below, then click 'Next':

Residential Name Format:

- Unparsed: First, middle, and last names are contained in the same column
- Parsed: First, middle and last names are contained in separate columns

Field Position:

Residential Name: 1

Name is formatted as [Last, First, Middle].

Name is formatted as [First Middle Last].

Input File Preview: Test_input.txt

	Residential Name	2	3	4	5	6	7	8
1	GARY F TRAVER			100 MOORE ST	AGAWAM	MA	01001	41:
2	KRIS T LOMBARDI			100 OAK HILL AVE	AGAWAM	MA	01001	
3	CARL A DICKMANN			101 HIGH ST	AGAWAM	MA	01001	
4	JOHN SHAW			102 MAPLE ST	AGAWAM	MA	01001	
5	KIRSTIN C MARGESON			102 MAPLE ST	AGAWAM	MA	01001	
6	IAN T LANE			102 MAPLE ST	AGAWAM	MA	01001	
7	NICOLE L ROY			103 NORTH ST	AGAWAM	MA	01001	
8	DONNA D DUPRE			103 NORTH ST	AGAWAM	MA	01001	41:
9	TERRY W ROSS			103 NORTH ST	AGAWAM	MA	01001	
10	EARL M RIVERS			103 SPENCER ST	AGAWAM	MA	01001	41:

< Back Next > Cancel

Once you have gone through each of the six data element screens, you will see the column headings for each of the data elements that were applicable to your input file labeled by their respective data element names, and not by a number, like in the example below.

	Residential Name	2	3	Address	City	State	Zip	8
1	ALDRICH,RICHARD,A			173 WASHINGTON RD	BRIMFIELD	MA	01010	
2	ALLEN,KIMBERLY,A			7 IVY ST	WORCESTER	MA	01604	50
3	ALLWEIN,JANICE,M			56 SURREY LN	WEST WARWICK	RI	02893	
4	ALMELA,WENDEE,C			6 BIG ROCK RD	MANCHESTER	MA	01944	
5	ALVAREZ,ELIUD,S			19 ENFIELD ST	NORTH ANDOVER	MA	01845	
6	ALVES,NANCY			520 HIGH ST # 1C	MEDFORD	MA	02155	78
7	AMARAL,OTILIA,M			23 NORTON AVE	TAUNTON	MA	02780	
8	AMORE,ANDREW			220 PLEASANT ST	CLAREMONT	NH	03743	
9	ANDERSON,BRETT			9 AUTUMN LN	AMHERST	MA	01002	41
10	ANDERSON,MARY			10 KINGSTON CT	NORTH READING	MA	01864	

3. **Confirm your Input File Processing Template Settings:** Next, you will be taken to the Input File Processing Template confirmation screen:

Input File Processing Template Settings
 Confirm your input file processing template settings below, then click 'Next':

Append Type:

Input File:

Output Destination:

Append Package:

Premium Content:

Filters:

Input File Preview:

	Residential Name	2	3	Address	City	State	Z
1	GARY E TRAVER			100 MOORE ST	AGAWAM	MA	(
2	KRIS T LOMBARDI			100 OAK HILL AVE	AGAWAM	MA	(
3	CARL A DICKMANN			101 HIGH ST	AGAWAM	MA	(
4	JOHN SHAW			102 MAPLE ST	AGAWAM	MA	(
5	KIRSTIN C MARGESON			102 MAPLE ST	AGAWAM	MA	(
6	IAN T LANE			102 MAPLE ST	AGAWAM	MA	(
7	NICOLE L ROY			103 NORTH ST	AGAWAM	MA	(
8	DONNA D DUPRE			103 NORTH ST	AGAWAM	MA	(
9	TERRY W ROSS			103 NORTH ST	AGAWAM	MA	(

< Back Next > Cancel

On this screen you can confirm all of the selections that you made for your input file format, as well as for your Phone Append job. You can modify any individual selection by clicking on the button that is next to the corresponding selection that you wish to edit.

Pay special attention to what is in the Input File Preview screen. This is how your data will run through Pure Append. Check to ensure that all of the data elements in your input file are defined correctly and parsed appropriately.

Once you are satisfied with your Input File Processing Template, click to be taken to the Output File Processing Template Settings screen. **For a guide on how to use the Output File Processing Templates screen refer to Section VIII: Defining Output File Layout.**

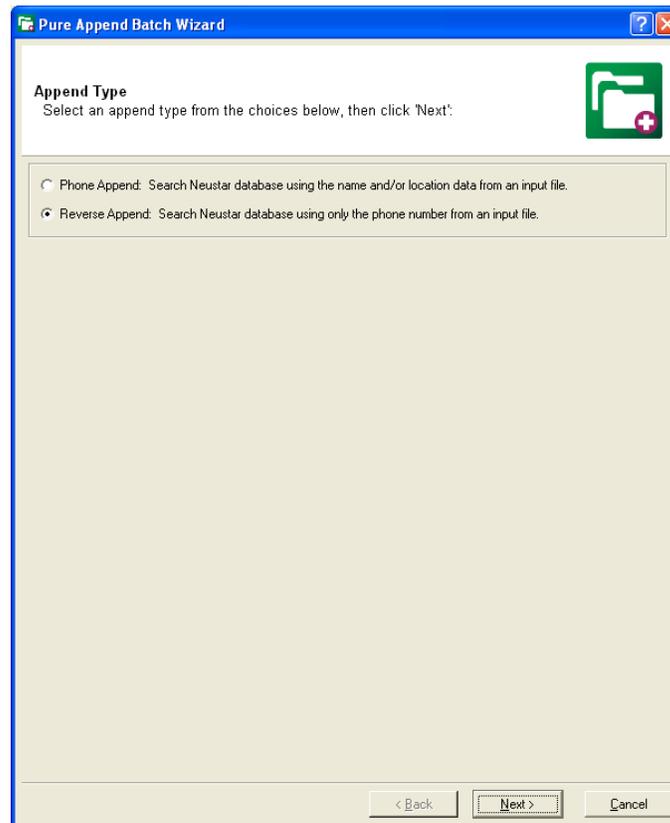
Section VI: Batch Mode – Reverse Append

Reverse Append Overview

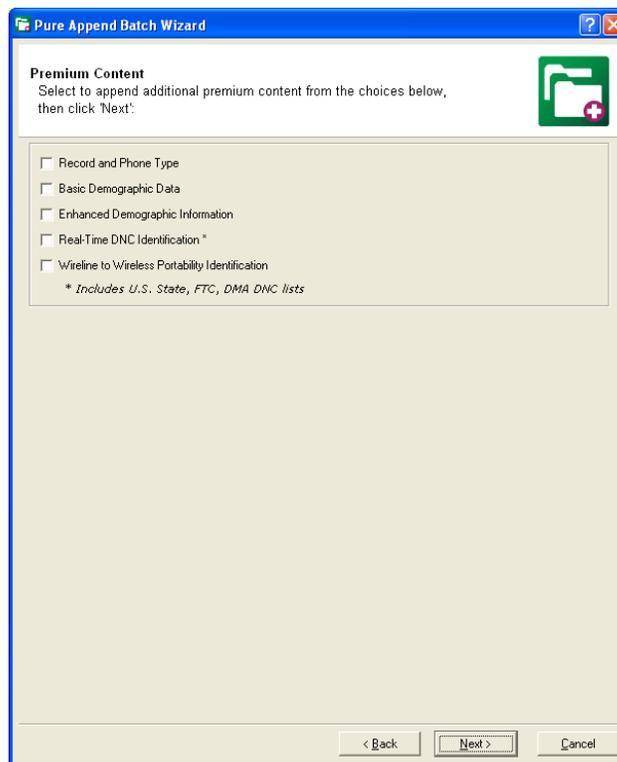
In Pure Append you have the ability to run a *Phone Append* or a *Reverse Append* job. A *Reverse Append* batch job requires that your input file contains a full 10-digit phone number. Pure Append will then match that input phone number to the Neustar database and return the name, address and any additional content you select for the phone number.

Setting up a Reverse Append Batch Job

1. From the main menu, select the  button. This will open up the *Pure Append Batch Wizard*.
2. The first screen on the Pure Append Batch Wizard will prompt you to select your append type. Select the radio button next to Reverse Append, and click .



3. On the next screen you will select if you want to append any additional premium content to your Reverse Append job. Select the premium content you would like to append, or if you would not like to append any additional premium content leave the boxes blank and click .



Below is a description of what additional data elements you will have appended to your records with each of the premium content packages that are available in Pure Append.

Note: *There is an additional charge for each premium content element available in Pure Append. By selecting to append any premium content element, you will automatically be billed at the rate that is specified in your Pure Append contract.*

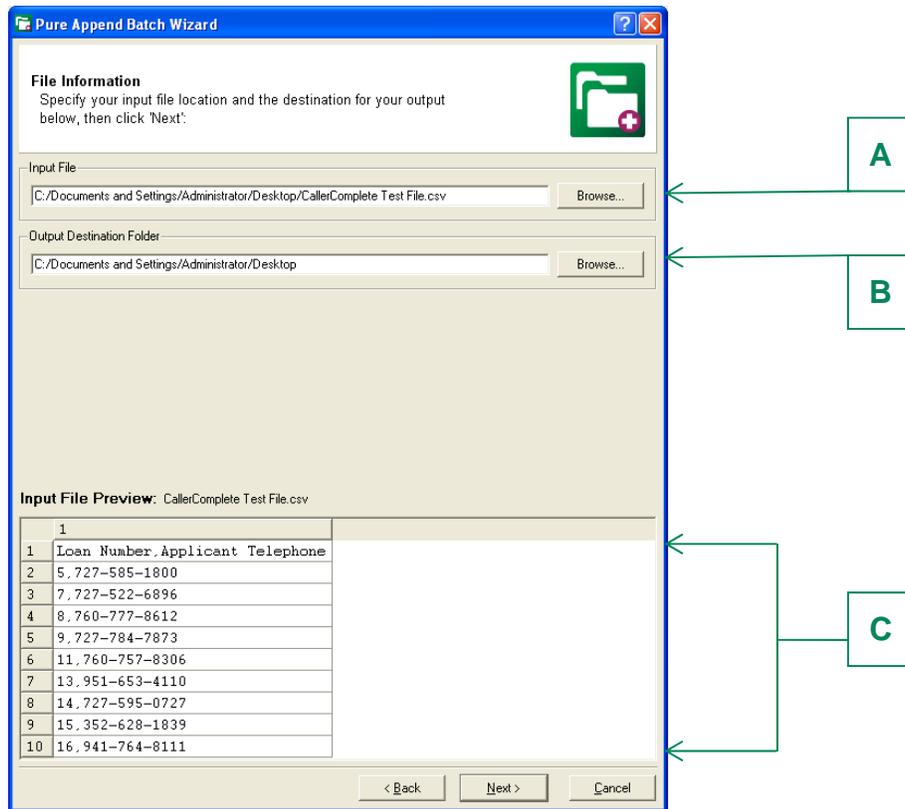
- **Record and Phone Type:** Selecting Record and Phone Type will append the following fields to your output file:
 - *Phone Type*
 - *Record Type*
 - *Time Zone*
- **Basic Demographic Information:** Selecting Basic Demographic Information will append the following fields to your output file:
 - *Marital Status*
 - *Number of Children*
 - *Presence of Children Age 0-2*
 - *Presence of Children Age 3-5*
 - *Presence of Children Age 6-10*
 - *Presence of Children Age 11-15*
 - *Presence of Children Age 16-17*

- *Presence of Children Age 0-17, Unknown Gender*
 - *Household Type (Family Composition)*
 - *Dwelling Type*
 - *Home Ownership*
 - *Median Home Value*
 - *Length of Residence*
 - *Income Predictor/Household Income*
 - *Miscellaneous Credit Card*
 - *Standard Retail Credit Card*
 - *Standard Specialty Card*
 - *Upscale Retail Card*
 - *Upscale Specialty Card*
 - *Bank Card*
 - *Oil/Gas Card*
 - *Finance Company Card*
 - *Travel/Entertainment Card*
 - *Verification Date*
 - *Given Name*
 - *Middle Initial*
 - *Gender*
 - *Age*
- For up to five additional household members that are over the age of 17

■ **Enhanced Demographic Information:** Selecting Enhanced Demographic Information will append the following fields to your output file:

- *Presence of Adults Unknown Age*
- *Presence of Adults Age 75+, Specific*
- *Presence of Adults Age 65-74, Specific*
- *Presence of Adults Age 55-64, Specific*
- *Presence of Adults Age 45-54, Specific*
- *Presence of Adults Age 35-44, Specific*
- *Presence of Adults Age 25-34, Specific*
- *Presence of Adults Age 18-24, Specific*
- *Presence of Adults Age 65+, Inferred*
- *Presence of Adults Age 45-64, Inferred*

- *Presence of Adults Age 34-44, Inferred*
 - *Presence of Adults Age Under 35, Inferred*
 - *Narrow Band Income*
 - *Occupation Code*
 - *Household Age Code*
 - *Household Age Indicator*
 - *Nielsen County Size*
 - *DMA Code*
 - *Structure Year*
 - *Number of Persons in Household*
 - *Number of Adults in Household*
- **Real-Time DNC Identification:** When you select to append Real-Time DNC Identification, you will be provided back a real-time, comprehensive identification of records that reside on the FTC and DMA Do Not Call lists. The FTC and DMA DNC lists are updated multiple times a day.
Note: Appending Real-Time DNC Identification codes requires that the user has a valid SAN number issued to them by the FTC's National Do Not Call Registry. By default this feature is turned off upon installation. Neustar will turn on this feature upon receiving a valid SAN number. Please contact your Neustar account representative for more information about receiving Real-Time DNC.
 - **Wireless to Wireline Portability Identification:** Selecting to append Wireless to Wireline Portability Identification will give you back a code that indicates whether or not the phone number that Neustar appends to your input records has been ported from a wireline number to a wireless number, or vice-versa.
Note: Wireless to Wireline Portability Identification codes requires that the user has a signed agreement with NeuStar directed to accessing and using these codes, and has paid any applicable fees. By default this feature is turned off upon installation. NeuStar will turn on this feature subsequent to executing that agreement. Please contact your NeuStar account representative for more information about receiving Wireless to Wireline Portability information.
4. The next screen you are directed to is where you will define the input file you want to run through Pure Append, as well as the destination for the output file that will be created.



- 4a To select the input file you would like to use for your Reverse Append job you can manually type in the location of your file, or click on (A). This will open up the input folder that resides in your Pure Append directory. Here you can select from a file that you have stored in that folder, or browse through your desktop/network to select a file. Once you select an input file you will see a preview of it displayed in the Input File Preview pane at the bottom of the screen (C).
- 4b By default, Pure Append will create your output file in the *C:/Program Files/Amacai/Pure Append/Output* directory. To select a different destination where your output file will be created, you can manually type in the location, or click on (B) to browse your desktop/network and select a new location.
5. Once you have your input file selected and have defined a destination for your output file, click , this will take you to the *Input File Layout Wizard*.

Section VII: Batch Mode — Defining Reverse Append Input File Layout

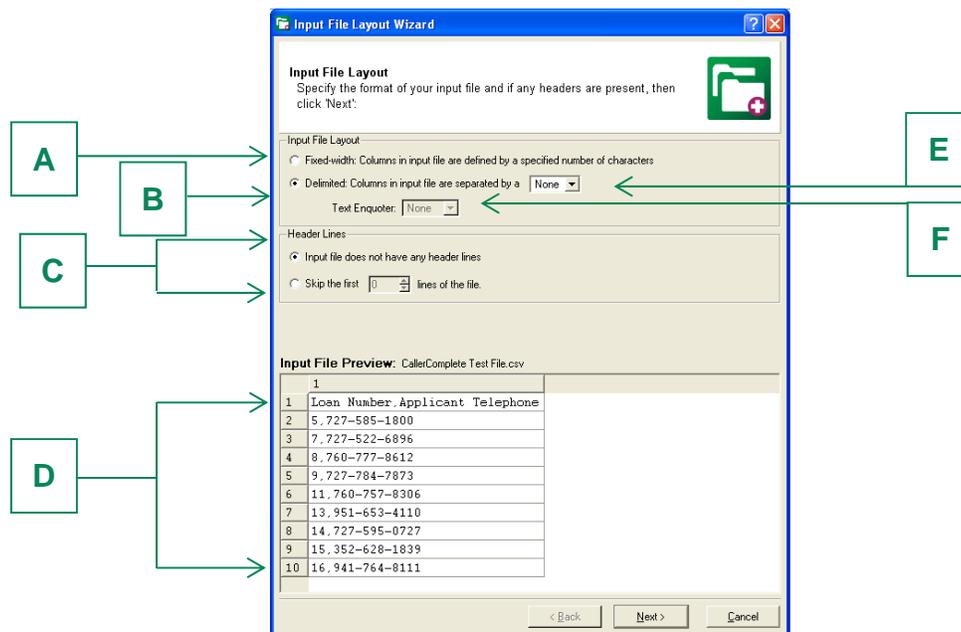
Reverse Append File Layout Wizard Overview

After you have defined “how” you would like to run your Reverse Append job in the Pure Append Batch Wizard, you will be taken to the *Input File Layout Wizard*. Here you will define for Pure Append how to read your input file.

Pure Append gives you the flexibility to use almost any type of input file, no matter how it is formatted. The *Input File Layout Wizard* is where you will define for Pure Append exactly how your input file is laid out, and where specific data fields are in your input file that Pure Append will use to make queries. Not every screen or data element that you are asked to define in this wizard will be applicable to your particular input file. If one of the data element screens does not apply to your particular input file, you can skip the screen by clicking .

Using the File Layout Wizard

1. **Define how your file is laid out:** The first screen of the *Input File Layout Wizard* is where you will define how your input file is laid out. This screen is below:



- **Define your input file layout (fixed-width or delimited):** Pure Append is able to recognize both fixed-width and delimited input files. If your file is fixed-width, click on radio button (A). If your file is delimited, click on radio button (B). You will see a preview of the data in your input file in the input file preview window (D). If you are unsure how your file is formatted, a definition of the two formats is below:

- **Fixed-Width:** If your file is fixed-width, then a specified number of characters define all of the columns in your input file. Therefore, you can define the data elements in your input file by defining the start position and length of each particular element.
- **Delimited:** If your file is delimited, then all of the columns in your input file are separated by a specific character (Pure Append can recognize comma, pipe and tab delimiters).
 - **For delimited files only:** Select your delimiter from (E). You can see comma, pipe or tab as your delimiter. When you have selected the correct delimiter, you will see your input file data that is displayed in the Input File Preview window (D) broken up into separate columns based upon the delimiter that you selected.

Note: All files that are not fixed-width must have some delimiter selected for you to run the append job. If your input file has just phone numbers (like the example above), select a random delimiter from the pull down menu.

Select if your file has text enquoters. By default, "None" is selected. If your file does have enquoters, select one from the pull down menu (F). You can select from single quotes, double quotes and carets as valid text enquoters. Once you have selected the correct text enquoter you will see the enquoters you chose removed from the Input File Preview window (D), and your input data columns should be parsed correctly.

- **Define if your input file has any header rows:** If your input data has any rows that you do not want to run through the application (e.g. columns, headings), you can define them in (C). By default, the radio button for no header lines is selected.
 - Click .
2. **Define the position of your input file data elements:** Next you will define in the application where specific data elements are on your input file. There are two data elements in Reverse Append mode that Pure Append can use when performing a query. You will be asked to define the position of all of these data elements in your input file. The data elements are:

- *Phone Number*
- *Record ID*

Note: It is not required that you have a record ID present in your input file. If your input file does not have a record ID, just skip the screen by clicking .

- **Define how your data elements are parsed:** On most of the screens where you are defining the location of your phone number field (s), you will have two options for how that data element is formatted in your input file:
 - **Unparsed:** Your phone number is unparsed if the entire data element (area code, exchange and phone number) are contained in the same column.

	A	B
1	Phone Number	
2	9082566528	

- **Parsed:** Your phone number is parsed if the data elements (area code, exchange and phone number) are contained in separate columns.

	A	B	C
1	Phone Number		
2	Area Code	Exchange	Phone Number
3	908	256	6528

- Select the radio button for the appropriate format of your phone number field.
- **Define the position of your input data elements:**
 - **Fixed-Width:** If your input file is Fixed Width, then on each data element screen you

Start Position Length:

will see boxes for . In the Start Position field, define for each data element the particular character number that the field starts on. In the Length field, define the length of the entire field.

As you define the Start Position and Length of each fixed-width column you will notice in the Input File Preview Pane that you are creating a defined column for that particular field, with the field heading displayed above the column. Pay attention that the correct headings are being applied to the right data elements.

- **Delimited:** If your input file is delimited, once you select your delimiter on the Input File Layout screen you will see in the Input File Preview screen that the character you selected as the delimiter was removed from your data, and your input data is broken into numbered columns.

Note: *If your Reverse Append input file only contains phone numbers (like the example below), then this will not happen. In this case, select any delimiter.*

Input File Preview: Pure Append 3 Reverse Input.txt

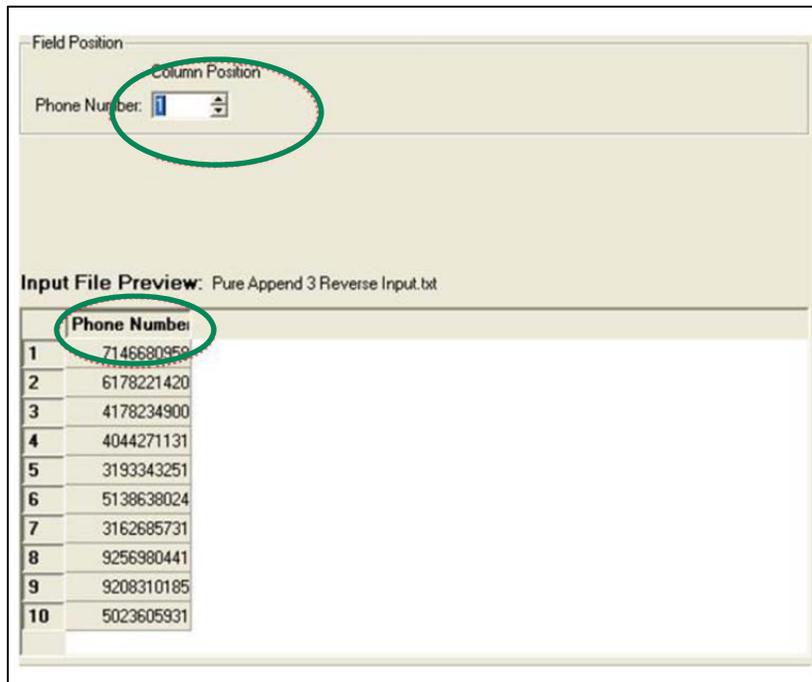
1	
1	7146680958
2	6178221420
3	4178234900

On each subsequent data element screen you will be defining the column number associated to the position of each particular data element, if that element is present in

Column Position

your input file. You will define the position in the box. As you define your column positions, you will notice that the name of the data element you are defining will replace the numerical heading over the column position you select.

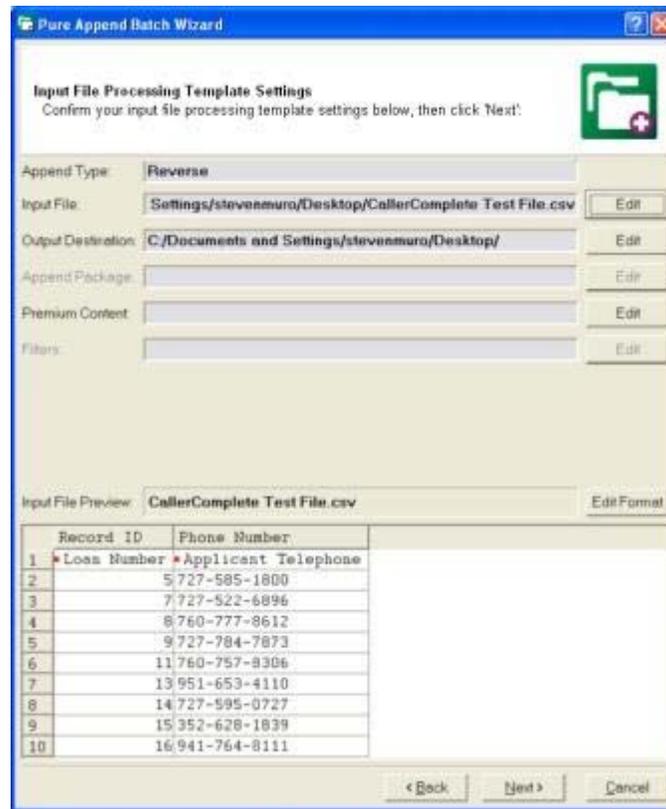
Example: *If you were on the Phone Number data element screen, you would set the Column Position field to "1", since your phone number data elements are in column number 1.*



Once you have gone through each of the two data element screens, you will see the column headings for each of the data elements that were applicable to your input file labeled by their respective data element names, and not by a number, like in the example below.

	Phone Number	Record ID
1	7146680958	25874
2	6178221420	25387
3	4178234900	85657
4	4044271131	85674
5	3193343251	12357
6	5138638024	52138
7	3162685731	13258
8	9256980441	85974
9	9208310185	85468
10	5023605931	98856

- 3. Confirm your input file processing template settings:** Next, you will be taken to the Input File Processing Template confirmation screen:



Input File Processing Template Settings
Confirm your input file processing template settings below, then click Next!

Append Type: Edit

Input File: Edit

Output Destination: Edit

Append Package: Edit

Premium Content: Edit

Filters: Edit

Input File Preview: Edit Format

Record ID	Phone Number
1	Loss Number *Applicant Telephone
2	5 727-585-1800
3	7 727-522-6896
4	8 760-777-8612
5	9 727-784-7873
6	11 760-757-9306
7	13 951-653-4110
8	14 727-595-0727
9	15 352-628-1839
10	16 941-764-8111

< Back Next > Cancel

On this screen you can confirm all of the selections that you made for your Reverse Append job, as well as for your input file layout. You can modify any individual selection by clicking on the button that is next to the corresponding selection that you wish to edit.

Pay special attention to what is in the Input File Preview screen. This is how your data will run through Pure Append. Check to ensure that all of the data elements in your input file are defined correctly and parsed appropriately.

Once you are satisfied with your Input File Processing Template, click to be taken to the Output File Processing Template Settings screen. ***For a guide on how to use the Output File Processing Templates screen refer to Section VIII: Defining Output File Layout.***

Section VIII: Batch Mode — Output File Layout Wizard

Phone Append Input File Layout Wizard Overview

After you have defined for Pure Append how your input file is laid-out in the *Input File Layout Wizard*, you will then specify exactly how you would like your output to be returned.

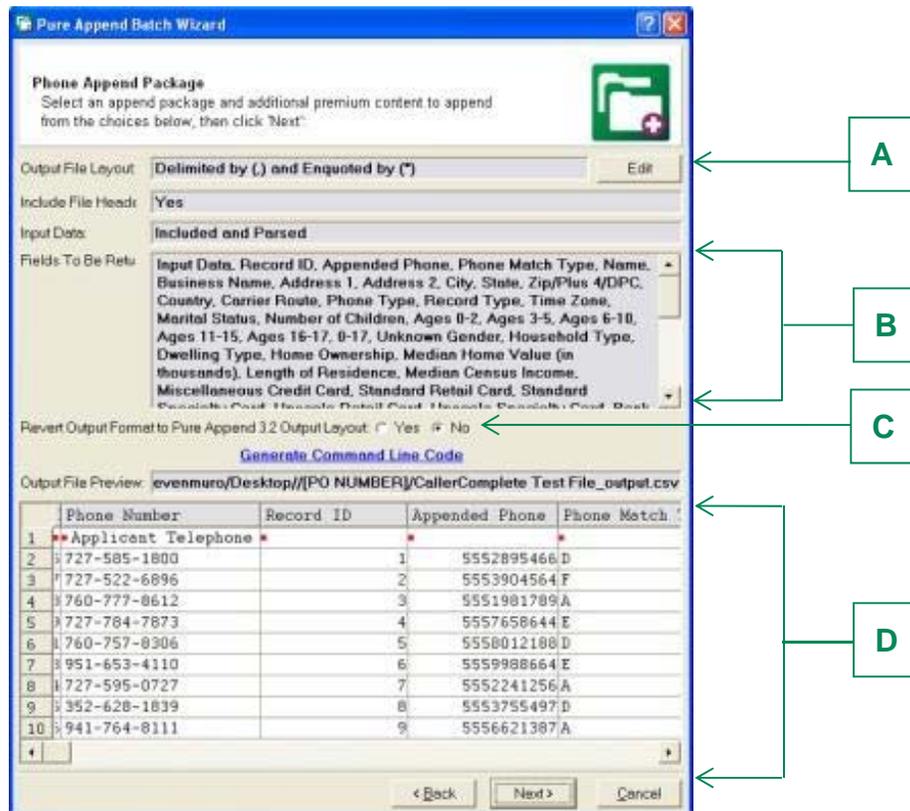
A new feature in Pure Append is the *Output File Layout Wizard*. This tool allows you to specify exactly how you want your output file returned from Pure Append. You can select if your file comes back fixed-width, delimited, what specific fields you want back and define headers for all of your input columns.

Note: *By default Pure Append will return your output file in the same format as the input file which was submitted. (e.g. If you input a pipe delimited file, your output will be returned pipe delimited).*

Confirming/Editing Output File Processing Template

Confirm or Edit Output Settings

After confirming your input file layout on the *Input File Processing Template Settings* screen, you will select . This will take you to the *Output File Processing Template Settings* screen. Unlike with your input file layout, Pure Append automatically selects your output file layout settings, and you can edit them if you choose to. By default, Pure Append returns output with your input data first, followed by any appended data, in the exact same format as the input file you submitted. The Output File Processing Template Settings screen identifies how your output file data will come back.



Understanding the Output File Processing Template Settings Screen

The first thing identified is the output file layout. This tells you if your output will be delimited (and what delimiter) or fixed-width. Next, the specifics of your output file are identified (B). These specifics include, if headers will be displayed on your output, if input data is included on the output file, and which fields specifically will be returned on your output file and in what order. You can also see where your output will be created on your desktop, as well as an example of how your data will be formatted on the output (D).

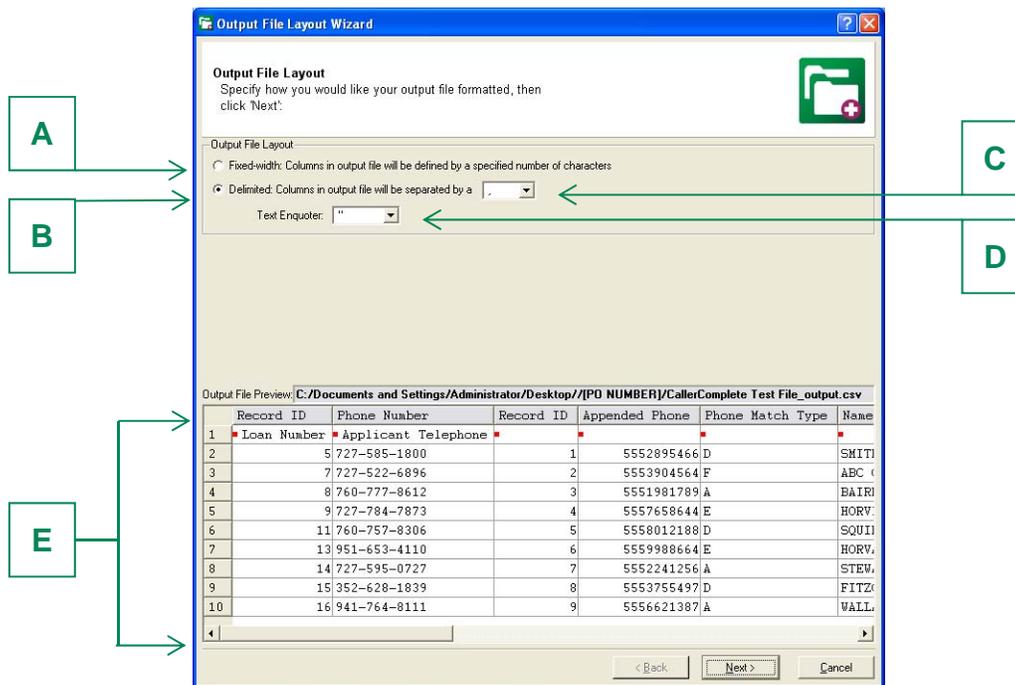
Note: *Pure Append Pro/Premium is different from Pure Append 3 in that output is no longer returned in one column on a comma delimited output file. If you wish to revert to the old Pure Append 3 output layout, select “Yes” in (C).*

Confirming or Editing your Output File Settings

After you are done looking over your output file settings, you can either select to begin the job, or you can select (A) to edit the output settings.

Using Output File Layout Wizard

1. **Define how you want your output file formatted:** The first screen of the *Output File Layout Wizard* is where you will define how you would like your output file formatted. This screen is below:



2. **Define your output file format (fixed-width or delimited):** Pure Append can output a file in either a fixed-width format or a delimited format (with valid delimiters being comma, pipe and tab).

By default Pure Append will choose your output format to be whatever format your input file was in. You can change it to fixed-width by clicking on radio button (A). To select delimited, choose radio button (B). If you select delimited, you will need to choose a valid delimiter. These are in pull

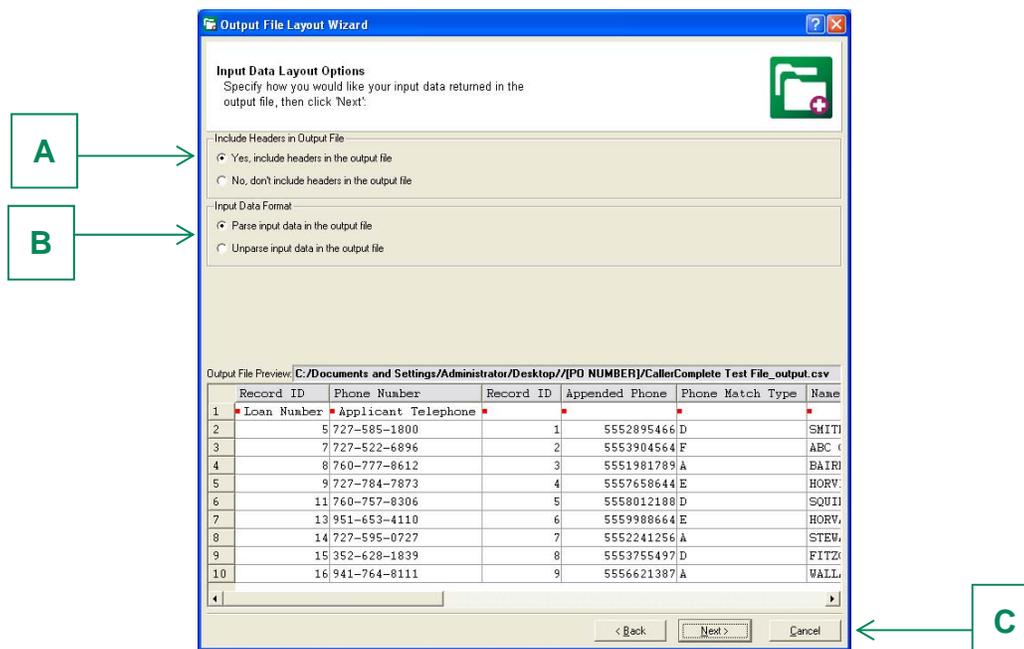
down menu (C). If you are selecting to output your file as comma delimited, you will need to select a text enquoter. Otherwise, a text enquoter is not imperative. If you choose to have text enquoters on your file, however, you can choose this in (D).

You can preview your output in (E). This is not how the output will actually look, as it is more of a representation of the specific fields that will be returned and how they are returned. When you are done choosing your output file layout settings, select .

3. **Indicate how your input is returned and if you want headers on your output:** On the *Input Data Layout Options* screen you will determine both if you want to include headers on your output file (A), and if you want your input data to come back parsed or unparsed (B).

Note: *Indicating if you want your data parsed or unparsed is essentially the same thing as asking if you want your data returned the same way it was in Pure Append 3. Select Parsed, unless you want all your input data returned in one column.*

Note 2: *The ability to return input data parsed or unparsed is only available when you choose to output a delimited file.*



4. **Define which columns you want returned from your input file and how you want them labeled:** On the *Define Input Data Columns* screen, you will define which fields will be returned on your output from your input file. By default, Pure Append will return each of the fields that you defined in the *Input File Layout Wizard*. By deselecting the checkmarks next to the input field headers, those fields will be removed from the output file.

Additionally you can define additional fields from your input file that were not defined in the *Input File Layout Wizard* (A). If you define a field and wish to change the heading you initially input, select (B). If you defined an additional input field and wish to remove it from your output, select (C). Once you have correctly defined how you wish to have your input displayed on your output file select .

Note: This screen will include *Start Position and Length*, instead of *Column Position* if you are inputting a fixed-width file.

Note 2: Your selections on this screen will vary depending on what type of file you are inputting and how you want that file output. Basic rules are as follows:

Delimited to Delimited:

- If you select to parse your input data, you can only define the column position for the additional input fields.
- If you select to unparsed your input data, you will not see the below screen. You will only have the option to include your input data on the output file or not.

Delimited to Fixed-Width:

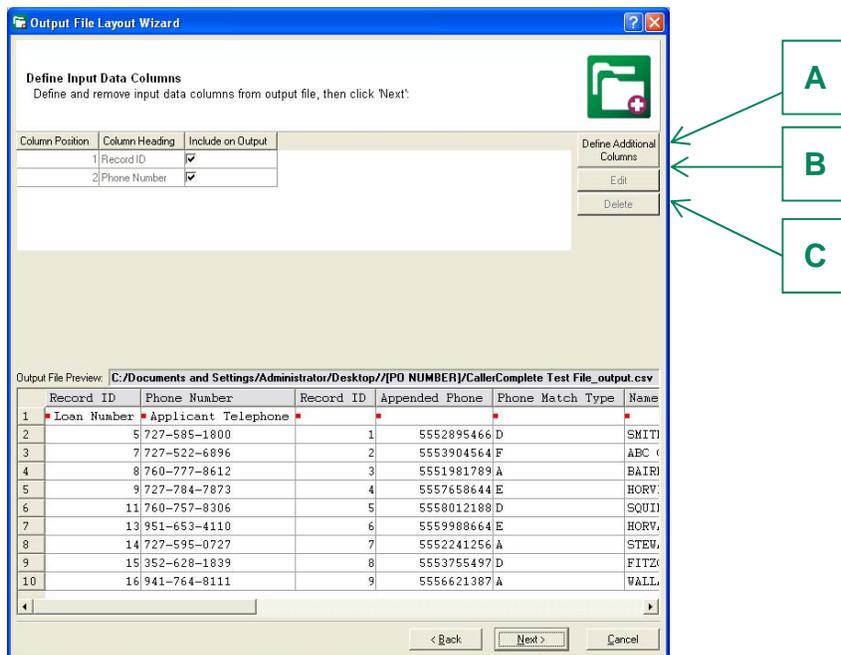
- Have the option to include headers on your output.
- You can define the column position of the input data and the max length for the field in the output file.

Fixed-Width to Fixed-Width:

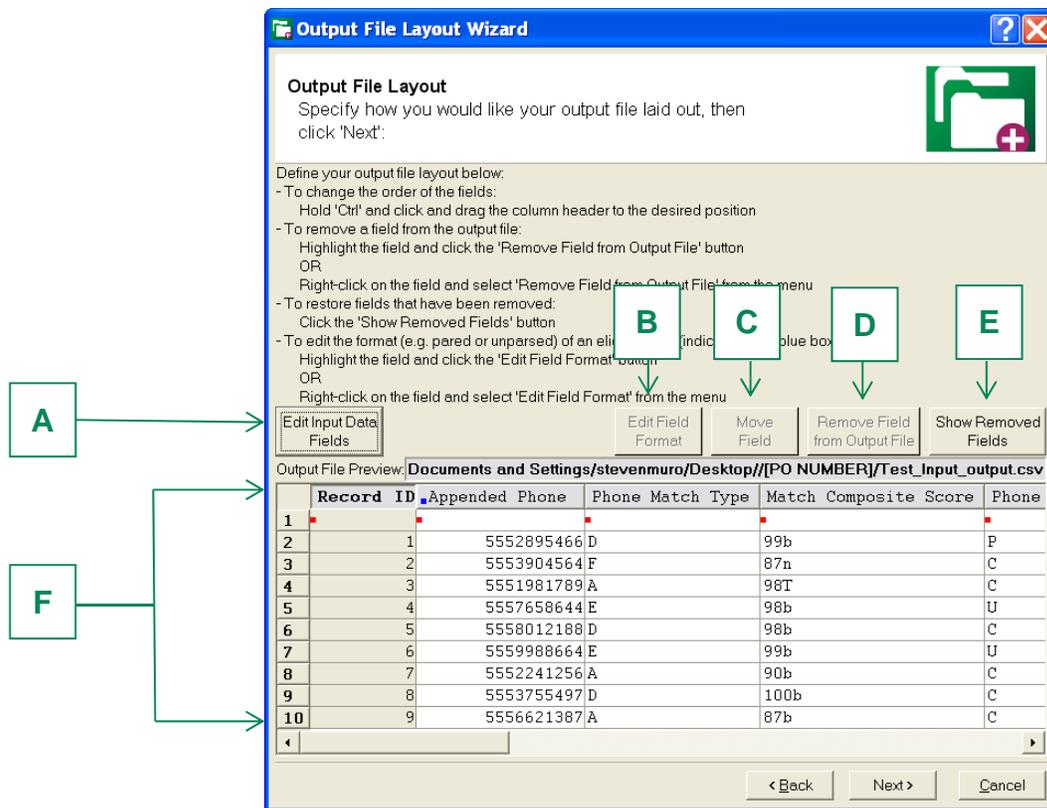
- Option to include input headers on your output.
- Can define start position and length of the additional input fields.

Fixed-Width to Delimited:

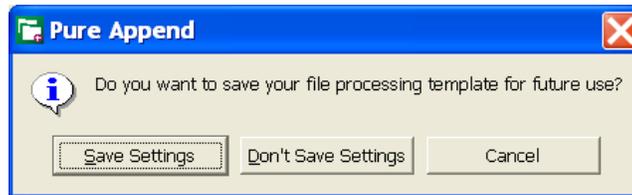
- If you have your input data parsed, you can only define the start position and length for the additional input fields
- If you have your input data returned unparsed, you can only select if you want to include your input data on your output file or not.



- Define which output fields you want returned on your output file, where you want them placed and how you want them formatted:** The next screen you see will be the *Output File Layout* screen. This screen allows you to identify which of the appended fields (based on the append package you selected) will be returned on your output file (F). You can also define how certain appended output fields will be formatted (B). If you want to move a field in your output file to a different position, you can highlight the particular field, then click on (C) and define the column position you want to move a field to. To remove any columns from your input file, simply highlight the field you wish to remove and select (D). If you have removed a field from your output and decide that you wish to place it back in the file, simply select (E), and you will see every field that you chose to remove and place them back in the file. At any time, you can go back to the *Define Input Data Columns* screen by selecting (A). Once you have defined how you want your appended data to be returned, select .

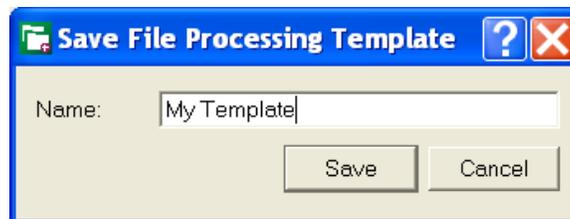


- Confirm settings and save your File Processing Template:** After selecting next, you will be taken back to the *Output File Processing Template Settings* screen. If all of the settings are correct, select .
- Save your File Processing Template:** Once you have confirmed your File Processing Template Settings, you will be asked if you would like to save it.

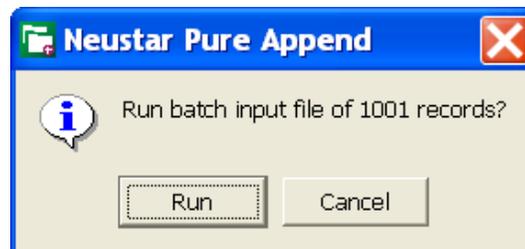


By saving your File Processing Template, you can easily re-run a job, or run similar jobs in the future by simply modifying the template that you created.

- To save your template click .
- Now you will be prompted to name your File Processing Template. The name that you give your template will be how it will be displayed on the main menu.
- Name your template and click .

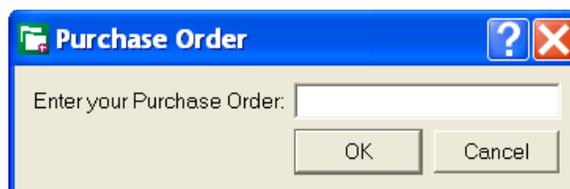


8. **Confirm input record count:** A pop-up window will come up displaying the amount of records you are about to process through Pure Append. Confirm that the record count is correct, then click

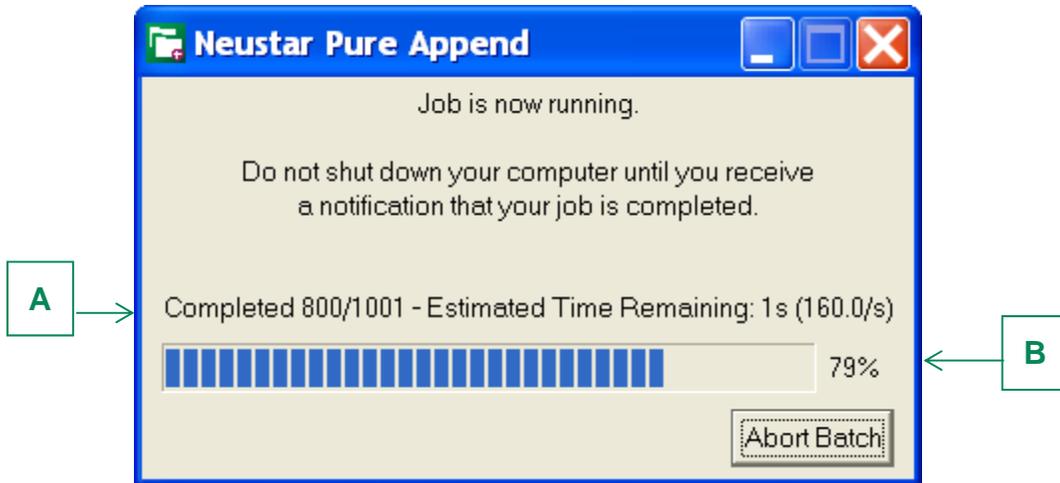


Enter your purchase order number: A pop-up window will come up prompting you to enter a purchase order number. This number will be what you see on your billing invoices, as well as how Pure Append will differentiate your jobs. For this field, make sure you use a number that you have never used before. After you have entered your purchase order number, click . Your append job will begin to run.

Note: For your purchase order number, you are restricted from using the following characters: / \ : * ? “ < > | () ,



Section IX: Batch Mode — Running A Job



Checking the Status of Your Job

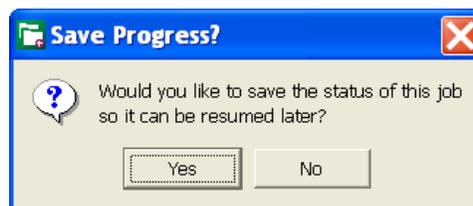
When a job is running in Pure Append, you will be able to see on the screen the progress of the job you are running.

- **(A):** This shows various statistics about the job you are running:
 - How many records you are in your input file and, of those records, how many of them have been processed. **Above Example: 350/1000**
 - The estimated time remaining until your job is finished running. **Above Example: 11 seconds**
 - How many records are being processed a second. **Above Example: 58.2 records per second**
- **(B):** This window shows the percentage of your overall job that is complete.

Aborting a Job/Saving an Aborted Job

When a job is running in Pure Append an output file is being created on your desktop. If a job is stopped while running (either by clicking , or by losing a connection), the partial results of the output file that was being created will remain in the location which you specified.

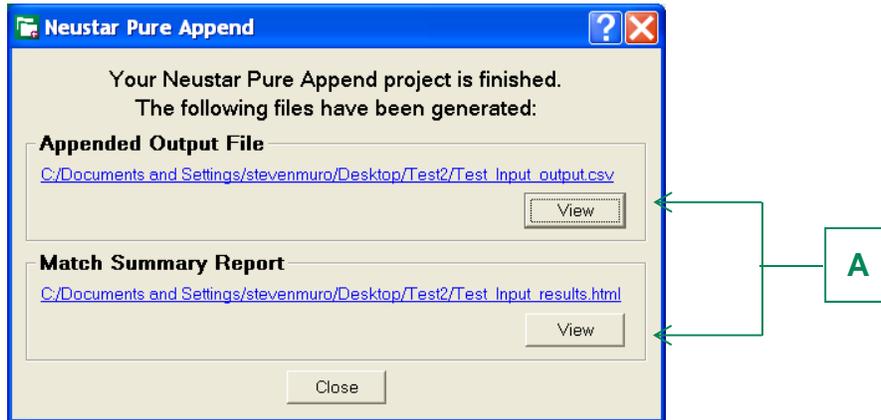
If you would like to abort a job that you are running in Pure Append, click the button at any time while the job is running. After you click the button, you will see the following pop-up displayed:



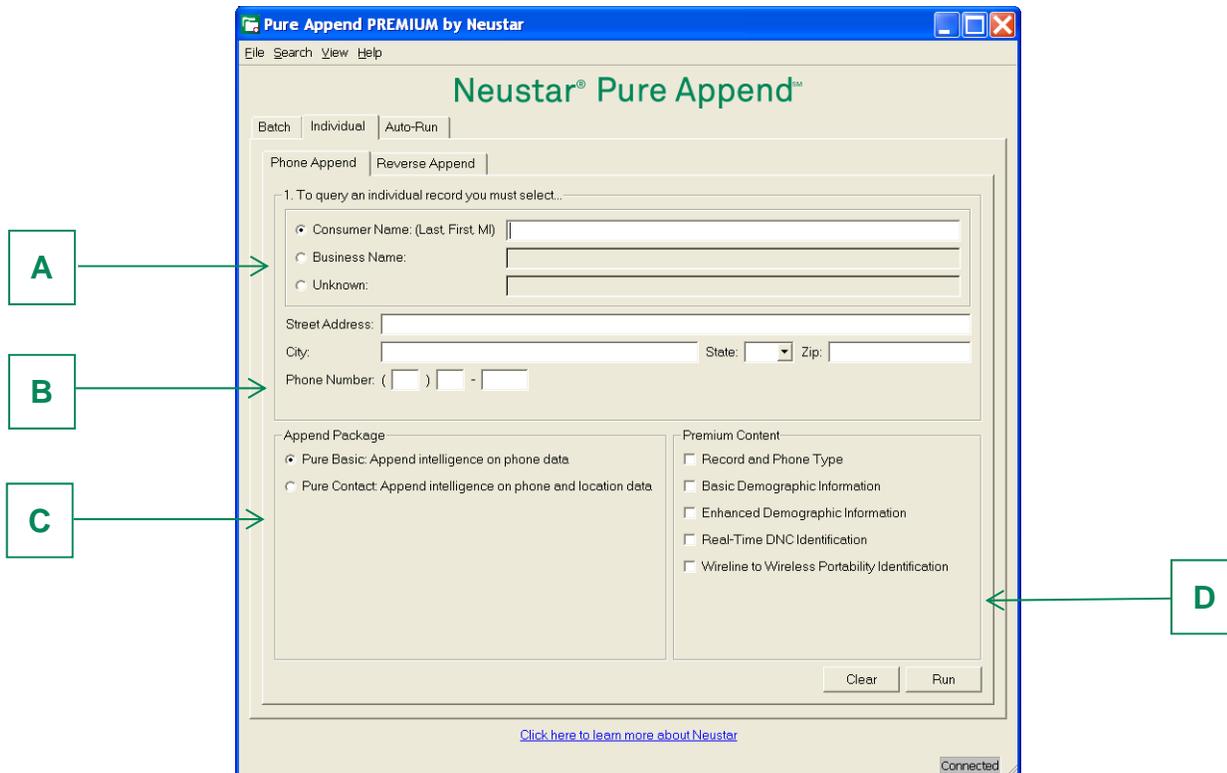
To continue your job at a later time, click , and the next time you launch Pure Append, you will have the option to continue your job.

Viewing Your Output

When your job is finished running, the below screen will pop-up:



This screen shows you the location of your appended input file and the match summary report that Pure Append created. You can view either of the files by clicking the button under the heading for the report that you wish to view. You can also go directly to the listed location on your desktop/network to open the files from there.



Section X: Individual Search — Phone Append

Phone Append Individual Search Overview

Above is the screen a client will use to perform a Phone Append individual search. A user can use six different fields as part of their search (Name, Address, City, State, Zip and Phone). Not all of these fields are required to perform an individual search. If you do not have the information for a particular field just leave it blank. The minimum requirements to run a query are either:

- Surname and zip code
- Full address, city, state (without surname)
- Full address and zip code

Performing a Phone Append Individual Query

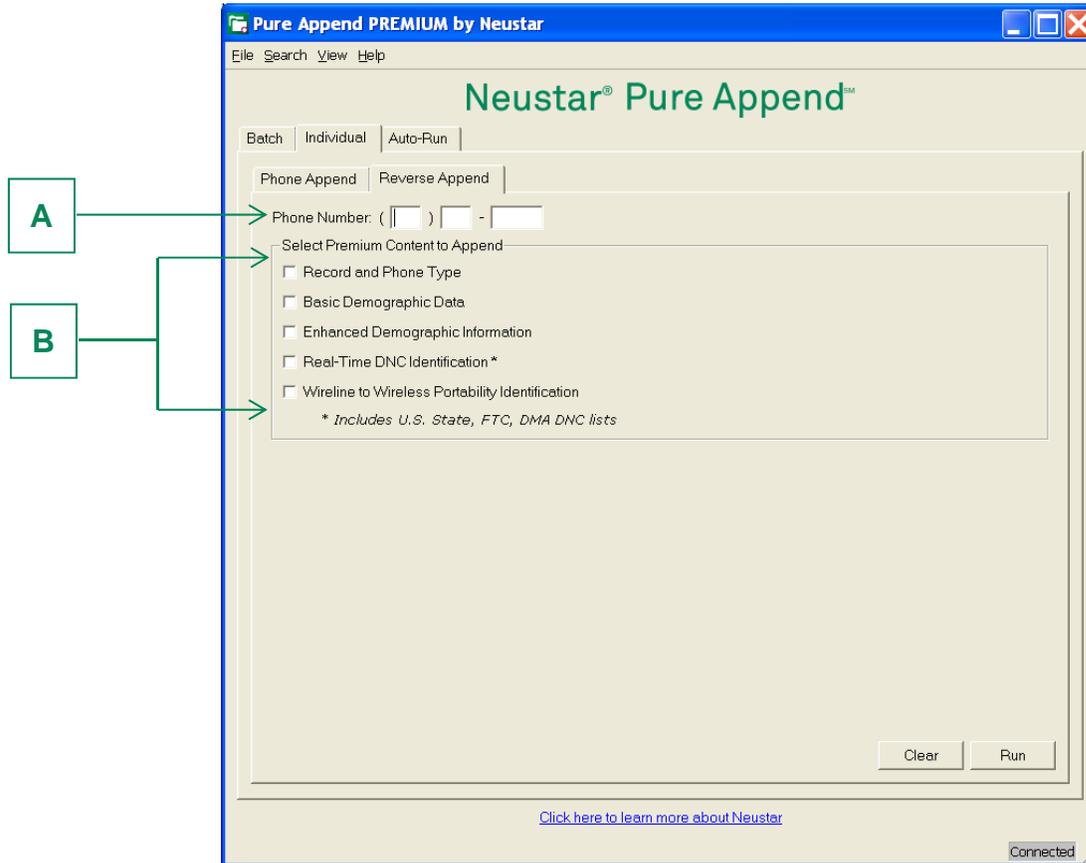
1. **Input Name (A):** Select the radio button for the type of name you are trying to query and type it into the respective field. If you are typing in a consumer name, input the name in the following format: last name, first name, middle name (initial).
Note: If you are typing in a consumer name, the minimum the name must have is a surname.
2. **Input Location/Phone Information (B):** Use the files in (B) to type in any location or phone data that you have for that record.
3. **Choose your Phone Append Package (C):** Pure Append has two unique phone appending packages a user can choose from in Phone Append mode. Select the radio button next to the one that is applicable for the job that you are running. These are:
 - **Pure Basic:** This option is selected when you just want to have intelligence on the phone number from your input record appended to the output file. When Pure Basic is selected, the following fields will be appended to your output:
 - *Neustar Appended Telephone Number*
 - *Phone Match Type*
 - *Match Composite Score*
 - *Phone Status Code*
 - **Pure Contact:** This option is selected when you want intelligence on the phone number, address and name for the records in your input file. Selecting Pure Contact will also give you the ability to select additional premium content that you can append to your output file. When Pure Contact is selected, the following fields will be appended to your output:
 - *Neustar Appended Telephone Number*
 - *Phone Match Type*
 - *Match Composite Score*
 - *Phone Status Code*
 - *Input Address Score*
 - *Input Phone Score*

- *Name Match Score*
 - *Address Match Score*
 - *Name*
 - *Address Line 1*
 - *Address Line 2*
 - *City*
 - *State*
 - *Zip/DPC*
4. **Choose your Premium Content (*Pure Contact only*) (D):** If you have selected Pure Contact as your append package, you can select up to six additional pieces of premium content to include your query. These are:
- **Record and Phone Type:** Selecting Record and Phone Type will append the following fields to your output file:
 - *US Postal Service Zip+4 Type*
 - *Phone/Exchange Type*
 - *Record Type*
 - *Household Relationship Code*
 - *Time Zone*
 - *Daylight Savings Time Observed*
 - **Basic Demographic Information:** Selecting Basic Demographic Information will append the following fields to your output file:
 - *Marital Status*
 - *Number of Children*
 - *Presence of Children Age 0-2*
 - *Presence of Children Age 3-5*
 - *Presence of Children Age 6-10*
 - *Presence of Children Age 11-15*
 - *Presence of Children Age 16-17*
 - *Presence of Children Age 0-17, Unknown Gender*
 - *Household Type (Family Composition)*
 - *Dwelling Type*
 - *Home Ownership*
 - *Median Home Value*
 - *Length of Residence*
-

- *Income Predictor/Household Income*
 - *Miscellaneous Credit Card*
 - *Standard Retail Credit Card*
 - *Standard Specialty Card*
 - *Upscale Retail Card*
 - *Upscale Specialty Card*
 - *Bank Card*
 - *Oil/Gas Card*
 - *Finance Company Card*
 - *Travel/Entertainment Card*
 - *Verification Date*
 - *Given Name*
 - *Middle Initial*
 - *Gender*
 - *Age*
- For up to five additional household members that are over the age of 17
- **Enhanced Demographic Information:** Selecting Enhanced Demographic Information will append the following fields to your output file:
 - *Presence of Adults Unknown Age*
 - *Presence of Adults Age 75+, Specific*
 - *Presence of Adults Age 65-74, Specific*
 - *Presence of Adults Age 55-64, Specific*
 - *Presence of Adults Age 45-54, Specific*
 - *Presence of Adults Age 35-44, Specific*
 - *Presence of Adults Age 25-34, Specific*
 - *Presence of Adults Age 18-24, Specific*
 - *Presence of Adults Age 65+, Inferred*
 - *Presence of Adults Age 45-64, Inferred*
 - *Presence of Adults Age 34-44, Inferred*
 - *Presence of Adults Age Under 35, Inferred*
 - *Narrow Band Income*
 - *Occupation Code*
 - *Household Age Code*
 - *Household Age Indicator*

- *Nielsen County Size*
 - *DMA Code*
 - *Structure Year*
 - *Number of Persons in Household*
 - *Number of Adults in Household*
- **Real-Time DNC Identification:** When you select to append Real-Time DNC Identification, you will be provided back a real-time, comprehensive identification of records that reside on all of the major Do Not Call lists currently maintained. This includes the FTC, DMA and all of the individual state lists. The FTC and DMA DNC lists are updated multiple times a day and the state DNC lists are updated monthly.
Note: Appending Real-Time DNC Identification codes requires that the user has a valid SAN number issued to them by the FTC's National Do Not Call Registry. By default this feature is turned off upon installation. Neustar will turn on this feature upon receiving a valid SAN number. Please contact your Neustar account representative for more information about receiving Real-Time DNC.
 - **Wireless to Wireline Portability Identification:** Selecting to append Wireless to Wireline Portability Identification will give you back a code that indicates whether or not the phone number that Neustar appends to your input records has been ported from a wireline number to a wireless number, or vice-versa.
Note: Wireless to Wireline Portability Identification codes requires that the user has a signed agreement with NeuStar directed to accessing and using these codes, and has paid any applicable fees. By default this feature is turned off upon installation. NeuStar will turn on this feature subsequent to executing that agreement. Please contact your NeuStar account representative for more information about receiving Wireless to Wireline Portability information.
Note: There is an additional charge for each premium content element available in pure Append. By selecting to append any premium content element you will be automatically billed at the rate that is specified in your Pure Append contract.
5. **Run Your Query:** Once you have set up a query, review it to ensure you have input your query correctly. If you wish to re-enter your query, you can clear your form by clicking . Otherwise, to run your query, click .

Section XI: Individual Search — Reverse Append



Reverse Append Individual Search Overview

Above is the screen a client will use to perform a Reverse Append individual search. To perform a query, follow the steps below.

Performing a Reverse Append Individual Query

1. **Input Phone Number (A):** Type in a full 10-digit phone number.
2. **Choose your Premium Content (B):** You can select to append up to six additional premium content elements to your query. These are:
 - **Record and Phone Type:** Selecting Record and Phone Type will append the following fields to your output file:
 - *Phone/Exchange Type*
 - *Record Type*
 - *Time Zone*

- **Basic Demographic Information:** Selecting Basic Demographic Information will append the following fields to your output file:
 - *Marital Status*
 - *Number of Children*
 - *Presence of Children Age 0-2*
 - *Presence of Children Age 3-5*
 - *Presence of Children Age 6-10*
 - *Presence of Children Age 11-15*
 - *Presence of Children Age 16-17*
 - *Presence of Children Age 0-17, Unknown Gender*
 - *Household Type (Family Composition)*
 - *Dwelling Type*
 - *Home Ownership*
 - *Median Home Value*
 - *Length of Residence*
 - *Income Predictor/Household Income*
 - *Miscellaneous Credit Card*
 - *Standard Retail Credit Card*
 - *Standard Specialty Card*
 - *Upscale Retail Card*
 - *Upscale Specialty Card*
 - *Bank Card*
 - *Oil/Gas Card*
 - *Finance Company Card*
 - *Travel/Entertainment Card*
 - *Verification Date*
 - *Given Name*
 - *Middle Initial*
 - *Gender*
 - *Age*
- } For up to five additional household members that are over the age of 17
- **Enhanced Demographic Information:** Selecting Enhanced Demographic Information will append the following fields to your output file:
 - *Presence of Adults Unknown Age*

- *Presence of Adults Age 75+, Specific*
- *Presence of Adults Age 65-74, Specific*
- *Presence of Adults Age 55-64, Specific*
- *Presence of Adults Age 45-54, Specific*
- *Presence of Adults Age 35-44, Specific*
- *Presence of Adults Age 25-34, Specific*
- *Presence of Adults Age 18-24, Specific*
- *Presence of Adults Age 65+, Inferred*
- *Presence of Adults Age 45-64, Inferred*
- *Presence of Adults Age 34-44, Inferred*
- *Presence of Adults Age Under 35, Inferred*
- *Narrow Band Income*
- *Occupation Code*
- *Household Age Code*
- *Household Age Indicator*
- *Nielsen County Size*
- *DMA Code*
- *Structure Year*
- *Number of Persons in Household*
- *Number of Adults in Household*
- **Real-Time DNC Identification:** When you select to append Real-Time DNC Identification, you will be provided back a real-time, comprehensive identification of records that reside on all of the major Do Not Call lists currently maintained. This includes the FTC, DMA and all of the individual state lists. The FTC and DMA DNC lists are updated multiple times a day and the state DNC lists are updated monthly.

Note: Appending Real-Time DNC Identification codes requires that the user has a valid SAN number issued to them by the FTC's National Do Not Call Registry. By default this feature is turned off upon installation. Neustar will turn on this feature upon receiving a valid SAN number. Please contact your Neustar account representative for more information about receiving Real-Time DNC.
- **Wireless to Wireline Portability Identification:** Selecting to append Wireless to Wireline Portability Identification will give you back a code that indicates whether or not the phone number that Neustar appends to your input records has been ported from a wireline number to a wireless number, or vice-versa.

Note: Wireless to Wireline Portability Identification codes requires that the user has a signed agreement with NeuStar directed to accessing and using these codes, and has paid any applicable fees. By default this feature is turned off upon installation. NeuStar will turn on

this feature subsequent to executing that agreement. Please contact your NeuStar account representative for more information about receiving Wireless to Wireline Portability information.

Note: *There is an additional charge for each premium content element available in pure Append. By selecting to append any premium content element you will be automatically billed at the rate that is specified in your Pure Append contract.*

- 3. Run Your Query:** Once you have set up your query, review it to ensure you have input your query correctly. If you wish to re-enter your query, you can clear your form by clicking . Otherwise, to run your query, click .

Section XII: FAQs

Data Related

1. *What are your phone append data sources? How are they different from other phone append providers?*

Neustar's phone append data repository is a unique hybrid that is built from over 240 verified data sources including Telco-verified data. These sources continually update and change their records based on phone number changes. These records include: RBOC data, ILEC/CLEC data, Telco data aggregators, Telco industry files, Telco network transactions and White Page Directory Listings. Other phone append providers, whether compilers themselves or resellers, are using "direct marketing-based" source files which are "address-centric". This means that record updates and changes are based on address updates and changes (using NCOA, for example), rather than telephone number changes. Address-centric updates may take longer than telephone-centric changes.

Neustar's phone append database is also larger in terms of available data to match against. Neustar has over 88 million unique 10-digit phone numbers for phone appending use. Primary and secondary addresses are also available for matching.

Other phone append providers cannot replicate the powerful combination of source data within the Neustar phone append data repository. This is essential to the superior match and accuracy of Neustar phone appending results.

2. *How recent is your phone append data? How often is it updated or refreshed?*

Neustar's phone append data is unmatched in recency and freshness within the industry. Neustar's source data is updated and verified through a "dynamic" system that processes an average of 650M monthly data transactions that verify telephone number to address linkage, resulting in 5-9M net changes in the database each month.

A record is updated and verified every 4 seconds on average. The Neustar system delivers phone append data to the client in which no record requiring a change or update is over 30 days old. This delivers superior data recency to clients compared to other providers utilizing compiled data sources with much older and longer update cycles.

3. *How can Neustar's match results compare with "multi-source file" resellers? Isn't a phone appending process against multiple data sources inherently superior?*

Neustar's phone append product utilizes a multi-sourced data repository comprised of more than 40 "telephony based" data resources. The telephone-centric nature of our data and our dynamic update process provides superior quality to the compiled phone append data used by most other phone append providers.

4. *How do I verify the accuracy of your phones?*

Neustar provides a phone status flag indicating whether a phone is highly probable to be "connected" or not. This is a value-add feature of Neustar's standard phone append service not available from other providers.

5. *Can I just buy your data and use my own match logic?*

Yes. In addition to our Pure Append product, Neustar also has other stand-alone data files that can be used to append phone numbers or other data according to the client's own matching logic.

In addition, there are fields which are returned with the Pure Contact package in Phone Append mode which break down the input data and identify the specific parts of the input that Pure Append matched on. These fields are:

- Input Address Score
- Input Phone Score
- Name Match Score
- Address Match Score

Technology Related

1. *How fast will my phone append jobs run on the Neustar system?*

This is a function of the size of the input file and the size of the client's connection to the Internet. With a high-speed connection, a user can expect peak throughput rates of approx. 100-150 records processed a second; these rates will decrease dramatically if you choose to append any premium content.

2. *How are phone append jobs prioritized in the Neustar system? What if I submit my job when other jobs have been submitted before me?*

Phone append jobs begin executing when they are submitted. The Neustar phone append system is so advanced in terms of data processing design and technology that multiple jobs can be running simultaneously with no significant impact on turnaround.

3. *What are the key differentiators between Neustar's phone append technology and that of other phone append providers? Why is Neustar better?*

Most phone append providers still rely on traditionally manually intensive data processing operations to complete and deliver a phone append job. The client has little control over input file processing and turnaround. A few providers offer a GUI-type application for client submittal of input files for phone append processing, but these applications are not nearly as robust as Neustar's, especially in terms of the data quality and confidence coding and scoring. Neustar's phone append process is truly a client-driven application. The phone append job begins as soon as it is submitted. There is no delay due to behind the scenes processing steps being done at the provider. Neustar's system and process are fully automated.

4. *Who do I call for technical support?*

For most issues, please contact your Neustar Sales Account Executive who will direct you to the appropriate person.

Process Related

1. ***Does Neustar phone append product work for both consumer and business phone appending?***

Yes. One of the strengths of Neustar's Pure Append is its built-in ability to match business records in residential files and return a high volume of usable telephone numbers.

Business Related

1. ***Who are the current Pure Append clients?***

Neustar provides marketing data for phone append clients across several vertical markets. Our major clients include some of the industry's largest data aggregators and compilers.