



CLEANER DATA. *BETTER DECISIONS.*

**matchIT User Manual**  
*Version 6*

# Table of Contents

|   |    |
|---|----|
| Important Notice.....                         | 1  |
| Preface .....                                 | 2  |
| Setup Wizard .....                            | 3  |
| Launching the Wizard.....                     | 3  |
| Importing Data.....                           | 3  |
| Before Import .....                           | 4  |
| Import Only .....                             | 5  |
| Find Matches .....                            | 5  |
| Save and Exit .....                           | 5  |
| Cancel .....                                  | 5  |
| End of Import.....                            | 5  |
| Importing Data.....                           | 6  |
| Importing without using the Setup Wizard..... | 6  |
| Contacts and Salutations.....                 | 7  |
| Names and Words.....                          | 8  |
| The 2 GB File Size Limit.....                 | 11 |
| Import Records .....                          | 12 |
| Data Summary .....                            | 13 |
| View Data .....                               | 13 |
| Main File Layout .....                        | 14 |
| Summary.....                                  | 14 |
| matchIT Field Names and Usage.....            | 14 |
| matchIT Field names by Type .....             | 14 |
| Using Your Own Field Names .....              | 15 |
| Input Options .....                           | 17 |
| Basic Options.....                            | 17 |
| Nationality Options.....                      | 21 |
| Extract Postcode .....                        | 22 |
| Advanced Input Options .....                  | 23 |
| ODBC Manager .....                            | 24 |
| Creating an ODBC Connection file .....        | 24 |
| Importing via an ODBC Connection .....        | 26 |
| Exporting via an ODBC Connection .....        | 27 |
| Non Mailable Records .....                    | 31 |
| Adding/Removing Mail Exclusion words .....    | 31 |

|  |    |
|--|----|
| Enabling/Preventing Mail Exclusion in New Data Files ..... | 32 |
| Reporting of Mail Exclusions .....                         | 32 |
| Browsing Records that contain Mail Exclusions .....        | 33 |
| Maintenance.....   | 33 |
| US Address and Zip code Validation .....                   | 34 |
| Address Enhancement Wizard.....                            | 35 |
| Step 1: Configuration & Settings .....                     | 35 |
| Step 2: Headline Data Options.....                         | 36 |
| Step 3: Address Data Enhancement.....                      | 37 |
| Step 4: Mailroom .....                                     | 38 |
| Address Enhancement Summary .....                          | 39 |
| Verifying the addressIT Results .....                      | 40 |
| Address Processing Detail .....                            | 41 |
| Utilizing addressIT for an Output File.....                | 43 |
| addressIT Coding Information.....                          | 44 |
| Error Codes.....   | 44 |
| Correction Codes .....                                     | 45 |
| suppressIT.....  | 47 |
| Using suppressIT with One Mailing File.....                | 47 |
| Importing Records .....                                    | 47 |
| Setting up Automatic Suppressions .....                    | 48 |
| The Matching/Suppression Process .....                     | 48 |
| Suppression Results .....                                  | 48 |
| Telephone/Fax Suppression.....                             | 52 |
| Advanced Telephone Suppression Options .....               | 53 |
| Using suppressIT with the Multiple File Wizard.....        | 54 |
| Setting up the Multiple File Job.....                      | 54 |
| Producing Multiple File Reports.....                       | 56 |
| suppressIT Implementation .....                            | 58 |
| Suppression File Locations.....                            | 58 |
| Selecting Matching Criteria .....                          | 60 |
| Company Contact Details .....                              | 60 |
| Loading Custom Suppression Files .....                     | 61 |
| Implementation Checklist.....                              | 63 |
| Support for Additional Suppression Files .....             | 63 |
| Breakdown of Steps Taken by Job Scripts .....              | 63 |
| Before running a Suppression Load Job Script.....          | 64 |

|  |    |
|--|----|
| Suppression File Types .....                                   | 65 |
| Running a Suppression Load Job Script .....                    | 65 |
| Running a Suppression Load Job Script for the First Time ..... | 65 |
| Using the Final Suppression Files .....                        | 66 |
| Suppression and Enhancement Service .....                      | 66 |
| NCOA Service .....   | 68 |
| NCOA Service .....   | 68 |
| Configuring NCOA Service .....                                 | 68 |
| NCOA Implementation.....                                       | 72 |
| NCOA Implementation.....                                       | 72 |
| NCOA Coding Information .....                                  | 73 |
| NCOA Coding .....  | 73 |
| Matching.....  | 74 |
| Introduction to Matching .....                                 | 74 |
| Match Key – Definition .....                                   | 74 |
| Match Score – Definition.....                                  | 75 |
| Summary of Finding Matches .....                               | 76 |
| Matching Parameters .....                                      | 76 |
| Matching Levels .....  | 77 |
| Residential Data.....  | 77 |
| Business Data .....  | 77 |
| Match Keys.....  | 78 |
| Selecting Specific Keys .....                                  | 79 |
| New Analysis.....  | 79 |
| Matching Summary .....   | 80 |
| Matches found by match key .....                               | 80 |
| Matches found by score range .....                             | 80 |
| View/Verify Matches.....                                       | 81 |
| View Matches Window .....                                      | 81 |
| Verify Matches Window.....                                     | 83 |
| Intelligent Data Merge .....                                   | 87 |
| Introduction .....   | 87 |
| Functionality .....  | 87 |
| The Options Screen .....                                       | 88 |
| Additional Information .....                                   | 89 |
| Flag Matches.....  | 90 |
| Transfer Data .....  | 91 |

|  |     |
|--|-----|
| Group Matches .....                                  | 92  |
| Delete Suppression Records .....                     | 92  |
| Total Score Breakdown .....                          | 92  |
| Matching Setup.....                                  | 93  |
| Basic Matching Options .....                         | 93  |
| Advanced Matching Options .....                      | 96  |
| Modifying the Weights Used for Matching .....        | 96  |
| Deletion Priorities.....                             | 97  |
| Multi Level Matching.....                            | 97  |
| Breakdown of Job Script Rows .....                   | 98  |
| Before Running the Multi-Level Matching Script ..... | 99  |
| Running the Multi-Level Matching Script .....        | 99  |
| Layout of Processed Data .....                       | 99  |
| Further Processing .....                             | 100 |
| Maintenance.....                                     | 100 |
| Permanent Register of False Matches.....             | 101 |
| How to Use the Register of False Matches.....        | 101 |
| Merge/Purge .....                                    | 102 |
| Introduction to Merge/Purge.....                     | 102 |
| File Layouts when Merging Files .....                | 103 |
| Unique References.....                               | 103 |
| Find Overlap .....                                   | 103 |
| Overlap Summary .....                                | 105 |
| View/Verify Overlap .....                            | 105 |
| View Overlap.....                                    | 105 |
| Verify Overlap.....                                  | 106 |
| Merge Files .....                                    | 106 |
| Flag Records.....                                    | 106 |
| Transfer Data .....                                  | 107 |
| Write Overlapping Records .....                      | 109 |
| Job Scripts .....                                    | 110 |
| Job Scripts Location .....                           | 110 |
| Job Scripts Overview .....                           | 110 |
| Job Maintenance .....                                | 111 |
| Running and Resuming a Job Script.....               | 112 |
| Creating a Job Script.....                           | 112 |
| Modifying a Job Script .....                         | 112 |

|  |     |
|--|-----|
| Explanation of Job Editor Layout .....                           | 113 |
| Adding and Removing Files (Rows) .....                           | 114 |
| Explanation of Columns .....                                     | 115 |
| Other Job Script Options .....                                   | 119 |
| Running a Job Script automatically when you start matchIT .....  | 120 |
| Multiple File Wizard .....                                       | 121 |
| Preparation for using the Multiple File Wizard .....             | 121 |
| Multiple File Wizard: Step 1 .....                               | 121 |
| Multiple File Wizard: Step 2 .....                               | 122 |
| Multiple File Wizard: Step 3 .....                               | 123 |
| Multiple File Wizard: Step 4 .....                               | 124 |
| Produce Matrix Reports .....                                     | 125 |
| Output .....   | 126 |
| Producing Output.....  | 126 |
| Main Options .....   | 126 |
| Campaign History Options .....                                   | 128 |
| Changing Output Layouts .....                                    | 129 |
| Selecting a Layout to Modify .....                               | 129 |
| File .....   | 129 |
| Label .....  | 130 |
| Letter/Page/Report.....  | 131 |
| Text.....  | 132 |
| Changing the Printer Setup .....                                 | 132 |
| Changing Report Layouts .....                                    | 132 |
| PRINT format output .....  | 133 |
| Output Flagged Records .....                                     | 133 |
| Quality Assurance.....   | 134 |
| Quality Assurance Introduction .....                             | 134 |
| Import Results.....  | 135 |
| View Records by Category .....                                   | 135 |
| View Data .....  | 136 |
| Sampling.....  | 136 |
| One in N sampling .....  | 136 |
| Other Sampling .....   | 136 |
| Preview Output .....   | 137 |
| Reports/QA Dashboard.....  | 137 |
| File Information - Compare current data with previous jobs ..... | 137 |

|   |     |
|---|-----|
| Reports/QA Dashboard - Processing .....     | 138 |
| Reports/QA Dashboard - Output .....         | 140 |
| Quality Scoring.....                        | 142 |
| Address Quality .....                       | 142 |
| Name Quality.....                           | 144 |
| Email Quality.....                          | 146 |
| Campaign Processing .....                   | 147 |
| Introduction to Campaign Processing.....    | 147 |
| The Campaign Process .....                  | 147 |
| Campaign Options .....                      | 148 |
| Campaign File Splitting Options .....       | 148 |
| Campaign History .....                      | 149 |
| Creating and Updating Campaign History..... | 149 |
| Viewing Campaign History .....              | 149 |
| Queries.....                                | 150 |
| Query Overview .....                        | 150 |
| Query Manager .....                         | 150 |
| Query Name.....                             | 150 |
| Filter .....                                | 151 |
| Fields .....                                | 151 |
| Order By .....                              | 151 |
| User-Defined Clauses .....                  | 151 |
| Use Campaign History Options .....          | 151 |
| View SQL.....                               | 151 |
| Clear All .....                             | 151 |
| New Query.....                              | 151 |
| Run .....                                   | 151 |
| Open .....                                  | 152 |
| Save .....                                  | 152 |
| Query Manager – Filter .....                | 152 |
| Query Manager – Fields .....                | 154 |
| Query Manager – Order By .....              | 155 |
| Query Manager – User-Defined Clauses .....  | 156 |
| Count Values .....                          | 157 |
| Run Query .....                             | 157 |
| System Commands Overview.....               | 158 |
| Configuring Centralised Files.....          | 160 |

|   |     |
|---|-----|
| Configuring Centralized Files.....        | 160 |
| Centralized Suppression files .....       | 160 |
| Centralized DAT files.....                | 161 |
| Database Utilities.....                   | 162 |
| Functions of Database Utilities.....      | 162 |
| File Menu Options .....                   | 163 |
| Database Menu Options.....                | 163 |
| Modify Structure.....                     | 163 |
| Undelete.....                             | 163 |
| Pack .....                                | 163 |
| Zap .....                                 | 163 |
| Fix Header .....                          | 163 |
| Recreate Index .....                      | 164 |
| Reindex.....                              | 164 |
| Browse Last/Reset Browse .....            | 164 |
| Count Records .....                       | 164 |
| Field Menu Options .....                  | 164 |
| Generate Unique Refs.....                 | 164 |
| Check Unique Refs.....                    | 164 |
| Close up blank address lines? .....       | 164 |
| Change Fields to Fit.....                 | 164 |
| Generate Addressee .....                  | 165 |
| Report Menu Options .....                 | 165 |
| List Structure .....                      | 165 |
| Check Files .....                         | 165 |
| Problems .....                            | 166 |
| Error Log .....                           | 166 |
| Print Diagnostic Information .....        | 166 |
| Solving Problems.....                     | 167 |
| Error Messages .....                      | 167 |
| Problems Caused by Power Failure Etc..... | 168 |
| Matching Problems.....                    | 169 |
| Frequently Asked Questions.....           | 171 |
| Technical Support.....                    | 171 |
| Further Information .....                 | 172 |
| Getting Started Guide .....               | 172 |
| Online Help .....                         | 172 |



|  |     |
|--|-----|
| Additional Modules/Licenes.....                    | 172 |
| Contact Us .....                                   | 173 |
| US Locations .....                                 | 173 |
| Texas Office .....                                 | 173 |
| Appendix .....                                     | 174 |
| Appendix A - Field Names & Usage .....             | 174 |
| Appendix B - Flag Field .....                      | 189 |
| Appendix C - NCOA Return Codes .....               | 191 |
| Appendix D - Cass Certification Return Codes ..... | 195 |
| Appendix E - NCOA Processing Codes .....           | 196 |
| Appendix F - Correction Codes .....                | 198 |
| Appendix G - DPV Return Codes.....                 | 200 |



# Important Notice

© Copyright 1992 – 2014 helpIT systems limited. All rights reserved.

Information in this document is subject to change without notice. It is given in good faith as to its accuracy but it implies no commitment by helpIT systems limited other than as stated in the Software License Agreement. Your attention is drawn to the **Quality Assurance Checks** mentioned in the Software License Agreement and described in the Quality Assurance chapter.

The matchIT software, documentation and reference materials are the property of helpIT systems limited and are supplied subject to the terms of the Software License Agreement. Reproduction of any kind in whole or in part without prior written consent is prohibited.

# Preface

This is the User Manual for matchIT version 5.3. See the Getting Started Guide for an introduction to the main features of matchIT. For more in-depth information on some topics, refer to the Online Help.

Not all sections of this manual may apply to your copy of matchIT. If you would like further information about any of the modules you do not currently have, contact your supplier (see "[Contact Us](#)").

# Setup Wizard

---

## Launching the Wizard

You can start any of the Setup Wizard's from matchIT's Wizard Pane, or you can access the Setup Wizard from the Import menu. The Getting Started Guide provides a step by step example for using the Setup Wizard.

---

## Importing Data

Assuming that you have a file of names and addresses, you need to specify its Input Format and the Field Layout. If the file is on CD or some other removable media, it may be best to copy it to your hard disk first, making it ready for input.

The Setup Wizard provides the simplest method of importing data into matchIT, from a variety of file types. The Wizard will read DBF, Access, Excel and ASCII text files, as well as an ODBC Connection file. Text files can be one of four types: comma delimited (commonly known as CSV), tab delimited, fixed width or fixed width without Carriage Return Line Feed (CRLF) characters – for this last type, you must specify the record length.

The use of the Setup Wizard is described in the Getting Started Guide, which is available as a separate booklet or in PDF format from the matchIT Help menu.

*Effective  
Quality  
Assurance is  
necessary to  
detect any  
problems  
with less  
common or  
inconsistent  
input  
formats.*

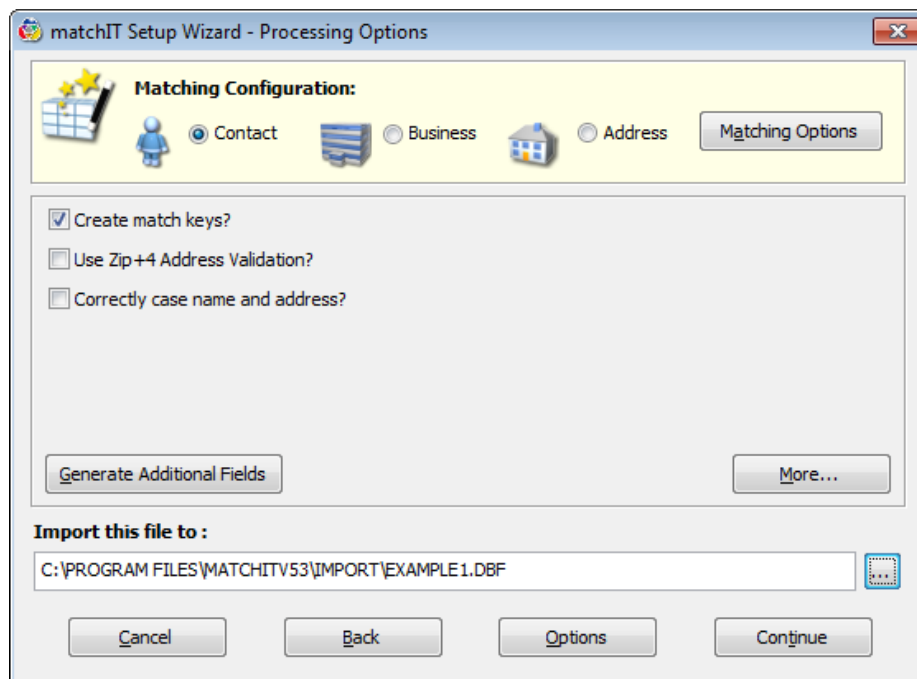
---

If files are inconsistent in their input format, they will not be imported properly. Please note that the Intelligent Setup Wizard only examines and displays the first few records in a file when trying to determine the type of data and its width – make sure that (for delimited files) fields are not being truncated. It is best to err on the side of caution by allowing too much width. You can check or change maximum field widths after Import by using the Database Utilities option [Change Fields to Fit](#).

---

## Before Import

After clicking "continue", the next screen in the Setup Wizard asks what needs to be done with the data next. The exact options available will depend upon the version of matchIT being used and the type of data imported.



- "Create Match Keys" must be checked to find duplicates within a file, or find matching records in another file e.g. if this file is a suppression or "stop" file. (available only with **matchIT Lite/Plus/Pro**)
- "Use Zip+4 Address Validation" can be checked to verify and correct US zip codes and address (available only with **addressIT**).
- "Create Salutations " must be checked to derive Salutations (e.g. Dear Mr Brown) - these can only be derived if Match Keys are created. The Default Salutation (see [Default Salutation](#)) is used if matchIT cannot work out the correct salutation. You can change the default using the Options button.
- "Correctly case name and address" (available only in matchIT **Pro** or with the **Salutations and Casing** module) should be checked if:
  - the data is all upper case
  - the casing is poor or inconsistent
- Matching records can be found to:
  - Individual, Family or Household (Address) level for personal data
  - Contact, Business or Address level for business data
- You must select the matching level by using the buttons at the top of the window.
- The More.../Basic... button toggles between advanced import options and basic import options.

---

What happens after the Setup Wizard is determined by the options set and then which action button is selected.

---

## Import Only

Select this to create a Main File and import the input data file into it, without finding matches.

Use this if:

- you want to change any of the matching rules before Find Matches
- this is a suppression file which you want to compare against another file but don't want to Find Matches within.

## Find Matches

Select this to create a Main File, import the data and then find matching records using default matching rules. Don't select this option if you are setting up this Main File to use in the Multiple File Wizard later, because the Multiple File Wizard performs the matching.

## Save and Exit

Select this to create a Main File layout with the required fields (including matchIT's fields chosen through the checkboxes), but empty of records. Use this if you want to change any Input or Operational options before importing the file, or if you are setting up Main File layouts to use in the [Multiple File Wizard](#) and want to leave the time-consuming process of Import until later.

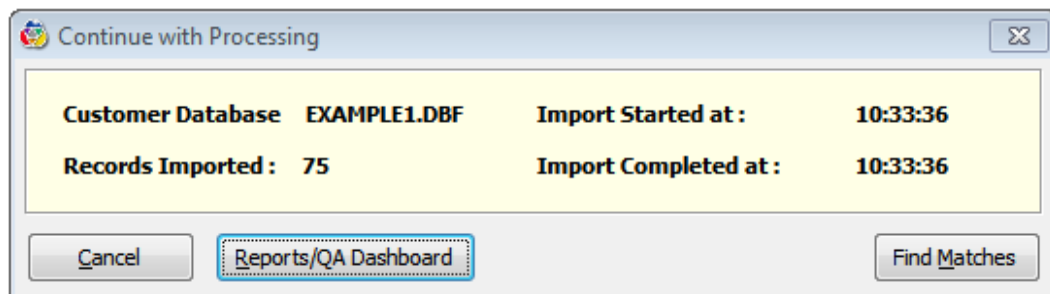
## Cancel

Select this to quit the Setup Wizard and lose the information entered about the file setup.

---

## End of Import

Once the data has been imported, matchIT displays a dialog to allow you to choose from several options:



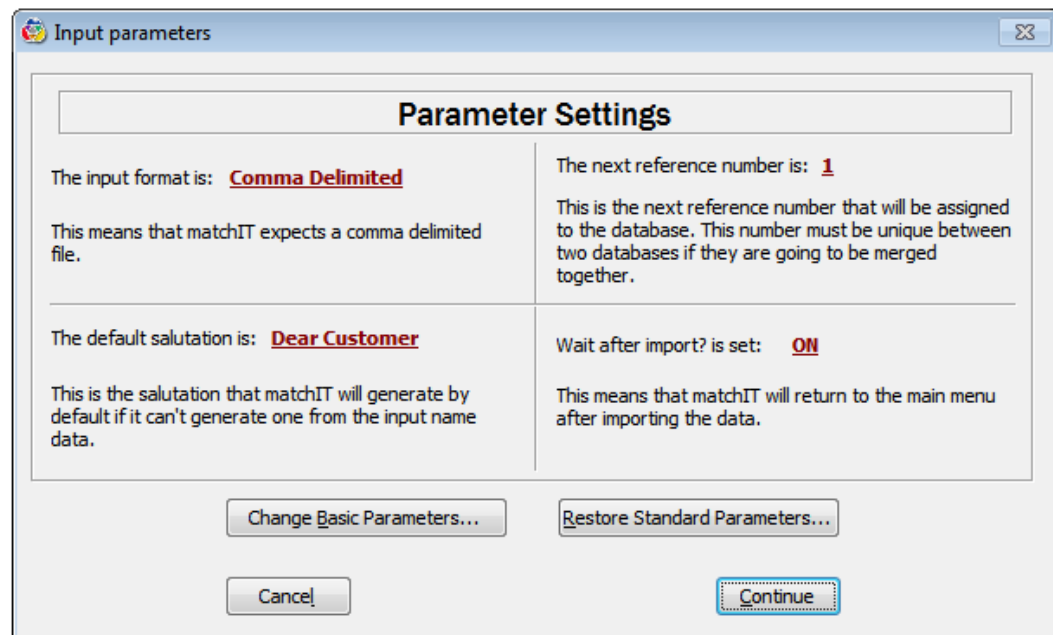
- "Q/A Wizard" to view the imported records, data summaries, records by categories, and rejected records.
- "Find Matches" to display the Matching Key and Range screen.
- "Cancel" to return to the main menu.

# Importing Data

## Importing without using the Setup Wizard

If the file is in the same input format and field layout as a file that you have previously loaded into matchIT, you don't have to go through the Setup Wizard again. The field layout is stored in the Main File that you used previously and the Input Options specify the Input Format and what processing you want to do on Import.

To import a file into matchIT without using the Setup Wizard, select Import Records from the Import menu. Firstly, select the Main File that you used previously, or create a copy of this file's layout by using the copy main file layout option. matchIT then prompts you to change the Input Options if necessary (via the Change Basic Parameters button) e.g. if the last file you Imported was Comma Delimited but this file is Fixed Width:



If you want to dedupe the file at a different matching level than the last file you deduped e.g. individual last time but family level this time, select Restore Standard Parameters and select the appropriate matching level. This restores not only the matching level (in Matching Options) but also the matching weights (and the settings for a different nationality).

Next, select the input file (the source file) that you want to load into matchIT.

If there are records in the Main File from a previous run, matchIT wipes the file clean (also known as "zapping" it) before it loads in the new data.



## Contacts and Salutations

---

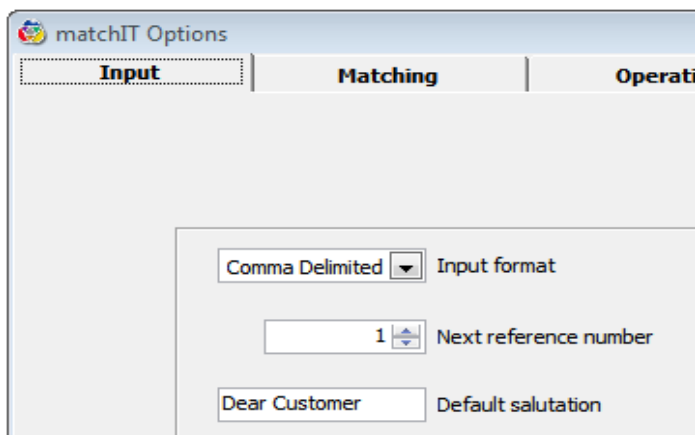
This section is only applicable if you have matchIT **Pro**, or the Salutations & Casing module.

---

matchIT **Pro** has the facility to generate contacts (Prefix Initials Surname e.g. Mr J R Smith) and salutations (e.g. Dear Mr Smith) for every record in a Main File. To derive salutations, check the "Create Salutations?" box at the end of the [Setup Wizard](#).

If your data is originally in "prefix, forename, surname" format, matchIT will use these fields to generate the contact. Otherwise it will look for a prefix in the "addressee" field or use the forename to assign Mr or Ms if there is no prefix present – it can only do this when the forename is in matchIT's Names and Words table as male or female. Prefixes are also defined by entries in matchIT's Names and Words table, along with the appropriate salutation rules.

A default salutation is used when matchIT cannot work out an appropriate one from the customer's name. This default can be changed via the [Default Salutation](#) option under the Jobs/Setup menu, Options, Input tab.



---

## Names and Words

The Name and Words facility (from the Jobs/Setup menu) is used for changing or adding entries to the NAMES lookup table. You can choose to add an entry, remove an existing one, or search the table for a particular entry. For adding an entry, there is another screen where the word to add can be entered, along with the matching equivalent (which matchIT uses when matching), the type (chosen from a drop-down list), the sex and salutation (if appropriate), and the proper case value (which matchIT will use when casing).

When searching for an existing word, there are two choices; 'Search' and 'Search Rest'. 'Search' will find the first occurrence of the entered word, while 'Search Rest' finds the next occurrence from the current position in the table, this enables multiple entries to be found. The word can be searched for as a specific type, or as any type.

The NAMES lookup table is actually held in a fixed-width text file in the DAT sub-directory; the layout of this file is as follows:

| Heading     | Width | Description   |
|-------------|-------|---|
| TYPE        | 1     | Type of entry – see below   |
| EQUIVALENT  | 25    | Matching equivalent of the entry (e.g. 'Tony' has a matching equivalent of 'Anthony', enabling these two names to be matched) |
| NAME        | 10    | The word which is actually looked up  |
| SEX         | 1     | Indicates the sex of the forename or prefix   |
| SALUTATION  | 2     | Indicates the type of salutation to be generated for a particular prefix  |
| PROPER CASE | 30    | Proper case value for the entry   |
| SWITCH      | 1     | Indicates whether this entry is the first part of a double word phrase  |

The different "Types" that can be entered in the table are as follows:

| Type | Description   |
|------|---|
| 'A'  | Address Word, such as "Rd" or "Street"  |
| 'B'  | Business word, such as "Ltd" or "Printers"  |
| 'C'  | UK county, such as "Kent" or "Glos"   |
| 'E'  | Exclusion word, such as "Deceased" or "Moved"   |
| 'F'  | Female forename (note the sex has to be set for these entries too)  |
| 'J'  | Job title word, such as "Manager"   |
| 'M'  | Male forename (note the sex has to be set for these entries too)  |
| 'N'  | Noise word (i.e. ignored when generating keys or address matching), such as "The" or "House"  |
| 'O'  | Overseas i.e. foreign country   |
| 'L'  | Local country, such as "UK" or "Scotland"; this enables local countries to be identified as countries, without the record being marked as foreign |
| 'P'  | Prefix, such as "Mr" or "Captain" (note the sex has to be set for these entries too, also the SALUTATION TYPE)                                    |
| 'Q'  | Qualification word, such as "PhD" or "ARICS"; these entries typically always need a proper case entry as casing of qualifications can be unusual  |
| 'S'  | Special casing word, i.e. a word that is cased unusually but doesn't fall into any of the above categories, such as "PhotoMe"                     |
| 'T'  | State or province, such as "Pennsylvania" or "PA"   |
| 'U'  | Unknown word; this is for the first words of a two word phrase, which, on their own, have no special meaning, such as the "Hong" in "Hong Kong"   |

Each prefix entry must have a salutation type associated with it. The following list shows the salutation types, along with an example of the type of salutation that will be generated:

| Type | Rule                         | Example            |
|------|------------------------------|--------------------|
| S    | Dear Prefix Surname          | Dear Mr Smith      |
| C    | Dear Prefix Surname          | Dear Mr Smith      |
| FS   | Dear Prefix Forename Surname | Dear Mr John Smith |
| FF   | Dear Forename                | Dear John          |
| F    | Dear Prefix Forename         | Dear Sir John      |
| B    | Dear Prefix                  | Dear Sir           |
| T    | Prefix                       | My Lord            |

In addition to these, the following salutation types will affect the way in which matchIT will generate a contact as well as a salutation.

| Type        | Salutation Rule           | Example           |
|-------------|---------------------------|-------------------|
| SZ (Suffix) | Dear (def) Prefix Surname | Dear Mr Smith     |
| ZZ (Suffix) | Dear (def) Prefix Surname | Dear Mr Smith     |
| TA          | Prefix                    | Your Eminence     |
| BA          | Dear Prefix               | Dear Madam        |
| SA          | Dear Prefix Surname       | Dear Family Smith |

---

\*'SA' is the same as type 'S', but if a full forename is found, the full forename is ALWAYS included in the generated contact, regardless of whether or not the ['Use full name in contact?'](#) option is ticked.

---

| Type | Contact Rule                          | Example                  |
|------|---------------------------------------|--------------------------|
| SZ   | (def) Prefix Forename Surnames Suffix | Mr John Smith Jr         |
| ZZ   | (def) Prefix Forename Surname         | Mr John Smith            |
| TA   | Prefix Forename Surname               | Your Eminence John Smith |
| BA   | (EQUIV) Forename Surname              | Countess Jane Smith      |
| SA   | Prefix Forename Surname               | Family John Smith        |

Additionally, each prefix, male forename and female forename must have a sex associated with it, taking a value of either 'M' (Male), 'F' (Female), or 'E' (Either).

## The 2 GB File Size Limit

The 2GB limit is essentially a by product of DOS and subsequently the Windows File Systems, these were limited to 2GB at a time when the largest hard disk purchasable was approximately 180MB. This problem is not limited to FoxPro – Microsoft Access and Sequel Server's MSDE product amongst others have a 2GB limit.

What does the 2GB limit mean in terms of matchIT? 2GB is 2,147,483,648 bytes. To work out how many records this represents, find out how many bytes per record are in the file. The Table tab in the Main File Layout Table Designer will show the total record length of each record and enable calculation of the maximum number of records that can be loaded into one table. The formula is  $1024 * 1024 * 1024 * 2$  divided by the record length.

To access the tab table, open a DBF file, click tools, then main file layout table designer and finally click the table tab

Steps to take to ensure the 2 GB limit is not reached:

1) Maximize the number of records able to be imported by reducing record lengths i.e. reduce the size of the input fields as much as possible (name and address fields can often be limited to 20 or 30 characters) and remove any fields not needed for matchIT to process prior to import.

2) Reduce or remove some of matchIT's generated fields as follows:

- Name - make this 1 byte if you aren't doing Individual level matching
- Coy\_name - delete if you aren't doing Business level matching
- Name\_key - delete this: it is just NAME1 + LEFT(NAME2, 1) if you want to use it in a match key
- Coy\_key - delete unless you are doing both Business and Individual matching
- Match\_ref - delete unless you are exporting matching info to another system
- Overlap\_ref - delete unless you are exporting matching info to another system
- Set\_dups - delete unless you need to count duplicate group sizes
- Premise - keep it short, 3-6 bytes depending on your data
- Salutation, Contact - delete and generate later, either on a split file or one with fields that were required for matching limited to one byte.

3) If using addressIT, reduce record lengths by not storing the input address by allowing addressIT to overwrite the input address fields. Do this only if addressIT's feature to compare changed addresses is not needed

There are other fields that matchIT usually adds that can be eliminated – please contact our support team for advice.

If the file still exceeds 2GB, consider the following alternatives:

- If it is the master file in a multiple file job which exceeds 2 GB, large suppression files can be kept out of the multiple file wizard and then used in Find Overlap - this is much more efficient too.
- If using suppressIT, it is easier to keep the suppression files separate than by using Find Overlap. In addition getting the suppression files included in the multiple file reports with suppressIT.
- If it is not a multiple file job or has no large suppression files, split the file on e.g. first character of postal code. If many records contain no postal code, dedupe each file individually and then find overlap between them. If the postal code is populated consistently and reliably, then finding the overlap is unnecessary.

## Import Records

matchIT first reads the records from the input file into the selected Main File. If they are already in a matchIT standard DBF file (see "[Main File Layout](#)"), then you can select Generate Keys from the Import menu instead of Import. Both options perform processing as follows (assuming that the relevant fields are defined in the Main File Layout and that you have the appropriate modules of matchIT Desktop):

- generate salutations and phonetic keys from the various name fields
- splits freeform personal names into component parts or combines them
- generate phonetic or non-phonetic address keys

The processing described above is implicitly specified by field names in the Main File Layout – the Setup Wizard adds the fields when it creates the file, depending on the options chosen. The processing described below is controlled by the Options chosen at the end of the Setup Wizard or on the Options screen (in the Jobs/Setup menu):

- correct and validate zip codes and addresses
- convert names, address lines and (if present) job titles to "proper case"
- relocate data items to appropriate fields – this can include zip codes, company names and job titles.

Information about the progress of these operations appears according to the Progress Interval specified – select the Operational Tab from the Options screen, Job/Setup menu, to modify the Progress Interval. After every Progress Interval, the display is updated. If the Main File has more records than "Max database size to display stats on info screen", a Browse view of the data being processed is displayed on the right hand side of the screen. The top half of this display shows fields from the input data, in the input order. The bottom half shows matchIT's generated fields, in an order specified by a parameter file (IMPORTFIELDS.DBF).

You can pause at any stage by pressing the Escape key i.e. if you want to devote processing power to another task for a while, or if you want to change the Progress Interval or abort the Import. after changing or leaving the progress interval, press Esc or F3 and then select 'Yes' to abort processing or 'No' to continue.

If you abort and later want to continue from where you left off, select the Generate Keys option from the Import menu. You will be prompted with the record number that follows the last record to be fully processed before the interruption. Check "Start at beginning" to generate keys from the beginning of the file; otherwise, confirm the number of the last record for which keys have been generated, or enter a different value.

During Import, matchIT writes a copy of the progress information appearing in the Feedback Window to the PERFORM.TXT file in the same directory as the Main File. See "Performance Data" for more details.

After carrying out these operations, if the Wait for User after Import option is ON, matchIT will ask if you want to use the Q/A Wizard View (to View Data or View the Data Summary) or Find Matches.

If the "Wait for User after Import" option is not checked, after Import has finished matchIT will automatically Find Matches using the default Match Keys.

The [Data Summary](#) will provide information on the newly imported data.

## Data Summary

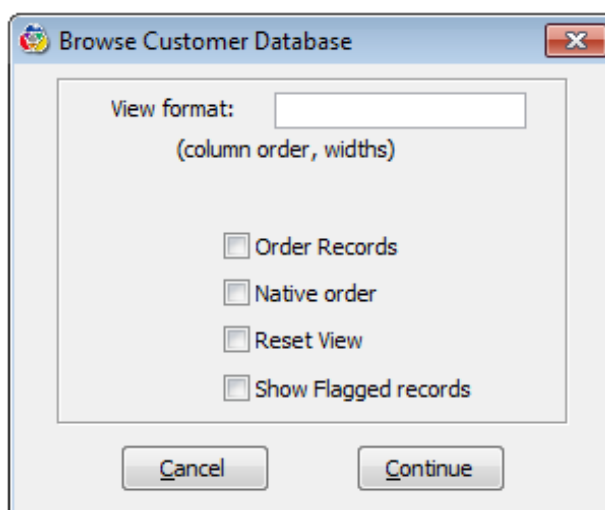
This is an option under the matchIT Import menu or via the Quality Assurance option under the Output menu – from here, you can choose to preview the report, print it or output it to a file. This option is described in more depth under [Quality Assurance Introduction](#).

---

## View Data

This option is available as a hyperlink at the top of matchIT's main window, or within the **View** menu as **View Data in Main File**. View Data allows you to browse and update the selected Main File in any order. It is similar to the View menu, **View Table** option, except that you don't have to specify the table to browse and you can browse the Main File in order of any field within it.

First, an options screen will be presented:



- Select the **View Format** you want to use, or enter the name of a new format under which to save the view that you create next. You can manipulate the display as normal.
- **Order Records** allows you to choose a field to order the records on (select a field from the list presented next). Each time you select to browse in order of a field for which an index was **not** created at the end of Import (which usually includes the default Match Keys and UNIQUE\_REF), matchIT will create an index – this will take quite some time on a large file.
- **Native View** means the fields will be displayed in the order they are in the Main File – the browse view may have been previously changed by changing the files sort order or column order.
- **Reset View** means the column order and width will be reset in the browse view. – the browse view may have been previously changed by changing column order and widths.
- **Show Flagged records** will include records that were flagged from the Main File (usually by Flag Matches) in the browse view. These will have a black marker in the leftmost column.

# Main File Layout

## Summary

The best way to configure a Main File with all the fields required for processing your data file is to use the [Setup Wizard](#). If, for some reason this is not possible or not an appropriate option, this section explains the fields your Main File must have so that matchIT can do what is required.

There are basically two kinds of fields that the system uses. First, there are **Input Fields**. These are the fields that you, the user, will supply for matchIT's processing. If they are name and address fields, you must give them standard matchIT field names, because otherwise matchIT will not recognize that it must apply appropriate processing to these fields. For example, it must know if a field is a freeform field containing a person's name, or if it contains just the surname, or if it is an address line etc. Although matchIT can search through name fields for job titles, through address lines for names or zip codes etc., it will work much more effectively if you can label your data with appropriate matchIT standard field names.

Additionally, matchIT uses **Generated Fields**. These are fields that probably weren't in your input data, but matchIT will generate them from your data. They are critical to the main processing steps (deduplication etc). It is normal to have the input fields at the start of your Main File layout, in one block, and to have the generated fields in another block at the end of the layout. We recommend that you keep to this unless you have a special reason not to, as this allows matchIT to work out which fields are Input Fields and which are Generated.

However, as shown in [matchIT Field Names and Usage](#), some fields can be Input in one file but Generated in another. Also, some Input fields can be replaced by Generated fields.

## matchIT Field Names and Usage

The table in [Appendix A - Field Names & Usage](#) lists field names and usage in alphabetical order.

## Quality Assurance Field

matchIT requires a FLAG field to prepare the [Data Summary](#) and for [View Records by Category](#) to allow you to examine certain categories of a record. Entries in the Flag field are explained in Appendix B.

## matchIT Field names by Type

These are the main data fields that matchIT recognizes specifically for import or matching:

### Personal Name

- ADDRESSEE, CONTACT, FORENAMES, FORENAMES2, INITIALS, INITIALS2, NAME, NAME1, NAME2, NAME3, NAME2FOUND, NAME\_KEY, PREFIX, PREFIX2, QUAL, SALUTATION, SEX, SUFFIX, SURNAME, SURNAME2

### Company Name

- COMPANY, COY\_KEY, COY\_NAME, NAME1, NAME2, NAME3



**Job**

- DEPARTMENT, JOB\_TITLE

**Address**

- ADDRESS1 to 9, ADD\_KEY, COUNTY, COUNTRY, DPS, POSTCODE, POST\_IN, POST\_OUT, PREMISE, STATE, TOWN, ZIP

**Telephone**

- FAX, REST\_PHONE, STD\_CODE, TELEPHONE

**Campaign**

- MAILING\_ID, MAIL\_DATE

**Match Set Grouping**

- MATCH\_REF, SET\_DUPS, OVERLAPREF, OVERLAPCNT, MATCHSCORE

**Deletion Priority**

- DEL\_PRI

**Quality Assurance**

- FLAG

**Unique Reference**

- UNIQUE\_REF

**Using Your Own Field Names**

You may use your own field names within matchIT. If you do, matchIT will not recognize them for special processing (e.g. if you name a field as CUSTOMER instead of ADDRESSEE, matchIT will not apply its personal name processing to that field). This is because matchIT uses the field name as the main indicator to tell it what kind of data is likely to be in that field.

Although matchIT won't apply any special processing to your own field names, it will apply its standard string handling routines. This means that you can use any field you like as either a matching key or for matching weights. We don't recommend doing this until you are confident that you completely understand how matchIT works, as using a non standard field can have a drastic effect on your matching results.

To allow you to use your own field names safely, we have set down a few guidelines on what to call your fields. If you follow these rules, you should have no problems using your own fields in matchIT:

- Each field name in a Main File should be unique. If you have fields that do a similar thing, number them – for example, "CUSTOMER1", "CUSTOMER2" etc.
- Whenever possible, select the field name "OTHER" from the suggested list in the Setup Wizard for fields that you know matchIT won't need to know about. We appreciate that in many situations, these names would not be sufficiently meaningful for processing, so in these cases, follow the naming rules below.
- Field names must not be greater than 10 (ten) characters long
- Field names must ONLY contain the letters A-Z or the numbers 0-9, or the underscore character ("\_"). Field names must NOT contain spaces or any other kind of punctuation.
- Field names must start with a letter (A-Z) NOT a number or an underscore.
- Field names are not case sensitive, so 'CUSTNAME' is the same as 'CustName' or 'custname'
- Field names must be AT LEAST three characters long.
- Although you should follow these rules for your field NAMES, you can use different TYPES of fields (character, numeric, logical, date etc.). However, matchIT can only match on character fields.
- Do not use any field names specified in the reserved list, as use of these names may conflict with matchIT's operation.

## **Words Not To Use As Field Names**

The Online Help contains a list of "reserved names" which you should not use as field names.

# Input Options

## Basic Options

The screenshot shows the 'matchIT Options' dialog box with the 'Input' tab selected. The dialog has five tabs: 'Input', 'Matching', 'Operational', 'File Locations', and 'Addressing'. The 'Input' tab contains the following settings:

- Input format:** A dropdown menu set to 'Fixed Width'.
- Next reference number:** A text box containing '1'.
- Default salutation:** A text box containing 'Dear Customer'.
- Default gender:** A dropdown menu.
- Extract zip code?:** A dropdown menu set to 'Copy'.
- Use full name in contact field?:** A checked checkbox.
- Omit excluded records?:** A checked checkbox.
- Proper case incoming data?:** An unchecked checkbox.
- Nationality Options...:** A button.
- Advanced Options...:** A button.

At the bottom of the dialog are two buttons: 'Discard Changes' and 'Save Changes'.

## Input Format

Input Format is a drop down list from which you can select as follows:

- Comma Delimited or COMMA** (commonly known as CSV): Use this setting for files that are either Comma or Comma and Quote delimited. This format refers to an ASCII text file in which records can be of variable length, ending with a carriage return and line feed. Commas separate the fields, and additionally double quotation marks can delimit character fields. For example:
  - "MR G. SMITH",456620,"123 CHURCH ROAD"
  - If the input data does not have the double quotation marks for character fields, this causes a problem if there are commas within a field e.g. Flat 103, 10 High Street intended as one address line. Therefore, this format cannot be guaranteed to be imported 100% successfully.
- Fixed Width or SDF** (System Data Format): refers to an ASCII text file in which the fields and records all have fixed lengths, there being no field delimiters, and a carriage return and line feed as the record delimiter. This is a common choice for data coming from IBM and plug-compatible mainframes.
- Tab Delimited or TAB:** Tab format is for an ASCII text file in which records can be variable length, ending with a carriage return and line feed. Fields are separated by the

TAB character and can be additionally delimited by double quotation marks. This format is preferable to Comma Delimited, as there are unlikely to be problems if the fields are not surrounded by double quotation marks.

- **PIPE:** Pipe format is identical to tab delimited, except that the fields are delimited by the pipe ("|") character.
- **DBF Table or DBF:** Database File format refers to a dBase type file i.e. one conforming to the dBase / FoxPro DBF file standards. matchIT itself uses this standard for all its tables. If you select this format, you will then be prompted to indicate whether the DBF file containing the data conforms to matchIT's field naming standards (see "[Main File Layout](#)").
  - If you reply "No", then you must create a skeleton DBF which does conform to matchIT's field naming standards, into which matchIT will copy the data from your DBF. During Import the data from the input DBF file goes first to an intermediate temporary DBF file, to enable matchIT to transfer it to a file conforming to matchIT naming standards.
  - If you reply "Yes", then matchIT will change the Input Format from DBF to EXT to tell it just to extract or re-extract Match Keys, salutations etc. without importing the data into the matchIT Main File. You can use EXT format in a Job Script to extract or re-extract Match Keys in a Main File. If you are importing/extracting through the Import menu, you can use Generate keys to do this without changing the input format.
- **Access Table or MDB:** Access format; you will be prompted for which of the available tables in the database you want to import.
- **Excel Worksheet:** Excel v5.0, v6.0 or v7.0 format; note that if there are multiple worksheets, matchIT will only be able to read the first sheet. Use ODBC for multiple worksheets with the data to be imported being a defined name in Excel.
- **Regenerate Keys or EXT:** DBF format conforming to matchIT's field naming standards (see DBF input above).
- **DIF:** Data Interchange Format used by VisiCalc.
- **FW2:** Framework II files.
- **MOD:** Microsoft's Multiplan version 4.01.
- **PDOX:** Borland's Paradox version 3.5 or 4.0 database files.
- **RPD:** RapidFile version 1.2.
- **SYLK:** SYmbolic LinK interchange format used by Microsoft's Multiplan.
- **WK1:** Lotus 1-2-3 spreadsheet revision 2.x.
- **WK3:** Lotus 1-2-3 spreadsheet revision 3.x.
- **WKS:** Lotus 1-2-3 spreadsheet revision 1.A.
- **WR1:** Lotus Symphony spreadsheet versions 1.1 or 1.2.
- **WRK:** Lotus Symphony spreadsheet version 1.0.
- **XLS:** Microsoft Excel version 2.0, 3.0 or 4.0.
- **No CRLF:** Select this option for an ASCII text file in which records are of fixed length, not ending with a carriage return and line feed, or other specific separator. If you select this format, you will then be prompted to enter the number of characters in each record. During the Import operation, the data goes first to an intermediate flat file with a CRLF terminator for each record. The name of this file is SDFnnn.TXT (where nnn is the

length of the record), and matchIT will delete this file when exiting. If the file contains ASCII null characters instead of spaces, you should reply "Yes" when asked if you want to convert nulls to spaces.

- **ODBC:** Select this option for a remote data source. You will be prompted for an [ODBC Connection file](#). This file must be created prior to import.

## Next Reference Number

The Next Reference Number parameter must be numeric. This will be used for a matchIT generated unique reference field called UNIQUE\_REF. Enter in this field the number at which you wish matchIT to start sequential allocation of reference numbers, for example, 1. Enter zero if you want a prompt, asking you for a start number, just before Importing commences. If you are Importing two such files prior to merging them, this facility will allow you to make sure the reference numbers in the merged Main File don't overlap.

## Default Salutation

This parameter determines the default salutation, either where matchIT can't determine one (for example, C Smith or Chris Smith, which could be either Mr or Ms), or where the Prefix imported isn't sex-specific (Dr, for example). If you include the word 'Dear' in the default salutation field on the Basic Parameters screen (e.g. actually key in "Dear Customer" and not just "Customer", so the screen shows Dear as a literal followed by "Dear Customer" in the data entry box), then all the salutations derived by matchIT will start with the word "Dear" unless the salutation for the type of title (or prefix) specifies "Title" only. For example, Mr J Smith will result in a salutation of "Dear Mr Smith" whereas The Bishop of Liverpool will result in a salutation of "My Lord".

## Default Gender

The Default Gender parameter is the sex to assume when matchIT can't determine whether the name is male or female e.g. Chris Smith, C Smith. If you set this parameter to M or F, matchIT will assume it to be male or female accordingly, and develop a salutation using Mr or Ms as the prefix.

## Extract Zip code

When processing address lines, matchIT can either extract (i.e. move) or copy "floating" ZIP codes from the address lines to a fixed field; set this parameter to "Extract" or "Copy" if required, or else set to "Leave". Note that a field labeled ZIP is required to put the data into – if there is no ZIP field identified during the Setup Wizard, it will automatically add the ZIP field to the main File Layout. If this field is not present, the setting of this parameter is ignored.

## Use Full Name in Contact Field

Set this parameter "on" to include the full forename of any incoming name in the CONTACT field; just the initial will be used if the parameter is off. For example, if the parameter is on, and the incoming name is "John Smith", then the generated contact will be "Mr John Smith", if it is off, then the contact will be "Mr J Smith".

## Omit Excluded Records

If matchIT finds Exclusion words such as "Deceased" in any field it is splitting up e.g. addressee, company name or address (if proper casing the address or using a phonetic address key), you can choose to automatically delete them during Import or Generate Keys. If you set this parameter "on", they are deleted, otherwise they are not. All excluded records are marked as such in the FLAG field (if present in the Main File Layout). Thus, if Omit Excluded Records is not switched on, you can choose to delete or mail these records after importing by selecting [View Records by Category](#).

## Proper Case Incoming Data

If this parameter is set on, the Import step will convert the address lines in your records (labeled ADDRESS1, ADDRESS2... ADDRESSn) to their proper case. It will also convert ADDRESSEE, JOB\_TITLE, DEPARTMENT, and COMPANY to the correct case. matchIT has a list of words it knows should be either all upper case, or all lower case, or a special mixture; these words can be found in the NAMES table, under the column PROP\_CASE. This proper casing will handle punctuation, apostrophes and abbreviations.

matchIT's default rules for casing data are as follows: letters following an apostrophe are capitalized (e.g. "Mr O'Reilly"), as are letters following "Mc" or (subject to one of the Advanced Input Options) "Mac" at the start of a name (see "Mac Name Treatment"). Double-barreled names have a capital letter after the hyphen. If the name or other word has an entry in the PROP\_CASE column in the Names table, it is cased as shown there e.g. BSc, IBM, plc. If not in the Names table, words are all capitals if they contain no vowels, otherwise they are changed to initial capital followed by lower case letters.

To add new words that you would like matchIT to case differently from the rules above, or to change existing entries in the table, select [Names and Words](#) from the Jobs/Setup menu. The Equivalent field contains the word to be looked up, the Name field the matching equivalent (e.g. "Anthony" for "Tony"), and the Type field denotes what sort of word is being added. The Sex field is only used for forenames and prefixes, and the Salutation field is only used for prefixes. The Proper Case field is where any special casing of the word should be entered.

## Nationality Options



### Nationality of Data

As there are other settings (including match key defaults and weights) that need to be set for processing foreign data, you can't change Nationality via this screen: you must use the Save/Restore Setup (see Online help for more details) option under the Setup menu to change the nationality settings.

### Extract Country

When processing address lines, matchIT can either extract (i.e. move) or copy "floating" countries from the address lines to a fixed field; set this parameter to "Extract" or "Copy" if required, or else set to "Leave". Note that a field labeled COUNTRY is required to put the data into – if this parameter is switched on before you use the Setup Wizard, it will automatically add the Country field to the main File Layout. If this field is not present, the setting of this parameter is ignored.

Note also that the data in the field will be proper cased if that option is switched on – if you want it in upper case, you must amend the entries for the countries using the Names and Words option under the Jobs/Setup menu.

## Extract Zip code

If the input file contains full US ZIP codes which are not in a fixed field, set this parameter to "Extract" to search through the address lines for a ZIP code and to move it to the ZIP code field. matchIT will not extract incomplete ZIP codes. If the ZIP codes are in the ZIP code field, you can select "Leave" to leave ZIP codes as they are. You can also select "Copy" to copy the ZIP code from the address lines into a fixed field, but to leave it in the address lines as well.

## Extract State/Province

When processing address lines, matchIT can either extract (i.e. move) or copy "floating" states and provinces from the address lines to a fixed field; set this parameter to "Extract" or "Copy" if required, or else set to "Leave". Note that a field labeled STATE is required to put the data into – if this parameter is switched on before you use the Setup Wizard, it will automatically add the State field to the main File Layout. If this field is not present, the setting of this parameter is ignored. Note also that the data in the field will be proper cased if that option is switched on.

## Abbreviate States

Choose this option to have matchIT abbreviate States or Provinces when processing address lines e.g. to change Pennsylvania to PA.

## Expect Building Number Before Apartment Number

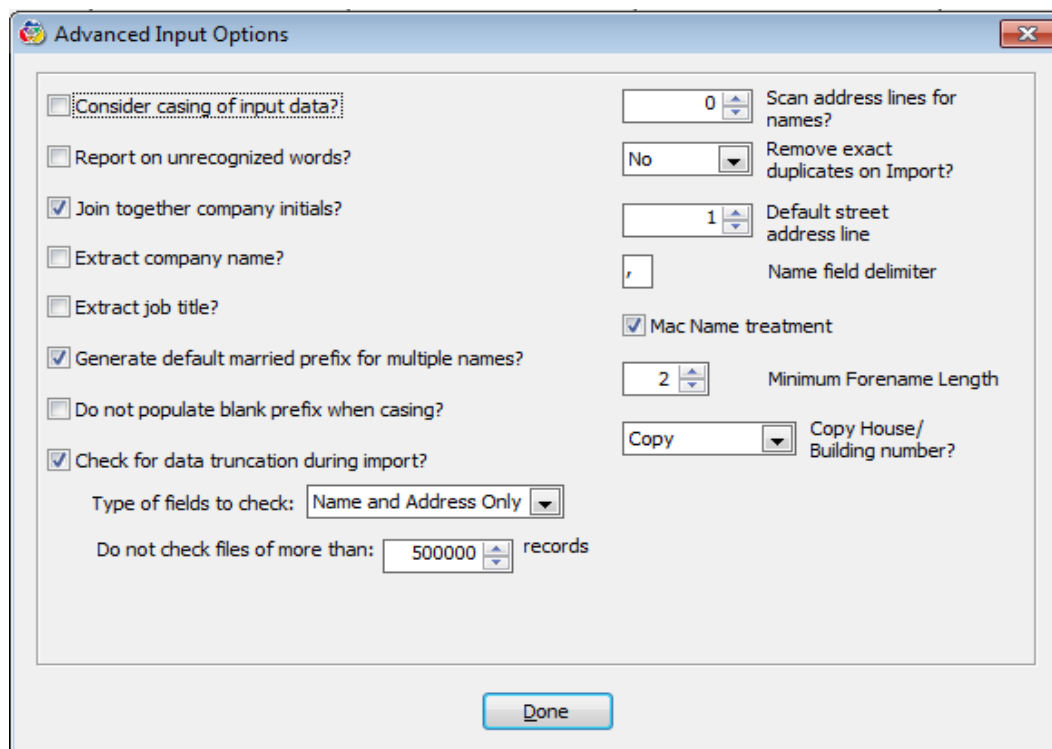
This parameter is used when addresses processed by matchIT contain two numbers in the address line e.g. 12/24 High St. If this parameter is "on", then the first number is taken as a premise number and the second as a flat number, and vice versa if it is off. This is important when matching with the 'Must have premise match?' parameter on, or extracting or copying the premise. As a rule of thumb, set this parameter off if your file contains mainly UK addresses, otherwise turn it on.

## Extract Postcode

If the input file contains full UK postcodes which are not in a fixed field, set this parameter to "Extract" to search through the address lines for a postcode and to move it to the postcode field. matchIT will not extract incomplete postcodes. If the postcodes are in the postcode field, you can select "Leave" to leave postcodes as they are. You can also select "Copy" to copy the postcode from the address lines into a fixed field, but to leave it in the address lines as well.



## Advanced Input Options



The image shows a software dialog box titled "Advanced Input Options". It contains various settings for data import, organized into two columns. The left column has checkboxes for "Consider casing of input data?", "Report on unrecognized words?", "Join together company initials?", "Extract company name?", "Extract job title?", "Generate default married prefix for multiple names?", "Do not populate blank prefix when casing?", and "Check for data truncation during import?". The right column has numeric input fields for "Scan address lines for names?" (0), "Remove exact duplicates on Import?" (No), "Default street address line" (1), "Name field delimiter" (comma), "Mac Name treatment" (checked), "Minimum Forename Length" (2), and "Copy House/ Building number?" (Copy). Below these are a dropdown for "Type of fields to check:" (Name and Address Only) and a numeric input for "Do not check files of more than:" (500000) records. A "Done" button is at the bottom.

**Advanced Input Options**

|   |  |                                    |
|---|--|------------------------------------|
| <input type="checkbox"/> Consider casing of input data?                                 | <input type="text" value="0"/>                         | Scan address lines for names?      |
| <input type="checkbox"/> Report on unrecognized words?                                  | <input type="text" value="No"/>                        | Remove exact duplicates on Import? |
| <input checked="" type="checkbox"/> Join together company initials?                     | <input type="text" value="1"/>                         | Default street address line        |
| <input type="checkbox"/> Extract company name?  | <input type="text" value=","/>                         | Name field delimiter               |
| <input type="checkbox"/> Extract job title?   | <input checked="" type="checkbox"/> Mac Name treatment |                                    |
| <input checked="" type="checkbox"/> Generate default married prefix for multiple names? | <input type="text" value="2"/>                         | Minimum Forename Length            |
| <input type="checkbox"/> Do not populate blank prefix when casing?                      | <input type="text" value="Copy"/>                      | Copy House/ Building number?       |
| <input checked="" type="checkbox"/> Check for data truncation during import?            |  |                                    |
| Type of fields to check: <input type="text" value="Name and Address Only"/>             |  |                                    |
| Do not check files of more than: <input type="text" value="500000"/> records            |  |                                    |

**Done**

The Advanced Input Options are described in the Online Help.

---

## ODBC Manager

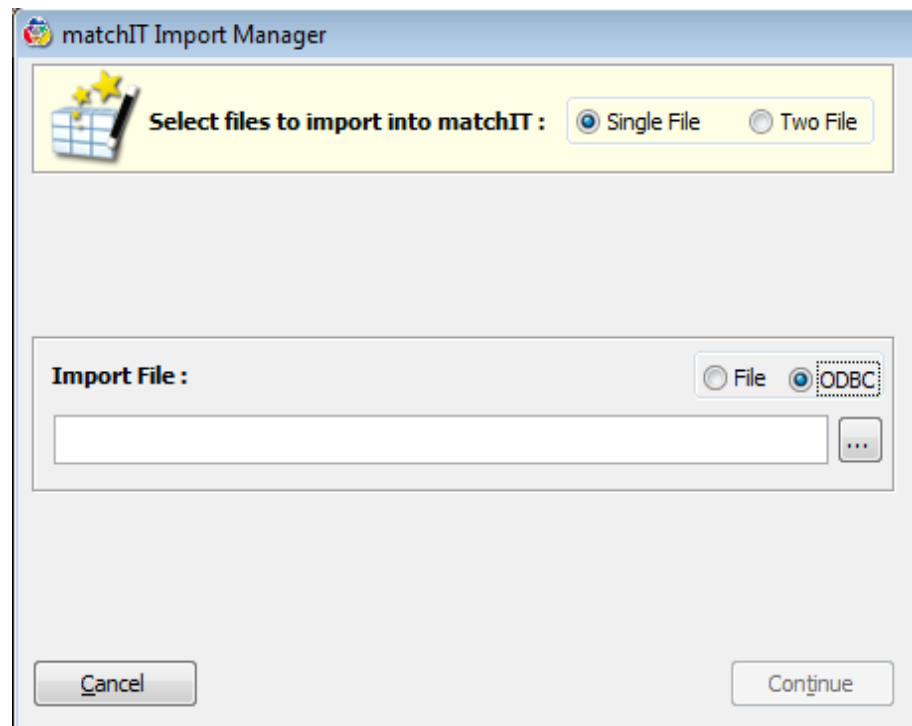
matchIT can read and export data using standard ODBC connections. Supported ODBC drivers include the standard ones for SQL Server, MySQL, DB2, Oracle and Access.

When importing data, the user must create a single table or view containing the data which is to be read into matchIT – for Access, this can be a query. The user can select which fields from the table or view they would like to import. matchIT uses an ODBC Connection file to import the required information from the chosen data source, as well as export data back to the original source database. On output, the user can choose to create a new table, overwrite an existing table, or delete records from within a table and reassign orphaned records in a child table.

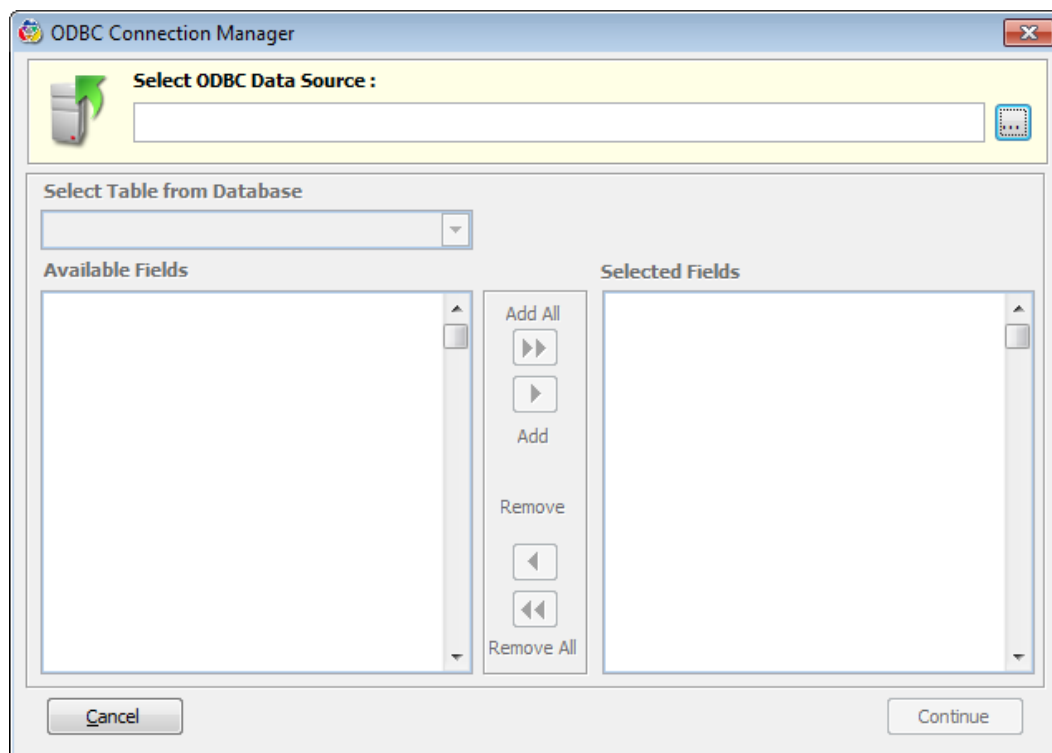
The following sections explain matchIT's ODBC functionality in detail, covering all of the major options and processes.

### Creating an ODBC Connection file


You can create an ODBC Connection file by selecting the ODBC Connection Manager option from the File menu or by choosing the ODBC option in the matchIT Import Manager window, as shown below (to access the ODBC Connection Manager window - click "... " after choosing the ODBC radio button).



The ODBC Connection Manager window is then displayed as follows.



## Choosing an ODBC Data Source

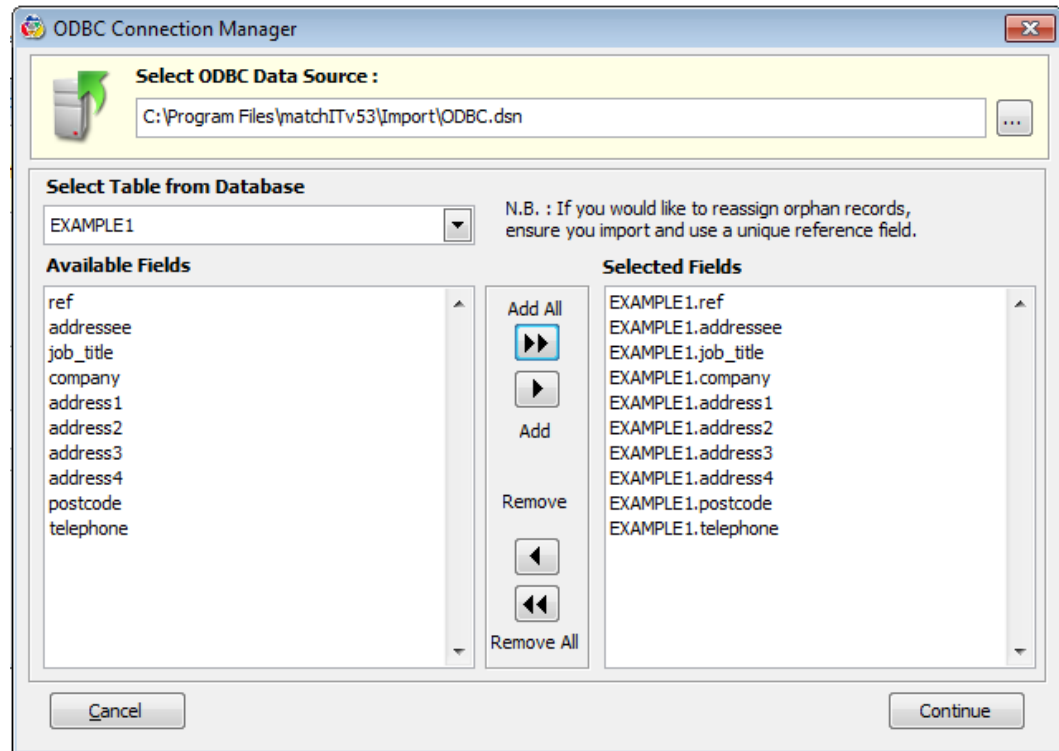
To choose an ODBC Data Source, click the  button. If prompted, enter the Login ID and Password for the data source.

## Selecting a Table

After choosing a data source, select a table or view from the drop-down list of available tables. This defines the data that will be imported.

## Choosing Which Fields to Import

When importing a table or view, you can choose what fields you would like to import. This feature can help improve processing time by limiting the size of large files with numerous fields that are unrelated to the matching process, as well as reducing the setup time required in matchIT. You can select fields individually by double-clicking, select a block of fields by highlighting them and clicking "Add", or use the Add All button.



## Importing via an ODBC Connection

Once you have created an ODBC Connection file, you can import the data selected via matchIT's Setup Wizard or by importing it into an existing matchIT Main File. Both methods are described below.

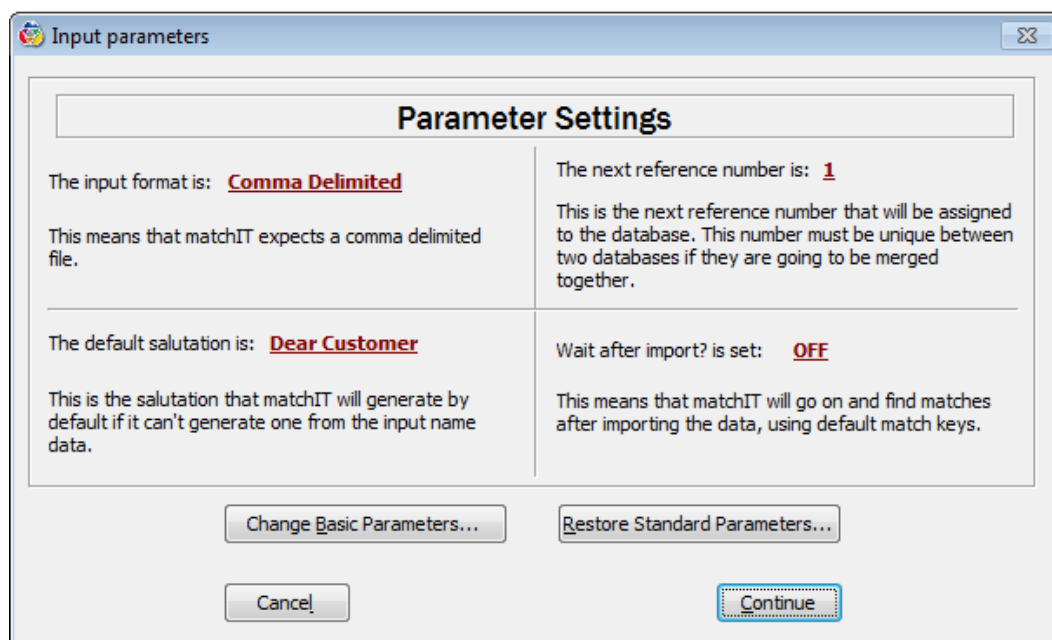
## Using matchIT's Setup Wizard to Import ODBC Data

The matchIT Setup Wizard can be launched by selecting one of the file wizards or by selecting the Setup Wizard option located under the Import menu. Choosing the latter method will prompt you for the file that you wish to import, so you can only use this if you have previously created an ODBC Connection (\*.ODB) file. However, starting the Setup Wizard via the Single File or Two File button will allow you to specify an ODBC Connection file or create a new one, as discussed in "Creating an ODBC Connection file".

## Importing ODBC Data into an Existing Main File

To import ODBC data into an existing matchIT Main File, the DBF structure of the Main File must be consistent with the fields selected in the ODBC connection. If the field layout is not consistent between the DBF and the ODBC connection file, data will be misplaced causing problems during import or matching.

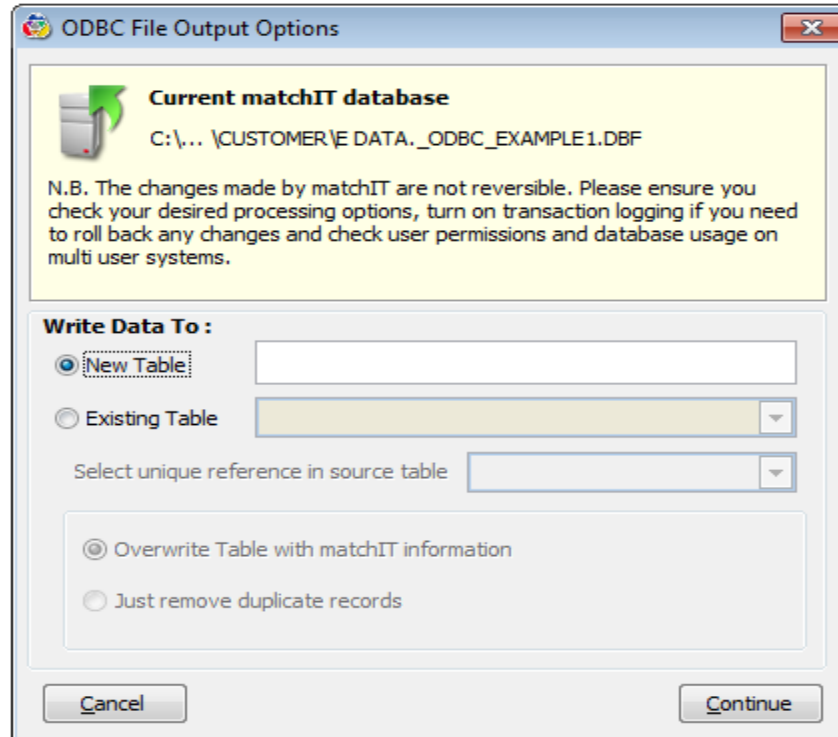
You can import records into an existing matchIT Main File by selecting the Import Records option from the Import menu. If the Main File is not already open, matchIT will prompt you for the file. Next, you will see the Input Parameters window, as described in [Importing without using the Setup Wizard](#).



Once you have reviewed and changed the parameters if necessary, select the Continue button to specify the ODBC Connection file that you wish to use. matchIT will then import the data and continue with processing as requested.

## Exporting via an ODBC Connection

matchIT can use the same ODBC Connection file to export data back to the data source. To do this, choose an output format of ODBC when specifying the output options. However, take careful note of the created ODB file name and location assigned by the Setup Wizard, so that you can select it for output as you will be prompted for the ODB file. You will then see the following window:

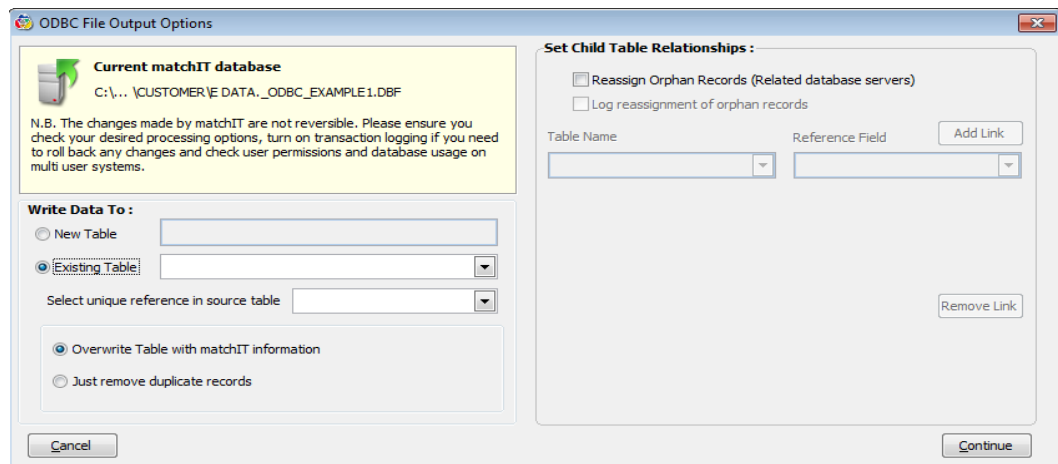


## Creating a New Table

To create a new table, choose the "New Table" radio button and enter a table name. The new table will be created in the Data Source specified by the ODBC Connection file.

## Overwriting an Existing Table

To overwrite an existing table in the source database, choose the "Existing Table" radio button. Choosing this output option allows you to specify other options which are only available for this type of output. The resultant output window is displayed below.



### Overwrite Table with matchIT information

This option will overwrite an existing table with information from the matchIT Main File. The type of output will depend on what output option was chosen (unique records, matched records, or flagged records) and the field layout will be determined by the layout option(s) chosen by the user.

### Just remove duplicate records

This will remove the duplicate records that you flagged within matchIT from the existing table that you selected.

---

Both the "Overwrite Table with matchIT information" and the "Just remove duplicate records" options can cause relational data to become corrupt if careful steps are not taken. matchIT has integrated "Child Table Relationships" to help cope with this task.

---

### Reassign Orphaned Records

This functionality is used when working with parent and child tables that are related via a specific reference field. Generally the parent table will be (or should be) a unique list of names (or companies) and addresses. The child table will often be transactional data, linked to the parent table via the reference field. Each parent record will relate to any number of child records in a one-to-many relationship. matchIT is commonly used to dedupe a parent table. This could result in orphaned child records, where parent records are removed and the child records that relate to the removed records are left orphaned (where the references in these child records no-longer relate to references that exist in the parent table).

The "Reassign Orphaned Records" functionality enables users to specify any related child tables during the output step (when writing the deduped parent data back). It will then re-populate the references of the records in the child table(s) with new references. The new references will be those of the records that the original parent records were deleted against.

To use this functionality in matchIT, there must be a parent table and a child table. The child records must contain references linking them to parent records. Parent Data should be imported via an ODBC connection, and upon doing so, it is essential that the reference field linking the parent and child tables together is labeled as 'unique\_ref' during the Setup Wizard stage.

The following example illustrates this...

#### PARENT TABLE

FRED WATERS, 1 High Street, Leatherhead ID110

MR F WATERS, 1 High St, LEATHERHEAD ID103

#### CHILD TABLE

F WATERS Transaction 31763 ID103 - changed to ID110

F WATERS Transaction 332140 ID103 - changed to ID110

In this example, all F WATERS records in the child table became orphaned, as their parent record had been removed in the parent table. The references for the child records have now been re-

assigned to the new parent record. So 'MR F WATERS' has been removed and all transactions in the child data that related to this record, now relate to 'FRED WATERS' instead.

After importing the parent data and flagging the duplicates, you can write the data back to the source database using the Output To File screen, Output Flagged Records or Output Matched Records. You can select the required fields as normal for the type of output that you are using.

---

Make sure that the same ODBC connection used to import the data is selected as the output destination, and select ODBC as the output format.

---

If you select ODBC as the output format, matchIT will display the 'ODBC File Output Options' screen:

The 'Reassign' functionality is only relevant when overwriting the source table, so from the 'Existing Table' drop-down, select the original parent data table. Next, select 'Reassign Orphan Records' on the right-hand side of the dialog. The child table and the corresponding reference field can then be specified, linking the child records to the parent records. Click on 'Continue' to export the cleaned parent data and re-populate the references in the child table where necessary.



# Non Mailable Records

The 'Non Mailable Records' functionality is designed to search for, flag and report specifically on records containing 'mail exclusion' words. The user can add, remove or edit mail exclusion words as required. In addition, mail exclusion words can be grouped together where they represent similar exclusion types. For example, "HMP" and "Prison" can both be added to the same group, as could "Goneaway" or "Moved".

matchIT performs the search for mail exclusions during import, or when re-generating keys on a pre-imported DBF file. All input fields are searched.

When mail exclusion words are found in a file, they are listed and counts of each are displayed in matchIT's standard Data Summary report.

The user can browse the records containing mail exclusions by the type of exclusion, from matchIT's 'Import Details' dialog. So, using the previous example, the user could choose to browse all 'Prison' exclusions, which may display records containing words such as 'HMP', 'Prison', etc.

---

## Adding/Removing Mail Exclusion words

All mail exclusion words must be added to matchIT's mail exclusions table; 'mail\_exclusions.dbf'(located in the matchIT's DAT sub-folder). The easiest way to do this is to browse the table via **View>View Table**, from matchIT's main menu. Upon selecting mail exclusions table, it will be displayed on screen and can be edited as required. Of the five fields displayed, each field (except the 'COUNTS' field) must be populated by the user when a new mail exclusion word is added. A description of each field is as follows:

- **EXCLUSION**  
Contains the actual mail exclusion word that matchIT will search for in the input data. All entries here must be upper case. Limited to 10 characters.
- **DESCRIPTION**  
Contains a description specific to the exclusion word. This will be displayed in the Data Summary report. Limited to 40 characters.
- **XTYPE**  
Contains a code, which will be copied into exclusion records within the working DBF file. Limited to 2 characters. Must be unique to each group/type of mail exclusions (not each individual exclusion word).
- **TYPE\_DESC**  
Contains a description of the exclusion group/type. All mail exclusion words in the same group, with the same XTYPE field value should have the same TYPE\_DESC. This description will ultimately be displayed in the 'Import Details' dialog, where the user chooses the group/type of mail exclusions they wish to browse. Limited to 20 characters.
- **COUNTS**  
This field is populated by matchIT. It should not be modified by the user.

To add a new field to the mail exclusions table, select **Table>Append New Record**. To remove an exclusion word, simply delete the record from the table by clicking on the small deletion cell to the left of the record.

After updating the mail exclusions table as require, the mail exclusion words must also be added to (or removed from, depending on what you are doing) matchIT's standard Names and Words table via **Job/Setup>Names and Words**. They should be categorized as type 'Exclusion'.

---

## Enabling/Preventing Mail Exclusion in New Data Files

matchIT will only ever scan for mail exclusions on a file, if the file contains a field labeled **MAIL\_FLAG**. It is therefore essential to add this field during the Setup Wizard stage, before the import begins. You can enable this feature by ticking the 'Generate Mail Exclusions Flag Field' option under 'Generate Additional Fields' in the Processing Options screen. This field is populated with the XTYPE codes from the 'Mail\_Exclusions' table, where records contain mail exclusion words. It should therefore be added with a width of at least 20, to cater for records that may contain multiple mail exclusion words.

Where mail exclusion scanning is not required, it is not necessary to add this field.

---

## Reporting of Mail Exclusions

Mail exclusions are displayed on the Data Summary report. The report shows the type of mail exclusion word present in the mail exclusions table, as well as the corresponding exclusion code, count of occurrences in the work file, and percentage of records in the file containing the exclusion word.

If the file that is being reported on is not the last file that had keys generated, matchIT will re-count the mail exclusions. Therefore the report may take a little longer to produce than usual.

If a MAIL\_FLAG field is not present in the dbf that is currently open, the Mail Exclusions section will not appear in the report at all.

The Mail Exclusions area of the Data Summary report is displayed below:

| Mail Exclusions   |      |   |   |
|---|------|---|---|
| Description   | Code | Number of<br>Records Containing<br>Exclusion Word | Percentage of<br>Records Containing<br>Exclusion Word |
| British Forces Postal Office  | BF   | 2   | 1.60%   |
| Care Of   | CO   | 1   | 0.80%   |
| Her Majesty's Prison  | FR   | 3   | 2.40%   |
| Other Exclusions  | OT   | 1   | 0.80%   |
| NB: A maximum of 12 mail exclusion words will be displayed above. Please contact helpIT systems if your mail exclusions table exceeds 12 entries. |      |   |   |

---

## Browsing Records that contain Mail Exclusions

After importing a file of re-generating keys in a file, any records that are found to contain mail exclusions can be browsed via **Import>Import Results>View Records By Category**.

To browse a specific category of mail exclusion, tick the 'Use Mail Exclusions' tick-box in the bottom right-hand area of the screen. A drop-down menu will now be enabled, which is populated with each different mail exclusion type found in the mail exclusions table, as pictured below:



To browse records containing mail exclusion words falling into any of the categories listed, select the category and choose 'Continue'. You can also modify the output options at the bottom of the main dialog if you wish to send the records to a separate DBF, report on them, or produce a PDF report displaying them.

If a MAIL\_FLAG field is not present in the dbf that is currently open, the Mail Exclusions section will not appear in this dialog.

---

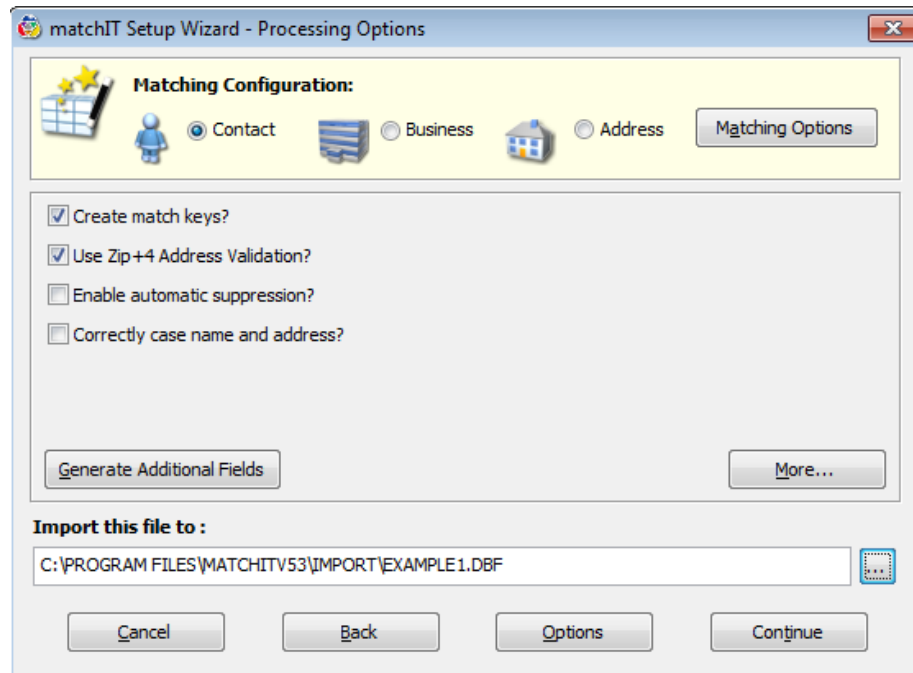
## Maintenance

When re-installing matchIT or moving matchIT to a different machine, it is essential that both MAIL\_EXCLUSIONS.DBF (located in the matchIT root directory) and the DAT sub-folder are copied to the new installation. This will ensure that any customization carried out will not be lost.

It is also advisable to regularly make backup copies of these files, in case the matchIT installation is accidentally removed or overwritten.

# US Address and Zip code Validation

Any version of matchIT can have the US Address and Zip code validation module, **addressIT**, integrated with it, using the addressing engine supplied by Datatech. The standard evaluation configuration does not include **addressIT**, but a user can request an evaluation – we will then send the evaluator a CD containing the United States Postal Service Address File (USPS).

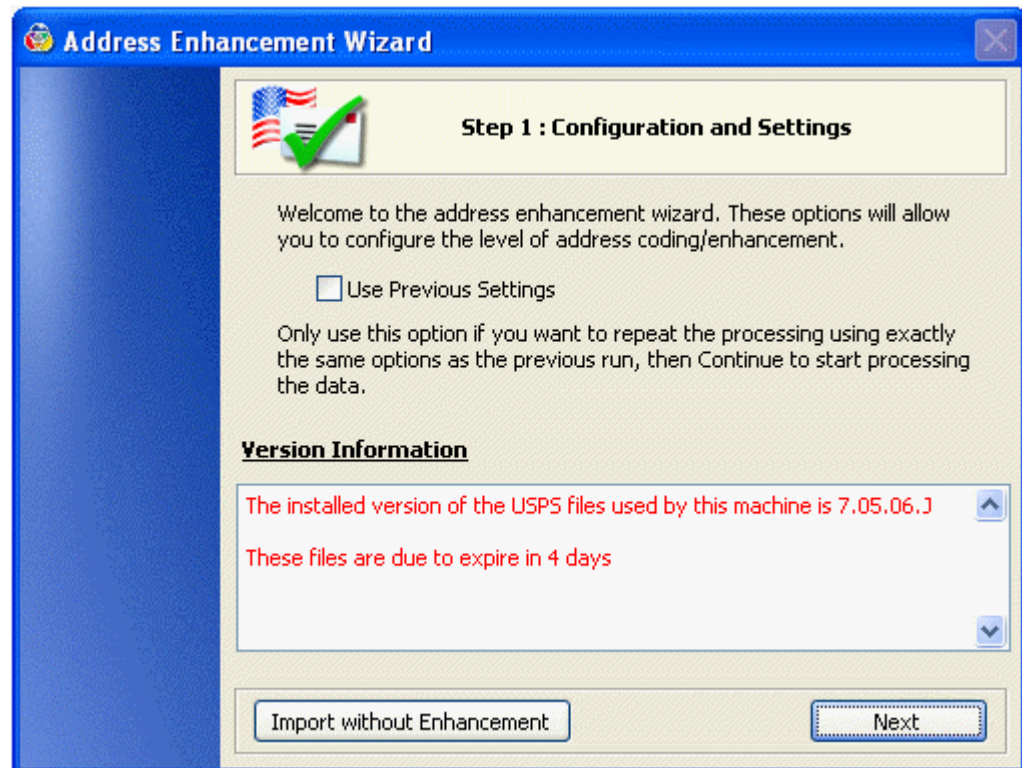


As with all of matchIT's operations, the data must first be imported into a DBF file. The Single or Two File Wizards on the left pane allow the user to do this. The same rules for naming fields, as described in the Getting Started Guide, should be used. Once the data file has been imported via the wizard the user needs to tick the **Use Zip+4 Address Validation** option in the Processing Options window, as shown above. The **Address Enhancement Wizard** will then be displayed after selecting **Continue**.

# Address Enhancement Wizard

The **Address Enhancement Wizard** will guide users through the key areas when preparing a file for Zip+4 Enhancement. Each step & the options available will be described in subsequent sections.

## Step 1: Configuration & Settings

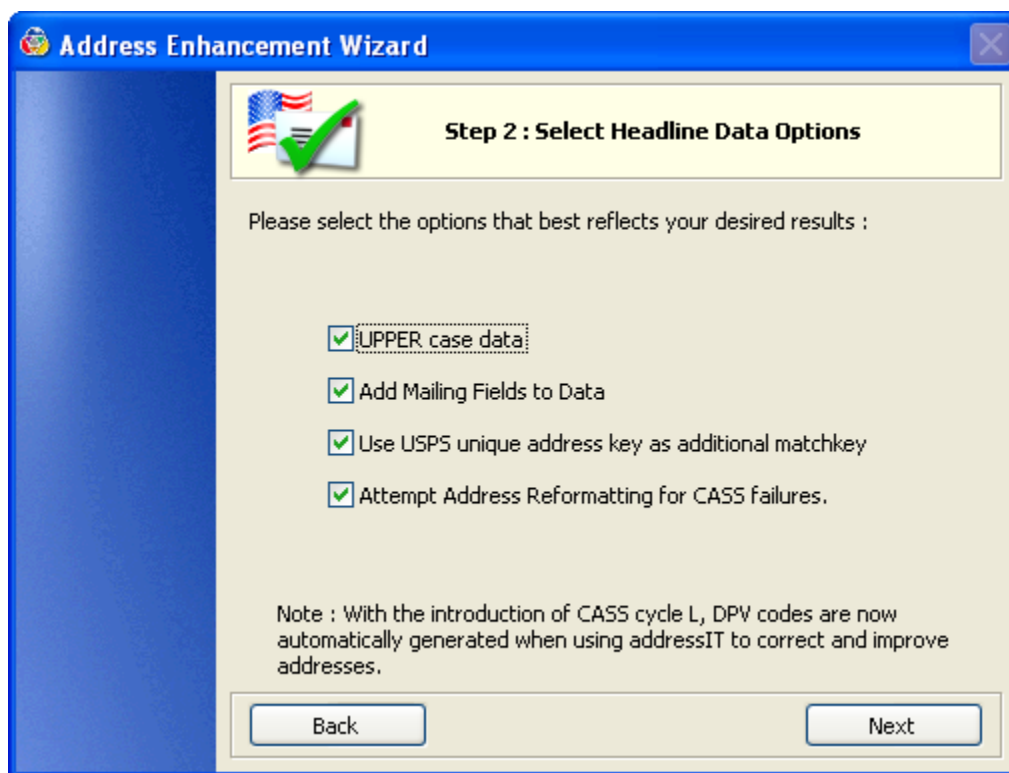


The **Configuration and Settings** window provides the user with several options to determine how they would like to begin enhancing their file:

- **Use Previous Settings** tells the matchIT to use the Zip+4 enhancement options from the previous run.
- **Import without Enhancement** will import/create the matchIT DBF for a source file, without performing any Zip+4 enhancement.
- **Next** will allow the user to go through each section of the Address Enhancement Wizard so that they can specify the options they would like to use on a particular file.

The **Version Information** section displays the expiry date for the **addressIT** data file. This expiry date can also be found in the **Addressing** tab of the matchIT options window. For this run through please select the **Next** button, as it will allow us to walk through each of the **Address Enhancement Wizard** steps.

## Step 2: Headline Data Options



In the **Headline Data Options** window, the user will have the ability to determine which initial options they would like to apply to their data set. The list below will detail each of the options found in step 2 of the **Address Enhancement Wizard**. Some of these options will have a direct effect on subsequent processing, so it is a good idea to read the tooltips provided when hovering the cursor over any of the Headline Data options.

- **UPPER case data** is a specific option that is more likely to be used if a formatted mailing piece is being produced.
- The **Add Mailing Fields to Data** option allows a user to add fields useful in preparing an output suitable for mailing, such as Carrier Route Codes, Line of Travel info or Delivery Point barcodes. If this option is not selected, the **Address Enhancement Wizard** will not display [Step 4: Mailroom](#).
- **Use USPS unique address key as additional matchkey** generates a unique key from the returned Zip+4 coding which is useful in enhancing the matching keys and results.

In this walk through, make sure to at least select the **Add Mailing Fields to Data** so that step 4 of the **Address Enhancement Wizard** is not skipped. After selecting the Headline Data options to use, please select the **Next** button to continue to Step 3.

## Step 3: Address Data Enhancement

**Address Enhancement Wizard**

**Step 3 : Address Data Enhancement**

Select the following to add fields to your data and enhance the information

Street Formatting

☐ Use Input Street Formatting  
☒ Use Standardized Address Formatting

ZIP update

☐ None  
☐ Add 5 Digit ZIP  
☒ Add 9 Digit ZIP+4 Code

☒ Add County Code (FIPS)  
☒ Add County Name  
☒ Add Congressional District

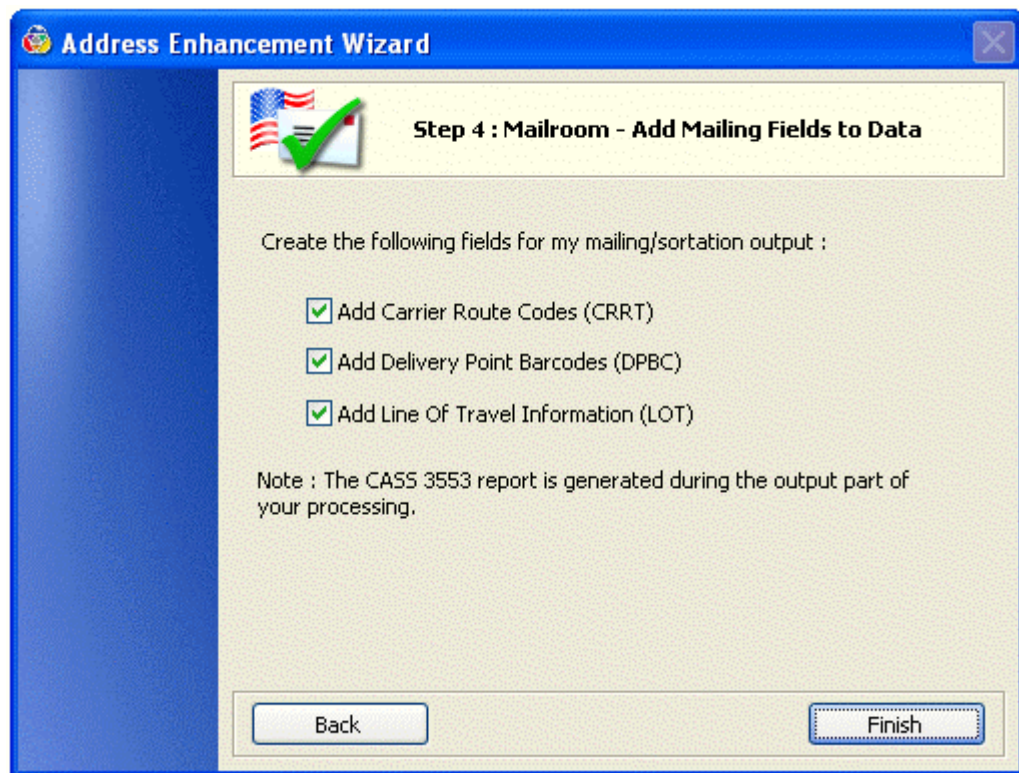
Back Next

Step 3 in the **Address Enhancement Wizard** allows the user to choose whether they would like to standardize the address data, as well as append some region specific data. A description of each option can be found below.

- The **Street Formatting** option allows the user to select whether they would like **addressIT** to use their input street format, or if they would like to have the entire address format standardized.
- To update or create a Zip field, check one of the **ZIP update** options. The user can then select whether they would like to have **addressIT** populate their database with 5 digit zip codes, 9 digit zip codes or none.
- **Add County Code** will create and populate a field labeled Ccode in the users database.
- To append county names to records in a database, select **Add County Name**. The information will then be contained in a field labeled Cname.
- Selecting **Add Congressional District** will append the Congressional district information in a field labeled Congdist.

After the desired options have been selected, the **Next** button will take the user to Step 4 (the final step in the **Address Enhancement Wizard**).

## Step 4: Mailroom



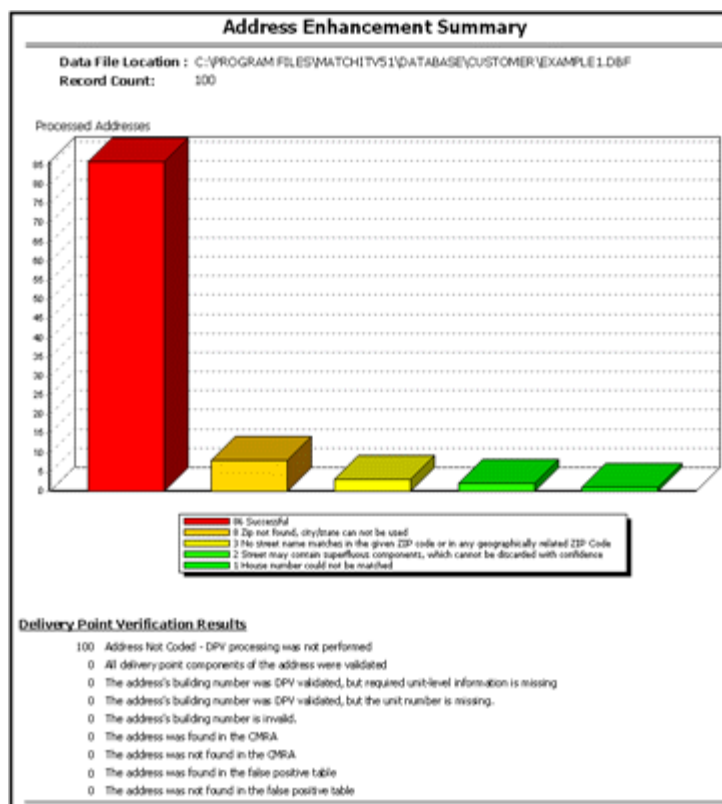
The options within the **Step 4: Mailroom** window will only be displayed by the **Address Enhancement Wizard** if the user selected to **Add Mailing Fields to Data** (in *Step 2* of the **Address Enhancement Wizard**).

- To add a Carrier field to the data set, a user can select the **Add Carrier Route Codes**.
- Choosing the **Add Delivery Point Barcodes** option will result in the addition of a field labeled Dpbar.
- Selecting **Add Line of Travel Information** will create a field labeled Lot within the users database.

Once the appropriate options have been selected, the **Finish** button will close the **Address Enhancement Wizard** and allow matchIT to carry on with the importation of the source data.

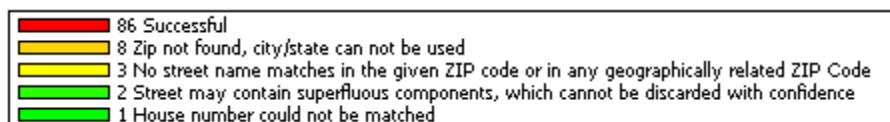


## Address Enhancement Summary




The **Address Enhancement Summary** is a simplified report that provides the user with a quick overview of the address enhancement results, as well as the details for the **Delivery Point Validation (DPV)** option.

Exact figures for the address enhancement graph can be found directly beneath the graph itself. It will display how many records were coded as a success, as well as how many records were coded as failures. Failures will be organized into categories that are based on the reason for the failure.

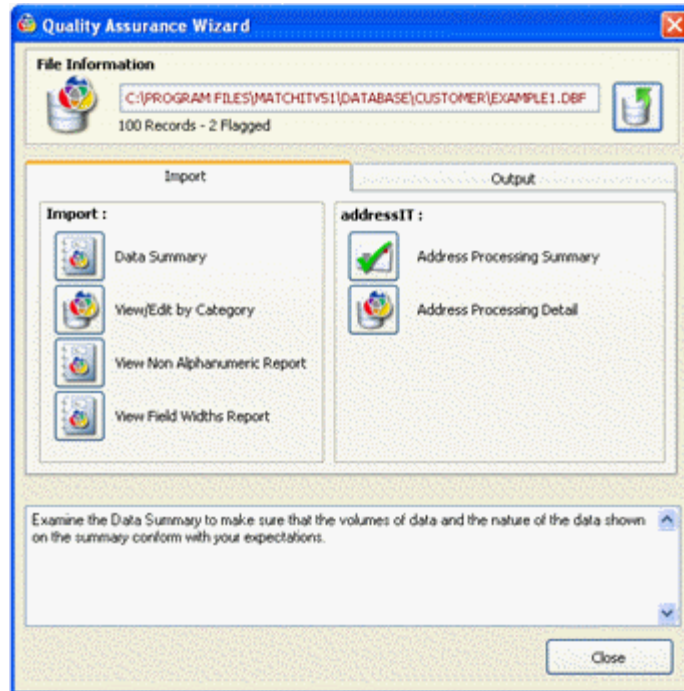


Specific **Delivery Point Validation (DPV)** information can be found in the **Delivery Point Verification Results** section of the report. This section will display the results for the Delivery Point Validation of the addresses found within the users source file.

This reports print toolbar will work in the same way as the other print toolbars. Please use the  icon to close the report preview and continue on.

---

## Verifying the addressIT Results



When a file has been passed through **addressIT**, the **addressIT** section of the Quality Assurance Wizard will become active. This section will provide the tools necessary to Q/A check some, or all of **addressIT**'s results.

- The **Address Processing Summary** will allow the user to either preview, print, file or PDF the **Address Enhancement Summary** previously discussed.
- When using the **Address Processing Detail** option to view records, matchIT will allow the user to view either address successes or failures based on criteria selected by the user. (See [Address Processing Detail](#) for more details)

The **Address Processing Detail** option is the most powerful quality assurance tools for **addressIT**. The next section will go over some of the more common **Address Processing Detail** options and functionality.

## Address Processing Detail

The **Address Processing Detail** option works much the same way as the **View/Edit by Category** option. A user can select one or more criteria for viewing **addressIT** successes or failures. Both the **Coding Successes** and the **Coding Failures** tabs offer an option to **Select All** records. **matchIT**, however, will not allow the user to **Select All** for both **Coding Successes** and **Coding Failures**.

In the lower half of the window, the **Output Options** are displayed. These options allow the user to perform several tasks that are based on the coding criteria specified by the user.

- Using the **Browse on screen** option allows the user to compare the input and corrected data in a side by side view.
- Selecting the **Output to file** option will create a separate DBF file containing records specified by the user's selected criteria.
- The **Print to report** feature will send a report to a user specified printer. This report is based on the **addressIT** criteria chosen by the user.
- If a PDF version of the report, mentioned above, is needed – the user can select the **Create PDF** option. They can then specify where they would like the PDF to be created/saved.

The **Continue** button allows the user to carry on with either of the options they have selected, while the **Compare** button allows the user to view data side by side – regardless of the option selected. Choosing **Flag Records** will remove records that correspond with the criteria selected by the user. The following screen shot and descriptions will discuss the **Compare** option provided in the **Address Processing Detail** window.

**View Zip and Address Enhancement Changes**

Navigate through the records to investigate the results from the address enhancement step.

Record Number 1 of 86

| Original Data |  | Corrected Data |                      |
|---------------|--|----------------|----------------------|
| Company       | FEIDER COMPANIES INC   | Company        | FEIDER COMPANIES INC |
| Address1      | PO BOX 1589  | Street         | PO BOX 1589          |
| Address2      |  | Street2        |                      |
| Address3      | NV   | Urb            |                      |
| Address4      | 89040  | City           | OVERTON              |
| Zip           |  | State          | NV                   |
| Corrections   | <ul style="list-style-type: none"> <li>PO Box match</li> <li>City corrected</li> <li>State corrected</li> <li>ZIP+4 corrected</li> </ul> | Zip            | 89040-1589           |

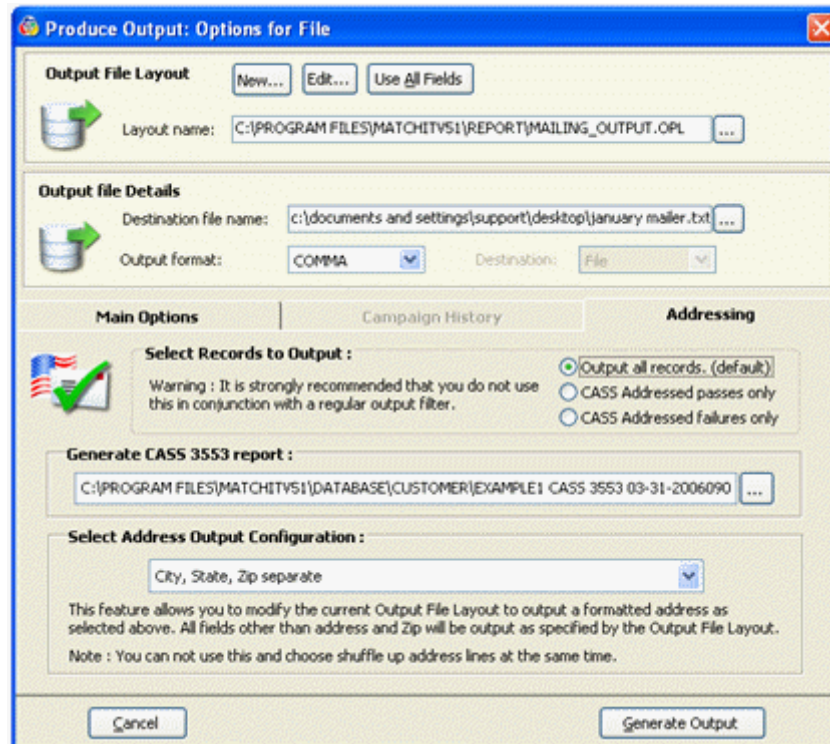
Navigation buttons: [Previous] [Next] [Close]

The window above displays a side by side comparison of the original data and the **addressIT** corrected data. The records displayed will depend on the success or failure criteria specified by the user.

matchIT does allow the user to modify either the original data or the corrected data. Modifying the data, of failed records, can help increase the chances that they will be CASS certified when the records are output in a source file. Once the Close button has been selected, the changes will be saved and the user will be returned to the main **Address Processing Detail** window. Returning to the main **Address Processing Detail** window will allow the user to carry on with any other processing of CASS successes or failures. Selecting the Close button will return the user to the **Quality Assurance Wizard**.

The next section will discuss the use of **addressIT** on an output file. From the **QA Dashboard** window, please select the **Output** tab. From the **Output** tab, choose the **Output to File** button. The **Produce Output** window should now be displayed.

## Utilizing addressIT for an Output File



The **Addressing** tab of the **Produce Output** window will become active when the user tries to output a file that has been processed by **addressIT**. These new **Addressing** options will be available in addition to the **Main Options** for outputting a file. The inclusion of these addressing options will allow the user to output subsets of their file depending on the CASS status of a record, while providing the ability to format the address lines and generate a 3553 CASS report for the resultant file. For more details on these options, please see the details below.

- The **Select Records to Output** section allows a user to determine if they would like to output all records, CASS passes, or CASS failures. This option will place a filter on the source file, so as to only output the records required by the user.
- To **Generate CASS 3553** report the user only needs to specify the path of where they would like the report to be saved. Once the output file has been generated, the CASS report will be run on that file. The user can then find a TXT and PDF version of the report saved to the location they specified. If **addressIT** was being used for a mailing piece, the 3553 CASS report will need to be supplied to the United States Postal Service (USPS).
- To format the address lines of an output file, the user can select the drop down option located in the **Select Address Output Configuration** section. The drop down contains several options for the most common address formats.
  - City, State, Zip separate
  - City & State combined, Zip separate
  - City separate, State & Zip combined
  - City, State, Zip combined

- Do not modify the Output File Layout

Selecting any of the options in the **Addressing** tab, can and will modify the source file layout. If the user would like to maintain a layout that has been specified, they will need to set the **Select Records to Output** option to **Output all records** and the **Select Address Output Configuration** option to **Do not modify the Output File Layout**.

---

## addressIT Coding Information

### Error Codes

#### Definitions and Samples

Here are the correction codes:

|       |  |
|-------|--|
| Blank | "The address has been successfully coded."   |
| 1     | "The address is coded but undeliverable (i.e. onside of street known to contain no houses)."                           |
| 2     | "The ZIP code was not found and the city and state cannot be used to determine a geographical area to search."         |
| 3     | "Coding would result in changing both ZIP and city. This is illegal for PO BOX and route type addresses."              |
| 4     | "The best match would result in too many suspicious changes."  |
| 5     | "The street was identified as an alias but was out of the range restricted for that alias."                            |
| 6     | "No street address was given."   |
| 7     | "There are no street name matches in the given ZIP code or in any geographically-related ZIP code."                    |
| 8     | "The street may contain superfluous components which cannot be discarded with confidence."                             |
| 9     | "The house number could not be matched."   |
| 10    | "The best match was made to a ZIPMOVE record but was not an exact match."  |
| 11    | A ZIPMOVE match was made but no exact match could be found in the new ZIP."  |
| 12    | "The Early Warning System indicates that an exact match will become available in the next database update."            |
| 13    | "There are multiple matches with the same degree of confidence. This may indicate an inconsistency in the USPS data."  |
| 14    | "Incorrect suffix, directional, street name, or unit resulted in multiple matches with the same degree of confidence." |

|    |   |
|----|---|
| 15 | "Incorrect ZIP, city, or urbanization resulted in multiple matches with the same degree of confidence." |
| 16 | "A corrected field was too long to fit into the supplied field."  |
| 17 | "Media Error. The database could not be read because of a hardware or system problem."                  |

## Correction Codes

### Definitions and Samples

The correction codes are used to describe what was done to the address in the coding process. Each coded record will be assigned a string of one or more characters.

Here are the correction codes:

|   |                              |
|---|------------------------------|
| A | "Normal street match"        |
| B | "PO BOX match"               |
| C | "Route type match"           |
| D | "'Unique ZIP' match"         |
| E | "'Small town' match"         |
| F | "Alias match"                |
| G | "'Highrise alternate' match" |
| H | "Firm match"                 |
| I | "Highrise match"             |
| J | "Highrise default match"     |
| K | "Route default match"        |
| L | "Street name corrected"      |
| M | "Street suffix corrected"    |
| N | "Predirectional corrected"   |
| O | "Postdirectional corrected"  |
| P | "City corrected"             |
| Q | "State corrected"            |
| R | "ZIP corrected"              |

|   |   |
|---|---|
| S | "Urbanization corrected"                        |
| T | "ZIP+4 corrected"                               |
| U | "House number corrected"                        |
| V | "Unit number corrected"                         |
| W | "Secondary unit designator corrected"           |
| X | "Firm corrected"                                |
| Y | "Street swapped with firm"                      |
| Z | "Street swapped with alternate"                 |
| 0 | "Dual address changed to PO BOX"                |
| 1 | "Dual address street match"                     |
| 2 | "Input city is not preferred but is acceptable" |
| 3 | "Street standardized"                           |
| 4 | "Unit not verified"                             |
| 5 | "Leftovers found"                               |
| 6 | "ZIPMOVE match"                                 |
| 7 | "LACSLINK match"                                |
| 8 | "SuiteLink match"                               |



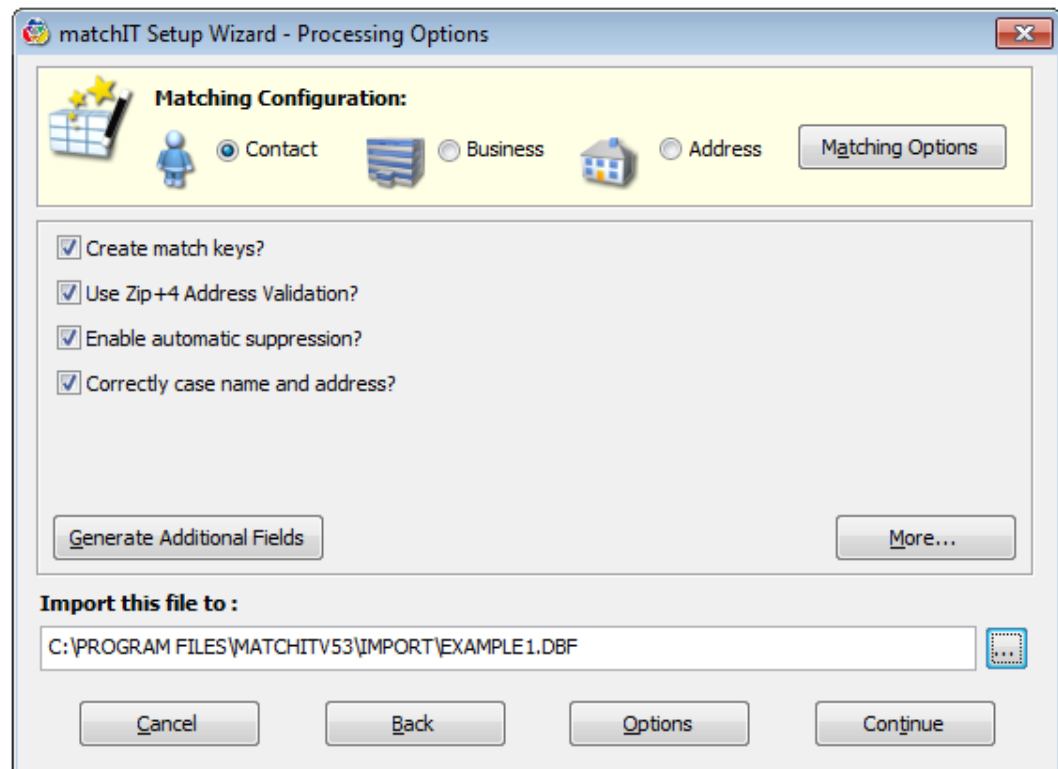
# suppressIT

## Using suppressIT with One Mailing File

### Importing Records

The easiest and safest way to use the **suppressIT** module is to use the Setup Wizard to set up any new job, as with the rest of matchIT Desktop. For instructions on how to use the Setup Wizard, please refer to the Getting Started Guide.

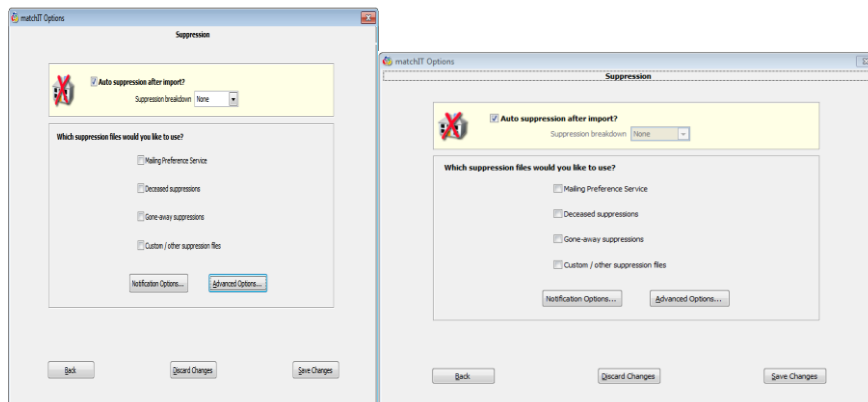
At the end of the Setup Wizard, you are presented with tick boxes to Create Match Keys, Create Salutations, Correctly Case Data, Use Zip+4 Address Validation, or Enable Automatic Suppression.



## Setting up Automatic Suppressions

Clicking the Options button will allow you to set the Suppression options (Suppression tab). From here you can select the suppression files you wish to use. To set the files, you need to tick the relevant box.

Alternatively, if you choose Find Suppressions from the Suppressions menu you will be presented with a similar screen. This should only be done after all internal duplicates have been removed from the file.



You can set the matching options and file locations for each file, by clicking the **Advanced** button.

As explained above, for initial installation, you need to check the Advanced Options, to ensure the correct files and matching options are being used. You only need to do this on initial implementation, unless you need to add more suppression files at a later date. For directions on setting up the Suppression files, see [Suppression File Locations](#).

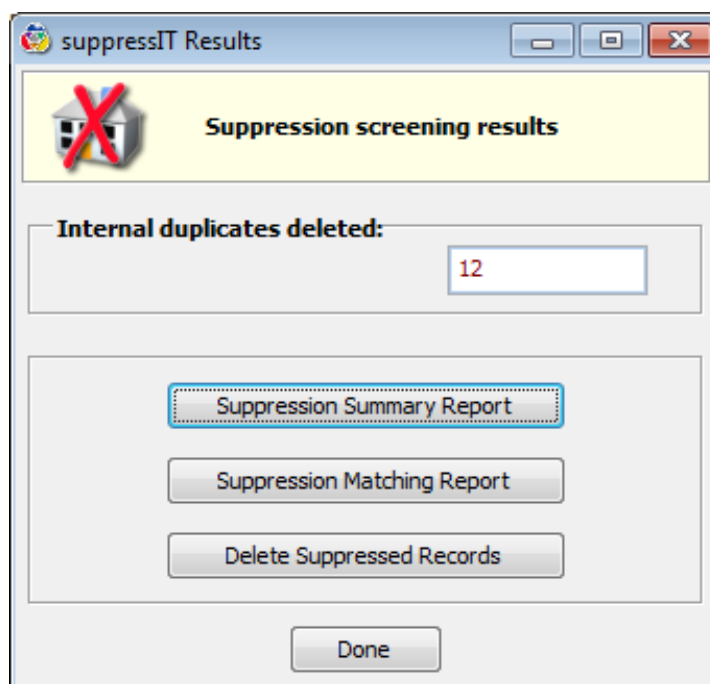
## The Matching/Suppression Process

When you have set all the **suppressIT** options, you are now ready to import the data. You will see the only option available is **Continue** or **Find Matches**, depending upon if you selected the **More...** option. This will create the matchIT database for your source file, add matchIT's fields to this database, copy the records into this database, and then find the internal duplicates (within the source file). When it has found the internal matches, it will automatically find the suppression matches – dependent on what suppression files you have specified.

As stated above, if you check the **Enable auto-suppression** box & then **More...**, you will see the only option available will be **Find Matches**. If you don't want to import the file yet, or want to **Import Only** (e.g. if you don't want to use the default rules for finding matches, or you want to use a different level of matching for the suppression files), you should uncheck the **Enable auto-suppression** box to enable the other options as usual. You can then run Import and Find Matches from the menus or when prompted, and run the Suppression processing from the Suppression menu, or when prompted after Find Matches.

## Suppression Results

When the Find Suppressions step has finished, matchIT displays the **suppressIT** Results. From this screen you can run the Suppression Summary Report and the Suppression Matching Report. You can also Remove Suppressed Records.



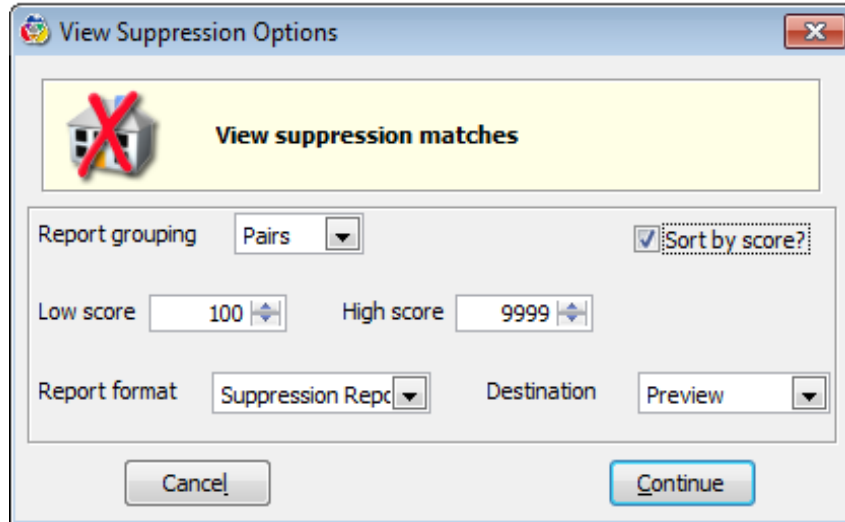
## Suppression Summary Report

This report can either be run from the **suppressIT** Results screen or from the Suppression menu. This report summarizes the suppressions found in three ways.

- The Number of Potential Suppressions is the number of records on the Client Database that will be suppressed. Please note that this number will not necessarily tally with the totals in the other sections. One Client record could match with more than one suppression record, but would still only be counted as one potential suppression.
- The Suppressions Found by File section lists the total number of suppressions found in each suppression file. These figures represent the total number of Client records that had matches in each suppression file. One Client record with more than one match in a particular suppression file would be counted once for that suppression file.
- The Suppressions Found by Score Range section lists the total number of matches found in each Matching Score Range. These figures represent all of the matches found. So, if one Client record had two matches in one suppression file and one match in another suppression file, it would be counted three times in these figures. This section is useful for understanding the results you are getting at different Matching Score levels.

## Suppression Matching Report

This report can either be run from the **suppressIT** Results screen or by choosing View Suppressions from the Suppression menu. If run from the **suppressIT** Results screen, the matches will be grouped in Sets and sorted by Score. If run from the menu, the View Suppressions Options screen will be displayed.



### Report grouping

Matching records can be grouped in Pairs of one client record and one suppression or Sets where all suppression records matching the same client record are displayed together.

### Sort by score

If this box is ticked the report will be sorted by matching score, otherwise it will be sorted by name.

### Low score and High score

The range of matching scores for which the results are to be displayed. Only matches within this range will appear on the report.

### Report format

The report format will default to Suppression Report. Alternatively, you can choose your own report layout from here.

### Destination

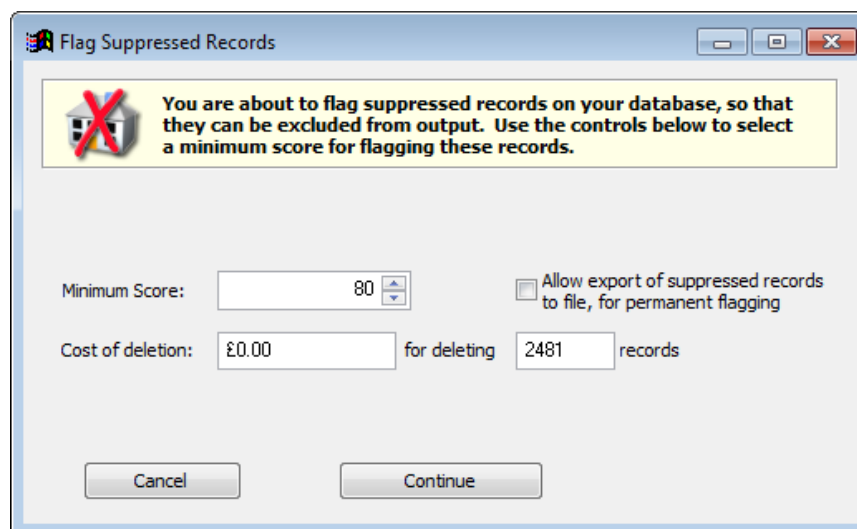
Preview for a print preview, Printer to print the report or File Preview to produce output to a file.

### Continue

Click **Continue** to confirm your choices and create the report.

## Delete Suppressed Records

This can either be run from the **suppressIT** Results screen or by choosing Remove Suppressions from the Suppression menu.



### Minimum Score

Records with a matching score equal to or greater than this value will be flagged for exclusion from the output file.

### Continue (accept cost)

This will remove all records meeting the Minimum Score above.

**Warning: You will be charged as soon as this button has been pressed. This charge cannot be undone.**

If you have the option Notify Suppression Hits By Email turned on, they are sent via an Internet connection to your supplier. If you don't have an internet connection available on the PC where you are running **suppressIT**, you will be asked to email a log file to your supplier.

### Cancel

Cancel the deletion process. You will not be charged.

You can incrementally remove score ranges if you wish (starting at a high score and getting lower- obviously, the lower the score, the more records will be removed). You will only be charged for the new records removed each time. *Remove Suppressions* is incremental – you will not be charged twice for the suppression, unless you "undelete" the records. (**We strongly recommend that you do NOT undelete records**).

Also, we suggest that you flag your internal matches first – this way, some of the potentially suppressed records will be removed before you come to suppress them. Since they are already removed, you won't be charged for records that have been removed due to internal deduplication.

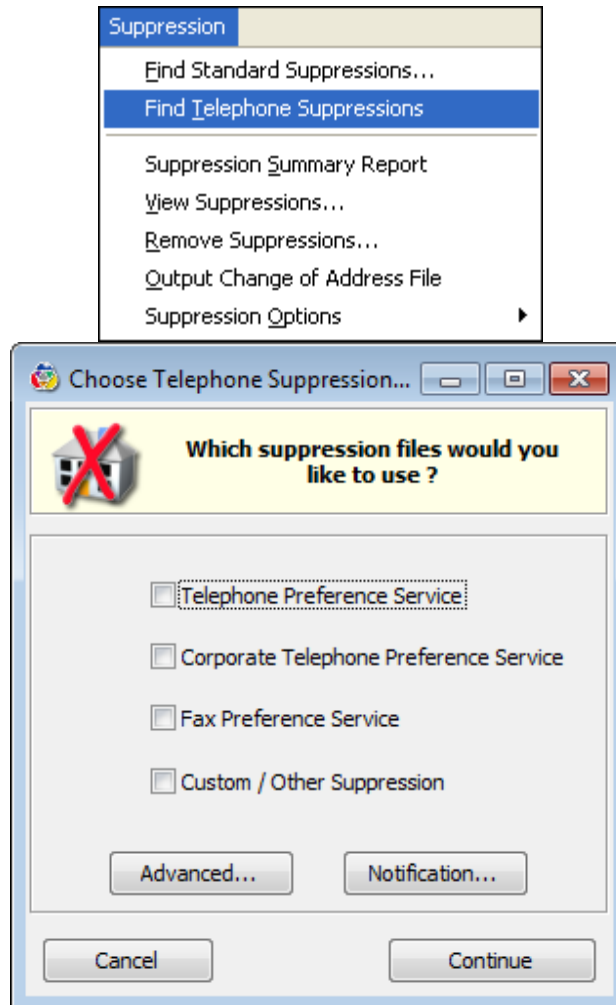
If you do not want to remove all the categories of suppressions that you have found, then you can switch categories off by using the Suppression Options screen (Choose Suppression Files) as illustrated earlier, before you remove the suppressions.

Once you have removed your suppressed records, you can continue using matchIT in the usual manner, for outputting records, etc.

## Telephone/Fax Suppression

As well as providing a way of suppressing your file against name and address suppression files, **suppressIT** also provides a facility for suppressing against lists of telephone or fax numbers.

In order to use this functionality, you must first import your data using the Setup Wizard, ensuring that your telephone or fax fields are labeled 'telephone' or 'fax'. Once you have finished importing your data, you can begin the telephone or fax suppression by selecting **Find Telephone Suppressions** from the main **Suppression** menu. This will produce the Choose Telephone Suppression Files dialog, as pictured below.



From within the Choose Telephone Suppression Files dialog, you can tick the suppression file(s) that you would like to suppress your data against. After making your selection, you can click on **Continue** to begin the suppression step. Before clicking on **Continue**, you should make sure that you have mapped **suppressIT** to the suppression files that you have chosen to use. To do this, click on **Advanced** to display the [Advanced Telephone Suppression Options](#) screen.

## Advanced Telephone Suppression Options

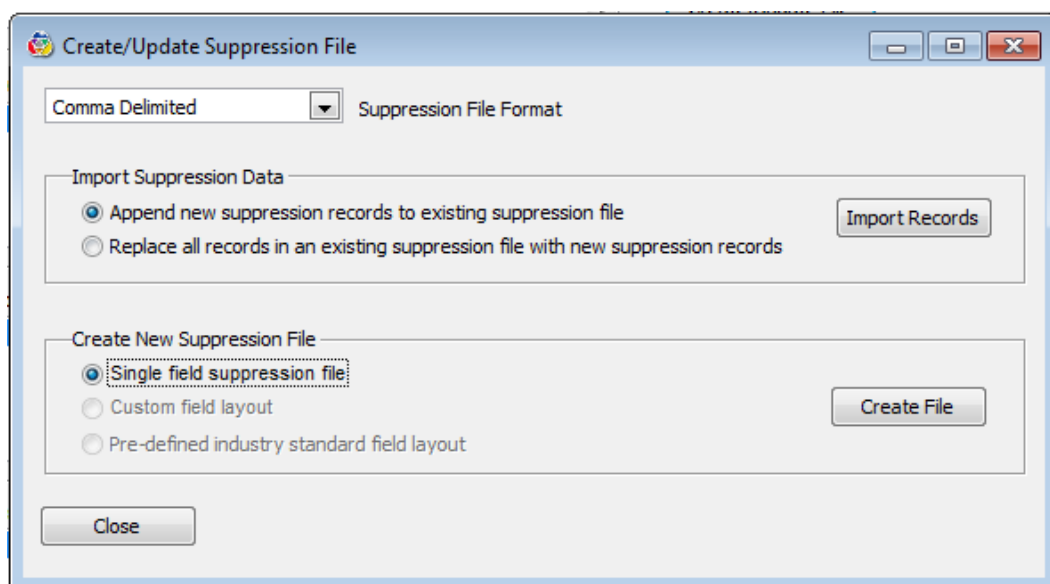
From within the Advanced Telephone Suppression Options screen, you are given the facilities to point to 'Add' suppression files available to your PC, no-longer point to 'Remove' suppression files that you no-longer wish to use, or ['Create/Update' suppression files](#). There are four different areas within this screen. Each area represents a different type of telephone suppression file. These four areas correspond to the four tick-boxes in the Choose Telephone Suppression Files dialog.

### Create/Update Suppression Files

From within the Create/Update Suppression Files dialog you can choose to either import suppression data into an existing DBF file, or create a new suppression DBF from scratch. Before making this selection, you must specify the format of your input suppression data file by using the **Suppression File Format** drop-down menu at the top of the dialog.

If you already have an existing suppression DBF file, either select **'Append new suppression records to an existing suppression file'**, to simply add to the data you already have, or choose **'Replace all records in an existing suppression file'** to overwrite the data you already have, with data from a new file. After checking the appropriate radio button, click on **Import Records** to begin importing the new data.

If you do not have a suppression file already set up, you can select **'Single field suppression file'** to create and populate a suppression file from a single list of telephone or fax numbers. Alternatively, if your input suppression data file contains multiple fields, select either **'Custom field layout'** to manually name each of the fields in your file, or select **'Pre-defined industry standard field layout'** and select one of a number of industry standard suppression file names, of which **suppressIT** is already familiar with the layout. After making your selection, click on **Create File** to begin the process.



## Using suppressIT with the Multiple File Wizard

### Setting up the Multiple File Job

Before you enter the Multiple File Wizard, please make sure that you have set up the locations of the suppression files that you want to use. Then set the files up for the Multiple File Wizard as usual.

**Multiple File Wizard - Step 2**

Please select a Source File for each file involved in the multiple file job, then select Setup Wizard.

If you have already created a Main File layout corresponding to this source file, you can select this Main File instead of Setup Wizard.

If you have previously imported the file, you can just select the Main File which you have already imported, without selecting a Source File.

Source File: C:\... \IMPORT\EXAMPLE1.TXT

Multiple Files with same file layout, or which have already been imported: Setup Wizard:

Main File: C:\... \IMAGES\EXAMPLE1.DBF

File reference: EXAMPLE1 File description: Example 1

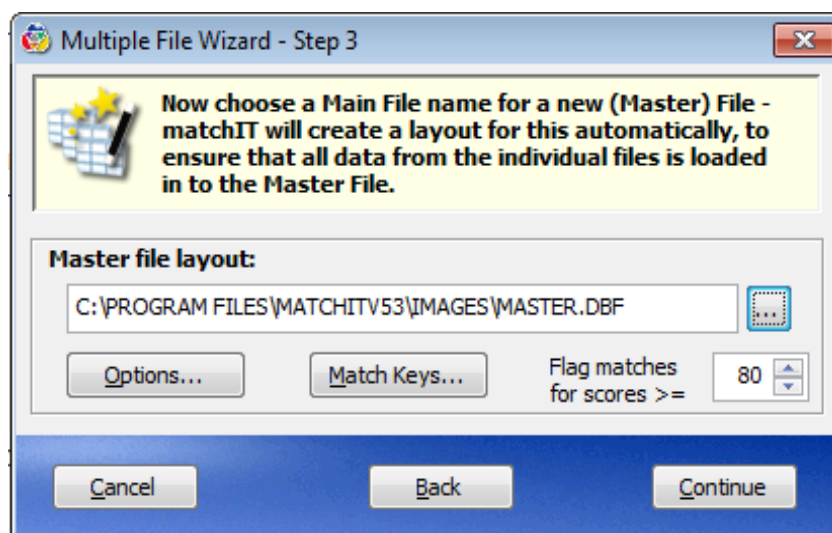
This is a: ☒ Merge File, priority: 1 or a: ☐ Suppression File

No. of files in job: 1

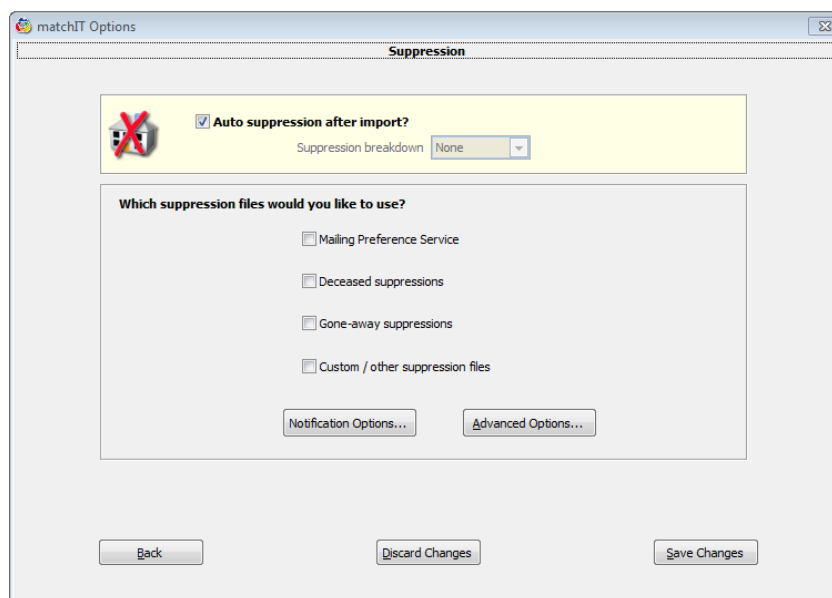
Do not select any of the standard external suppression files within this step – if you have any suppression files which are smaller than or comparable to the total mailing volume, then select them as suppression files here – otherwise, set them up as external suppression files, as described in the next section.

When you specify details of the Master File, select *Options*:

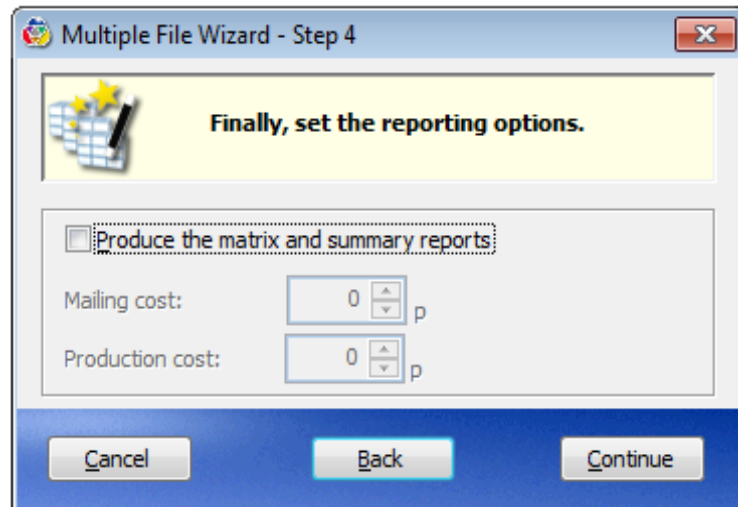




Then select the **Suppression Tab**, tick the box labeled **Automatic Suppression After Import**. Here you can also change the Suppression Options as usual.



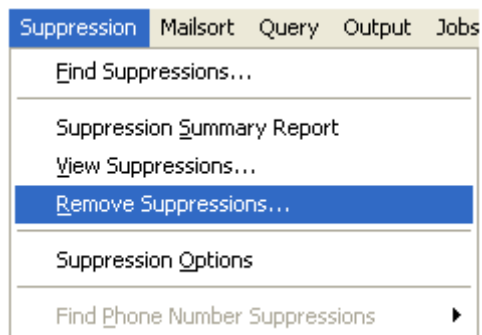
As the final stage in setting up the Multiple File job, **do NOT select to produce the matrix and summary reports**, as you must review and accept the suppression charges (and remove the suppressions) before the matrix report can be produced.



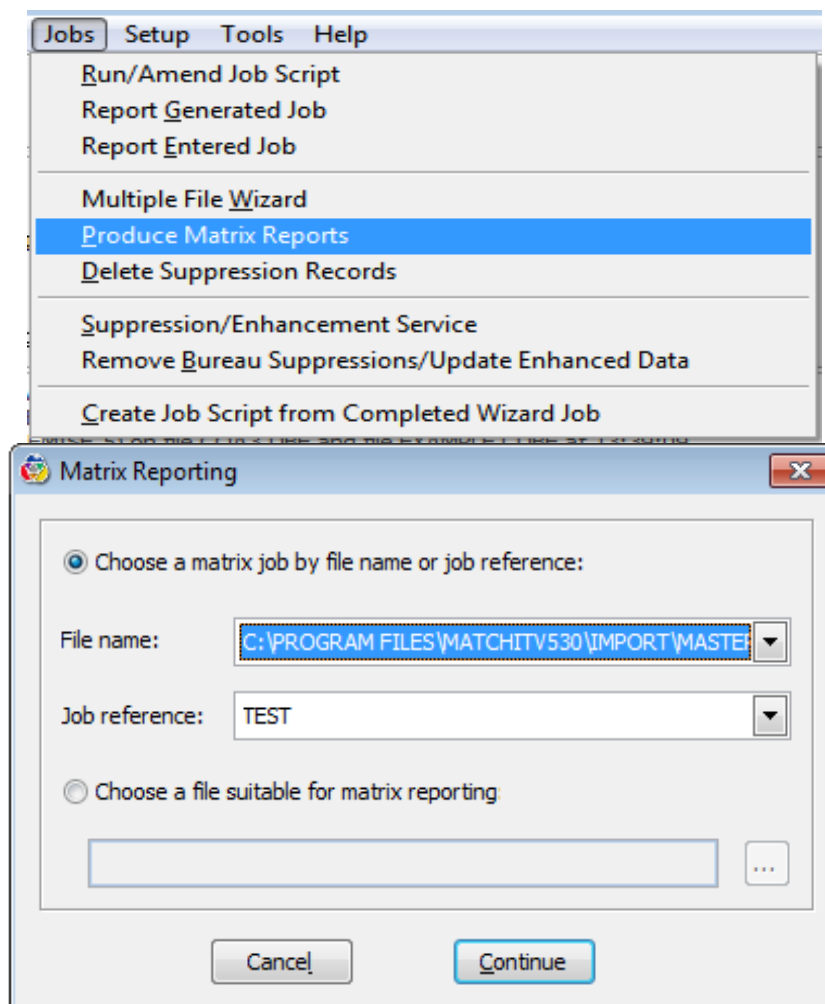
You can then run the job as usual.

## Producing Multiple File Reports

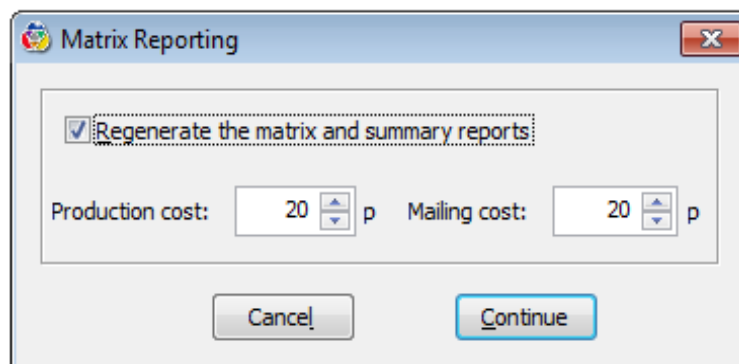
When the job has finished, select the **Suppression Summary Report** and then to **Remove Suppressions** from the **Suppression** menu.



Finally, select to Produce Matrix Reports from the Jobs menu and select the Job reference that you have just run.



Select to Regenerate the report, enter the costs and the report will then be produced.

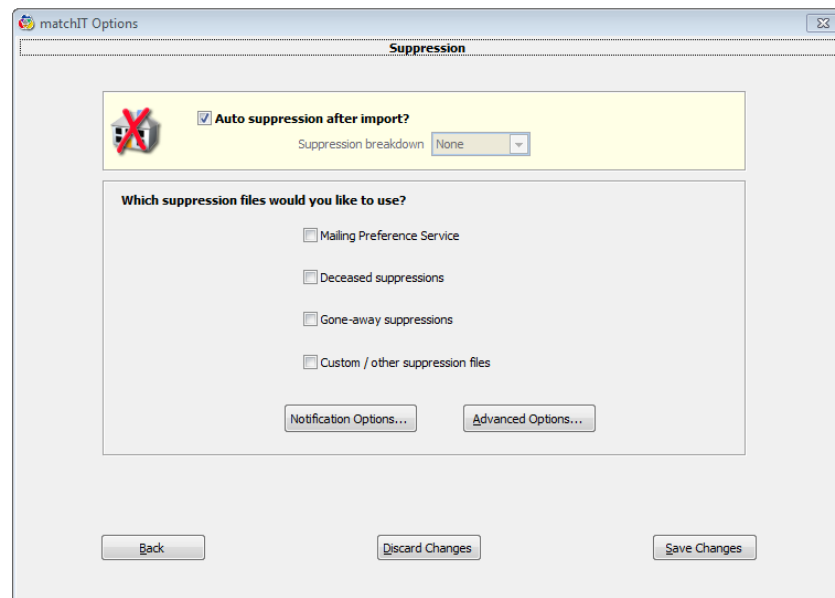


---

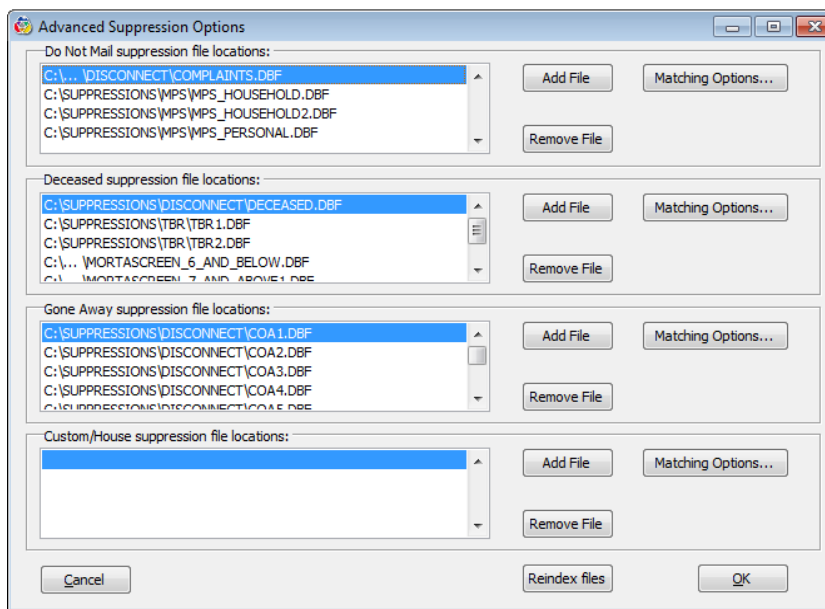
## suppressIT Implementation

### Suppression File Locations

Before you use **suppressIT** in matchIT, you must set matchIT up to point to the suppression files that you have imported or loaded from the supplied suppression CD. Unless your network is geared up for fast indexed I/O on very large files, we recommend that you place these into a folder on your local machine.



Now open matchIT, and choose **Suppression Options** from the Suppression menu and click on the Advanced button. This will take you into the **Advanced suppressIT Options** screen, which will allow you to set the locations of the suppression files. You can select a suppression file by clicking the **ADD** button.



You will need to **Add** each of your suppression files to this screen. Generic terms for the categories of suppression files are being used. These are provided for your convenience. If you put a file into the wrong category, matchIT will still process the file correctly, but your summary report will not reflect the right categorisation.

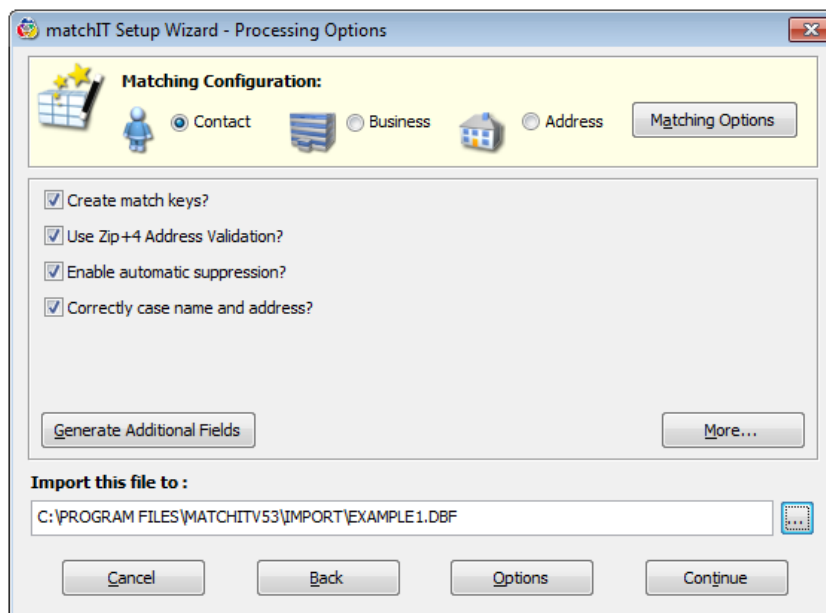
The **Remove** button allows you to remove it from the list, respectively.

When you have added all your files, you must click on the Matching Options button for each file set, to set up the matching options that will be used when matchIT runs the suppressions for you.

**TIP:** After running a suppression if you don't want to use a certain file, remove it from the file locations, the report and the counts will change respectively as will the costs.

## Selecting Matching Criteria

When you have set the files you wish to use, you need to set the Matching Options/Keys. Clicking the Matching Options on each section displays the Suppression Matching Options dialog box.



For the standard MPS, Deceased and Gone Away suppression file locations, use the default keys as supplied unless you have a good understanding of the implications of different keys for run times and hit rates (see the Help or User Manual topic "Match Key – Definition". If you're not sure what match keys to use, please call us. The default keys that we supply with **suppressIT** are as follows:

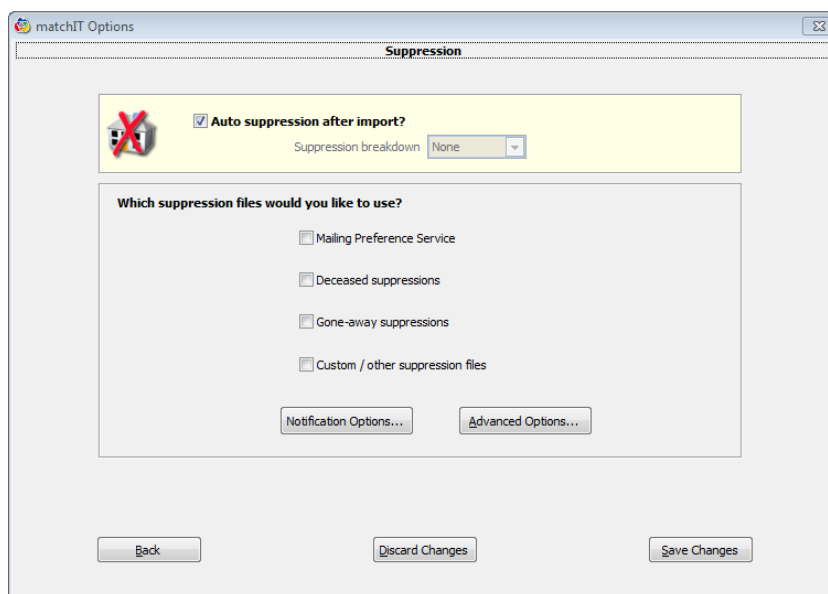
- MPS (Mailing Preference Service) and DDNC (Deceased Do Not Contact)  
`ADD_KEY+NAME1`  
`LEFT(ZIP,5)+SUBSTR(ADD_KEY,5,8)+LEFT(PREMISE,5)+NAME1`

You can also specify matching options here: the minimum score to report for each file, the matching level and options for what to do when premise numbers do not match. By default, **suppressIT** is set to match deceased files at individual level and MPS and gone away files at family level, with options set to insist that premise numbers match and do not match if one is empty.

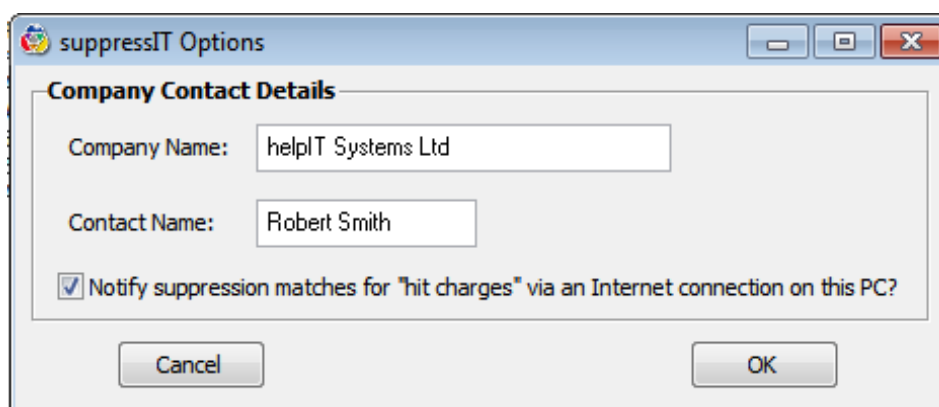
If you have updated the match keys for any of the files, please say Yes when matchIT prompts you to reindex the files, or choose Reindex Files from the **Advanced suppressIT Options** screen, otherwise every time you use **suppressIT** you will have a significant delay while it reindexes the suppression files that you are using.

## Company Contact Details

The final part of **suppressIT** you will need to set up before you use it is the Company Contact Details. To access these, choose the **suppressIT Options** from the Suppression menu. You will see a screen like this:



Now, click on the **Notification Options** button, and you will see the Company Contact details screen below:



Make sure that the **Notify suppression hits by email** box is ticked (if it isn't, you won't be able to enter the contact information) and then fill in your company name and a contact name. Usually the contact name will be the person who most uses **suppressIT**.

Now click on OK twice, to return to the main menu.

## Loading Custom Suppression Files

The first thing you will have to do is to get the suppression files that you want to use with *suppressIT*. Usually, these files will be provided in matchIT-compatible DBF files from your supplier. If they are, please skip to the next section, Suppression File Locations. If you are using suppression files not supplied by your supplier, please follow these instructions:

- If you received your data in a text file, this means that you will have to import it into matchIT as for any other file that you use with matchIT. If you use the Setup Wizard to specify the layout of the file, select to *Add* a field at the end of the layout and label it *S\_ID* with a field width of 2 character.

- If you have already imported the file into matchIT, you will need to modify the structure of your suppression file (from the Jobs/Setup ... Main File Layout menu option), to add the *S\_ID* field.
- You must then populate this field with a file identifier. This identifier must be the same for all records in your file, but does not have to be unique across other files.

To do this, you can go into matchIT's system commands (from the Tools menu), and type:

USE ? (followed by clicking on the Process Command button)

Now choose your suppression file.

Now type:

REPLACE ALL S\_ID with "C"

or C1, C2 etc. if you have more than one custom file. The "C" must be upper-cased.

If an imported file will exceed 2GB after it has been imported into matchIT, you must split it into two or more smaller pieces, each imported into its own matchIT table. If you have multiple matchIT tables for the suppression file, each table that you split the file into should have the same *S\_ID* value.

In terms of performance, it does not matter if you split a file into pieces or not, as the processing time will always be in proportion to the total number of records you are suppressing against.

Next, you must browse the SUPPCATS table in the matchIT directory (which you can do using the View Table option in matchIT's View menu) to add an entry for the code letter that you have used. The supplied table looks like this:

| Code | Fullname             | Category                       | Supplier       | Priority | Cost | In_use | Totalcount | Totalcost | Perm_cost | Coa_avail | Hosted | Cust_param |
|------|----------------------|--------------------------------|----------------|----------|------|--------|------------|-----------|-----------|-----------|--------|------------|
| C    | House suppressions   | House file                     | CLIENT         | 1        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| U    | House Telephone file | House Telephone file           | CLIENT         | 1        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| T    | TPS                  | Telephone Preference           | DMA            | 2        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| M    | MPS                  | Do Not Mail                    | DMA            | 2        | 0    | F      | 0          | 0         | 0         | F         | F      | T          |
| F    | FPS                  | Fax Preference                 | DMA            | 2        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| W    | CTPS                 | Corporate Telephone Preference | DMA            | 2        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| M2   | Baby MPS             | Do Not Mail                    | DMA            | 2        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| GN   | NCOA Update          | Gone Away                      | ROYAL MAIL     | 4        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| GS   | NCOA Suppress        | Gone Away                      | ROYAL MAIL     | 4        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| DN   | NCOA Deceased        | Deceased                       | ROYAL MAIL     | 4        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| G2   | Purity               | Gone Away                      | ACXIOM         | 4        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| G3   | ESF                  | Gone Away                      | EXPERIAN       | 4        | 0    | F      | 0          | 0         | 0         | F         | F      |            |
| D2   | Mortascreeen         | Deceased                       | MILLENNIUM     | 4        | 21   | F      | 0          | 0         | 58        | F         | F      |            |
| M1   | disConnect Complaint | Do Not Mail                    | EQUIFAX        | 3        | 20   | F      | 0          | 0         | 50        | F         | F      |            |
| D1   | disConnect Deceased  | Deceased                       | EQUIFAX        | 3        | 20   | F      | 0          | 0         | 50        | F         | F      |            |
| G1   | disConnect Gone Away | Gone Away                      | EQUIFAX        | 3        | 20   | F      | 0          | 0         | 50        | F         | F      |            |
| B    | TBR                  | Deceased                       | THE READ GROUP | 5        | 20   | F      | 0          | 0         | 60        | F         | F      |            |
| G    | GAS                  | Gone Away                      | THE READ GROUP | 5        | 20   | F      | 0          | 0         | 60        | F         | F      |            |
| GC   | reConnect            | Gone Away                      | EQUIFAX        | 3        | 20   | F      | 0          | 0         | 50        | T         | F      |            |

To Add a record, use the Table menu, Append New Record.

The Fullname field is the name that will appear on the reports.

The CODE field corresponds to entries in the *S\_ID* field of your suppression tables. **NOTE: If you have *S\_ID* values that are not present in this table, they will NOT appear in your reports!**

The PRIORITY field indicates the priority of the file. Lower values = higher priorities.

Therefore, suppressions will be logged against priority one files in preference to priority two – and so on.

The CATEGORY field just gives some information about the content of the file for the user.

The COST field indicates the price of a suppression (in pence). *suppressIT* will always take the cheaper suppression record in preference to the more expensive one for equal priorities.

Unless you have specific requirements that are different, use the entry for the Mailing Preference Service as a model for your new entry.



## Implementation Checklist

Finally, use the following checklist to ensure that you have done everything necessary:

- Imported (or copied) the suppression DBF tables.
- If they are Custom Suppression Files, they all have a fully populated one-character S\_ID field and set up entries in the SUPPCATS pricing table for *suppressIT*
- Pointed *suppressIT* to each file location, via the *Advanced suppressIT Options* screen.
- Set up matching keys & options for each file classification on the screen.
- Provided company identification details.

If this has all been done and checked, then you are ready to use *suppressIT*.

---

## Support for Additional Suppression Files

Suppression files, which typically contain several million records, should be loaded using automated job scripts. This provides the ability for files to be split where required, and prevents users from having to remember specific vital steps that are required when setting up a suppression file.

The 'support for additional suppression files' functionality is comprised of one master template job script (including the program set), and five copies of this script, which have been adjusted to cater for the following suppression files: Purity, ESF, Mortascreen and Baby MPS. The different copies of the master job script vary based on the structure of the suppression files they were created for, as well as the number of records contained in each suppression file.

When loading a suppression file using its dedicated script, the user will simply be required to edit the start of the first program script by adding the path, name of the source data file, and the format. The user can then start the script and leave it to run. The length of time it takes to complete is dependent on the size of the file and the performance specification of the PC that matchIT is running on.

When the suppression file load process finishes, the suppression files will be located in the same folder as the source data folder, and will be ready to use in matchIT.

## Breakdown of Steps Taken by Job Scripts

The Suppression Load process is made up of three main stages. Each stage, and the corresponding row(s) displayed in the Job Editor screen are explained below.

For further in-depth details relating to any of the steps in the load process, please contact [helpIT systems](#).

- **Stage 1 &ndash; Split and Append Source Data (first row in the job script)**

Stage 1 is represented by the very first row in the job script. In this row, matchIT uses the SPLIT\_SUPPRESSION program to identify the suppression source file (specified by the user), and then split the file into portions. The number of portions depends on the width of the file and number of records. The source data portions are then appended into 'load' tables.

- **Stage 2 &ndash; Generate Keys in the 'Load' tables (middle rows in the job script)**

Stage 2 is represented by the second row in the job editor, and further rows depending on how many files the suppression file has been split into. Each row generates keys in and address processes a suppression file portion contained within an intermediate suppression load file.

- **Stage 3 &endash; Create Final Suppression Files (last row in the job script)**

Stage 3 is represented by the last row in the job script. In this row, matchIT creates the final suppression files in the same directory as the source data file. It creates the appropriate indexes for the file(s) and names them appropriately (suffixed with a number if there is more than one suppression table).

## Before running a Suppression Load Job Script

### 1: Create a suppression load directory

The first thing to consider before using a suppression load script is the location of the suppression source data file. This is important, as all processing is carried out in this directory, so it must be a directory on a local drive with plenty of free disk space.

The name of the directory containing the suppression source data file is used by the programs in the script, to determine which suppression file is being loaded. This will ultimately determine which pre-defined 'master structure' file is used to load the data into. It is therefore essential that the directory be named correctly.

All pre-defined job script templates can be found in the "Suppression\_Load" directory, which is in matchIT's "Progs" sub-folder. The sub-folders within "Progs\Suppression\_Load\" reflect the suppression load directory names that the script would recognize (e.g. the suppression source data could be stored in "D:\Data\Suppressions\Purity" but not "D:\Data\Suppressions\Puritydata").

### 2: Specify the suppression source file details from within the job script

After creating the suppression load directory and copying the suppression source data file into it, the details of this file must be specified in the job script. To do this, select Automation from the main matchIT screen. From within the Job Maintenance dialog, select the corresponding job script using the 'Job Reference' drop-down and then click on 'Modify Job'. The job script will now be displayed in the Job Editor window.

The suppression source file details will now need to be specified in both programs featured in the script: SPLIT\_SUPPRESSION.PRG and CREATE\_FINAL\_SUPPRESSION\_FILES.PRG. These can be edited in turn by double clicking on the program and choosing 'Edit Source File'. When each program is displayed on screen, modify the appropriate code at the beginning of the program.

In SPLIT\_SUPPRESSION.PRG, the path and name of the source file, the format of the source file and a suppression file type value must be specified. The suppression file type determines the category of the suppression file that is being loaded. Please see [Suppression File Types](#) for further information.

The example below shows how the code might look after it has been edited:

```
lcInputFile = "D:\Suppression_Load\MyFile"
lcInputFormat = "DELIMITED WITH CHARACTER '|'"
lcSID = "C"
```

In this example, "lcInputFormat" (representing the format of the source file) has been set to expect PIPE delimited.

In CREATE\_FINAL\_SUPPRESSION\_FILES.PRG, it is only the path and file name that must be specified.

## Suppression File Types

The suppression file type, specified by **lcSID** in SPLIT\_SUPPRESSION.PRG links the file to a record in SUPPCATS.DBF, located in the matchIT root folder. This can ultimately be used to determine the information displayed on suppressIT reports next to that suppression file - the priority the suppression file takes amongst other suppression files and the hit costs that may be involved in using a specific file.

If a file is simply to be referred to as a 'Custom Suppression File' with no hit charges, then the file type should be set to "C". Otherwise, it should be set to correspond with a new record in SUPPCATS.

SUPPCATS.DBF already caters for common types of suppression files. The existing records can be used as examples of how to add further categories if required.

## Running a Suppression Load Job Script

If the steps detailed in the "[Before Running a Suppression Load Job Script](#)" section have been followed correctly, the script will be ready to run.

To run a Suppression Load script, select Automation from the main matchIT screen. When the Job Maintenance dialog appears, select the job script that is to be run, from the "Job Reference" drop-down menu and click on "Start Job". The script will start. Unless the current suppression load directory has never been used to load suppression files before, the script will run without user intervention until the suppression load process is complete.

---

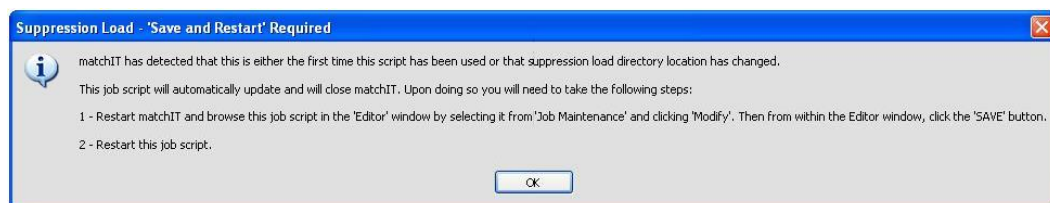
Note: when loading suppression files containing several million records, the scripts are expected to run for several hours before completion.

---

## Running a Suppression Load Job Script for the First Time

If the directory containing the suppression source data has never been used for suppression loading before, the script will create a "Load" sub-folder and will copy into it the required intermediate load tables.

After preparing the new load directory, the script will automatically update its paths and file mapping to the new suppression load directory, and the following message will appear:



Upon clicking 'OK', in order to recompile the script with the new file mappings, matchIT will close. At this point, restart matchIT and re-run the job script. It will now run until all suppression files have been loaded.

## Using the Final Suppression Files

When the script has finished running, the final suppression tables will be ready to use.

These can be used just like any other suppression file in the suppressIT module; simply map the suppression file(s) in the Advanced suppression options and either tick 'Enable Automatic Suppression During Import' when importing a new file, or select 'Suppression>Find Suppressions', to suppress a pre-imported file.

For further information on using the suppressIT module, please refer to the suppressIT section of the User Manual.

## Suppression and Enhancement Service

This service is accessible from the Jobs menu using the Suppression/Enhancement option, and also from the very end of the processing wizard. Trough this option even if you don't have suppressIT and addressIT, you may now:

- identify suppressions (eg deceased records and people that have moved house - known as goneaways)
- Append additional data via consumer names lookups
- Append additional data business data (SIC Codes, phone numbers etc) and business validation

If your mainfile contains consumer records (ie it does not contain a company field), then you will see the following screen when selecting the service.

Suppression/Enhancement Hosted Services Options

**Consumer Suppression Options** | **Consumer Enhancement Options**

**Suppression Options**

☐ Permanent
 ☒ Temporary
 ☒ Basic Options
 ☐ Advanced Options

☒ Gone Away suppressions
 ☒ Deceased suppressions
 ☒ Mailing Preference Service

☐ Provide new address

To select individual suppression files, please select Advanced Options.

**Production and Mailing Costs**

Production cost per item: £ 
 Mailing cost per item: £

**Projected Suppression Counts and Savings**

Estimated total number of suppressions: 4900

**Estimated Net Saving: £490**

These projections are for Equifax disConnect Gone Away and Deceased suppressions only. By default all common suppression files will be used so counts will be higher, particularly for Deceased suppressions.

Accurate counts and costs will be provided for you before you are committed to paying for the suppressions involved and you will be able to select or deselect individual suppression files at this stage

For additional information please visit our [website](#)  
 Or phone 01372 225904  
 Alternatively, to email, click [here](#)

Cancel Continue

From this screen you may select any suppressions you would like to run using the suppression options (choose advanced options if you want to specify the suppression file provider eg ReAD, Equifax etc). You can also enter your predicted production and mailing costs to get a ballpark cost saving that you might see by using the service (and hence removing unwanted mailing records from your database).

Additionally, you can click on the enhancement tab to choose from various different data enhancements that you might want to make to your data. If your mainfile contains business data, then only a business enhancements screen will be available.

When you have selected the options you want, click continue and you'll see a message indicating a receipt file has been written to your computer. You will then be taken to a user details screen where you must enter your contact details. From there click continue to have a copy of your data file encrypted and uploaded to helpIT.

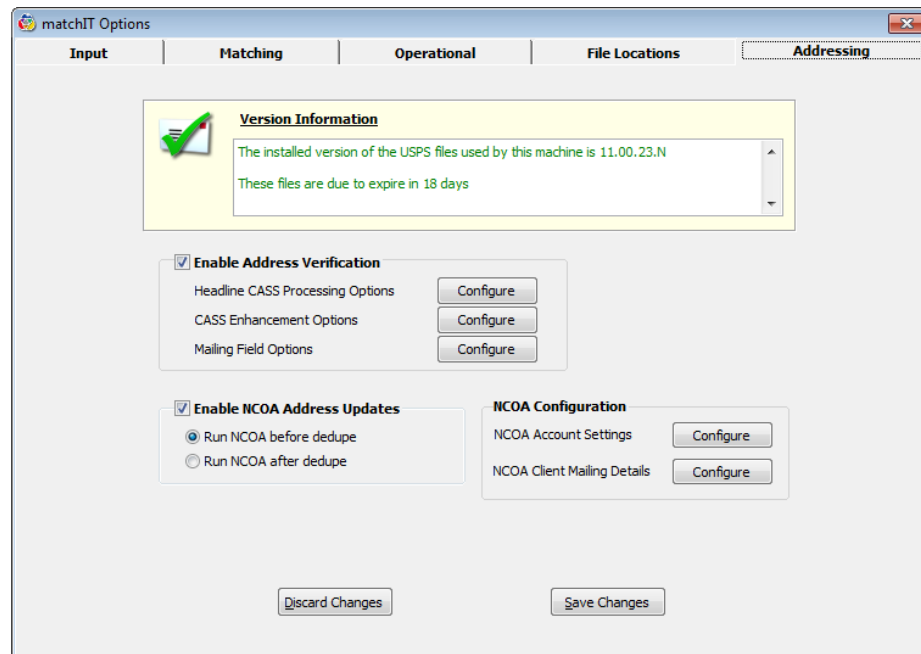
When you receive your processed data back from helpIT, you will need to integrate these results into your original mainfile. This is done by copying the return file into the same folder that your mainfile resides in, and then opening your mainfile and choosing 'Remove Bureau Suppression/Update Enhanced Data' from the jobs menu. This will flag any records that should be suppressed any add any additional data that you've requested to the mainfile.

# NCOA Service

---

## NCOA Service

This service is coupled with the addressIT module and can be configured from Setup>Options>Addressing or simply from the Options icon. The NCOA service allows a copy of your data file to be encrypted and uploaded for NCOA processing which in turn provides you with change of address information correction. The Options screen will look like the following:



NCOA options are available below the CASS Zip+4 Options which have been condensed for easier viewing into 3 Configuration tabs.

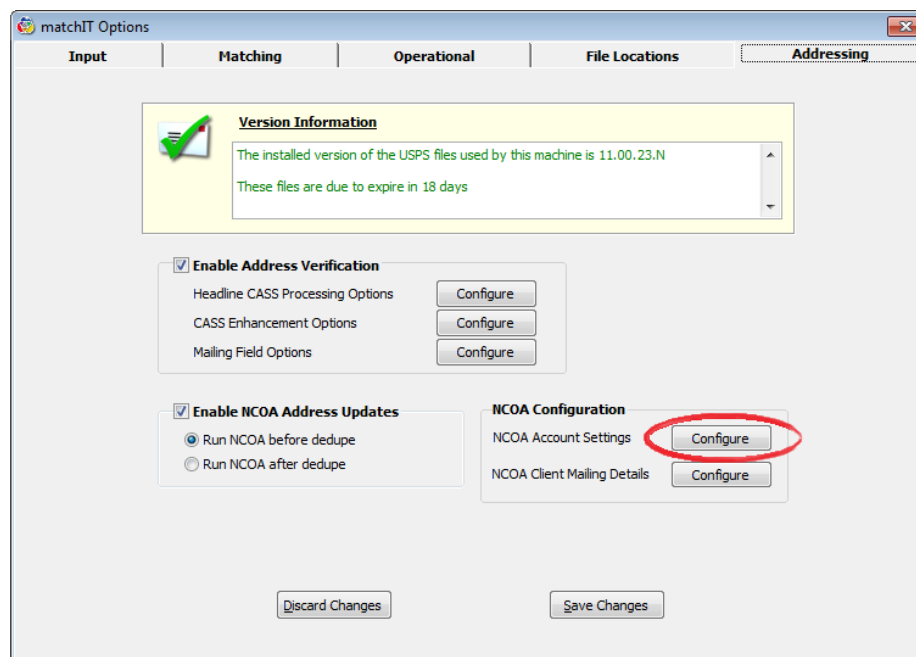
Options to enable the NCOA before or after deduping are available as well as Account Settings and Client Mailing Details. The Account Settings contain information settings to create a new account, adjust an existing account, or delete an account.

When you receive your processed data back, you will need to integrate these results into your original mainfile. This is done by copying the return file into the same folder that your mainfile resides in, and then opening your mainfile and choosing 'Add Returned NCOA Addresses' from the jobs menu. This will update your address data with the returned NCOA data.

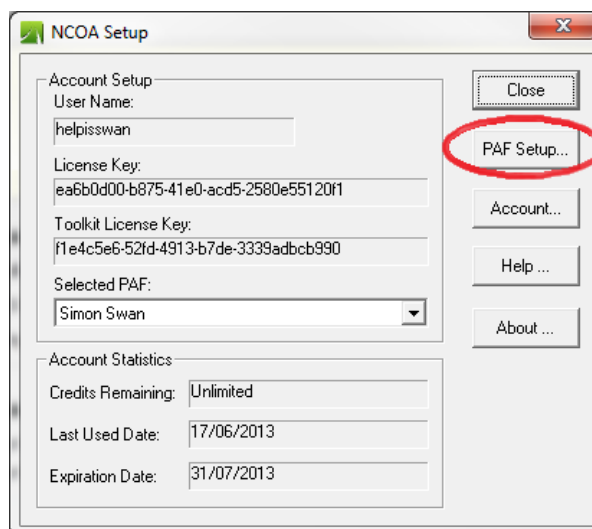
---

## Configuring NCOA Service

Before you get started applying the NCOA Service, you will need to obtain a license key from helpIT Systems and also fill out some of the basic information that NCOA will need to generate your PAF forms and reports. To generate a new account, click on the **Configure** option next to **NCOA Account Settings** in the Addressing tab under matchIT Options.



1. Select **PAF Setup** and then select **Add New** to create a new PAF account.



2. Fill in the appropriate information in the PAF setup wizard to continue.

NCOA Processing Acknowledgment Form Assistant

List Owner

\*Required field

Company Name\*

Address\*

City\* State\* ZIP+4\*

Telephone Number\* Email Address

Parent Company Name

Marketing or "DBA" Company Name or Primary Affiliate Company Name

Name\* Title

Enter information pertaining to the List Owner\*

\*The List Owner is:

- The Person/Company for whom processing will be done
- Usually the owner of the mail created from this list
- The beneficiary of the NCOA Link processing

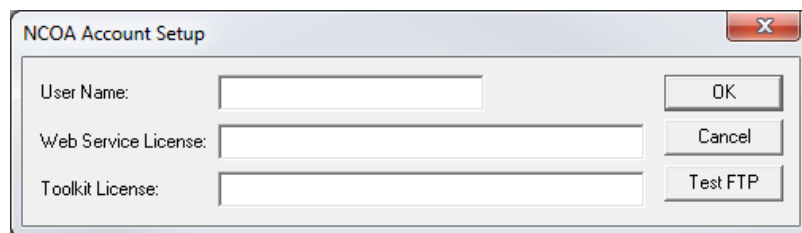
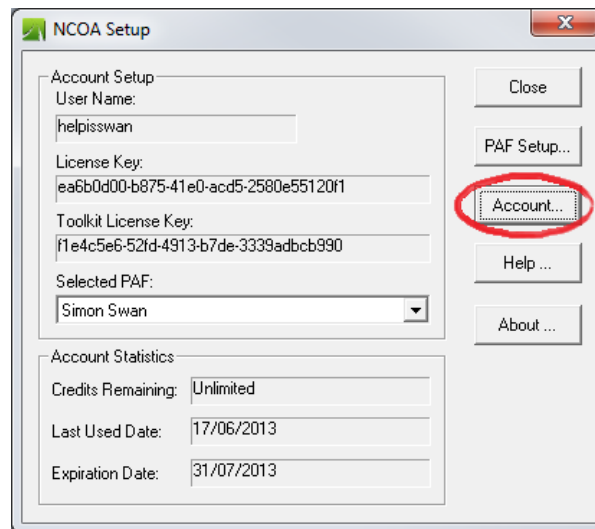
< Back Next > Cancel

3. Once the PAF wizard is completed, the NCOA PAF form will appear on screen. Fax this form to helpIT Systems at 408-236-7491. Your license key and registration information will be sent back to you once the PAF processing is verified. The PAF ID at the bottom of the NCOA PAF form is the main ID used to enable your account. Be sure not to submit multiple PAF forms as only one of the PAF ID's will be enabled.

If you are mailing records on behalf of another party, use the **NCOA Client Mailing Details** option to change your settings. If you are formatting data for a third party, please fill out the user form found in the section **NCOA Account Settings**

4. Once you receive the PAF registration information back from helpIT, select the **Account** option and enter the information into the **NCOA Account Setup**.





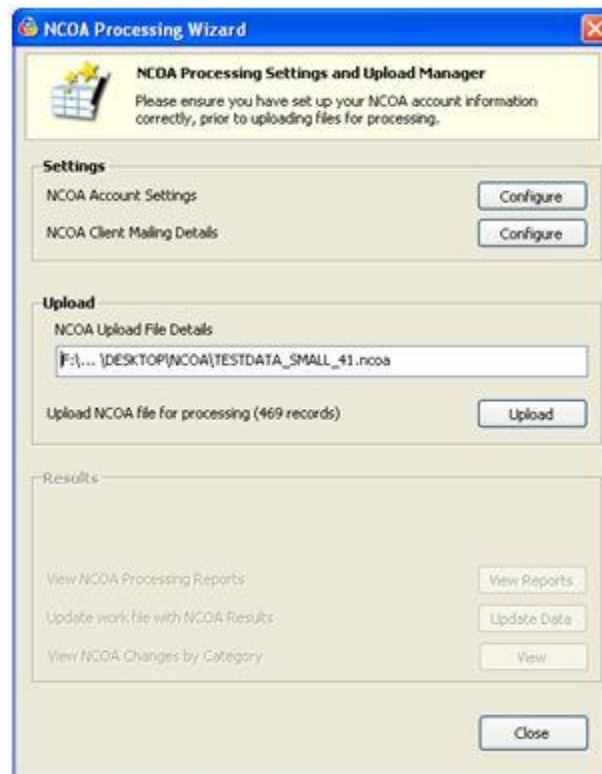
5. You can test the uplink connection by clicking on **Test FTP**. The setup is now complete and NCOA functionality will be available for any records containing contact information. Your NCOA account should now display as enabled instead of pending and the NCOA setup is complete.

---

# NCOA Implementation

## NCOA Implementation

NCOA is a module that works in conjunction with addressIT and is only available as a add-on to existing addressIT customers. NCOA will correct any addresses that have registered with the National Change of Address through the USPS. The result is a corrected address along with coding information to describe the reasons for the correction.

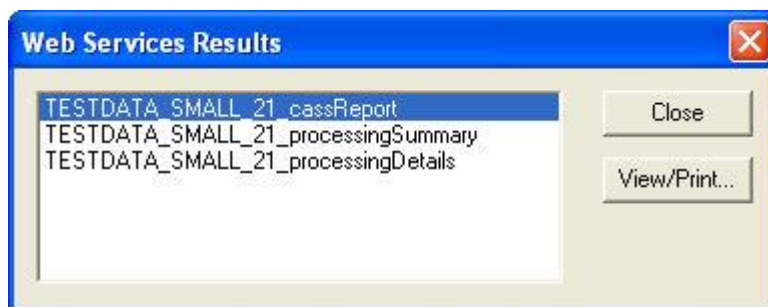


Various reports are available from the NCOA Processing Wizard including:

**Cass Report** - Displays the output of address correction using CASS Certified software in conjunction with current USPS address database files.

**Processing Summary** -NCOA Link Processing Summary Report showing processing information of address changes and moves.

**Processing Details** - Report showing the original address linked to the changed address after NCOA processing is completed.



---

## NCOA Coding Information

### NCOA Coding

For NCOA Return Codes see Appendix C

For CASS Certification Codes see Appendix D

For NCOA Return Codes for Processing Summary Report see Appendix E

For NCOA Correction Codes see Appendix F

# Matching

---

## Introduction to Matching

In matchIT, there are two critical steps: the first step is the Import or *Extract* process, this process performs (optional) *data enhancement* and generates *Match Keys*. The second step is the actual *Find Matches* step itself. In turn, the Find Matches step can be broken down into two steps as follows:

### Match Key – Definition

In an ideal world, a user would be able to compare every single record in a database with every other record in the database. In a 10,000 record database, this would mean you would do roughly  $10,000 \times 5,000 = 50,000,000$  comparisons – even on this small database, the processing time would be unreasonably long.

Another problem with comparing every single record with every other record is that you may find numerous false matches – records which are obviously not matches to the human eye, but where certain key elements are either the same or empty. For example, if the name and part of the address are the same, and the zip code is blank, then it may add up to give a matching score.

Although this score may be fairly low, pairs of records like this should not usually be reported as a match at all, because they would obscure genuine ("true") matches with a lot of miskeying and inconsistency between the records: if too many false matches are reported, it becomes difficult for the user to "see the wood for the trees".

We need a way to improve on this process, both to cut down the sheer volume of comparisons, and also to reduce the number of false matches that may occur. The way to do that is by using *Match Keys* – a match key is something that groups of records in a database have in common, which indicates that detailed comparison of the records is worthwhile to see how well the records match each other in other respects. The records within these groups are only matching *candidates*, they may not be true matches – further inspection is necessary to check if they are true.

To reduce the number of comparisons, we can look at a field and say that only records that match the value of that field are potential matches. For example, we could select a Surname field (if the surname is held separately from the title and initials), this would only compare records of individuals with the same surname. This would instantly and drastically reduce the number of comparisons we would have to do. Now, for example, Mr Smith would not be compared to Mr Jones, because their surnames are completely different. All the Smiths would be compared, because there is the possibility that they might be the same person. In this approach, we have used the Surname field as a *Match Key*.

This approach is an improvement on our original idea, but it has its limitations. Mainly, it does not allow for miskeying of the surname. For example, take the name Shore. People generally expect this to be spelt Shaw, as this is far more common than Shore. The two spellings *sound* the same, but our solution above would not compare Mr Shaw and Mr Shore, because the surname field is different. The obvious solution to this is to use a "sounds like" version of the Surname field as a *Phonetic Match Key*. The *Extract* process takes important fields (such as name, address, company), and generates phonetic versions of the key elements in those fields.

However, even this approach has its drawbacks. The main problem is that this still gives us too many records to compare (most of the time). For example, if you are comparing records across

the whole country, there are a lot of Smiths – and Mr Smith in New York is obviously not the same as Mr Smith in San Francisco. Secondly, it does not cut down on the number of false matches. To get around this, we use combinations of fields to narrow the search. In the example above, it would be a good idea to consider part of the zip code as well. So we may choose something like phonetic key of surname plus the outward bound (first half) of the zip code. This is a more explicit *Match Key* than just phonetic surname.

In matchIT, we do two or three scans of the database, using different Match Keys to find all the possible matches. If, for example, the two Mr Smiths above were the same, but one record did not have a zip code, we would miss the matching records if we relied just on phonetic key of surname plus the first half of the zip code. This is because the search requires the first half of the zip code as well as the phonetic surname to be the same, in order for the two records to be in the same "candidate group". However, if the street in both the records is the same (which will be the case if they are true matches), we can do a second search based on phonetic key of surname plus the phonetic key of the most significant word(s) in the street, this would find the match on the second scan of the database.

At the start, we mentioned that there are two steps to finding matches. The process we have described above is the process of establishing *Match Keys*. This helps us cut down the number of potential matches that are fed into the second step, which is the *Match Score* step – this step enables us to determine how well the other data matches in each pair of records.

## Match Score – Definition

So, now we have two records that may or may not be for the same person (or family, household or company). If we have used the Match Key process above, then the likelihood of them being the same is much improved.

We will now go through the record, field by field, and work out how similar they are. Each field can contribute to a *match score*, depending on how close those fields in the records are. At the end, we have an overall score that tells us how alike two records are – the higher the score, the more similar the records are. When deleting duplicates with matchIT, you can enter a threshold score, for and above which matchIT will automatically flag one record from all matching pairs.

With most data files, all pairs scoring above a particular score (say 90) will be true matches and anything below (say) 80 will be false matches – this leaves a grey area between (say) 80 and 90 where most of the pairs are true matches but some are false. For "underkill", you can therefore enter (say) 91 as a threshold score for deletion. For "overkill", you can enter 80.

This process works well, but it is essential that users fine tune it themselves. This is because matching requirements can vary from company to company, file to file and even job to job. For example, sometimes you want to dedupe to individual level, sometimes to company or family. In addition, data files vary widely in the structure and overall "shape" of their data". Sometimes zip codes are reliable and complete, sometimes they are unreliable. There are many ways that the data can differ or be incomplete, and this frequently changes with every new file that you "dedupe", or match against other files.

Because we know that everyone's data is different, we have allowed the way that two records are compared to be customized, using a parameter table that tells us how much each field contributes to the overall matching score. Using this table, we can tell matchIT how important each field is in the matching process. We call this the *Weights* table, as it reflects the relative weighting that each field has towards the total match score. For each field that the user wants to match on, there are five weights, representing whether the pair of fields in the two records is a *Sure*, *Likely* or *Possible* match, or whether *One* or *Both* of the fields are *Empty*. If a pair of fields is quite different, it is given zero weight i.e. it does not contribute at all to the total matching score.

For name and address matching, matchIT compares the elements of the name (or address) as a whole, rather than just comparing them element by element – this allows it to match names where

some of the components are omitted or in a different order in one record (e.g. John Michael Smith and Mike Smith, or addresses which have a house name in one record but not in another).

To summarize, the *Match Keys* act as a filter, filtering in candidate pairs that may be matches.

Match Keys work best when using phonetic keys, and combinations of fields. After that, each candidate pair of records has a *Match Score* calculated for it, based on the *Weights* table. This allows matchIT to work out how well each pair of records matches.

Further detail on how matching works is given in the Online Help.

---

## Summary of Finding Matches

To find matching records in a Main File, the following steps are used:

- Import the data. The simplest method is using the "[Setup Wizard](#)". If you are not using the Setup Wizard, select Restore Standard Parameters from the dialog which you see when you select Import, and choose the appropriate matching configuration before you Import the data – see [Importing without using the Setup Wizard](#). If you are importing through the Setup Wizard, at the end of the Setup Wizard, tick the checkbox for "Create Match Keys" and choose the appropriate matching level in the "Select matching level" radial.
- Utilize the Find Matches option either at the end of the Setup Wizard, from the Matching menu, the toolbar, or from the dialog at the end of Import.
- Choose the Match Keys to use (unless you chose Find Matches at the end of the Setup Wizard, in which case default Match Keys are used).
- Wait while matchIT searches for possible duplicate records.
- View, verify and/or flag the matches that have been found.



*Find Matches  
button*

---

## Matching Parameters

When importing data through the Setup Wizard, matchIT asks what level of matching is to be used. The choices offered depend upon whether the data is business or personal.

The parameters can also be modified for specific requirements. To change these, either select Save/Restore Setup (see "Multiple Parameter Sets") or select "Options" from the Jobs/Setup main menu and change the "[Matching Setup](#)" - see Online help for more information".

---

## Matching Levels

The Setup Wizard allows you to choose between contact and business level matching, only if there is a field named "Company" in your Main File.

### Residential Data

#### Individual Level

This will find matches at an individual level e.g. John Smith and Mary Smith living at the same address will not be matched, nor will John Smith and James Smith. However, John Smith and Mr J E Smith will be matched and (by default) John Smith and E J Smith will be regarded as a possible match, as perhaps E J Smith is known by his middle name.

#### Family Level

This finds matches on surname at the same address e.g. John and Mary Smith at the same address will be matched, as will John Smith and James Smith, and all but one record will be flagged.

#### Household Level

This matches records with the same address, regardless of surname e.g. John Smith and Lucy Jones living at the same address will be matched.

### Business Data

#### Contact Level

At contact level, deduplication is performed down to one record per person at a location. This is effectively the same as individual level matching for residential data, as by default matchIT ignores the company name for contact level matching – this tends to work better because company names change so much, different companies within the same group often have employees in common etc. For example, John Smith and Mr J E Smith will be matched, even if one is at British Steel plc and the other at Corus, as long as the addresses and zip codes match well enough. However, John Smith and Fred Brown at the same address/zip code will not be matched

#### Business Level

This level is used to produce one record per company or business. Therefore, two different employees working for the same company will be matched, as long as the addresses and zip codes match well enough. Once you have selected to continue with Business Level matching, you will be prompted for Loose (the default), Tight or Legal business matching. These options are illustrated in the window prompt.

### Address Level

This matches records with the same address, regardless of surname or business name. All contacts and businesses at the same address will be matched when using this level of deduplication.

## Match Keys

Match Keys define which fields matchIT uses when looking for candidate matching pairs in your Main File – it is important that you understand what this means, so please refer to the definition of Match Keys in [Introduction to Matching](#) if you are unsure.

The screenshot shows a Windows-style dialog box titled "Matching Key and Range". It has a standard title bar with a close button. The main area is divided into several sections. At the top, under the heading "List of Fields / Keys Available", there is a scrollable list containing eight items: "Phonetic Last NameKey & Initial + First 5 characters of Zip code", "Phonetic Last Name Key + Phonetic Key of Street", "Phonetic Last Name Key + Phonetic Town/City Key", "Phonetic Address Key (Town/City & Street)", "Phonetic Last Name Key + Phonetic Company Name Key", "Local part of Phone Number", "Phonetic Last Name Key + Upper cased Address1 ignoring punctuation and casing", and "Phonetic Address Key (Town/City & Street) + Building or apartment number". Below this list is a "Select Key" button and an "Index:" label followed by a text input field containing "NAME1 + LEFT(ZIP,5)". To the left of the main area is a section titled "Keys Chosen for Matching" which contains three buttons: "New Key", "Remove Key", and "Clear Keys". Next to these buttons is a scrollable list with three entries: "NAME1 + LEFT(ZIP,5)" (which is highlighted), "NAME\_KEY+SUBSTR(ADD\_KEY,5,4)", and "ADD\_KEY+PREMISE". Below this list are two more buttons: "Verify Keys" and "Use Default Keys" (the latter is enclosed in a dashed border). To the right of the "Keys Chosen for Matching" section is a section titled "Key Range" which includes a "Start:" label with a text input field containing "0", and an "End:" label with a text input field containing "zzzzzzzzzzzzzzzzzzzzzzzzzzzzzz". At the bottom right, there are two radio buttons labeled "Basic" (selected) and "Advanced", followed by a checked checkbox labeled "Is this a new analysis?". Finally, at the very bottom right, there are two buttons: "Cancel" and "Continue".

At the top of the screen is a scrollable list of Match Keys called the Fields/Key list. This contains both suggested Match Keys and all fields in the Main File, with the keys that you are most likely to need displayed at the top of the list.

Use the Basic or Advanced option to display these keys in plain English or as field names from the Main File. In their plain English description, keys detailed in proper case have been standardized by matchIT, ones entirely in lower case have not been standardized. It is better to use the standardized fields, but you could construct your own keys from non-standardized fields, in addition to using matchIT's generated keys.

The simplest way to select Match Keys is to check the "Use default keys?" box on the Match Keys screen. This will select a standard set of keys which are suitable for most jobs – as supplied on initial installation, they are suitable for matching at individual, family, contact or business level.

The keys are suitable for data that is either virtually all US or is all non-US. For household matching, the default keys will work okay but are not ideal, as two of the supplied match keys feature phonetic surname and only one does not. Therefore, for household matching we recommend that you select from the first few keys in the List of Fields/Keys Available as follows:



- two keys that do not feature phonetic surname e.g. for US data:  
Zip code  
Address Key  
or (for non-US data):  
Address Key  
First 5 characters of ZIP code + Phonetic Key of Street.
- one key that does feature surname to pick up extra household matches where the surname is the same but for some reason the household match is too fuzzy to be picked up by either of the first two keys e.g. for US data:  
Phonetic Surname Key + First 5 characters of ZIP code  
or (for non-US data):  
Phonetic Surname Key + Phonetic Town/City Key.

The set of default keys provided with matchIT may be overwritten by checking the box "Save as default keys?", but don't do this unless you have a thorough understanding of how match keys work.

## Selecting Specific Keys

To select your own keys:

- Click "Clear Keys" to clear all currently chosen keys, if required.
- Highlight the field you wish to use in the Field/Key list and click "Select Key" or double click and this field will be added to the key list.
- To add another field into this key, highlight the second field to be used and click "Select Key" again – in this way, you can build compound keys such as Zip code + Phonetic Surname Key.
- Click "New Key" to add another and repeat from step 2.

If you make a mistake, just click on the key that is wrong (in the "Keys Chosen For Matching" box) and click "Remove Key".

"Verify Keys" will check your chosen keys for you and suggest any problems which may occur with using those keys.

## New Analysis

If you are working with a Main File that has already been analyzed for matches, you may not wish to lose any previous matching results. If so, uncheck the box "Is this a new analysis?"

---

## Matching Summary

Matching information is recorded in the Perform (short for "performance") database. The Matching or Overlap Summary shows information from this database, which you see automatically at the end of the analysis, or you can view it from the Matching menu. The information displayed is as follows:

**Database in use:** the database you are using.

**Number of records:** the total number of records in your database.

**Number of matching pairs:** the number of pairs of potentially duplicate records that matchIT has found.

**Number of potential deletions:** the number of records matchIT will flag, provided you accept the results and flag at the default threshold score. This is often different to the Number Of Matches Found. This is because if you have more than two records which match each other, say 1, 2 and 3, then record 1 matches record 2 and record 1 matches record 3, but also record 2 matches record 3. This gives 3 matching pairs, but only 2 records will be flagged. This exponentially increases for larger match sets: 10 records in a match set means 45 matching pairs, but only 9 potential deletions!

### Matches found by match key

**Run number:** When matchIT does its Find Matches routine it makes several passes (or runs) over the database, on each of the chosen Match Keys.

**Records compared:** the number of records matchIT has read for each match key. This may be less than the number of records in the Main File if there are records with blank keys, or a Start Range was specified.

**Matches found:** the number of matching pairs found by each key.

**Match Keys used:** the Match Keys used since the New Analysis box was last set On.

### Matches found by score range

**Score range:** This shows ranges of match scores depending on the *Minimum Score To Report* and the maximum possible score.

**Number of matches in range:** This is the number of pairs of matches found in each score range.

## View/Verify Matches

After matchIT has performed the Find Matches step, the following screen is displayed:

| Run Number | Number of Duplicates* | Matching Key   | Time Taken |
|------------|-----------------------|--|------------|
| 11         | 14                    | Phonetic Last Name Key + First 5 characters of Zip code                  | 00:00:00   |
| 12         | 2                     | Phonetic Last NameKey & Initial + Phonetic Key of Street                 | 00:00:00   |
| 13         | 3                     | Phonetic Address Key (Town/City & Street) + Building or apartment number | 00:00:00   |
|            |                       |  |            |
|            |                       |  |            |

\* This shows number of potential duplicates

Reports/QA Dashboard

Cancel View Matches Verify Matches Flag Matches

From here, the matches found can be viewed, verified or flagged. These options can also be accessed from the Matching menu. View Matches is used to simply produce a report listing the matches found whereas Verify Matches allows matches to be flagged interactively, declared false matches, and/or allows records to be modified. Flag Matches removes all duplicates scoring above a threshold match score, without further user intervention.

## View Matches Window

Selecting **View Matches** displays another window, as shown:

[illegible]

The most useful options are those in the top half of this screen:

*There is one run for each matching key selected.*

- If the Report Grouping option is set to Pairs, then it is possible to view matching pairs that were found by a specific key by unchecking the All Runs option and entering the number that corresponds to that specific key. Alternatively, to view all matching pairs, check All Runs. If the Report Grouping option is changed to Sets, the All Runs option will automatically be checked, as it is not possible to view sets from a specific key.
- Matching records can be grouped in pairs (e.g. John Smith, Mr J Smith and J Smith Esq at the same address will be shown as three pairs of matches), or in sets where all records matching each other are displayed together i.e. the three Mr Smiths above would be shown as one set of three records.

*Potential duplicates are given a score based on how well they match: the higher the score, the closer the match*

- The range of matching scores for which the results should be displayed is also controllable and (if viewing in Pairs) records can be sorted by score. Set the score sample size to e.g. 10 if you wish to see just the first 10 pairs for each match score. Selecting this automatically sorts the records by score and displays them in pairs
- The report format will default to Business or Residential, dependent upon whether there is a company field in the Main File. (See "[Matching](#)") You can choose your own report layout from here and also Verify Matches (see next section).

*If you want to print the report to a printer other than the default printer, or to print more than one copy or a page range, you should select a Destination of Printer, rather than print from the Print Preview.*

- Destination can be either:
  - Preview for a print preview,
  - Printer to print the report,
  - File output to a text file or
  - PDF to save a PDF version of the report.

- The results from all runs (since the New Analysis box was checked) can be viewed, or one run number can be selected by unchecking the "All runs?" box. The default run number is that of the last matching run performed.
- Matching records can be grouped in pairs (e.g. John Smith, Mr J Smith and J Smith Esq at the same address will be shown as three pairs of matches), or in sets where all records matching each other are displayed together i.e. the three Mr Smiths above would be shown as one set of three records.
- The range of matching scores for which the results should be displayed is also controllable and (if viewing in Pairs) records can be sorted by score. Set the score sample size to e.g. 10 if you wish to see just the first 10 pairs for each match score. Selecting this automatically sorts the records by score and displays them in pairs
- The report format will default to Business or Residential, dependent upon whether there is a company field in the Main File. (See "[Matching](#)") You can choose your own report layout from here and also Verify Matches (see next section). The default reports used for business/residential matching are BIZPAIRS or BIZSETS.FRX and RESPAIRS or RESSETS.FRX respectively.

- Destination can be either:
  - Preview for a print preview,
  - Printer to print the report,
  - File output to a text file or
  - PDF to save a PDF version of the report.

#### Advanced Options

## Verify Matches Window

**Verify Matches** provides an easy way of checking the quality of the matches found, even if you want to flag matches globally. Selecting **Verify Matches** from the **Matching** menu or other dialog shows all matches in order of score, lowest score first. Verify Matches is also available as a "Report Format" from the [View Matches](#) screen, where you can specify which runs to view, the score range and score sample size.

The Verify Matches option within matchIT has the ability to display matching records in either a pairs view (default) or a sets view. To change the default view for the Verify Matches option you will need to relabel a file named "NotVerifySetsFromWizard.txt" in the matchIT directory (C:\Program Files\matchITv51). Essentially the file should be named "NotVerifySetsFromWizard.txt" if you wish to examine records in the pairs view. However, if you wish to look at records in a sets view the file needs to be renamed to "VerifySetsFromWizard.txt".

For global deletion, see "[Flag Matches](#)". The default screen used for pairs of matches is shown below:

## Verify Matches in Pairs

| First Record |                     | Second Record |                   |
|--------------|---------------------|---------------|-------------------|
| ADDRESSEE    | DR M GUNDESEN       | ADDRESSEE     | MARK GUNDERSON    |
| UNIQUE_REF   | 0000005             | UNIQUE_REF    | 0000047           |
| COMPANY      | WOODFORD UNIVERSITY | COMPANY       | UNIV. OF WOODFORD |
| ADDRESS1     | 107 FOSTER HALL     | ADDRESS1      | ROOM 107          |
| ADDRESS2     | #102                | ADDRESS2      | 102 FOSTER HALL   |
| ADDRESS3     | AL                  | ADDRESS3      | AL                |
| ADDRESS4     |                     | ADDRESS4      |                   |
| ZIP          | 36849               | ZIP           | 36849             |
| TELEPHONE    |                     | TELEPHONE     |                   |
| PREMISE      | 107                 | PREMISE       | 102               |
| CONTACT      | Dr M Gundesen       | CONTACT       | Mr Mark Gunderson |
| SALUTATION   | Dear Dr Gundesen    | SALUTATION    | Dear Mr Gunderson |





Current Matching Score: 93

Navigation buttons: next score, False Match, Change Fields, Bookmark Place, Go To Bookmark, Done.

This screen will display potential duplicates, in pairs. The different colored highlighting is used to help distinguish where the differing fields are in the records. Fields in red are different, yellow

shows information which is contained in the same field in the other record and white displays those fields which are identical.

The buttons in the top right part of the screen control movement through the table.

|   |   |  |
|---|---|--|
| <p><i>Keyboard shortcut keys for next pair and previous pair are Page Up and Page Down.</i></p> |  | <p>goes back to the first pair displayed (lowest matching score selected).</p>   |
|   |  | <p>goes back to the previous pair displayed.</p>   |
|   |  | <p>goes forward to the next pair (which may or may not have the same score as the current pair displayed).</p>   |
|   |  | <p>jumps to the next pair with a different match score. If you are viewing the records in order of score (the default), this will be the next highest score. (A little message "No more scores!" appears in the top right when the end of the pairs is reached.)</p> |

Below this pair the matching score is shown and (on the right), various buttons for dealing with a matched pair:

|  |   |  |
|--|---|--|
| <p><i>Keyboard shortcut keys for Flag/Recall Left and Flag/Recall Right are Ctrl+left arrow and Ctrl+right arrow</i></p> |    | <p>To flag a record in Pairs format, select one of these buttons to flag the record on the left or right-hand side respectively. The button then changes: to recall a record, select the appropriate button with a green tick.</p> |
|  |    |  |
| <p><i>False Match is Ctrl+Delete</i></p>   |  | <p>If the pair shown is not a true match, you can select this button to remove the match – meaning that this pair will no longer be regarded as a match.</p>   |

---

Typically, you either flag false matches in a score band if most of them are true matches, or flag the odd true match if most of them are false. You do not need to both flag false matches and flag true matches within a score band, as global deletion will flag all matches above a match score as long as they have not been declared false. If you are using the Matrix Report or Group Matches feature, any matches you flag interactively will not be included. To allow this, you can increase the match score of any pair in the grey area, so that you move them into the area that is being automatically flagged or grouped.

---



This button allows you to enter the name or names of any additional fields that you want to see in the Verify window. Just scroll down and type the name of the field at the end of the list. You have to know the exact spelling of the field name or it will not be displayed, but you don't have to specify the field type or width.

You can also change the order in which the fields are displayed, by dragging the square button to the left of the name. Then select OK and say 'Yes' to the question "Make structure changes permanent". NB: this question refers to the structure of a temporary work file, not the structure of the Main File.



This button asks matchIT to remember the current pair so you can return to this pair later if you are deleting a lot of matches interactively.



This button will return you to the marked pair.

Click **"Done"** when you have finished. If you have not marked your position in the file, matchIT will ask if you wish to. This means you can return to the same point at a later date.

## Verify Matches in Sets

**Verify Matches in Sets**

Match Set: 93 1 0000047: MARK GUNDERSON, UNIV. OF WOODFORD, ROOM 107

Expand All

Master: 0000047 Duplicate: 0000005 Score: 93

Transfer selected data to master

| Field      | Master            | Duplicate           |
|------------|-------------------|---------------------|
| ADDRESSEE  | MARK GUNDERSON    | DR M GUNDESEN       |
| COMPANY    | UNIV. OF WOODFORD | WOODFORD UNIVERSITY |
| ADDRESS1   | ROOM 107          | 107 FOSTER HALL     |
| ADDRESS2   | 102 FOSTER HALL   | #102                |
| ADDRESS3   | AL                | AL                  |
| ADDRESS4   | AL                | AL                  |
| ZIP        | 36849             | 36849               |
| TELEPHONE  | 102               | 107                 |
| PREMISE    | Mr Mark Gunderson | Dr M Gundersen      |
| CONTACT    | Dear Mr Gunderson | Dear Dr Gundersen   |
| SALUTATION |                   |                     |

Intelligent Data Merge False Match Flag Record

Matches in Group

| Unique_rScore | DelFlag | Addressee | Company        | Address1            | Address2        | Address3        | Address4 | Zip   | Telephone | Premise           | Contact | Salutatio |
|---------------|---------|-----------|----------------|---------------------|-----------------|-----------------|----------|-------|-----------|-------------------|---------|-----------|
| 0000047       | MASTER  | F         | MARK GUNDERSON | UNIV. OF WOODFORD   | ROOM 107        | 102 FOSTER HALL | AL       | 36849 | 102       | Mr Mark Gunderson | Dear Mr |           |
| 0000005       |         | F         | DR M GUNDESEN  | WOODFORD UNIVERSITY | 107 FOSTER HALL | #102            | AL       | 36849 | 107       | Dr M Gundersen    | Dear Dr |           |

Customize Layout Jump to Score Jump to Next Score Done

This screen will display potential duplicates, in sets. The different colored highlighting is used to help distinguish where the differing fields are in the records. Fields in red are different, yellow shows information which is contained in the same field in the other record and white displays those fields which are identical.

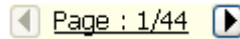
The tick boxes between matching records (in the top right part of the screen) control what information is transferred to the Master record.



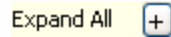
specifies what fields to transfer to the Master record.



transfers selected fields to the Master record.



goes forward to the next page of matching sets.



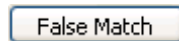
expands all matching sets shown in the current page of matching sets.

Below the matching pair display there are various buttons for dealing with that particular matched pair:

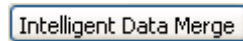


to flag the duplicate record in the pairs view section, select this button. The button then changes: to "Restore Record" which allows you to unflag the record.

*False Match is Ctrl+Delete*



if the pair shown is not a true match, you can select this button to remove the match – meaning that this pair will no longer be regarded as a match. The button then changes: to "Restore Match" which allows you to reactivate the displayed matching pair.



uses the Intelligent Data Merge (see Intelligent Data Merge) settings specified by the user to create a meta-record of the two records shown in the pairs section.

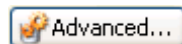
---

Typically, you either flag false matches in a score band if most of them are true matches, or flag the odd true match if most of them are false. You do not need to both flag false matches and flag true matches within a score band, as a global deletion will flag all matches above a match score as long as they have not been declared false. If you are using the Matrix Report or Group Matches feature, any matches you flag interactively will not be included. To allow this, you can increase the match score of any pair in the grey area, so that you move them into the area that is being automatically flagged or grouped.

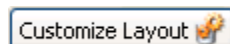
---



quickly find records that contain a piece of information as specified by you. The records that contain the information will then be displayed in the Verify Matches in Sets window.



customizes the "Verify Matches in Sets" window by allowing the user to apply filters and sort orders so that only records of specified concern are displayed.

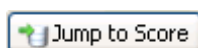


allows you to enter the name or names of any additional fields that you want to see in the "Matches in Group" section. Just scroll down and type the name of the field at



the end of the list. You have to know the exact spelling of the field name or it will not be displayed, but you don't have to specify the field type or width.

You can also change the order in which the fields are displayed, by dragging the square button to the left of the name. Then select OK and say "Yes" to the question "Make structure changes permanent". NB: this question refers to the structure of a temporary work file, not the structure of the Main File.



jumps to the first matching set of a specified match score.

Click "**Done**" when you have finished.

---

## Intelligent Data Merge

### Introduction

The Intelligent Data Merge allows a user to construct a list of simple rules for the merging of matched records. These rules can then be applied to the merging of fields as part of other operations performed on the matching records. The idea behind the process is that it allows the user to extract the most important information from each pair of fields and combine that information into one field of superior quality. These enhanced fields are then inserted into the appropriate record (i.e. the destination record or record to be kept), thus improving the overall quality of the record.

Intelligent Data Merge configuration should be reviewed (via the Jobs/Setup menu, Matching Setup) if you change matching parameters, to avoid incorrect merging of data. If in doubt, you should not use this option. Thorough checking of results is advisable when using Intelligent Data Merge, especially on any new type of data.

### Functionality

The process compliments the functionality of the [Transfer Data](#), [Flag Matches](#) and [Verify Matches](#) operations by giving the user more control over what data should be retained.

### Transfer Data

The Transfer Data operation (from the Matching or Merge/Purge menus) allows a user to transfer data from specified fields in one record to those fields in the matched record. The IDM process can override the options for the Transfer Data operation. To use IDM in the Transfer Data option, simply check the appropriate box on the main Transfer Data option screen.

## Flag Matches

The deletion process employs a Deletion Priorities table to select which record should be flagged. The IDM process will not override this, rather complement it by running after the choice of which record to flag is made, thus retaining valuable information in the flagged record and merging it with the kept record. To use IDM when deleting matches simply check the appropriate box on the screen that appears at the beginning of the deletion process.

## Verify Matches

Within the Verify Matches operation, the IDM process operates as a tool which the user can control interactively.

Selecting this option will produce a "meta" record showing the result of the process on the selected fields. The process should take no more than a second or two and then the window on the right will appear. The window shows the results of the intelligent merge for the two records.

Only the fields which exist in both records and have been specified in the IDM Options set-up will appear. Clicking either of the **'replace'** buttons will insert these fields into the corresponding record and additional changes can then be made. Selecting **Discard** will return to the Verify view without making changes.

## The Options Screen

The main options screen for the IDM process can be found under the menu **Setup > Matching Setup as Intelligent Merge Options**. This is described fully in the Online Help.

**Intelligent Merge Options**

| Available Fields  | Fields Selected  | Default Options  | Special Options  |
|---|--|--|--|
| ADDRESSEE<br>JOB_TITLE<br>COMPANY<br>ADDRESSLINES<br>POSTCODE<br>TELEPHONE<br>SEX<br>STD_CODE<br>REST_PHONE<br>MATCH_REF<br>BASE_SCORE<br>SET_DUPS<br>DDFMTCF | JOB_TITLE<br>COMPANY<br>TELEPHONE<br>FAX<br>DEPARTMENT<br>ADDRESSLINES | Default Priority:<br>[Dropdown]<br><br>Casing:<br>[Dropdown] | <input type="checkbox"/> Name Completion<br><input type="checkbox"/> Assume Surname Exists |

Buttons: [OK] [Cancel] [Load...] [Save As...] [Clear]

Pressing 'OK' will save the selected fields and corresponding options for use in the Intelligent Data Merge procedure. Pressing 'Cancel' will cancel the operation.

Available Fields - This list will only show those fields which exist in the current database or, in the case of two databases, which exist in both.

Special Options - 'Name Completion' will only be available if an 'Addressee' field exists.

## Default Priority

This option controls the standard merging of all fields. Clicking once on a fieldname in the list of selected fields will make these options available. If an option does not become active then it means that the particular option is not available for the selected field. Additionally, the priorities available for selection may also differ depending on the selected field:

**Keep Longest/Keep Shortest** – These options allow the user to keep the field which is longer or shorter respectively.

**Keep Highest/Keep Lowest** – These options allow the user to keep the highest or lowest value field. If both fields are numeric, then simply the highest or lowest value will be kept. If the fields are not both numeric then a string comparison will be done and the higher or lower string will be kept.

**Keep Uppercased/Keep Lowercased/Keep Propercased** – These options analyze each word in the fields and will merge fields together depending on the case of each word. For instance, the process will be able to pick out only the uppercase words in both fields and combine them into one field.

**Keep Value** – This option allows the user to enter a preferred value – if one of the fields being compared has this value, that value will be kept.

**Keep for Other Value** – This option allows the user to enter a value or condition referring to the contents of another field. The data for the field selected will be kept from that record containing the “other field” which satisfies the condition. The contents of the Value entered for this option must be one of the following:

- highest(field\_name)
- lowest(field\_name)
- longest(field\_name)
- shortest(field\_name)
- field\_name = value

As this feature is not expected to be used by inexperienced users and is expected to be a standard setting which is rarely changed, there are no checks for the correctness of the syntax entered here.

You shouldn't use the other value in the "Keep for Other Value" as a value to merge in its own right, as that will compromise the check for the value in Keep Other Value.

**Keep if Length** – This option allows the user to enter a preferred field length – if one of the fields being compared has this length, the value from that record will be kept.

## Additional Information

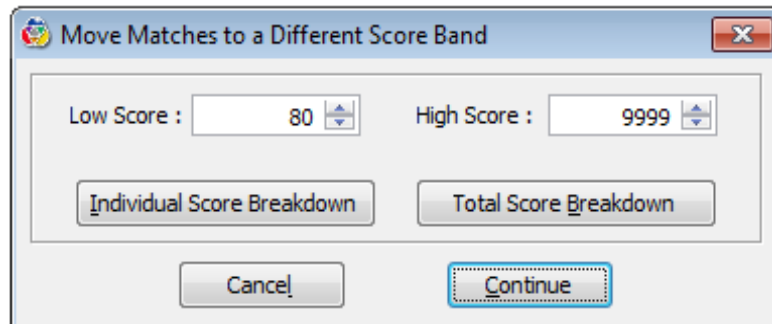
Certain fields, such as Address and Telephone, are dealt with in a different way to others in the merging process. The overall way in which these fields are treated cannot be altered. Please see the Online help for further information.

---

## Flag Matches

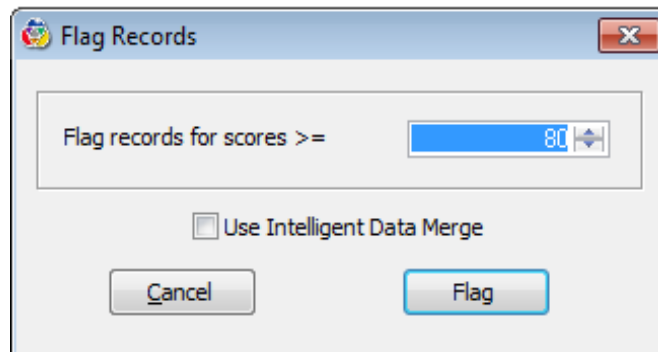
Flag matches is used to flag records above a certain matching score without further user intervention. It can be selected from the screen displayed after finding matches or from the Matching menu.

If selected from the main menu, you are first asked if you wish to modify any of the scores (e.g. to flag false matches where you know the reference numbers of the pairs involved). Also, you can view how many pairs achieved each match score and flag as False any particular match score – for details on this, see [Total Score Breakdown](#).



Modifying scores is not usually necessary: click Next if you do not wish to change anything.

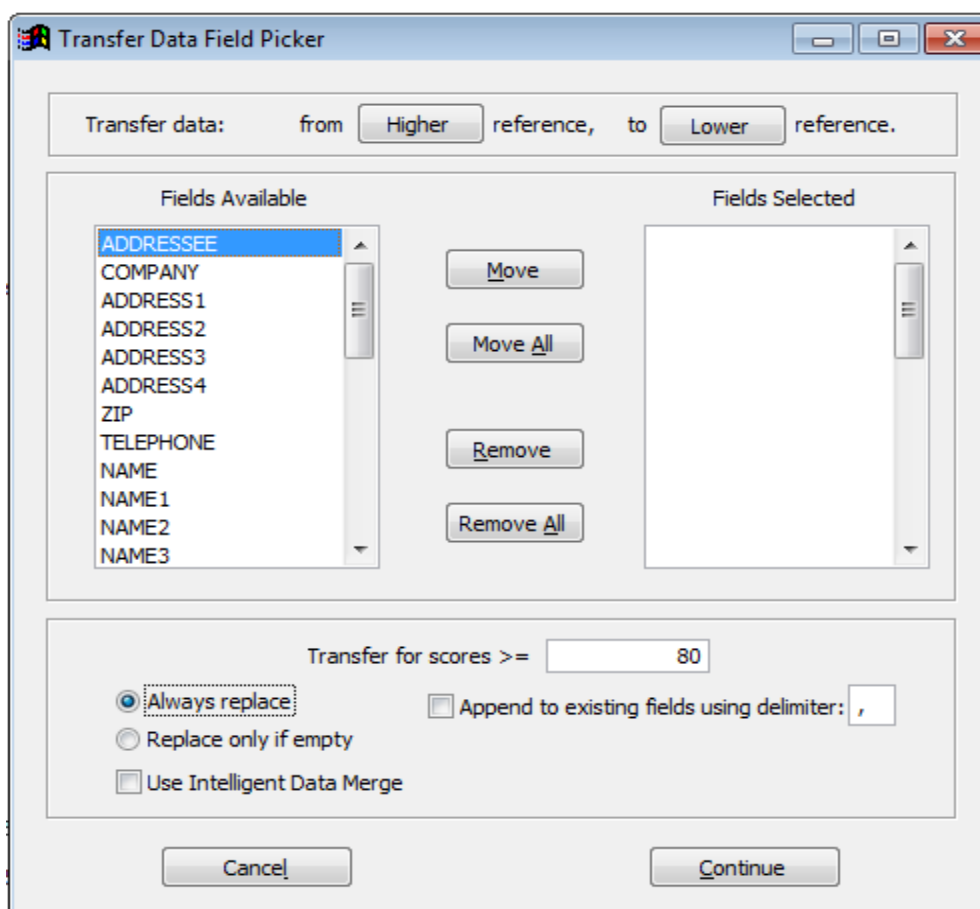
The "Flag Records" screen is displayed next (or straight away if you chose this option after finding matches). Here you enter the matching score at and above which you want duplicate records removed. It defaults to the [Minimum score to report](#):



If you leave the score at the default, only those records that weren't given a Matching Score will be left in the Main File. If you enter e.g. 100, it will only flag records in the Main File with a Matching Score greater than or equal to 100, leaving one record for each individual, company, family or household, depending on the level of matching you selected previously. You can also select to use [Intelligent Data Merge](#).

## Transfer Data

The Transfer Data operation (from the Matching menu) allows a user to transfer data from specified fields in one record to those fields in the matched record. However, the IDM process can override the options for the Transfer Data operation. To use IDM in the Transfer Data option, simply check the appropriate box on the main Transfer Data option screen.



Below the field picker there are other options can be set:

- **Transfer for scores** – data is only transferred for records whose matching score is equal to or greater than the value shown.
- **Transfer data** – from Higher to Lower shows where the data will be copied from to. Clicking on one of the buttons (Higher/Lower) will swap the order.
- **Always Replace/Replace Only if Empty** – If there is data in a field that is about to be overwritten, matchIT needs to know whether to replace it (always replace) or leave it (replace only if empty).
- **Blank All Fields/Append to Existing Fields** – You can optionally choose to blank all the fields you are transferring to before starting, or append the data being transferred to that already in the field.
- In all cases, you should ensure that the field being transferred to is large enough to contain all the data or some of it will be lost. To make sure that only the best match is

used to transfer data across where many records match one, define a field MATCHSCORE (numeric 8) in your receiving file, using "[Main File Layout](#)".

- Click "Continue" to start the process.

---

## Group Matches

Group Matches is available from the Matching menu, and is used to collate match sets after a matching run. For this to happen there must be a MATCH\_REF field in the Main File layout, which is of type character and is at least as wide as the UNIQUE\_REF field. matchIT will ask for a threshold score, and then collate all records which are in a match set with a matching score higher than it. It does this by determining the 'master' record of a set; that is, the one which is to be kept in favor of all the others in the set. It then copies the contents of the master record's UNIQUE\_REF field into the MATCH\_REF field of all of the other records in the set. This means that if the Main File is viewed in MATCH\_REF order, all the match sets will be grouped together.

---

matchIT will do the exactly the same thing as described above if 'Flag Matches', is chosen from the Matching menu, but will also flag the matches. Group Matches will **not** flag any records.

---

---

## Delete Suppression Records

If you have processed a job created by the Multiple File Wizard, you are prompted at the end to remove suppression records from the mailing file. If you don't say "Yes" to this prompt then, you can remove them via this menu option.

---

## Total Score Breakdown

Total Score Breakdown is available from the Matching or Merge/Purge menus, or before you select Delete Matches or any of the Merge/Purge options from the relevant menu. This facility shows the matches found on the currently selected Main File (or Files) categorized into score bands. It displays the number of matches found at a particular score, an example of a matching key that was used to find them, and a flag value, which can either be True (T) or False (F). Setting this flag to **False** marks as False matches all of the matches found at that score, so they will not appear on any future matching reports. This is useful when, after verifying or viewing the matches, it is found that matches at a particular score are all False, but some lower scores are True matches.

## Matching Setup

This section is for users who wish to customize matchIT's matching setup. We recommend that you have some experience with matchIT before changing the default setup.

### Basic Matching Options

The screenshot shows the 'matchIT Options' dialog box with the 'Matching' tab selected. The 'Current match level' is set to 'Individual'. The dialog contains several checkboxes and dropdown menus for configuring matching rules.

| Option   | Value                               |
|--|-------------------------------------|
| Must have match on gender?   | <input checked="" type="checkbox"/> |
| Must have match on location?                                       | <input checked="" type="checkbox"/> |
| Must have building/house/apartment number match?                   | <input type="checkbox"/>            |
| Don't allow matches where there is no street number in one record? | <input type="checkbox"/>            |
| Flag higher unique reference value?                                | <input type="checkbox"/>            |
| Flag higher record number?   | <input type="checkbox"/>            |
| Allow equal file priority in multiple file jobs?                   | <input type="checkbox"/>            |
| Name key generation  | Personal                            |
| Minimum score to report  | 80                                  |
| Phonetic name matching   | soundIT                             |
| Keep best record   | Internal Only                       |
| Log false matches  | Disabled                            |

Buttons at the bottom: Discard Changes, Save Changes, and an Advanced Options... button.

### Must have match on gender

If you set this parameter "on", then matches where the sex is different (where the sex is normally deduced from the title) will be suppressed, even if the name matches and there is no independent confirmation of the sex by the forename. Note: even if you have this parameter off, matchIT will always return a nil score on name (if you are not doing family matching) if the sex of the two records is different and is independently confirmed by the sex deduced from the forename of each record.

Sex is only regarded as different if one record must be Male e.g. Mr and the other Female e.g. Mrs, so it will match Mr and Dr, or Mrs and Dr etc. but not Mr and Mrs.

## Must have match on location

If this parameter is set "on", then a matching pair is not reported if a 'location check' has failed. In detail, this means that the zip codes in the two records (if present) must achieve at least a probable match with the address score at least a Possible match, or the address score must be at least a Likely match irrespective of the zip codes, or the zip codes must achieve a Sure match irrespective of the address. This is to prevent false matches where there is some match on address, but where the addresses are clearly not the same, for example "10 High Street, Bookham", and "10 High Street, Alford". Switch this parameter **off** if you want to match people or companies in different locations; you may want to match on items of data that are independent of location, such as date of birth or bank account. See also the section about Address Matching.

## Must have building/house/apartment number match

If you set this parameter "on", then matches with different premise or apartment numbers in the addresses will be suppressed. This could be appropriate if you have a very localized file with a lot of neighboring records, perhaps with similar names.

## Don't allow matches where there is no street number in one record

If this parameter is "on", then matches where one of the records has a premise number in the address, and the other hasn't will be suppressed. This is useful when your file has a lot of addresses with house names in the address lines. Note that this parameter has no effect if the "Must have premise match" parameter is off.

## Flag higher reference

(does not apply to matchIT **Lite**)

This specifies the default rule for global flagging of matches, when the deletion priorities are equal or switched off (see [Keep best record](#) and Online help). If you set the Flag Higher Reference parameter "on", the record with the higher reference number from each pair is flagged by the Flag Matches option; otherwise the earlier record in the file is flagged.

## Name key generation

This parameter governs how the NAME1, NAME2 and NAME3 Match Keys are generated; if the parameter is set to 'Personal', the keys are generated from the personal name, if it is set to 'Business', they are generated from the company name (See the '[Phonetic name matching](#)' parameter). If you want to switch from any other type of matching to business matching or vice versa, you should do so by using the Save/Restore Setup (see Online help for more information on Save/Restore Setup) option, rather than by just changing this parameter. This is because business matching uses different matching rules to other matching levels.

## Minimum score to report

The Minimum Score to Report is the minimum matching score necessary to allow the records to be reported as potential matches. These records are written to the Matches table (or the Merges table for Find Overlap processing).



## Phonetic name matching

There are two stages to the matching process that matchIT uses; the key stage and the scoring stage. The first stage creates standardized and phonetic keys based on the input data, which allows potential matches to be identified. The second stage scores each pair of potential matches, using phonetic and fuzzy matching. This parameter governs the phonetic algorithm that matchIT uses when generating keys and for scoring.

There are three choices available:

- **soundIT**

matchIT provides a unique phonetic algorithm for name matching, called *soundIT*.

*soundIT* takes account of vowel sounds and syllables in the name, and, more importantly, determines the stressed syllable in the word. This means that "Batten" and "Batton" sound the same according to *soundIT*, as the different letters fall in the unstressed syllable, whilst "Batton" and "Button" sound different, as it is the stressed syllable which differs. Another advantage of *soundIT* is that it can recognize groups of vowels and consonants that form vowel sounds – thus it can equate "Shaw" and "Shore", "Wight" and "White", "Naughton" and "Norton", and "Leighton" and "Layton" (which are all reasonably common English surnames).

This algorithm was developed with extensive testing on a large table of the most common surnames in the UK. Therefore, it is specifically designed to be used with English names. If a file with mostly non-English names is processed through matchIT, then you may want to try the 'Loose' *soundIT* or Soundex algorithms instead. For US data we recommend that you use *soundIT*, because it is proven to work well also with Spanish, German and other names that occur commonly in the US. *soundIT* has been designed with foreign language versions in mind (i.e. for data collected in countries where foreign languages are spoken). These could quite easily be developed, according to demand. Please contact your supplier if you are interested in this.

Note that the keys that matchIT generates are 'Loose' *soundIT* keys, where all vowel sounds are equated, together with some consonants, such as 'm' and 'n', 'd' and 't', 's' and 'f'. This is so that potential matches are not missed at the key stage; matchIT uses the 'full' *soundIT* algorithm at the scoring stage, which will separate out false matches from true matches.

- **Loose soundIT**

This option is effectively the same as the *soundIT* option, except that matchIT uses the 'Loose' *soundIT* algorithm as described above at the scoring stage. This is for use mainly with non-English names, on which *soundIT* works less effectively, and can miss true matches. This option should not be used on files with mainly English names, as it can potentially lead to more false matches.

- **Soundex**

Soundex is a widely-used algorithm (patented just after the First World War!), which constructs a crude non-phonetic key by keeping the initial letter of the name, then removing all vowels, plus the letters H, W and Y, and translating the remaining letters to numbers. It gives the same number to letters that can be confused e.g. 'm' and 'n' both become 5. It also drops repeated consonants and consecutive letters that give the same number e.g. S and C. It only takes the first four characters of the result, or pads it out with zeroes if it is less than four long. Thus all the common spellings and misspellings of the name "Tootill" equate to the same Soundex key: Tootill, Toothill, Tootil, Tootal, Tootle, Tuthill, Totill are all translated to "T340".

The algorithm that matchIT uses is an enhanced version of Soundex, and is for use mainly with non-English names. This option should not be used on files with mainly

English names, as it can lead to false matches e.g. Brady, Beard and Broad get the same Soundex key.

- **Non-phonetic**

This option constructs a non-phonetic version of the supplied name fields as match keys and allows only non-phonetic name matching.

---

Note that, at the scoring stage, matchIT performs name comparisons using data from the NAME field, not from the phonetic keys NAME1, NAME2 and NAME3 – this way it can check for simple typing errors such as "Wilson" and "Wislon" which do not match phonetically.

---

## Keep best record

This parameter governs the use of deletion priorities (see Online help), where matchIT makes a decision about which is the 'best' record to keep from a matching pair e.g. the one with the most data. There are three settings: Disabled, Internal Only, and Internal and Overlap. Set the parameter to Disabled if you don't want to use deletion priorities, and want to use default rules (see the '[Flag Higher Reference](#)' parameter). Otherwise set it to Internal Only, where deletion priorities will be used on matches in a single file, or Internal and Overlap, where they are used on matches in a single file and across files.

## Advanced Matching Options

The Advanced Matching Options are described in the Online Help.

## Modifying the Weights Used for Matching

Select the Weights option from the Jobs/Setup; Matching Setup menu if you wish to alter the values of the weights attached to the different fields in the matching process. You should not modify the matching weights unless you have read and understood the description in "[Introduction to Matching](#)".

A full description of Matching Weights and the Matching Matrices is given in the Online Help.

## Deletion Priorities

The Flag Matches option deletes the records with the lowest priorities from each set of matches.

If priorities are equal, it keeps the latest record on the file from each set or the one with the lowest Unique Reference, depending on the value of the Flag Higher Reference? Basic Matching option.

A full description of Deletion Priorities is given in the Online Help.

- **Field Name** is the name of the field in the selected Main File - if any field is not present, the rule for that field is ignored.
- **Comment** is just for your guidance, to explain if necessary what the field name contains.
- **Priority** shows the value which is accumulated for each rule that applies to the record being evaluated. When deciding which record to delete, matchIT accumulates priorities for each record and keeps the record with the highest total priority.
- **Value** specifies what Value the Field Name must be to obtain the Priority shown. The usual Value is "Empty" e.g. in the first rule above, if the surname (or first business name when matching business names) is empty, a Priority of -99 is given, which downgrades that record heavily. The other common Value is a constant e.g. if you specify rules as follows:
  - There are some special Values which only apply to specific field names:
    - "Default" applies only to the salutation field: the record will be downgraded in the example above if the salutation is the current default e.g. Dear Customer rather than e.g. Mr Smith.
    - "First Name" and "Initial" apply to the first forename field, where it is a full name or an initial rather than empty. "First Name" can also apply to the 2nd significant word in a business name, when matching business names.
    - "Derived" applies only to the Prefix field: if the Prefix is derived from the first forename e.g. Ms for Christine, the record will be downgraded compared with a supplied Prefix such as Mrs or Dr.

If you define a field called DEL\_PRI (numeric), matchIT will record the priority of each record that it examines for potential deletion, so you can check that your priorities are working as you expect.

---

## Multi Level Matching

Multi-Level Matching is performed using a job script (see Job Scripts for more information), which incorporates a number of bespoke Visual FoxPro programs, as well as customized settings and modified match keys.

The script is supplied as a template, and by default is set up to use 'Example1.TXT' and a corresponding DBF file. When the script needs to be used for processing live data, the user will need to modify the script in such a way that it points to the source data and corresponding DBF file(s). Once the user has pointed to their files, the script will be ready to run.

The job script will perform an Import and dedupe, it will then modify the structure of the working DBF and will perform the deletion step a total of three times. Upon finishing, the working DBF will contain separate fields displaying individual level, business level and address level matches. These field will enable the user to see which records match which, at what level, and how many other records any one record may match.

When the script has finished, the user can either export the data and matching results manually, using matchIT's standard Output menu, or can set up another script specifically for Output. This output script can be set up to run as soon as the Multi-Level Matching script finishes.

## Breakdown of Job Script Rows

Each row displayed in the Job Editor, when browsing the Multi-Level Matching job script, is listed and described below. The Job Editor dialog can be accessed by selecting the job script from within the 'Job Maintenance' dialog, then clicking on 'Modify'.

Most rows in the script feature a program, and as these programs have been designed not to require any further modification from the user, the descriptions below merely give an overview of what each program does. For further information, please contact [helpIT systems](#).

- **Row 1 ("1 RESTORE SETTINGS.PRG")**

Restores all parameters, weights and matching matrices required to find matches on all levels: NAME, COMPANY and ADDRESS. The parameters will force matchIT to generate name matching keys using individual names. Matching does not take place at this stage.

- **Row 2**

Imports the source data file into a pre-defined DBF structure and generates match keys. At this step, the options (accessed via the 'Options' cell) must specify the correct input format.

- **Row 3 ("2 RENAME NAME FIELDS.PRG")**

Renames the name matching keys (generated during the previous step using individual names) from NAME to IND\_NAME, NAME1 to IND\_NAME1 and from NAME2 to IND\_NAME2. New blank Name fields are generated. The parameter that specifies which type of names are used to populate the name key fields are changed from 'Individual' to 'Business' in preparation for the next step.

- **Row 4**

Regenerates name matching keys following the parameter change in the previous step. Keys are generated using business names.

- **Row 5 ("3 ADD IND WEIGHT.PRG")**

Modifies the weights table, adding a weight on individual name as well as business, address and zip code.

- **Row 6**

Finds matches using specific match keys, which incorporate phonetic company name, phonetic individual name, postcode elements and phonetic address keys.

- **Row 7 ("4 COPY MATCHING RESULTS.PRG")**

Finds matches at address level using an additional program, which re-evaluates address-matching using different matching options from the previous matching run.

With all levels of matching now performed, the program in turn deletes and recalls matches at each level, each time populating the MATCH\_REF and SET\_DUPS fields with matching information that corresponds to that level. After each Delete step, the MATCH\_REF and SET\_DUPS fields are renamed accordingly; after deleting individual level matches, these fields are renamed 'INDIV\_REF' and

'INDIV\_DUPS', after business level deletion; 'COY\_REF' and 'COY\_DUPS' and after address level deletion; 'ADDR\_REF' and 'ADDR\_DUPS'.

On completion of this program, the Multi-Level Matching script finishes. The processed table now contains references grouping matches together at the level they matched at.

## Before Running the Multi-Level Matching Script

Before the Multi-Level Matching Script is run, it must be set up to point to the file that is to be processed. Row 2 of the script, which by default points to Example1.txt in the 'Source File' column, should instead point to the correct source data file.

All rows that point to Example1.dbf in the 'Main File' column, should point to the template DBF file corresponding to the source data file. This file will have the source data file imported into it and will then undergo processing, so it's structure must therefore match the source data file.

The easiest way to set up a template DBF file is to bring the source data file through the Single File Wizard. After mapping all fields as required, tick 'Create Match Keys' in the Processing Options dialog, and then click on 'More' and 'Save and Exit'.

If the Multi-Level Matching script is to be used more than once on a set of data, it is recommended that the script be cloned first. This way, after processing the data, the script will not need to be changed, and potentially changed back the next time that set of data needs processing. Scripts can be cloned by right clicking on the grid in the Job Editor dialog and choosing 'Clone Job'. The clone should be given a name that relates to the data that it will be processing.

## Running the Multi-Level Matching Script

Once the script has been set up correctly, it can be initialized by clicking on 'Start Job' in the Job Maintenance dialog. The script should only ever be started from the beginning, as opposed to resuming it from a specific step using 'Resume Job', which will undoubtedly cause it to fail.

To run the script from the command line, please refer to ['Running a Job Script automatically when you start matchIT'](#).

## Layout of Processed Data

When the script has finished running, the processed DBF file will contain new fields grouping the individual, business and address level matches together. These are structured in the same way as MATCH\_REF and SET\_DUPS.

If a record matches one or more other records at a specific level, the corresponding ...DUPS field will display a figure representing the number of records that the record matched against. If it does not match any records at that level, the field will be empty. E.g. If record A matches records B, C and D at address level, it will contain a number 3 in its ADDR\_DUPS field. If it only matches B and C at business level it will contain a number 2 in the COY\_DUPS field. If it does not match any of these records at individual level, it will not contain anything in its INDIV\_DUPS field.

The ...REF fields indicate which records match which. In the above example, records A, B, C and D would have identical ADDR\_REF values. A, B and C would have identical COY\_REF values (record A would have its COY\_REF field populated with its UNIQUE\_REF value) and all of these records would have different INDIV\_REF values (all identical to their UNIQUE\_REF values).

The image below illustrates this example:

| Addressee    | Company                    | Address1          | Address2          | Address3          | Address4   | Postcode | Indiv_ref  | Indiv_dups | Coy_ref    | Coy_dups | Addr_ref   | Addr_dups |
|--------------|----------------------------|-------------------|-------------------|-------------------|------------|----------|------------|------------|------------|----------|------------|-----------|
| JOHN SMITH   | STANTON COPSHAW DIRECT     | 3RD FLOOR         | LOW PROFILE HOUSE | 12 NEWHALL STREET | BIRMINGHAM | B3 3ER   | 0000000001 | 0          | 0000000001 | 2        | 0000000001 | 3         |
| MRF BLOGGS   | STANTON COPSHAW DIRECT LTD | LOW PROFILE HOUSE | 12 NEWHALL STREET | BIRMINGHAM        |            | B3 3ER   | 0000000002 | 0          | 0000000001 | 2        | 0000000001 | 3         |
| SARAH JONES  | STANTON COPSHAW LTD        | 12 NEWHALL STREET | BIRMINGHAM        |                   |            | B3 3ER   | 0000000003 | 0          | 0000000001 | 2        | 0000000001 | 3         |
| MISS A GREEN | FRINTON WILKES PLC         | 12 NEWHALL STREET | BIRMINGHAM        | WEST MIDLANDS     |            | B3 3ER   | 0000000004 | 0          | 0000000004 | 0        | 0000000001 | 3         |

## Further Processing

Upon completion of the Multi-Level Matching script, the processed data can either be exported manually using matchIT's standard Output functions or it can be exported using another job script, which will need to incorporate the program 'OUTPUT.PRG'.

To manually export the data when the script finishes; return to matchIT's main menu. Make sure that the processed table is open in matchIT, then select Output>Output To File.

To automatically export the processed data using a job script, the additional job script will need to be set up before running the Multi-Level Matching script. The user will need to point to 'OUTPUT.PRG' from within the script and need to edit it to ensure that the correct output format, fields and destination(s) are specified. After setting the Output script up, open the Multi-Level Matching script in the Job Editor and tick the 'Run Another Job After This One' box, in the bottom right-hand corner of the screen. When prompted, select the Output script. Now, when the Multi-Level Matching script finishes the Output script will automatically run.

## Maintenance

### Adding A Custom Weight

If custom weights need to be added, the "3 ADD IND WEIGHT.PRG" program will need editing. The code required to add a custom weight is already used in the program to add a weight on Individual Name. Therefore, this existing code can be copied and pasted, and then edited to look at the field in which the weight is to be added.

An example of the code required, if a weight on Email were to be added is as follows:

```

SELECT WEIGHTS

GO TOP

REPLACE EMAIL WITH 60

SKIP 1

REPLACE EMAIL NAME WITH 40

SKIP 1

REPLACE EMAIL NAME WITH 25

SKIP 1

REPLACE EMAIL NAME WITH 15

SKIP 1

REPLACE EMAIL NAME WITH 25

SKIP 1

REPLACE EMAIL NAME WITH 0

SKIP 1

REPLACE EMAIL NAME WITH 1

SKIP 1

```

---

This code should be inserted between the following existing lines of code:

---

```
#ENDIF
DO UseTable WITH "PARAMS", "P", "", 1
```

## Adjusting the Minimum Score to Report

To adjust the minimum score to report, from within the Job Editor screen double-click on the 'Options' cell of row 6 (where the 'Match Keys' cell is set to 'Change'), then when prompted; set the 'Setup Option' drop-down to 'Change' and click on 'Continue'. The main options for this row will now be displayed.

From within the 'Matching' tab of the options, set the 'Minimum Score to Report' setting to the desired score. Please note; this is set to 50 by default, to ensure that the Address level matches are found as well as the business and individual level matches.

---

## Permanent Register of False Matches

Given unchanging unique reference numbers for a file or for two files being matched, if the user flags a pair of matches interactively as being a false match, the pair of references will be stored in a register. On subsequent matching runs using the same files, the same pair of records, based on their unique reference numbers, will not be reported as a matching pair. The user will be able to reset the register completely, or search for a pair of refs and remove them from the register. The register will be kept in the same folder as the relevant Matches or Merges file.

## How to Use the Register of False Matches

To use the false match register, set the Log False Matches option in Matching options before or after finding matches/overlap, then flag false matches using Verify Matches (pairs or sets) or Verify Overlap. The unique reference numbers for each pair of records flagged as a false match are written to a false match register, which is a DBF file with:

- the name of the Main File followed by "\_Screens.MDF" for Find Matches
- the Second File followed by the Main File with an MDF extension for Find Overlap (this file is kept in the same folder as the Second File).

Next time the user finds matches or overlap on a file in the same folder, matchIT will not report any pair of records as a match where the unique reference numbers of these records are recorded in the appropriate false match register. To ignore the false match register, the user can set the Log False Matches option off. The false match register can also be browsed from the View Table option in matchIT and individual pairs of references deleted, or the whole register can be deleted.

# Merge/Purge

---

## Introduction to Merge/Purge

---

**This section is only applicable if you have matchIT Plus or above.**

---

The most typical use of Merge/Purge processing is when you have a file of existing customers and also an external list of prospective customers. Typically, you want to write to all the new prospects, but want to be sure you do not inadvertently send the same letter to any of your existing customers. In this case, you need to locate any of your existing customers that happen to be on the new list, and "purge" them from it.

If, on the other hand, you do want to send the same letter to all existing customers and prospects as well, what you can do is to create a new file (or table) by "merging" the new list and your file of existing customers, eliminating (or not creating), any duplication. These two operations have much in common, and in fact when merging, matchIT first purges records from the new file and then merges the remainder into the Main File. Thus purge is the same as merge, but stopping short of the final stage; no merging takes place.

Each input file must have been Imported into a matchIT Main File (using the Setup Wizard or Import records options) before you can do Find Overlap successfully.

---

You do not have to Find and Delete Matches from each individual file before running Find Overlap, but you must do so if you want the internal duplicates in each file removed!

---

The Basic Merge/Purge Process is as follows:

- Find Overlap.
- View/Verify the Overlap to check the matches found.
- Merge or Purge (for a suitable threshold score).

---

**Note** You do not have to Find and Delete Matches from each individual file before running Find Overlap, but you must do so if you want the internal duplicates in each file removed!

---



---

## File Layouts when Merging Files

Before merging two files, the two Main File Layouts should be checked to pre-empt problems later on e.g. has one file got more address lines or wider fields? If so, make sure that the Main File is the one with more lines or the wider fields. If necessary, you should use [Main File Layout](#) from the Jobs/Setup menu to add or widen fields in the Main File.

---

If you are using the [Multiple File Wizard](#) to merge files, the wizard creates a master layout for you which preserves all of the data from the individual files i.e. it is a superset of all the individual structures.

---

The Main File is the first file you select. Purge Records does not change the Main File, but removes records from the Second File. Merge Files adds unique records from the Second File to the Main File.

### Unique References

If you let matchIT allocate Unique References when the files were originally imported, you must make sure that the Unique References don't overlap between the files. To ensure this, you can set the Next Reference Number (in Matching Options) before Importing the second file, to a value at least greater than the number of records in the first file. Alternatively, you can set it to zero if you want matchIT to prompt you for the starting Unique Reference whenever you Import a file. If your Unique References are not unique between the two files, you can use Generate Unique References in the Fields menu in Tools/Database Utilities to regenerate them in either file or in the merged file.

---

If you are using the [Multiple File Wizard](#), the wizard does this for you.

---



---

## Find Overlap

Find Overlap matches the records from one Main File against records with the same key from another file. You can then view a report of the results and choose which records to merge or purge, individually or by a range of the scores. If you have several files to merge, you must merge each one at a time into the Main File, use Job Scripts or the Multiple File Wizard. If you want to remove internal duplicates in the files being merged, you must find and delete matches from each file individually, before running Find Overlap on the two files.

---

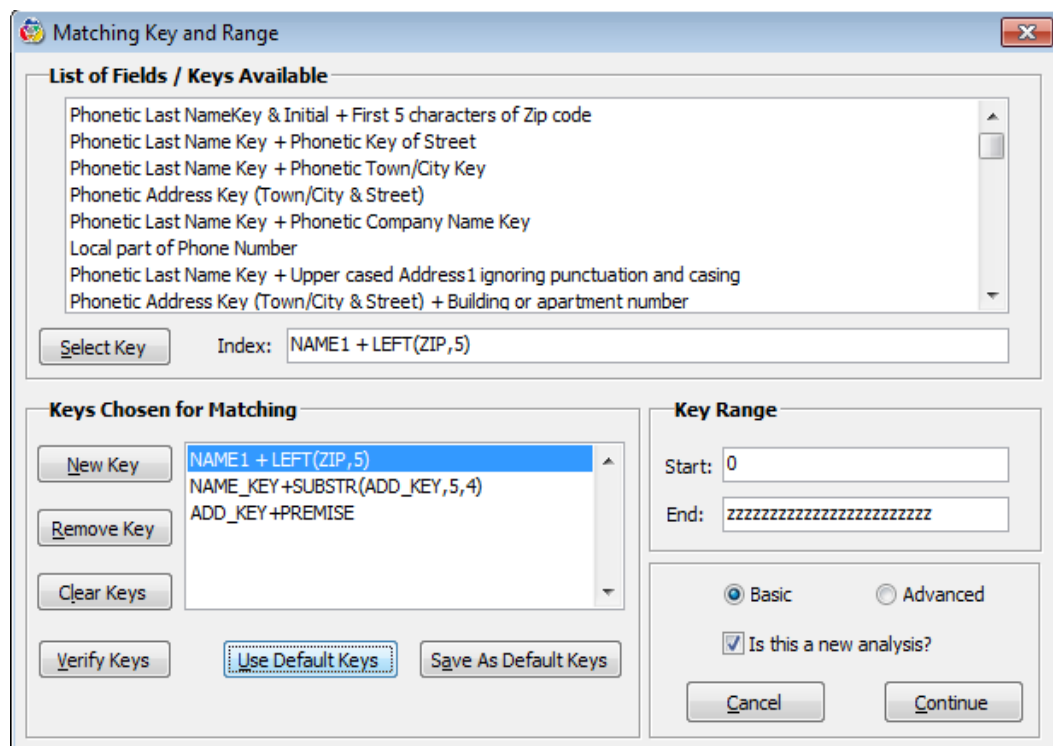
If you are using the [Multiple File Wizard](#), the wizard does all this for you.

---



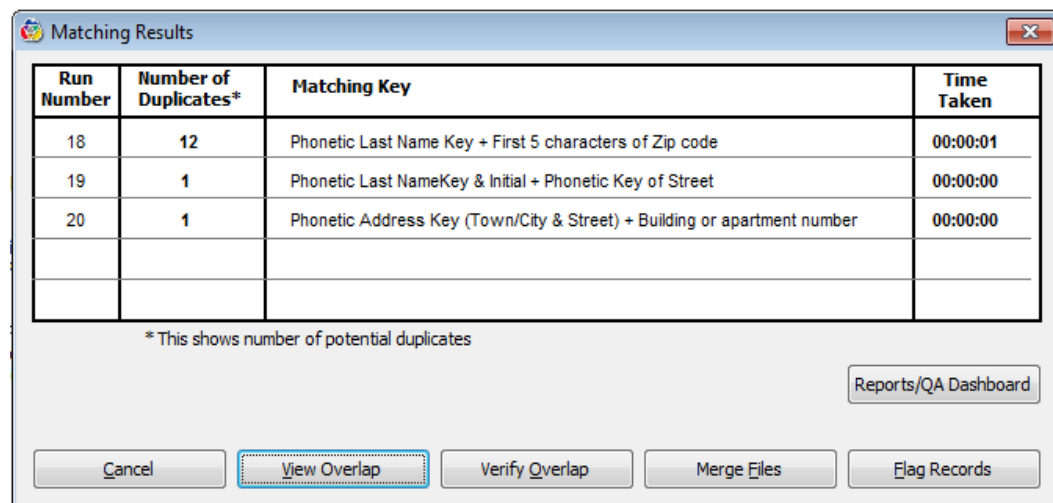
*Find Overlap*

Obviously, to Find Overlap, two files must be open. If this is not the case, matchIT will prompt you for file names when "Find Overlap" is selected (from the toolbar or Merge/Purge menu).



The "Matching Key and Range" screen is shown first, as for Find Matches. Choosing the keys for finding the overlap between two files is exactly the same as for finding matches within one file, except that the Match Keys displayed will be limited to fields which are in both files and have the same width. If for example, Zip is not displayed as a match key, it may well be because it has a different width in the second file from the first. To overcome this problem, you can type in a match key in the Index box of e.g. LEFT(ZIP,5). See "[Match Key – Definition](#)" to review the description of entering your own keys.

After matchIT has done its work and found any matches, a summary is displayed (in the usual report preview screen) and then the screen below, which offers the most common options:



The choices from here are:

- View Overlap between the two files (similar to [View Matches](#))
- Verify Overlap between the two files (similar to [Verify Matches](#))

- Merge Files into the Main File
- Flag Records from the Second File
- Cancel

---

If you are selecting any of these options having previously closed your two files, ensure they are reopened in the same order as before. If you open them the wrong way round, matchIT prompts you to swap them, to ensure that it shows or processes the right pairs of matches.

---

As for Flag Records, when you select any option for processing the results of Find Overlap from the Merge/Purge menu, it allows you to view the individual match scores or score bands, before proceeding to the operation that you selected.

---

## Overlap Summary

This is essentially the same report as for matching: see "[Matching Summary](#)".

---

## View/Verify Overlap

Viewing and verifying the overlap between two files is similar to viewing and verifying matches within a single file (see [View/Verify Matches](#)). The only difference is that different reports are used and you can only View Overlap in pairs, not sets.

### View Overlap

**View Overlap** can be selected from the dialog presented after finding the overlap between two files or from the **Merge/Purge** menu.

**View Overlap Options**

**Report format** Business **Destination** Preview

☒ All keys? Run number 11 Low score 80 High score 9999

☐ Create matches file? Score sample size 0 ☒ Sort by score ?

Reporting key  Low key  High key zzzzzzzzzzzzzzzzzzzzz ☐ Undo Find Overlap?

Cancel Basic... Continue

## Verify Overlap

---

As with **Verify Matches**, this can be selected straight after finding the overlap or from the **Merge/Purge** menu.

---

The screen displayed is the same as that for **Verify Matches**. For details see "[Verify Matches](#)". If the two files have different layouts, the fields displayed for each record may be different. You can use the **Change Fields** button to change the order in which the fields are displayed, to help you compare the two records more easily.

---

## Merge Files

When selecting Merge Files, you can enter the highest match score which you want to merge records for. If you enter zero, only those records on the Second File which were not given a Matching Score will be merged into the Main File. If you enter 100, only those records on the Second File which were given a Matching Score less than 100 in the MERGES table will be merged. If you enter all nines, or if the MERGES table is empty, all records on the Second File will be merged.

---

## Flag Records

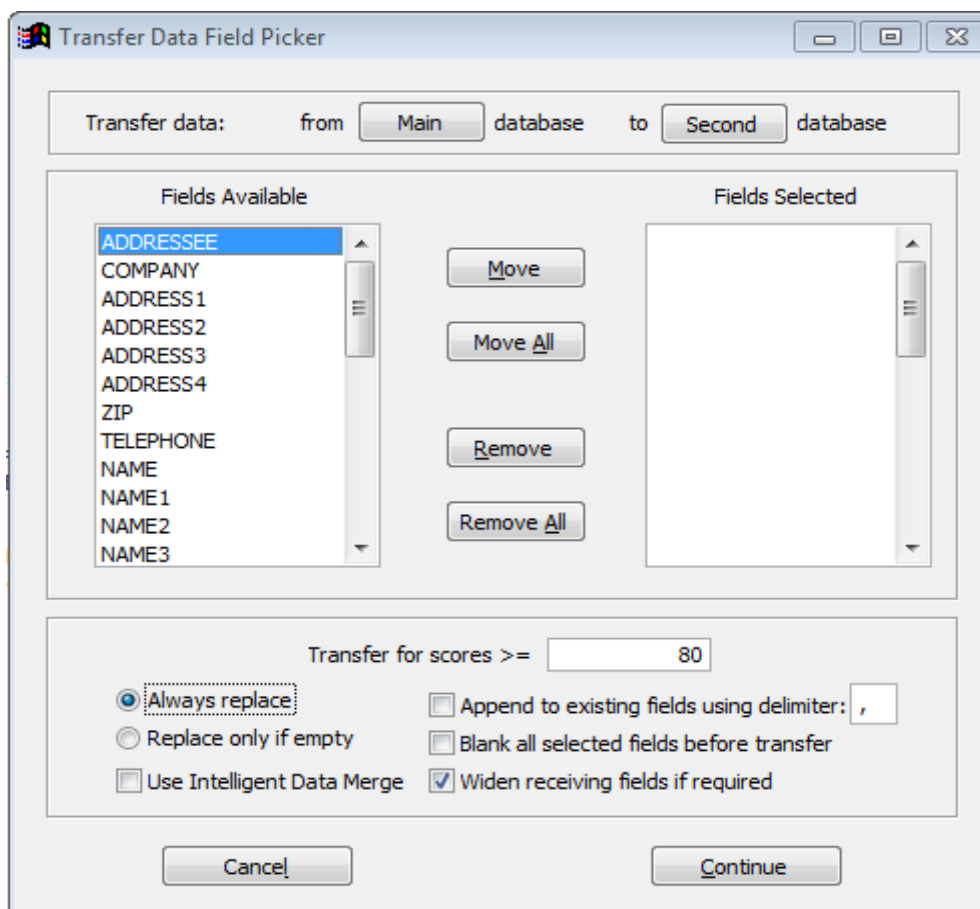
If you select Flag Records, you can enter the lowest score which you want to purge records for. If you enter zero, which gives the highest possible number of deletions from the Second File, all those records on the Second File which were given a Matching Score in the MERGES table will be purged from the Second File. If you enter 100, all records on the Second File which were given a Matching Score greater than or equal to 100 in the MERGES table will be purged. If you enter all nines, or if the MERGES table is empty, no records on the Second File will be purged. Finally, the Second File is selected as the Main File in use, to enable you to go straight to the Output menu without having to remember to select the right file first.

## Transfer Data

This option in the Merge/Purge menu allows you to transfer data (such as telephone numbers, company data and geodemographic codes) from a master file to a customer file. You must run Find Overlap first.

The steps for this process are:

- Open your Main File and your Second File and run "Find Overlap" (from the Merge/Purge menu).
- Select "Transfer Data" (also from the Merge/Purge menu).
- Modify matching scores or click "Continue" (click Continue if unsure).
- The following screen will appear:



Data can be transferred between any fields which the Files have in common and these are shown in the left-hand panel. If you wish to transfer data from a field not listed, you must first use "[Main File Layout](#)" to add fields as necessary.

Either double-click or single-click and select "Move" or "Remove" to move or remove fields from the available list to selected field list or back.

Below the field picker there are other options can be set:

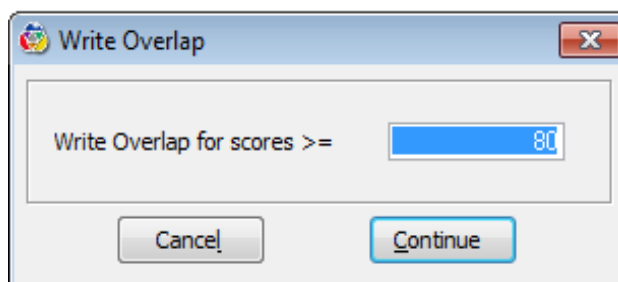
- **Transfer for scores** – data is only transferred for records whose matching score is equal to or greater than the value shown.
- **Transfer data** – from Main to Second shows where the data will be copied from to. Clicking on one of the buttons (main/second) will swap the order.
- **Always Replace/Only if Empty** – If there is data in a field that is about to be overwritten, matchIT needs to know whether to replace it (always replace) or leave it (replace only if empty).
- **Blank All Fields/Append to Existing Fields** – You can optionally choose to blank all the fields you are transferring to before starting, or append the data being transferred to that already in the field.
- In all cases, you should ensure that the field being transferred to is large enough to contain all the data or some of it will be lost. To make sure that only the best match is used to transfer data across where many records match one, define a field MATCHSCORE (numeric 8) in your receiving file, using "[Main File Layout](#)".
- Click "Begin Transfer" to start the process.
- matchIT will select this new table as the current one and a summary screen will be displayed.

## Write Overlapping Records

This option on the Merge/Purge menu allows you to write overlapping records (after Find Overlap) from the **Main File**, to a new file e.g. to mail multiple buyers.

The steps for this process are:

- Open your Main File and your Second File and run "Find Overlap" (from the Merge/Purge menu).
- Select "Write Overlapping Records" (also from the Merge/Purge menu).
- Modify matching scores or click "Continue" (click Continue if unsure).
- A further window will appear, from which you select the minimum score for writing out the records. The default (as for Find Overlap) is to output records with a matching score greater than or equal to the [Minimum score to report](#). Click "Continue" to continue.



- You will then see window that allows you to either output the "**Overlapping Records**" or to access the "**QA Dashboard**". Select the "**Overlapping Records**" option and you will see a new window that will allow you to specify your new files layout.
- Select **Generate Output**, once your options have been specified, to begin the operation. You will now be prompted for a file name and location.
- matchIT will select this new File as the current Main File and a summary screen will be displayed so you can go on to produce output or return to the main menu (the **Done** button).

# Job Scripts

---

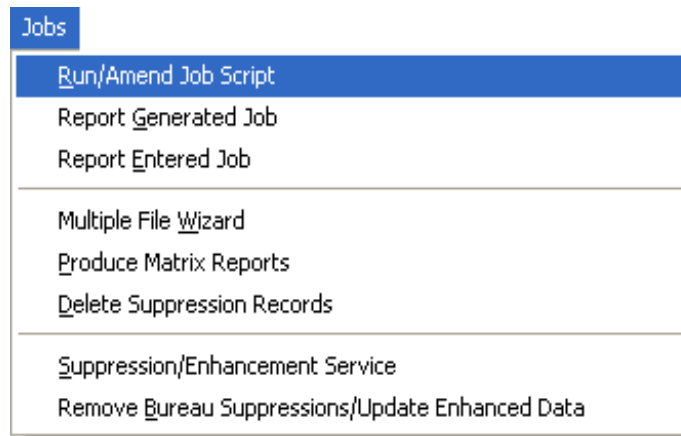
## Job Scripts Location

---

This section is only applicable if you have matchIT **Pro**.

---

To access the job script options, you can go to the *Jobs* menu, followed by *Run/Amend Job Script*:



Alternatively, you can choose the Automation Wizard icon from the Wizard Pane.

### *Run a Job Script*

You can also run any job by specifying a job name as a parameter of the matchIT program icon.

---

## Job Scripts Overview

The Run/Amend Job Script option allows you to specify, run, clone and amend standard jobs consisting of multiple Import, Find Matches, Delete Matches, Find Overlap, and Merge/Purge steps. This option also allows you to specify an unlimited number of files to merge, with a pecking order, and any number of suppression files to compare the merged file with. You can also run FoxPro program files (either compiled FXP files or simple series of interpreted commands in PRG files) as part of the script, for example to copy a file, replace data fields etc.

Job scripts are very flexible and powerful automation tools for matchIT processing. Job scripts don't let you cut corners – they just allow you to repeat things easily. You still have to do the same amount of work specifying file names, Match Keys, deletion scores etc. – but with job scripts, once that is done, you can use that script again any number of times to repeat processing without having to specify it again. If you are not already fully familiar with the workings of matchIT, we strongly suggest that you become familiar with the normal menu-driven Import and Matching functions before you try and set up a job script. Once you have done this, the Multiple File Wizard is the easiest way to set up a multiple file job script and is also easier to use than the Merge/Purge menu options.

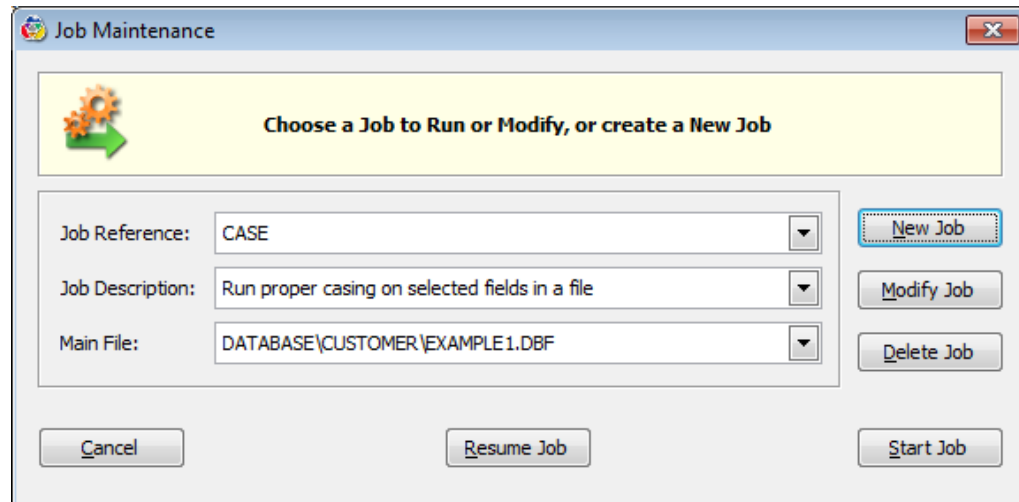
Job scripts may look complicated, but if you read and understand the information given here, setting them up and using them should be quite straightforward.



---

## Job Maintenance

Selecting the Run/Amend Job Script option will bring up the Job Maintenance Screen, from which you will be able to create, delete or run job scripts:



The main fields on this screen are *Job Reference*, *Job Description*, and *Main File*, which are explained below:

### Job Reference

The job reference is your identifier by which you define the job. matchIT also uses the job reference as a unique identifier for the job, therefore you cannot have two job references the same.

### Job Description

The job description is an optional descriptive field to enable you to more clearly describe the job in question.

### Main File

This field specifies the Main File for the job. The Main File is the first DBF file in your list of files, and it is the one which the other files are merged into (or the one Suppress files purge from). This is the file that will contain the results of any merge/purge processing when the job is complete.

You can choose any job by choosing from one of these three popups. If you choose a job, the other fields will be automatically updated to reflect your change.

---

## Running and Resuming a Job Script

Below the main panel listing the available jobs are three buttons: **Start Job**, **Resume Job** and **Cancel**. Select **Cancel** to return to the main menu without running a job. Any changes you have made to the job scripts will be remembered. Select **Run** to actually start the selected job script.

Select **Resume Job** if you have had to interrupt a job script whilst it was running, and now want to resume from where you left off. Choose the step from which you wish to resume – it will default to the step which was last run, which is obtained from the Performance log (which you can view via the View menu, Performance Data, All Runs). Note that "step" does not mean line number of the job script; a single line may include, for example, one Import step, three Find Matches, two Find Overlaps, one Merge Files and one Purge Records.

Now we have explained how to actually choose and run a job script, we'll explain how to create them in the first place.

---

## Creating a Job Script

To the right of the main panel are the buttons associated with editing the job scripts. To create a NEW job script, click on the New Job button.

You will now see a small window asking you for a new reference. Type in something here which will be the name of the job script. We suggest that you call it something descriptive. The only limitation on this name is that it must be a name you have not used before (i.e. it must be unique).

You will now see the Job Editor Screen, which is described below.

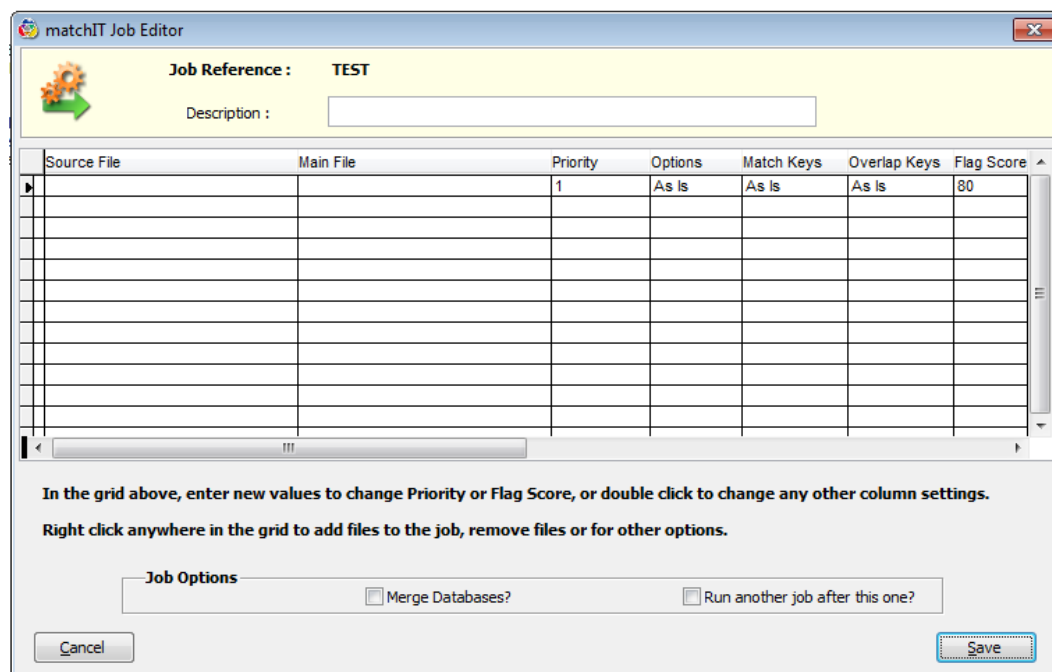
Additionally it's now possible to automatically generate a job script at the end of Wizard Processing using the Save Job button which appears on the Wizard Processing Complete window. You can also use the Job Overview report to check that the automatically generated job contains all the processing steps that you're expecting.

---

## Modifying a Job Script

At the Job Maintenance screen, you can choose to edit an existing job script (instead of creating a new one which is described above). To do this, first choose the job you want to modify from the list of jobs available, then click on the Modify button on the right hand panel.

Whether you have chosen to modify a job, or create a new one, the next screen you will see is the **Job Editor**:



## Explanation of Job Editor Layout

The main concept behind the job editor is that it is designed to represent a list of files to be processed. Each line will correspond to the processing done on one file. The processing is generally done in left-to-right, top-to-bottom order (like reading a book). Processing may include importing a source file (into a predefined Main File layout), followed by internally deduping it, followed by finding its overlap with the master file (the one at the top of the list), and the purging of duplicate records from the file, or merging the records into the master file.

Therefore, the columns correspond to these processes – first you have the **Source Name**, which will be the file name of the source text file, followed by the **Main DBF**, which will be the Main File layout that the data is imported into. This is followed by the **Priority** column, which indicated the files relevant priority in the list (low numbers = high priority). Next, we have the column for import & matching configuration, **Options**, and then columns for internal deduplication (**Match Keys**) and then finding overlap between two files (**Overlap Keys**). Finally, we have a column for the **Flag Score** to be used for processing.

In terms of file order, the first file is the **Master file**. This is the file that each find overlap is done against. Also, if files are merged, they will be merged into this file.

The files that follow this will be **Merge/Purge** files. Each of these files can be imported and internally deduped according to how you set up that line of the job, and then will be compared with the master file. (Note: they will NOT be compared to each other). These files will then be purged of the overlapping records, or merged into the master file.

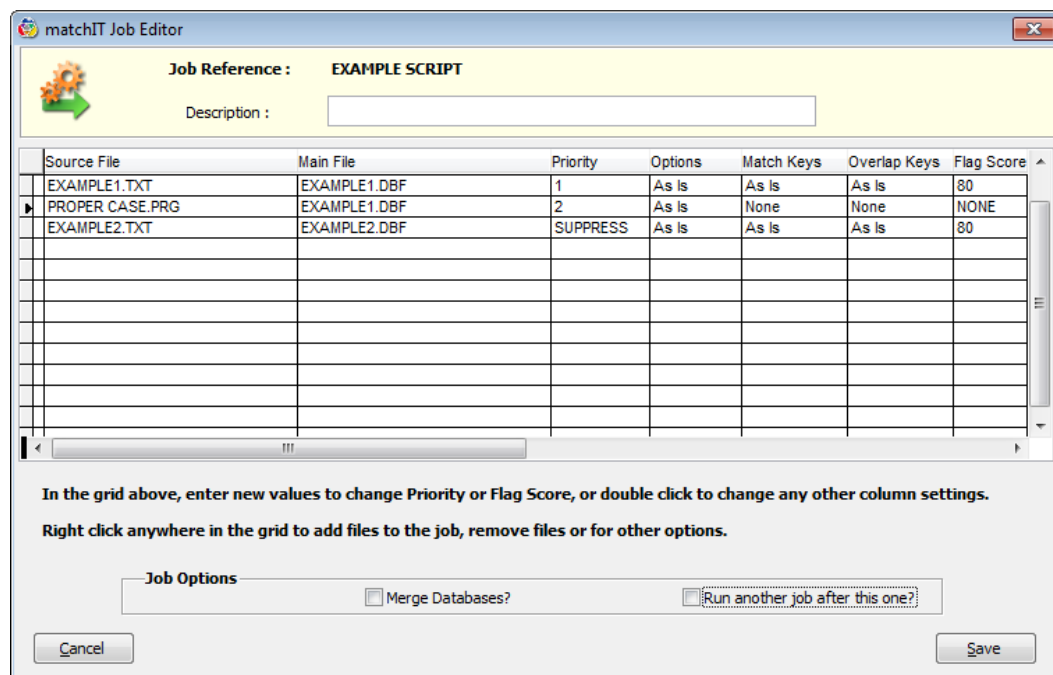
Following this comes **Suppression** files. These files can be imported, deduped and compared to the master in the same way as the Merge/Purge files. However, these files are special in that they contain **exclusion records**. That is, when the overlap is complete, the records will be removed from the master file, not the secondary file (which is the case if you select Purge Records from the Merge/Purge menu). Files such as the MPS (Mailing Preference Service) file are suppression files.

You can also add bespoke program files to the job scripts at any point. These files are not imported or processed in any way, but contain FoxPro program code. They can be used to insert

special programming steps and options into the job scripts which would not normally be possible.

A good understanding of the FoxPro programming language is normally required to create and use these kinds of files.

Therefore, a common job script could look like this:



The following sections will explain the columns and settings above in more detail.

## Adding and Removing Files (Rows)

To add or remove a merge file or a suppression file, you must *right-click* the mouse in the file listing part of the window, to see the menu. If you are removing a row that already exists, you must select that row by *left-clicking* on it first. Note that when you start editing a new job script, matchIT will automatically add a row for you.

To add a merge/purge file, click on the **Add Row** option. This will add a new blank row at the bottom of the list. Similarly, you can add a **Add Suppression Row** with the equivalent option.

Note that when suppression files are added, they are always added to the bottom of the whole list, whilst merge/purge files will be added to the end of the merge/purge list only (i.e. before suppression files).

If you want to remove the currently selected row, click on **Delete Row**.

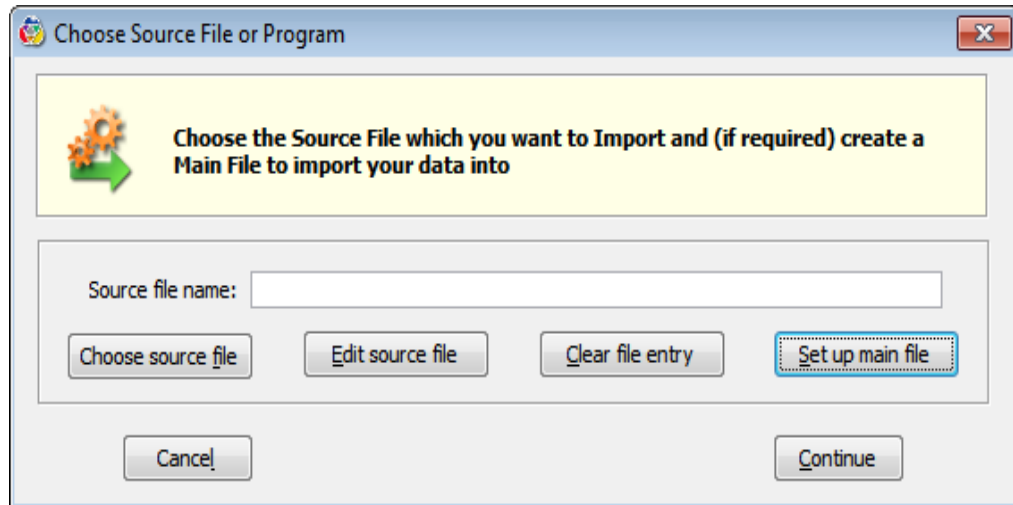
With this menu, you can also **Rename Job** (click on it and it will ask you for the new name – the same naming conventions apply as when you create a new job script). Furthermore, you can also **Clone Job** (copy the current job). When you do this, matchIT will again ask you for the new job script name. Note that when the copying of the job has been done, the job you will be editing will be the new job.

## Explanation of Columns

### Source Name

This column specifies the file name of the original data – the data before you have done anything to it. This is the file which will be imported into matchIT.

If you double-click on an entry in this column, you will see the following screen:



You can either type directly into the field to change the file name, or you can click on the Choose source file button to choose another one. Click on Edit source file to view (and perhaps change) the data file.

### Special Cases

There are two special uses for this screen that the user should be aware of:

- If you choose a file with extension .FXP (a Visual FoxPro compiled executable file) or .PRG (a text file which contains a FoxPro program – see later for more details), then this file will not be treated as an import file, but as an **executable** program file. This means that matchIT will not process the data in the file, but will attempt to run it instead. In this case, all the other columns in the row are irrelevant, and will be ignored by matchIT.  
Note that compiled Visual FoxPro programs must be compiled using the same version of Visual FoxPro as your version of matchIT – you can ascertain this via the Help menu, About matchIT.
- If you have an import format other than EXT or Regenerate Keys (see Setup below), and the source file name is blank, then matchIT will not do any import processing on the file. matchIT will assume the file has already been imported, and will not try to do so again.  
In the case of the EXT format, the source file should **always** be empty. (This format means do the **generate keys** step only – don't add records from a source file previous to this). For more information on this format, please consult the Import Options section.

## Main File

This column corresponds to the Main File that will contain the data after it has been imported. To choose a file for this, just double-click on the field, and matchIT will ask you for a file name.

Note that the file must exist before the job script is run – the job script cannot automatically create Main File layouts. The File can of course be empty. When the job is run, any data in this file will be over-written by the data in the source file.

## Priority

The priority of a file corresponds to its place in the processing order. The lower this number, the more important a file is. The file with the highest priority (usually 1), will be at the top of the list.

This file will be the Master File, with which all other files are compared, and into which files can be merged.

Priorities are automatically assigned when you add merge or suppression files, in the order that they were added to the job. You can change any of these priorities by typing into an appropriate number into this field. This field supports decimal numbers if necessary.

For suppression files, these will have the priority set to "SUPPRESS". You can make a merge file a suppression file by typing in the word SUPPRESS into this field. Similarly, you can turn a suppression file into a merge file by typing a number into this field.

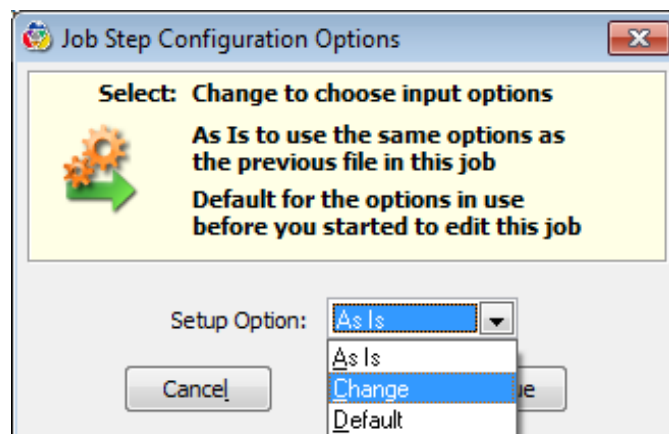
Suppression files do not have priorities amongst themselves, as they only act to remove records from the master file (when a record is removed from the master file, it doesn't matter if suppression file A or suppression file B removed it – the result is the same).

If you blank out the priority field, this will be treated as priority zero by matchIT. If you have two files with the same priority, the order they will be processed in will be the order that they were added (i.e. the one you added to the job first will be processed first).

## Options

The *Options* column is where most of the matchIT processing options are set. These include options such as operation parameters and Import Options – please consult the matchIT Options section for more information on the options available.

Double-clicking on a row in the Options column will give you a choice of three options:



## Change

Select *Change* to view the standard matchIT Options screen (with a couple of tabs that do not relate to job script processing removed). From here, you can change processing options as required.

## As Is

This option has two slightly different meanings, depending on whether it is chosen for the Master File or any other file.

If *As Is* is chosen for the Master File, this means that the matchIT options chosen will be the same as the current configuration. (Check this via the Jobs/Setup menu, Options before starting the job script).

If *As Is* is chosen for any file other than the first one on the list, the job script processing will take the matchIT configuration from whatever was set up in the previous line in the script. (That is, it remains unchanged).

## Default

Whenever this option is chosen, the job script processing will take the configuration from the current setup of matchIT. (Note that this has the same effect as *As Is* for the first file in the list).

## Notes

One pitfall for the unwary in job script configurations is the *generation of unique reference numbers*. As has been stated elsewhere, it is vital that within a single file, all unique reference numbers *remain unique*. This is simple within only one file, but when you are cross matching and merging two or more files together, then maintenance of the reference number becomes more complicated.

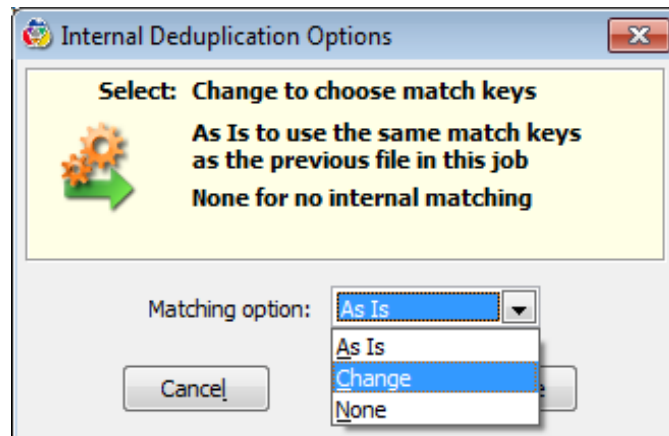
One way to resolve this problem is to assign a new unique reference starting number for each file that is being imported. You can do this by setting the *Options* column to *Change* for every file that is being imported, and by manually setting the starting reference number in the matchIT options for each file. Alternatively, if you set the job script up using the Multiple File Wizard, it will ensure that the unique references are really unique across all the records in all the files in the job – otherwise it will regenerate them starting from 1.

Another feature of the job script processing that can be used is the *Input Format* option. As mentioned above, if you set this to anything except *EXT*, and have a blank *Source File* name, then no import processing will be done. This can be very useful for quicker processing of files that have already been imported. Furthermore, if you do not want to add new records into a file, but just want to regenerate the matchIT fields, you can set the Input Format to *EXT*.

## Match Keys

Match Keys are used for the internal deduplication step of matchIT. As with normal use of matchIT, you should specify a set of Match Keys in order to carry out the deduplication. This corresponds to the Find Matches menu option.

In a similar way to the Setup column, double-clicking on this field will show you an options screen:



### Change

This option works in an equivalent way to the Change option in the Setup column. Choose this option and click on Continue to go to the Match Keys screen where you can edit the Match Keys that will be used in the find matches step in the job.

### As Is

Again, this works in a similar way to the As Is from the Setup column. Selecting it means that the Match Keys used for this file will be the same as for the previous file in the list.

Note that this option does not apply to the first file in the list.

### None

If you select this, then no internal Find Matches steps will take place. Use this for files that have already been deduped by matchIT, or files which do not need to be cleaned.

---

Setting the options in this column will only cause matches to be **searched for**. If you want to actually delete the matches as well, you must set the Deletion Score to a non-zero value.

---



## Overlap Keys

This sets the keys that will be used to find overlap between the master file, and the current file.

This works almost exactly the same way as the Match Keys option works.

The only real difference is that the first file can only have this set to None, as it can't find overlap with itself.

As for the Match Keys, this will only **search for** the overlap, it will not actually process the results – so if you want to merge the file with the master file or purge records from this file, set the deletion score column to the appropriate score value.

## Deletion Score

This determines the score at which a potential match is considered to be a true match. It is used in two ways. Firstly, for internal deduplication, this is the threshold score for deleting records.

Secondly, when a Find Overlap is carried out, this is the threshold for purging records (usually in preparation for merging them into the master file).

With the master file, this score only refers to the deletion threshold for internal duplicates.

If you do not wish records to be deleted, set this value to zero (0) or "NONE".

## Other Job Script Options

### Merge Databases

If you check this option, each file after the first one will be merged with the first file. Records that have been found to overlap with the master file (via the Find Overlap steps) will not be added to the master file.

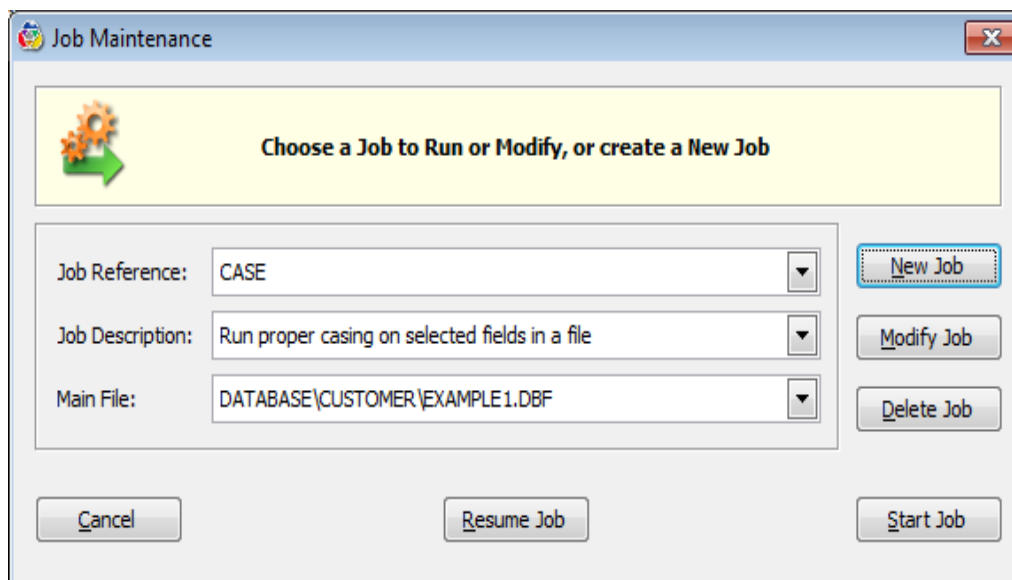
If you set this option off, then the overlapping records in the "merge files" will be purged according to the deletion score in each file, but the file will not be added to the master file. Note that if the deletion score is set to zero or NONE, then records will not be purged either.

Note that the Multiple File Wizard is an exception for use of this option, as it always merges the files into the master file irrespective of whether this option is set on.

### Run Another Job At End?

Sometimes, you may wish to link more than one job together. This is especially the case when running small program files, or when you want to merge files into multiple master files. In all cases, the first job will be totally complete before any part of the next job is started.

To enable this option, click on the check box. You will be presented with a job script picker screen like this:



To run another job at the end of the current job, just choose the new job from the list available. Once you have chosen the job you want, click on the Continue button to confirm the choice.

If you don't want to run a job at the end, click on the Clear button. This will tell the job script processing NOT to run a job at the end of the current one.

Click Cancel if you are happy with the current state of this option, and don't wish to change it.

## Running a Job Script automatically when you start matchIT

You can run a job script automatically when matchIT starts by modifying the properties of the matchIT icon so that after the *Target* you add /R: followed by the job script name e.g.

**"C:\Program Files\matchITv5\matchit.exe" /R:jobname**

where **jobname** is the reference of the job script. To quit matchIT automatically at the end of the job script, you have to run a program at the end of the job that simply contains these commands:

**on shutdown    && this stops matchIT asking if you want to quit matchIT on next command**

**quit    && Quit matchIT**

However, if you want matchIT to automatically close on the job completion and remove any Temp files that were created your close script will contain the following:

**DO UseTable WITH "PARAMS", "P", "", 1**

**lcCleanup = p.do\_cleanup**

**replace p.do\_cleanup with "YES" && set to cleanup temp files without asking**

**do cleanup**

**DO UseTable WITH "PARAMS", "P", "", 1**

**replace p.do\_cleanup with lcCleanup**

**on shutdown    && this stops matchIT asking if you want to quit matchIT on next command**

**quit    && Quit matchIT**

# Multiple File Wizard

---

## Preparation for using the Multiple File Wizard

The **Multiple File Wizard** enables you to easily set up a multiple file merge or merge/purge job. Before using the Multiple File Wizard, it saves time if you set the File Locations for the Database and Import directories to those containing the files for the job (from the Jobs/Setup menu, Options.)

*There is a limit of 2GB (2,147 Mb) on the size of any Main File.*

Please note that all the files in the job are merged into a single master file, which the Multiple File Wizard creates, containing all of the fields and all of the records from any file within the job. There is a limit of 2GB (2,147 Mb) on the size of the resultant master file, which in practice could be about 5 million records – the actual number of records depends on the record length i.e. the number and width of fields in the resultant master file layout.

If you want to process more records than this, it will usually be because there are some very large suppression files involved. In this case, you should use the Multiple File Wizard for the mailing files and any small suppression files, then use [Find Overlap](#) between the large suppression files and the resultant master file. This also reduces the processing time significantly, because matchIT does not need to process match keys for all of the records within the large suppression files – obviously the Multiple File Wizard does not report internal matches within any suppression file, but it will take significantly extra time if very large suppression files are built into the master file. If you want to use Find Overlap for such a job but still include the suppression files in matrix reports from the job, please consult your support provider for job scripts that achieve this result.

### Multiple File Wizard: Step 1

Select the **Multiple File Wizard** option from the matchIT Wizard Pane or from Jobs/Setup, Multiple File Job menu. You will be asked for a Job Reference, and a Job Name for the resultant reporting. After you have entered these details, select Continue.

## Multiple File Wizard: Step 2

Then you will get the options to configure the first file:

**Multiple File Wizard - Step 2**

Please select a Source File for each file involved in the multiple file job, then select Setup Wizard.

If you have already created a Main File layout corresponding to this source file, you can select this Main File instead of Setup Wizard.

If you have previously imported the file, you can just select the Main File which you have already imported, without selecting a Source File.

Source File: C:\... \IMPORT\EXAMPLE1.TXT

Multiple Files with same file layout, or which have already been imported: Setup Wizard:

Main File: C:\... \IMAGES\EXAMPLE1.DBF

File reference: EXAMPLE1 File description: Example1

This is a: ☒ Merge File, priority: 1 or a: ☐ Suppression File

Options No. of files in job: 1

<<Previous file Delete file Next file >>

Cancel Continue

For each file, perform the following steps:

- Select the source file that you would like to use. If the file has already been imported into matchIT, there is no need to specify a source file.
- If the source file has been imported into matchIT specify that DBF as the Main File. If you have a "shell" DBF to import your source file into, specify that DBF as the Main File. If you do not have a DBF, you can use the Setup Wizard button to create a "shell" DBF for importing. When using the Setup Wizard option the DBF that is created will automatically be set as the Main File.

---

If you have several files with the same "exact" layout, you can utilize the "Multiple Files with same file layout.." button. From the next window, you can specify either several source files or several DBF's that have already been imported. You can also specify the priorities and Suppression files from this window.

---

- Select Options and set the Input Format to the format of the source file e.g. SDF for fixed width files with Carriage Return, COMMA for comma delimited.

- You can also change any of the other Input Options e.g. Proper Case Incoming Data, Addressing.
- If the file is a suppression file, select the Suppression File radial. If it is not a Suppression File, make sure the priorities are as you want: 1 is the highest priority i.e. the file for which you most want to keep records where they match records on another file. If you enter the highest priority file first and then in order of priority, the priority defaults to the right value.
- In the Options menu, under the Matching tab you can select the option "Allow equal file priority in multiple file jobs?". This option will allow matches to be flagged randomly in files of equal priority and not according to the order that the files were loaded.

---

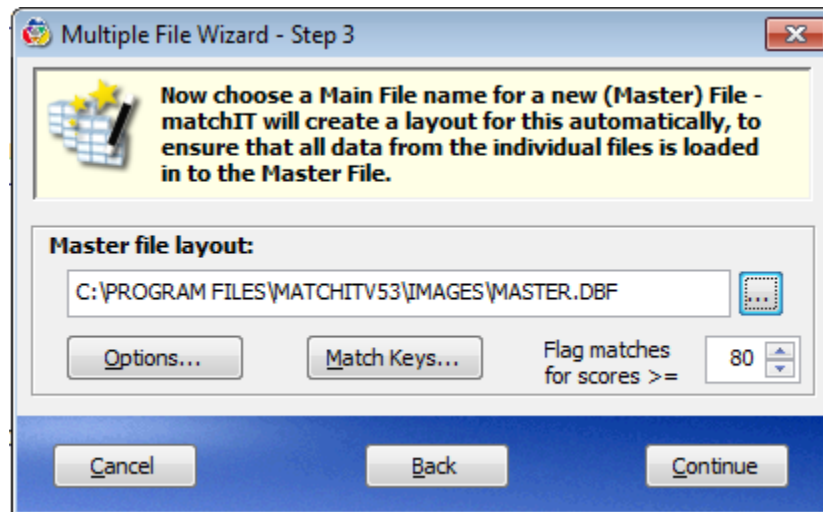
If the file already has list codes and priorities in, these will be disregarded. If they are labeled LISTC and LISTP, they will be replaced by the list code and priority you enter on this screen.


---

After you have selected all the files, select Continue.

## Multiple File Wizard: Step 3

You will then see the window below:

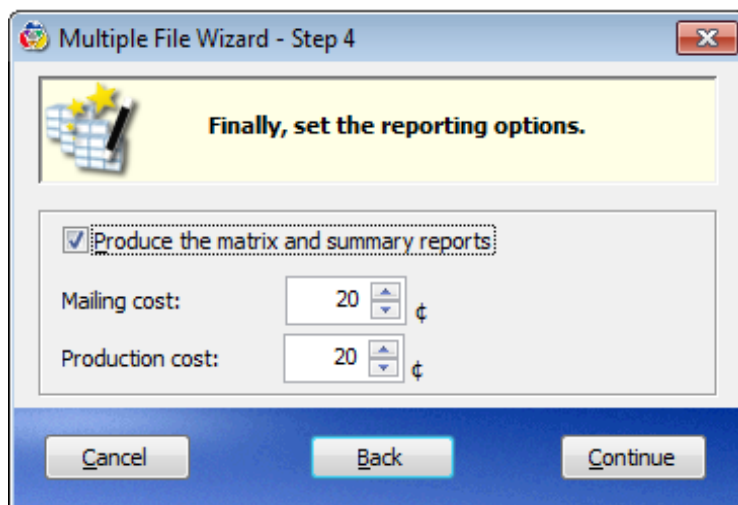


Click on the file selector button  and enter a name and path for the Master file. matchIT will create a merged table layout with all the fields from all of the individual files, with the maximum field width from each file. All input files (including suppression files) are merged into the Master File. Each file is automatically given a list code reference (in the LISTC field) so splitting out the non-duplicate records from each original file is possible after the job. You are prompted to remove the Suppression records at the end of the job.

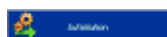
Then choose the Match Keys that you want to use, as for Find Matches. You must also enter a deletion score so that the job will automatically delete the matching records (as in Delete Matches).

## Multiple File Wizard: Step 4

Finally, you will see the screen below:



If you want the matrix and summary reports produced, check the option shown and enter the costs.



*Run/Amend Job  
Script*

You will then be prompted as to whether you want to run the job immediately.

Whether you do or not, you can amend and run the generated job at any stage from the Run/Amend Job Script option on the matchIT Jobs menu or from the Automation button in matchIT's Wizard Pane – your job is saved under the Job Reference name you input in step 1. This is described in the Job Maintenance help topic.

You can change the generated job script later to change file names and file setup options, but you must not change processing priorities or add files, because there is currently no way to specify the list code and list priority for the matrix report in the Run/Amend Job Script window.

You can print the Data and Matching summaries and the matching reports from the Input and Matching menus as normal, with the Master File selected. If you change your mind about the Deletion Score you used, you can undelete records using Database Utilities (matchIT's program folder), Verify Matches to determine the new deletion threshold, Delete Matches and finally Produce Matrix reports from the Jobs/Setup, matchIT Jobs menu.

---

If when using Verify Matches you want to interactively decide on true and false matches in a "grey area", you can flag any pair as a False Match, or increase the score of any pair so that it is included in automatic deletion. You must NOT delete matches interactively in Verify Matches if you want the Matrix Reports to tally.

---

If you do not remove the suppression records from the Master file when prompted, or you undelete them, you can remove them later using the Delete Suppression Records option from the Jobs/Setup, Multiple File Job menu.

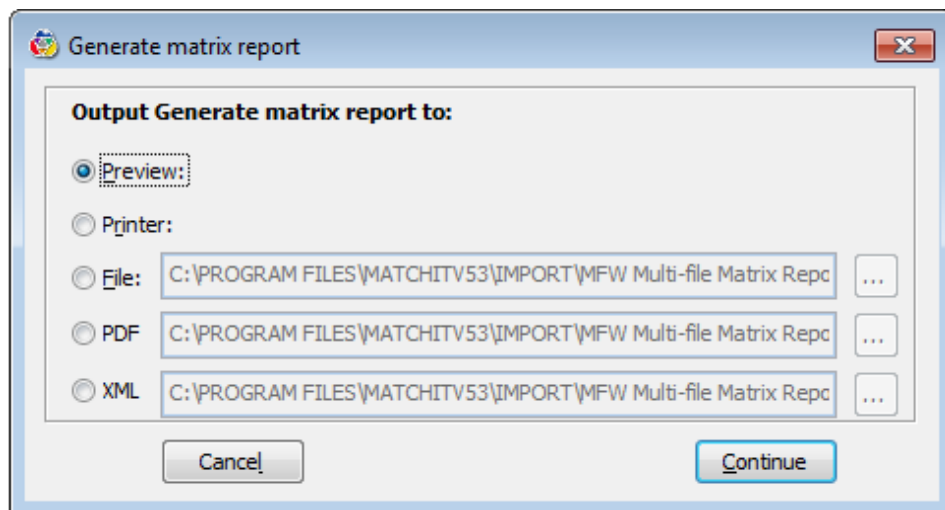
---

## Produce Matrix Reports

The 'Produce Matrix Reports' enables you to output the matrix and summary report for a multiple file dedupe job at a different time from running the job script, or generates these reports from a single file dedupe job that has been configured to be compatible with a multiple file job. Note, if you generate reports from a file rather than a job script, then the long descriptions of the constituent files in the job will not appear on the summary report. Instead the report will say 'Mailing File 1', 'Mailing File 2', and 'Suppression File 1', 'Suppression File 2', etc. This is the only difference in the reporting.

Choose 'Produce Matrix Reports' from the Multiple File Job sub-menu of the Jobs/Setup menu.

You will then see a screen, which gives you the choice of choosing which job script you want to produce the matrix reports for, or which single file. If no multiple file job scripts have been set up (that is, using the Multiple File Wizard), then the first option will be disabled, and you will only be able to choose a file. Once the job script or file has been chosen, and the OK button selected, you will then see another screen, which gives you reporting options. You can choose to regenerate the reports here, which you will need to do if you have generated reports for another job or file in the meantime, or need to change the mailing and production costs. However, if you have generated the reports for this job or file previously, and you are happy with the mailing and production costs, then you don't need to regenerate the reports. Clicking the 'Continue' button will then allow you to choose an output format for the matrix report and the summary report.



# Output

## Producing Output

In matchIT **Lite** you can only Output to File.

You can choose from File, Label and Page options: File creates a file on disk to send elsewhere for printing, Label prints mailing labels and Letter/Page/Report prints letters or envelopes according to a layout that you establish via the Output Layouts option. The information that you enter is mostly similar for all three options.

## Main Options

**Produce Output: Options for File**

**Output File Layout**

☒ Output Supplied Fields  
☐ Use Custom File Layout

New... Edit... Use All Fields

Layout name: Use all fields

**Output file Details**

Destination file name: export\result.txt

Output format: COMMA Destination: File

**Main Options**

**Data Options**

☒ Use sequential numbering?  
☐ Close up blank address lines?  
☐ Use Campaign History options?  
☐ Include flagged records?  
☐ Include Proofing File Output?

**Sampling Options**

Record at which to start output: 1 and number it: 1

Number of records: ☒ All ☐ Selection: 0

☐ Sampling records in every 1000

**Output Proofing Options**

Proofing file name: export\proof.txt

Number of proofing records: 1 ☐ Fill to maximum field width


**Filters and Ordering**

☐ Use index order? Index Expression: Edit...  
☐ Use filter? Filter Expression: Edit...

Cancel Generate Output



## Layout name

This will either show "Use all fields" or a predefined output layout, which you can change by clicking on the  button. You can edit the output layout selected – see [Changing Output Layouts](#).

### Defaults:

**File** Layout defaults to "Use all fields".

**Label** Layout defaults to ADDRESS.LBX, which is a standard layout which should be suitable for most mailing labels, in terms of content. To change the label dimensions and the number across or down the page, use the Label Wizard via the Edit, Output Layouts menu.

**Page** Layout defaults to MAILSHOT.FRX, which you will most likely need to amend.

## Destination File Name

The name of the output file.

## Output Format

This shows the current output format, which can be changed for output to file by using the drop-down list. The options here are basically the same as for [Input Format](#) except for:

- Paradox format (which is not available for output)
- Access (which you can only output by using an ODBC connection, although you can output as a DBF file which you can then read easily in Access, including field labels)
- Excel (which is limited to Excel 5 format and thus 65,000 records, unless you use an ODBC connection).

---

For ODBC format, the Connection File Name must be a pre-existing connection file (see "[ODBC Manager](#)"). You will be prompted for a file name.

---

## Destination

If the output is labels or letters, it can be previewed on the screen or printed directly.

If you are outputting to file, this option cannot be changed.

## Sequential Numbering

- **Sequential numbering:** check this option to generate sequence numbers in the output.
- **Record at which to start printing:** enter the number of the record from which you want to start the output.
- **And number it:** enter the sequence number you want to output, in the first record output (only available once sequential numbering is selected).
- **Number of records:** Either choose "all" (the default) or enter the number of records you want to output.

## Close up blank address lines?

Check this option to close up the address lines to eliminate any blank lines in the output. matchIT will prompt you to say whether you want to close up the zip code field as well.

## Use Campaign History Options?

Check this option to use Campaign History functions (only if you have matchIT **Campaign**).

## Include Flagged Records

Include records that have been flagged, as duplicate or otherwise, in your output file.

## Sampling Options

You can print a sample of the records by checking the box and entering a number. See also "[Quality Assurance](#)".

## Filters and Ordering

You can create Filters and/or Indexes for any of your Output Files. For example, you may have a filter of **COUNTRY='US'** and an index of **SURNAME+FORENAMES**. This would output all records with a Country value of "US", the resultant file would then be sorted by Surname then Forename.

## Campaign History Options

These options are only available in matchIT **Campaign**.

## Campaign ID

This is stored in the MAILING\_ID field for each record, if this field is defined in the Main File Layout. Mailshot letters in the delivered MAILSHOT.FRX template also take their standard text from the text record for this campaign.

## Date

This is the date printed on Mailshot letters and the date stored in the MAIL\_DATE field for each record, if this field is defined in the Main File Layout. This feature is available only in matchIT **Campaign**.

## Use Reference File

If you have a file of unique reference numbers which you want to mail, one reference number per line, then you can specify the name of the file and matchIT will extract those records from the Main File and output just those records. This feature is available only in matchIT **Campaign**.

## Changing Output Layouts


This section is not applicable if you have matchIT **Lite**.

### Selecting a Layout to Modify

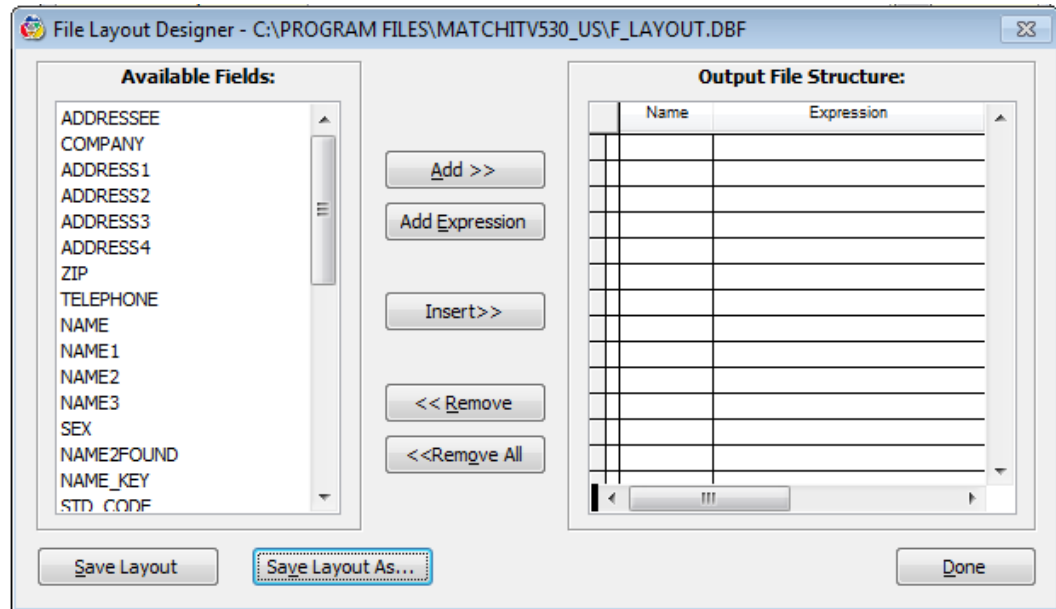
The "Output Layouts" option from the Edit menu allows you to modify file, label or letter/page/report layouts. You can create new formats by saving modified ones under a new name, or by selecting New when asked for a layout to modify.

Select which type of layout you wish to modify and then select the layout name.

### File

The list of fields for output to file can be modified and saved for future use. The top line in the dialog shows the file name and path of the current layout: click on the  button to choose other output layout files (\*.OPL). Choose the Edit button to change the output layout. You can also select this option from the Edit menu, Output Layouts.

You will then see the File Layout Designer:



This allows you to specify which fields (and field expressions if you wish) will be output to your file. The field picker shows you all the fields which are available in the currently selected file in the left hand pane, and all the fields which have been selected for output in the right hand pane. You can click on the *Remove All* button in the middle to remove all the fields selected.

You must select the fields from the left hand pane in the order that you want them output. You can scroll down the available fields list to see more fields and double click any field name to move it to the right hand pane. You can also add or insert Field Expressions into the layout e.g. PADL(ALLTRIM(SEQ\_NUM), 7, '0') to output a sequence number padded out with leading zeroes (you must output the normal sequence number via the check box as well, because this is the SEQ\_NUM field).

Click *Save Layout As* when you have finished editing your layout(s).

## Label

Mailing Labels are address labels, the layout of which can be modified via the Label option of this menu. New Label layouts can be created using the Label Wizard option.

### The Label Wizard

In a few steps you can create a simple label which can be used or further modified:

- Select Edit -> Output Layouts -> Label Wizard . If you do not have a Main File open, choose one now.
- matchIT asks a preliminary question about your printer, as it does not support Dot Matrix and line printers.
- Next, the Label Dimensions window is displayed:

Label Wizard - Label Dimensions

Font: Arial Size: 10 Style: Normal Change Font

Label horizontal spacing: 0.100 Page Header Height: 0.000

Label Width: 2.500

Label Height: 1.500

Left Margin: 0.100 Page Footer Height: 0.000

Number of labels across page: 2

All measurements are in inches

Continue Cancel

- Enter information about label dimensions, margins, and number of labels across the page. You can also select Change Font to change the font used and whether the dimensions are in inches or centimeters.
- Click "Continue" to move to the next stage.
- Now you can select the fields you would like on your label. Check the options required and change the spinner at the bottom to reflect how many address lines are to be used (up to a maximum of the number in your file).

Label Wizard - Choose Fields

Please choose fields to include in your label :

☒ Use input Addressee? ☐ Use Zip code?

☐ Use generated Contact field? ☐ Use Department?

☒ Use Job Title? ☐ Use Country?


☒ Use Company Name? ☐ Sequential Numbering?

☒ Use Postcode? ☐ Bag Breaks on Labels?

☐ Use Mailsort Selection Code?

Number of address lines to use: 4

Create Label Cancel

- Click "Create Label" when finished and save your new label.
- You will then be shown your new label in the Label Designer window for further editing. This activates a new set of menus. To display the toolbars, you must select these options from the View menu. Context-sensitive help is displayed in the bottom left-hand corner of the screen.
- You can move the fields around by selecting the box containing the field, then drag it to another place.
- You can add new fields by firstly viewing the Report Controls Toolbar (View menu), then clicking on the  button.
- When you now hover the mouse over the label it forms a crosshair. Click and drag a box to anywhere where there is space.
- An expression builder will pop up. Type the field name you wish to include on the label.
- You can preview the layout without leaving the design view, by selecting Preview from the View menu.

## Defaults

Labels should show the direct or residue selection code of their destination, as well as the name and address. The default label layout for both these types of label is ADDRESS.LBX, which is a standard content that should be suitable for most mailing labels, including a person's name, job title, company, 5 address lines plus state and zip. Any fields which are not defined in your Main File are not printed.

## Letter/Page/Report

matchIT's reports as well as your own letter layouts can be edited to include any fields or wording you need. They all use the same report designer as the Label Editor, described above.

## Defaults

MAILSHOT.FRX in the Report sub-directory provides a model for printing "mail-merge" type letters. CLIENT.FRX in the same directory is a model for a checklist of customer names and addresses.

There are standard reports provided for printing residential and business records in pairs or sets, namely RESPAIRS, RESSETS, BIZPAIRS and BIZSETS. These formats show the person's name in the format in which it was imported, zip, 4 lines of address and (if present) the telephone number. The business formats also show the name of the business after the person's name. If you want to show more or less data, vary the order of the fields or the field widths, you will need to create new report format that you can base on the closest standard report by modifying the standard report and saving it under a new name.

In order to view or change the printing format of any of the reports, or to create new formats, or to change the type of printer, select the Output Layouts option of the Edit menu.

## Text

With this option, you can create and modify freeform text for a letter easily, but this text can only be printed in a consistent typeface, not bold, italics etc for individual words or phrases. You can also enter a campaign ID and date, to be stored in fields labeled MAILING\_ID and MAIL\_DATE in the Customer records – this feature is available only in matchIT **Campaign**. If they are not defined in your Main File Layout, the information is not recorded.

## Changing the Printer Setup

Use the Windows Print Manager to control printer selection and setup.

## Changing Report Layouts

The Format and Report menus allow many different operations. These include:

- defining new fields and deleting existing fields
- changing field lengths and positions
- changing, moving, adding or deleting headings.

You can cut and paste field definitions from one report to another. You can also move or cut and paste groups of fields.

---

Don't change the field expressions DUP\_REF(REF1) and DUP\_REF(REF2) in the matching reports, or move them from their position at the beginning of each line (except that you may position them after the Match Score field). If you do, you may find that data from the wrong client records is printed in the report. You can correct this problem, if it arises, by using the Report menu option "Send To Front".

---

---

## PRINT format output

Please see the Online help for more information.

---

## Output Flagged Records

This is an option from the Output menu. It is used to create a File consisting of all the flagged records from your Main File.

To create a File containing the flagged records, follow these steps:

- Select "Output Flagged Records" from the Output menu. If you do not have your Main File open, you will be prompted to open it.
- A window will open displaying several different output options, including an option for output format. Once you have set your options e.g. supplied fields or all fields, select Generate Output. You will then be prompted to save the flagged records file.

matchIT will now copy the flagged records from your Main File into the new File you just named and unflag them from this new file. When it has finished, matchIT will automatically select the new file as the Main File.

# Quality Assurance

---

## Quality Assurance Introduction

We **strongly recommend** that you use appropriate Quality Assurance Checks to check all output from matchIT before you use it in a "live" or production environment e.g. before you print address labels. matchIT is a very flexible system which will handle all sorts of data, but this very flexibility makes it impossible for us to check out all combinations of parameters, data and user actions in our testing. The duty of care in checking output has to lie with you, the user.

To assist and complement your Quality Assurance Checks, matchIT provides several features.

---

These procedures will take quite some time on a large file, but the potential for large quantities of errors is much greater on large files, so it is advisable to take the time required to follow these processes.

---

Please let your support provider know of any errors, omissions or any unexplained results, so that we can address any problems that arise.

We will update this section of the manual as we get feedback and suggestions from our users about Quality Assurance methods, so for the latest version of this topic, please consult the Online Help.



---

## Import Results

This option, from the Import menu, gives you options to preview and print the **Data Summary**, **View Records by Category** and **Non Alpha Numeric Characters**. The Data Summary is produced automatically at the end of Import (or Find Matches if you have Wait for User after Import switched off). You should examine this to make sure that the volumes of data and the nature of the data shown on the summary conform with what you expect e.g. with the last time that you ran similar data through matchIT. The Data Summary is regenerated each time you ask for it, so will show different values after deletion of matches than those generated immediately after Import.

View Records by Category allows you to "home in" on many of the categories of record for which entries are shown on the Data Summary and browse them on screen, print them, delete them from the file and/or copy them out to a separate file.

### View Records by Category

You should also use **View Records by Category** from the **Import** menu or the **QA Dashboard**. It allows you to browse all records meeting selected criteria, most of them are categorized on the Data Summary that is displayed after Import. You can change records and delete records and those changes will be retained in the DBF file – so you can make any corrections that you wish in this view.

You can select several categories to view at once. You can also choose to delete the selected records, print them and/or to write them out to a separate file.

After you browse the selected records, matchIT returns you to the same screen to select more categories if you wish. To leave the screen, select **Close**.

---

## View Data

"**View Data**" from the **View** menu allows you to browse records in different orders e.g.

- browsing in Prefix or Salutation order will show groups of records, typically at the top or bottom of the view, which have default salutations or unusual titles. The vast majority of records will be in a contiguous block i.e. MISS, MR, MRS, MS and Dear Miss, Dear Mr, Dear Mrs and Dear Ms – you should at least spot check these, but then look in detail at the records at the top and bottom of the list (i.e. not Miss, Mr etc.), because here in particular you may find errors or unusual salutations. You will also find default salutations that perhaps should not be default
- browsing in Address line 1 order may show undeliverable items at the top
- browsing in Company order will show blank companies at the top
- browsing other fields is a common technique for spotting problem entries in a field - the problematic entries will usually be at the top or bottom

Each time you select to browse in order of any field for which an index was not created at the end of Import (such as all the fields mentioned above), matchIT will create an index – this will take quite some time on a large file, but not as much time as sorting out an error when it's too late to pre-empt it.

You can change records and delete records in View Data and these changes are retained in the DBF file – so you can make any corrections that you wish in this view.

---

## Sampling

On the Output Options screen you can print/output a range of records.

### One in N sampling

One in N sampling from the Output Options screen is available to help pre-empt problems with final ("live") output. When you choose this option, an intermediate table is created containing a selection of the records in your Main File. For example, if you have a Main File of 100,000 records, and choose One in 1000 sampling, your test file will contain 100 records – the 1000th, 2000th, etc. from your Main File.

Obviously, sampling does not guarantee that there will be no errors in your data.

### Other Sampling

Alternatively, on the Output Options screen users can choose to output a number of records, the first 100 records from the File, or the 1000th through to the 1100th record.

---

## Preview Output

You can also preview output using matchIT's default address labels, even if you are not printing labels from matchIT or printing labels at all, because this is an easy way to visually check name and address data before committing it to any further processing.

---

## Reports/QA Dashboard

The Reports/QA Dashboard is available directly from the Output menu, and at various other points from the matchIT processing wizards and will guide you through some basic Quality Assurance steps.

### **File Information - Compare current data with previous jobs**

This section allows you to configure some of the reports available so that the results from your currently imported file can be compared with previously imported data sets. This is a useful QA tool since it will quickly become obvious when comparing your current data file with previous similar jobs if obvious discrepancies exist (e.g. column widths are different, data counts are drastically different).

The reports supporting the compare functionality are as follows:

- Import Summary
- Field Widths Report

## Reports/QA Dashboard - Processing

### Import Summary

This is a summary of your imported data. It summarizes information such as:

- Potential data errors
- Data enhancement and relocation
- Records which should perhaps be excluded from the output
- Salutations
- Male/Female split
- Forenames found in matchIT's names table.

Note that this report is generated immediately following import, and not re-generated should you subsequently remove duplicates or make any other subsequent changes. To see the latest snapshot of your data, use the Data Summary report from the Import menu.

### Address Processing Summary

The addressIT Summary contains postcoding statistics for the Main File, including the results of postcode generation and correction.

### **Drill down by Category**

This allows you to display all records meeting selected categories, most of them as categorized on the Data Summary which you can view after Import.

You can select several categories to view at once. You can also choose to delete the selected records, print them and/or to write them out to a separate file.

After you browse the selected records, matchIT returns you to the same screen to select more categories if you wish. To leave the screen, select Close.

### **Non Alphanumeric Report**

The Non Alphanumeric Report displays all the records in your imported data that contain non alphanumeric data.

### **Field Widths Report**

This allows you to check the maximum and minimum widths of the contents of each field in your imported data.

### **Quality Scoring Report**

This report allows you to check the overall quality of elements in your data such as the individual names, company names, addresses and email addresses.

## Reports/QA Dashboard - Output

**File Information**

C:\PROGRAM FILES\MATCHITV53\IMPORT\EXAMPLE1.DBF

125 Records 125 not flagged, 0 flagged Main File

☐ Compare primary file statistics to a previously processed file?

Select File ☐ Browse specified default folder to select your comparison file Highlight differences above  
No default folder specified 20.00 %  
☐ Browse folder containing Main File to select your comparison file

Processing Mailsort **Output**

Output to File Output with a limited number of unique values from a particular field

Output to Page Write Flagged Records

Output to Label Preview Proofs and Samples

Print/Production/Labour cost: 0 p Postage/Call cost: 0 p Cost Saving Report

The Address Processing Summary shows processing statistics for the file, including the success rate of postcode verification/correction.

Close

### All

With this option you can choose to output all records.

### Range from

With this option you can choose to output all records or a selection of records.

### One-in-N Sampling

When you choose this option, an intermediate table is created containing a selection of the records in your Main File. For example, if you have a Main File of 100,000 records, and choose One in 1000 sampling, your test file will contain 100 records – the 1000th, 2000th, etc. from your Main File. Obviously, sampling does not guarantee that there will be no errors in your data.

**Output to File/Output to Page/Output to Label**

These buttons will bring you to the standard matchIT Output screen, from which you can access all of the output options available in your version of matchIT, but for the selected sample of records. Even if you never produce labels from matchIT, using the default Address label to preview a sample of names and addresses gives a clearer picture than a Browse view of what those names and addresses will look like if and when they are eventually printed from another piece of software. You can even print a sample of "labels" on plain paper to Q/A them more easily and perhaps file them.

**Write Flagged Records**

matchIT will now copy the flagged records from your Main File into the new File you just named and unflag them from this new file. When it has finished, matchIT will automatically select the new file as the Main File.

**View Data**

View Data allows you to browse and update the selected Main File in any order.

Click Close to exit the Reports/QA Dashboard .

**Cost Savings Report**

This report allows you to enter your Print and Postage costs and see how money you are going to save on any mailing you do having removed duplicates, and having matched your data against any suppression files.

# Quality Scoring

---

## Address Quality

The Address Quality Score is designed to measure the completeness of an address independently of whether it has been standardized against a Postal Address File.

The Address Quality Score will be assigned only if there is a field QUAL\_ADDR (char 2) in the Main File Layout. The user can add this field in the Setup Wizard.

A separate flag denotes if the record is foreign.

The Address Quality Score is on a scale of 0-9, with quality scores being assigned as follows:

- address matched to Postal Address File and PAF address used - 10
- garbage strings identifiable by pattern recognition e.g. asdasd - 0
- empty - 0
- empty address key - 1
- no city detected and no zip/postcode entered - 3
- no thoroughfare detected - 4
- no city detected but zip/postcode entered - 5
- one point for each of county and country entered, one point for Building/Apartment number detected and two points for each of thoroughfare, city and zip/postcode entered

The maximum score for a non-PAF standard address is therefore 9, .

The quality scores are assessed in the order shown and as soon as a quality condition is met, that score is assigned and the scoring process ends.

The scores are parameterized whether to score points for country, region or Building/Apartment number using flags in Params.dbf as follows:

- QS\_REGION – 0 disables scoring for County (US default setting 1)
- QS\_PREMISE – 0 disables scoring for Building/Apartment number (US default setting 1)
- QS\_COUNTRY – 0 disables scoring for Country (US default setting 0)

In addition, QS\_BLANKPC value 0 restricts addresses without zip/postcodes to a score of 1 (default setting 1).

With the default settings identified above, the scores in the table below should be returned:



| Quality | Description   |
|---------|---|
| 10      | PAF address used  |
| 8       | Building/Apartment number, thoroughfare, city, state, zip/postcode populated                |
| 7       | Building/Apartment number or region, thoroughfare, city, zip/postcode populated             |
| 6       | Thoroughfare, city, zip/postcode populated  |
| 5       | Thoroughfare, zip/postcode populated  |
| 4       | City, zip/postcode populated  |
| 3       | Thoroughfare detected with or without Building/Apartment number but no city or zip/postcode |
| 1       | Empty address key (city and thoroughfare can not be detected)                               |
| 0       | Empty address and empty zip/postcode  |

---

---

## Name Quality

The quality score will be assigned only if there is a field QUAL\_INDIV (char 2) in the Main File Layout. The user can add this field in the Setup Wizard.

We will provide a quality score for name on a scale of 0-9 (with 0 being the poorest quality), with quality scores being assigned as follows:

- 0 = Empty
- 0 = sdf i.e. repeated patterns denoting garbage
- 0 = Empty name key
- 1 = John
- 2 = Smith
- 3 = J Smith
- 4 = Mr Smith
- 5 = Mr J Smith
- 6 = Joh Smith (Unrecognized first name or error in first name, no prefix)
- 7 = John Smith
- 8 = John R Smith
- 9 = Mr John Smith
- 10 = Mr John R Smith

The quality scores are assessed in the order shown and as soon as a quality condition is met, that score is assigned and the scoring process ends.

To generalize the examples above, the scores in the table below should be returned, after any name parsing, casing or salutation generation:

| Quality | Description   |
|---------|---|
| 10      | Surname, input title, forename and middle initial(s) all populated                      |
| 9       | Surname, input title, forename all populated, no middle initial                         |
| 8       | Surname and forename and middle initial populated but no input title                    |
| 7       | Surname and forename recognized in Names.dat populated but no input title               |
| 6       | Surname, and forename unrecognized in Names.dat, populated                              |
| 5       | Surname, title and initials populated, no forename or length of forename is 1 character |
| 4       | Surname and title populated, no forename or initials                                    |
| 3       | Surname and initial(s) populated but no title or forename                               |
| 2       | Surname populated but no title, initials or forename                                    |
| 1       | Empty surname   |

---

## Email Quality

The quality score will be assigned only if there is a field QUAL\_EMAIL (char 2) in the Main File Layout. The user can add this field in the Setup Wizard.

We will provide a quality score for email on a scale of 0-9 (with 0 being the poorest quality), with quality scores being assigned as follows:

- 0 = Empty
- 0 = Nonsense
- 9 = Username, domain, and recognized top-level domain (TLD) found
- 2 = Top level domain (TLD) not recognized

# Campaign Processing

---

This section is only applicable if you have matchIT **Campaign**.

---

---

## Introduction to Campaign Processing

The Campaign module of matchIT allows you to select records for mailing campaigns and keep track of who was selected for each campaign. Each time you produce a Mailshot or output file, matchIT will automatically update your Campaign History table with details of the current campaign. Later on, you can examine this history table.

To maintain Campaign History automatically, you will need to add the fields **MAILING\_ID**(width 10) and **MAIL\_DATE**(Date type) to your Main File Layout. The Setup Wizard will normally add these fields automatically, but you can add them manually by specifying them at the end of the Setup Wizard or via Main File Layout option in the Tools menu.

You will also need a History table. Whenever you update mailing history, matchIT will ask you for a History table. You can create a new History table at any time by entering a new name when asked. We recommend that you use separate folders for each campaign that you are tracking, so that the history tables for each campaign are kept separate.

---

## The Campaign Process

There are 5 main steps involved in the campaign process in matchIT:

- Firstly, import and deduplicate your data in the normal way for matchIT. Basically, you should create the table which (or part of which) will be used in the output step.
- Secondly, run a query if you want to select a subset of the records on the table for output. You may also use a separate file of reference numbers (such as one generated by analysis software) to filter the output.
- The next step is to create the actual output. You may need to create a Campaign record to record the Campaign Identifier and date. When the output is created, the actual updating of the history file usually takes place.
- Some users producing multiple mailshots or output files from different selections of the master file may find it more efficient to create all the output first, and then update the mailing history file afterwards. In this case, an additional step (updating the history file) will be needed.
- Viewing Campaign History allows you to see when each record in the Main File was selected, for which campaigns.

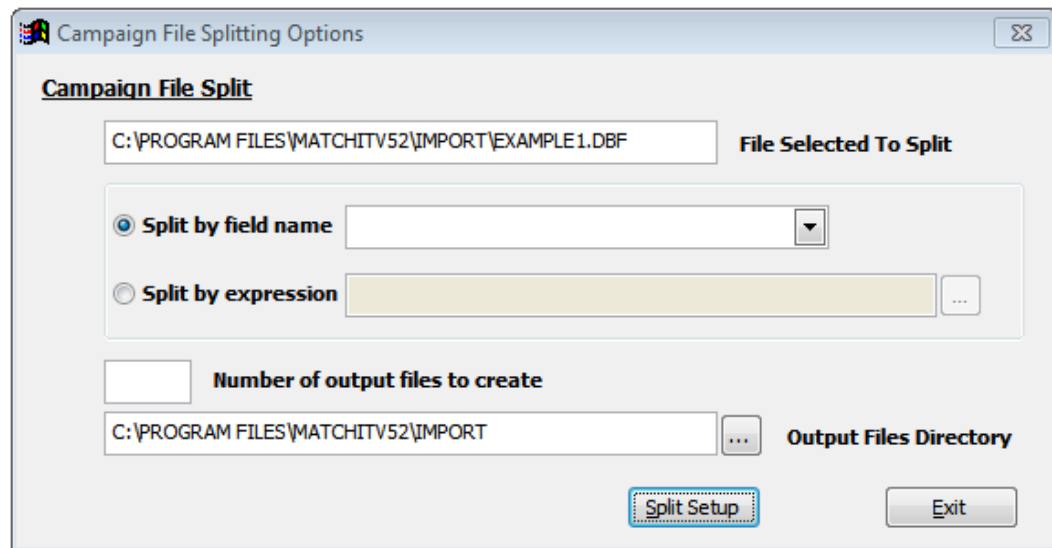
## Campaign Options

The Campaign Options can be accessed through the Output screen's Campaign Options tab or by running a Query with Use Campaign History Options switched on.

- **Campaign ID** – Either select one from the list or add a new ID by clicking the Add button. Campaign IDs can be deleted by clicking on the Remove button.
- **Date** – Enter the date the mailshot is to be sent.
- **Use Reference File** – Switch this option on to use an external list of references to filter the output/query. The list of references should be in a comma-separated ASCII file format (basically, one reference per line). The reference length should be the same as the length of UNIQUE\_REF in your Main File. For each reference that matches to a UNIQUE\_REF in the Main File, one record will be output. Click on the *Choose Another* button to select the reference file. matchIT will remember the file name the next time.

## Campaign File Splitting Options

The "Split file for a Campaign" option is located under the Campaign Processing section of the Output menu.



The above window allows you to control what file to output and what field/expression to split on. You can also specify how many output fields you would like created, and where they need to be stored.

---

## Campaign History

### Creating and Updating Campaign History

To create or update a Campaign History table, all you need to do is Run a Query or go through the steps to produce output with Output to File or Printer. In either case, you must switch Use Campaign History Options on and set those options accordingly (See Campaign Options). It should be noted that if you produce an output as a print preview, this will NOT cause Campaign History to be updated. Also, you must have the fields MAILING\_ID and MAIL\_DATE in your Main File to trigger matchIT's Campaign History function.

When you produce a mailshot, either by running a Query or by Generating Output, matchIT will ask you if you would like to update a Campaign History file.

If you answer 'Yes' to this question, you will then need to choose a History table to be updated. If you have not already created a history for this Main File, just type in the name of the new history table in the file selector. matchIT will automatically create a new History table if it does not exist.

If you answer 'No' to the above question, updates can always be made later.

### Viewing Campaign History

To view Campaign History, choose the **View Campaign History** menu option from the **Output** menu. matchIT will now ask you for a History table. You should choose your Campaign History table for this Main File.

# Queries

---

This section is only applicable if you have matchIT **Campaign**.

---

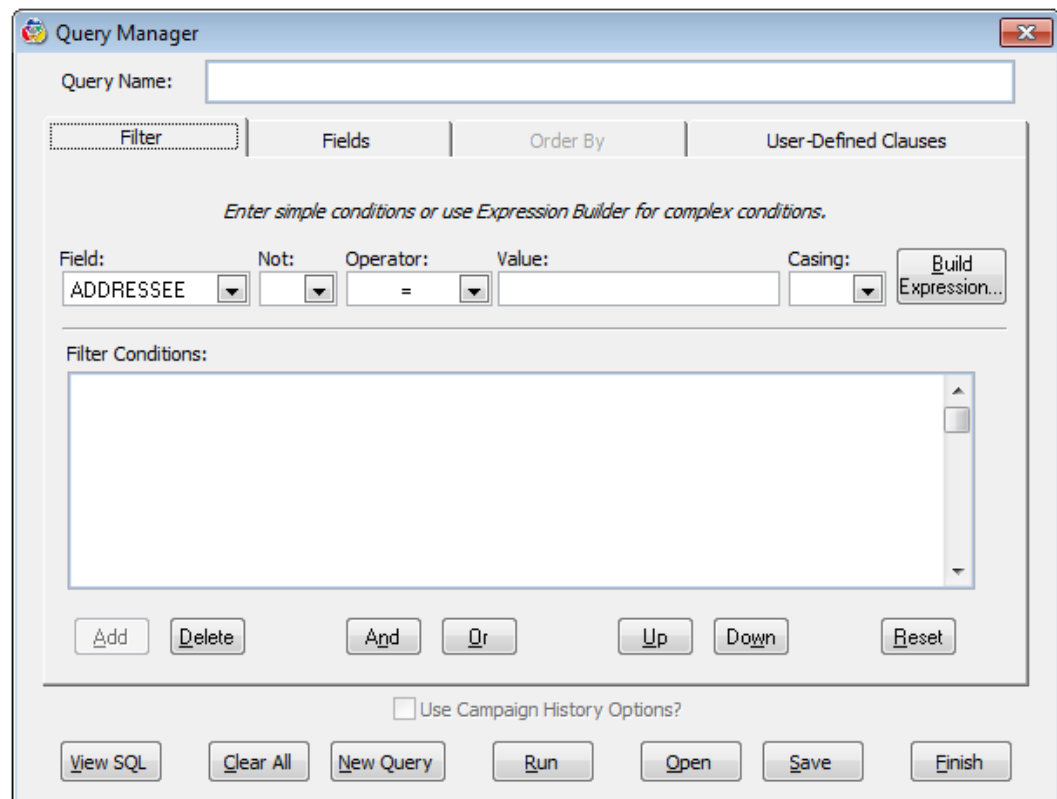
## Query Overview

Queries provide the facility to search a chosen table for all records whose contents have characteristics that you specify. You can define standard queries that you can repeat later or modify.

Queries are manipulated through the Query Manager.

## Query Manager

Using the Query Manager, you can create a query or run an existing query.



The screenshot shows the 'Query Manager' dialog box. At the top, there is a 'Query Name:' text box. Below it are four tabs: 'Filter' (selected), 'Fields', 'Order By', and 'User-Defined Clauses'. The 'Filter' tab contains the instruction 'Enter simple conditions or use Expression Builder for complex conditions.' Below this is a row of controls: 'Field:' with a dropdown menu showing 'ADDRESSEE', 'Not:' with a dropdown menu, 'Operator:' with a dropdown menu showing '=', 'Value:' with a text box, 'Casing:' with a dropdown menu, and a 'Build Expression...' button. Below these controls is a large text area labeled 'Filter Conditions:'. At the bottom of the dialog are several buttons: 'Add', 'Delete', 'And', 'Or', 'Up', 'Down', 'Reset', 'View SQL', 'Clear All', 'New Query', 'Run', 'Open', 'Save', and 'Finish'. There is also a checkbox labeled 'Use Campaign History Options?'.

### Query Name

The name of the current Query will be displayed if you have either Saved the Query or Opened an existing Query.



## Filter

Filter Conditions are used to limit the records that will be included in the Results Table. For example, a filter of COUNTRY#'US' would output any records that did not have a Country value equal to "US".

## Fields

The Fields page is used to select the fields that will be included in the Results Table.

## Order By

On the Order By page, select the fields by which you want the Results File ordered.

## User-Defined Clauses

Additional SQL Select clauses can be added in the User-Defined Clauses page.

## Use Campaign History Options

Check this to use Campaign History Options. Your Main File must contain the fields MAIL\_DATE and MAILING\_ID. This option cannot be used with a Query containing a GROUP BY clause in the User-Defined Clauses. When you run a query with this option switched on, you will be brought to the Campaign Options screen.

## View SQL

To edit the SQL Select statement directly, click on the View SQL button.

## Clear All

Click on the Clear All button to remove all of the filter conditions, field selections and clauses you have entered.

## New Query

Clicking on the New Query button will close the existing Query without saving changes.

## Run

After either creating a new Query or Opening a previously saved Query, click on the Run button. Alternatively, select Run Query from the Query menu and select a previously saved Query. You will be prompted to name the Results File. This is the file in which the results of your Query will be stored.

## Open

To open a pre-existing Query, click on the Open button.

## Save

To save the current Query, click on the Save button. You will be prompted to name a Query File. Once saved, a Query can be opened in the Query Manager or run by selecting Run Query from the Query Menu.

## Query Manager – Filter

To enter a simple condition, choose the Field and Operator, enter a Value and choose a Casing option (if desired), then click on the Add button. To build a more complex condition, click on the Build Expression button.

## Field

This drop-down list contains all of the fields that exist in the Main File. Choose the field for which you want to create a condition.

**Not**

Select Not to negate the condition.

**Operator**

Choose an operator for the condition.

**Value**

Enter the value for which you are testing. When the Empty Operator is chosen, Value will be unavailable.

**Casing**

The Casing option selected will be applied to both the Field and Value you have selected. If you have chosen Upper, then the Uppercase of the field will be compared with the Uppercase of the value you have entered. When the Empty, Length > and Length < Operators are chosen, Casing will be unavailable.

**Build Expression**

Click this button to access the Expression Builder. This will allow you to build more complex filter conditions.

**Filter Conditions**

This window displays the filter conditions that will be applied to the query.

**Add**

Click the Add button to add a condition to the Filter Conditions window. The Filter Condition added will be based on the values of Fields, Operator, Value and Casing.

**Delete**

Click on Delete to remove the currently selected condition from the Filter Conditions window.

**And/Or**

To create multiple condition in your Query, click on the And/Or buttons to add the appropriate connector to the Filter Expressions window.

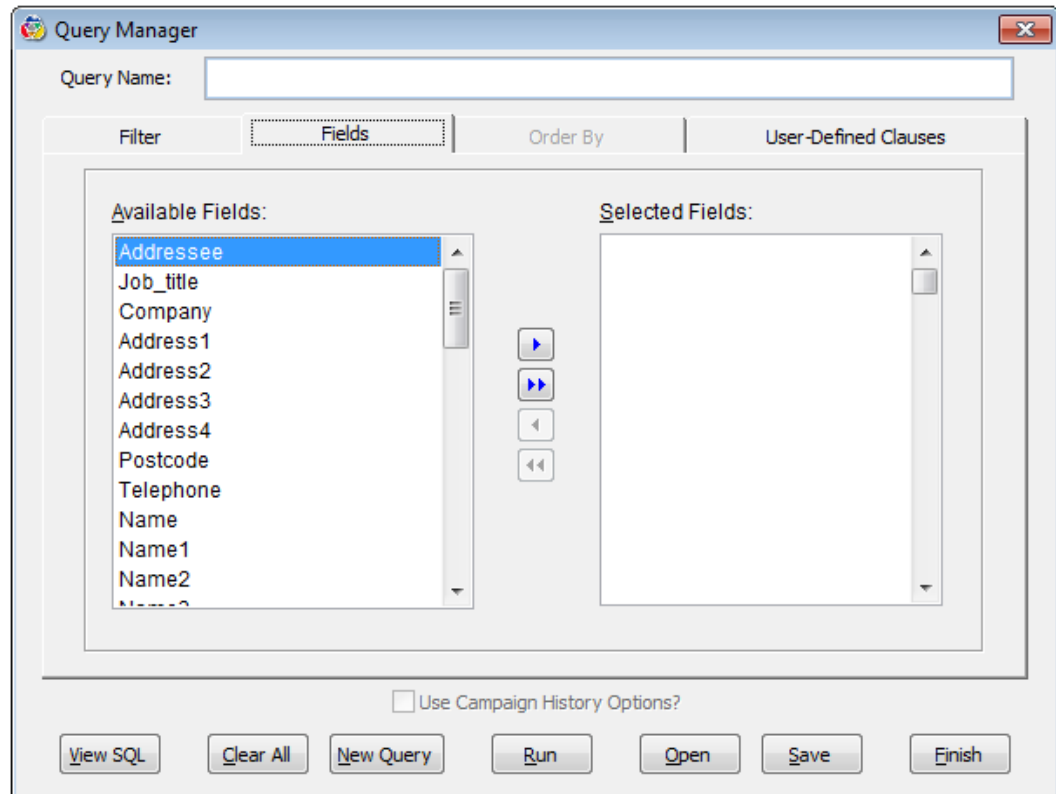
**Up/Down**

Click on the Up/Down buttons to rearrange the filter conditions in the Filter Expressions window.

## Reset

The reset button will remove all of the Filter Conditions you have entered.

## Query Manager – Fields



### Available Fields

This window will display the fields that exist in the Main File. To transfer a field from this window to the Selected Fields window either click on the single right arrow button or double click on the field name itself. Clicking on the double right arrow button will move all fields from the Available Fields window to the Selected Fields window.

### Selected Fields

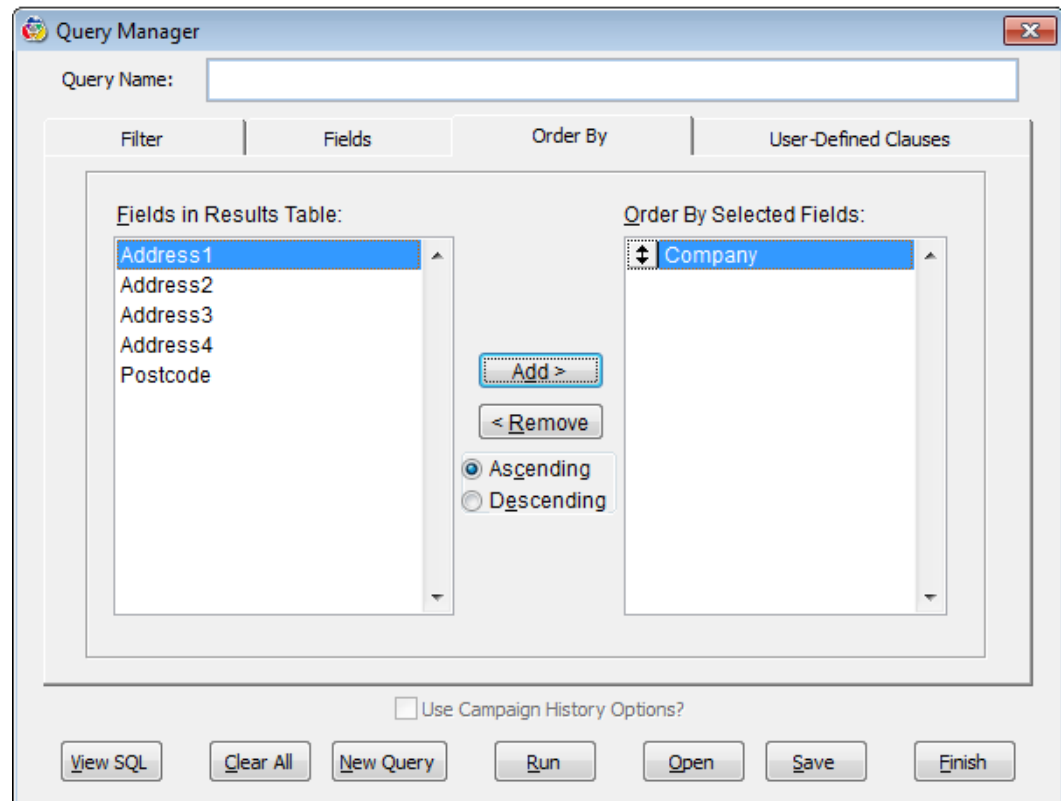
This window will display the fields that will be included in the Results Table. To remove a field from this window either click on the single left arrow button or double click on the field name itself. The field will then be moved back to the Available Fields window. Clicking on the double right arrow button will move all fields from the Selected Fields window to the Available Fields window.

---

**NOTE:** If no fields appear in the Selected Fields window, all fields that exist in the currently selected table will be included in the Results Table.

---

## Query Manager – Order By



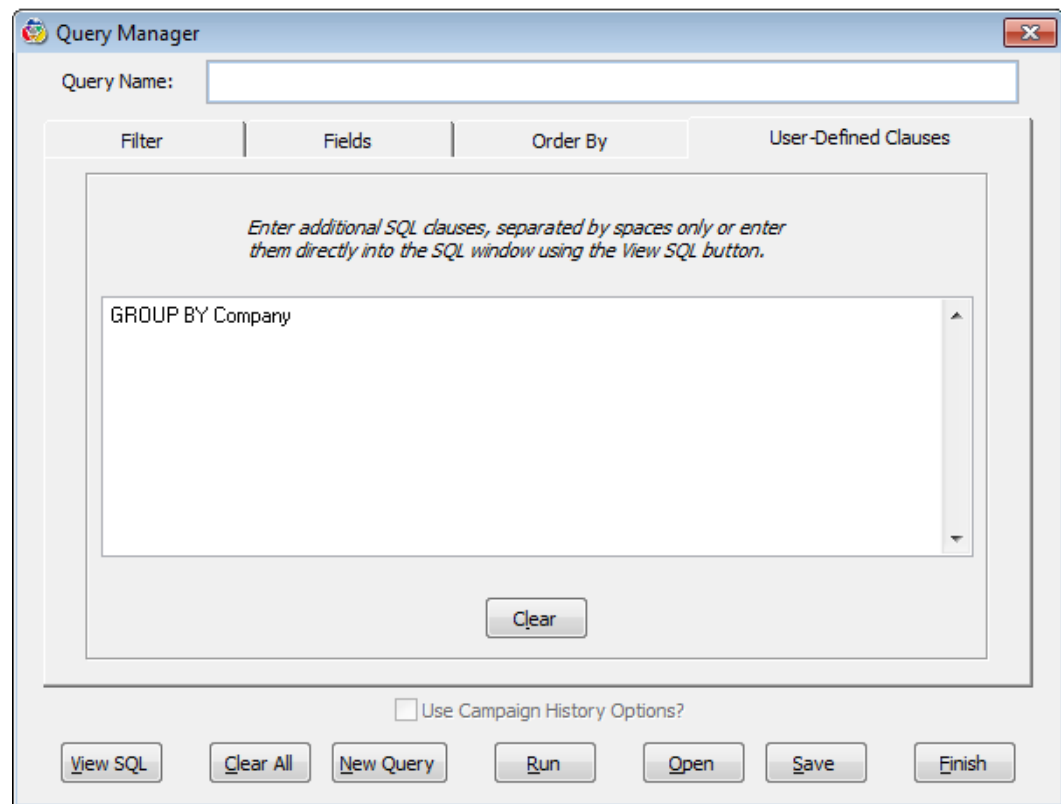
### Fields in Results Table

This window will display all of the fields you have selected to appear in the Results File. To transfer a field from this window to the Order By Selected Fields window choose Ascending or Descending, then either click on the Add Button or double click on the field name itself.

### Order By Selected Fields

The Results Table will be ordered by the fields listed in this window. To remove a field from this window, either click on the Remove button or double click on the field name itself.

## Query Manager – User-Defined Clauses



Any additional SQL Select clauses you wish to use can be entered in the User-Defined Clauses window. Alternatively, you can edit the SQL Select statement directly using the View SQL button.

### Clear

Click on the Clear button to remove all User-Defined Clauses you have entered.

---

## Count Values

Select Count Values from the Query menu to create a simple query to count the occurrences of the values contained in a field (or field expression) of your Main File. You can Run this query from the Count Values screen or Save the query, which can then be opened in the Query Manager.

---

## Run Query

Select Run Query from the Query menu to run a previously saved Query. If the Main file and the Query comply with the Campaign requirements, you will be asked if you want to Use Campaign History Options. If you answer Yes, you will be brought to the Campaign Options screen. If you answer No, or upon exiting the Campaign Options screen, you will be prompted for a Results File name. This will be the name of the file containing the results of your Query.

# System Commands Overview

If you know some FoxPro (matchIT uses Visual FoxPro) or dBase (known as "xBASE") programming, you can use the System Commands utility to key in simple xBASE commands.

The System Commands facility is not intended to replace any requirement for a full FoxPro license rather than the run-time one included with matchIT, and your support provider does not provide telephone support, Online Help or documentation for program commands other than the examples below.

As all files are closed when you select the System Commands option from the Tools menu, you will have to first use the database you want, or select it after keying any command that requires a database.

Some FoxPro commands that you might find useful are (type the command in the box then click "Process Command"):

- To open a database file for use by other commands:  
`USE ?`  
(then select the database)
- To set the order of a database:  
`SET ORDER TO UNIQUE_REF (if the index exists)`  
`INDEX ON ADDRESS1 TO TEMP (if the index doesn't exist)`
- To browse (view) a database:  
`BROWSE`  
(This allows various facilities to reposition on a different record, seek a key etc. through the Browse menu)
- To delete all records from a database from the current record onwards:  
`DELETE REST`  
In this example, REST is a scope clause - scope clauses can be added to all the commands below. Other examples of scope clauses are ALL, NEXT 100, NEXT 9999 etc.
- To recall logically deleted records from a database for a condition:  
`RECALL FOR condition`
- To delete all records from a database which have blank addressee AND company fields, OR blank address lines 1, 2 and 3:  
`DELETE ALL FOR (EMPTY (ADDRESSEE) AND EMPTY (COMPANY)) OR (EMPTY (ADDRESS1) AND EMPTY (ADDRESS2) AND EMPTY (ADDRESS3))`  
In this example, FOR specifies a condition clause - you can combine condition clauses with AND and OR and use brackets to control the way in which the conditions are combined. Note the additional brackets in this example, surrounding the first condition (to the left of the OR) and the second condition (to the right of the OR)
- To initialize a field called LISTSOURCE to a value 'ABC' if it is blank, for a given range of unique reference numbers:



```
REPLACE ALL LISTSOURCE WITH 'ABC' FOR EMPTY(LISTSOURCE) AND  
BETWEEN(UNIQUE_REF, '0001000', '0099999')
```

- To copy records for various list sources to another file and then delete them from the first file:

```
COPY TO drive:path\filename FOR INLIST(LISTSOURCE, 'ABC',  
'XYZ', '123' etc.)
```

```
DELETE FOR INLIST(LISTSOURCE, 'ABC', 'XYZ', '123' etc.)
```

- To create a copy of the file in a sorted order:

```
SORT TO drive:path\filename ON fieldname1, fieldname2, fieldname3 etc. FOR  
condition
```

# Configuring Centralised Files

---

## Configuring Centralized Files

It is recommended that matchIT be installed to the Centralized File Server (CFS) to provide easy access to the configuration of the Centralized Files. The CFS can be any Windows based hardware capable of running matchIT Desktop.

Install matchIT to the CFS or select an existing matchIT client as the CFS. Ensure all Suppression options are configured correctly and function normally.

If you choose to use an existing matchIT client as the CFS make sure it is NOT using the Centralized files as its default Suppression data. Copy the data to a new folder e.g. C:\CSUPPRESSION or C:\CDAT, where C indicates Centralized.

---

## Centralized Suppression files

On the machine selected as the Centralized File Server (CFS):

1. Install/copy your suppression files to e.g. C:\CSUPPRESSION
2. Copy the file SUPPLOC.SDBF (from the \matchITV51 directory) to the CFS dir e.g. C:\CSUPPRESSION\SUPPLOC.SDBF
3. Share this folder (allow all users, read only access) to enable access from the network via mapped drive or network share

On the matchIT clients (MIC):

1. Install/copy your suppression files to a local disk and set suppression file locations on the local copy of matchIT as usual (menu SUPPRESSION>SUPPRESSION OPTIONS>STANDARD SUPPRESSION OPTIONS). From within matchIT (using the menu VIEW>VIEW TABLE and change 'Files of type' to 'All files'), open MATCHIT.INI and under the CSUPPLOC field, enter the network path to your CFS where the SUPPLOC.SDBF file resides e.g. \\CFS\SUPPRESSION, then close MATCHIT.INI.
2. Open SUPPLOC.SDBF on the CFS e.g. \\CFS\CSUPPRESSION\SUPPLOC.SDBF.
3. Edit the path for all files from e.g. C:\CSUPPRESSION\DISCONNECT\DECEASED.SDBF to reflect the network path e.g. \\CFS\CSUPPRESSION\DISCONNECT\DECEASED.SDBF

When matchIT is started on the MIC a check is done comparing the local suppression files (as specified in the local SUPPLOC.SDBF) to the centralized suppression files. If the local file is older, the user is prompted to update the local copy. If they reply yes, ALL out of date MIC files are updated with CFS files. If they reply no, a warning is displayed stating that no local suppression files will be refreshed. Due to the size of the Suppression files, copying the entire set may take several minutes depending on data volumes and network speed/traffic.

---

## Centralized DAT files

### On the machine selected as the Centralized File Server (CFS):

1. Copy matchIT DAT files to C:\CDAT
2. Share this folder (allow all users, read only access) to enable access from the network via mapped drive or network share

### On the matchIT client (MIC):

From within matchIT (using the menu VIEW>VIEW TABLE and change 'Files of type' to 'All files'), open MATCHIT.INI and under the CDATLOCS field, enter the network path to your CFS where the CDAT files reside e.g. \\CFS\CDAT, then close MATCHIT.INI.

When matchIT is started, ALL files in the CDAT location with file extension DAT and also Business noise words.DBF and mail\_exclusions.dbf will be copied invariably to the local DAT location in PARAMS.DBF.

The DAT location may also be viewed/edited in matchIT via menu: JOB/SETUP>OPTIONS>FILE LOCATIONS, DAT FILES PATH

---

NOTE: The matchIT DAT location must be within the matchIT directory 'C:\Program Files\matchITV52' for update to take place. This restriction enables a user to use a non-standard local set of DAT files for a specific job (via matchIT Options, File Locations). Customized DAT files stored outside of the matchIT directory will not be updated.

---

# Database Utilities

---

## Functions of Database Utilities

You can run Database Utilities from the matchIT Program Group, or run FIXDB.EXE in the matchIT directory. This utility can be used for many different things, for example:

- modify layouts of matchIT's parameter tables
- search for corrupt tables or indexes in the matchIT directory tree
- rebuild corrupt indexes
- correct a corrupt database header
- permanently delete "logically deleted" records
- recall "logically deleted" records
- wipe a whole table permanently of all records
- view and report on any database (table)
- change a delimiter in an ASCII text file
- append to any table from DBF and text files
- export from any table to DBF and text files
- regenerate matchIT's UNIQUE\_REF so it is unique
- blank out a specific field in a database
- eliminate blank address lines by shuffling up later lines
- limit field widths to the maximum size of the data within them
- generate an Addressee field from Prefix, Forenames and Surname.

Only the most commonly used options are described below; the remainder are described in the Online Help.

---

Use the normal matchIT menus in preference to Database Utilities whenever possible as Database Utilities does not perform the usual safety checks that matchIT does.

---

---

## File Menu Options

**Choose Database:** to open a different database (table) from that selected previously

**Convert Text File:** while matchIT can cope with most standard data formats, occasionally you may have to deal with a non-standard data file. If you want to import a delimited file which has no Carriage Return Line Feed (CRLF) at the end of each record, matchIT has to convert it before Import. This option will convert such a file into comma delimited format (CSV). You will need to know how many fields there are in your data file and what the delimiting character is. Follow the on-screen prompts. You will then be asked for a filename for the newly created file.

**Append:** appends records into a DBF file from another DBF file, comma or tab delimited file, or an SDF (fixed length) file. This can be useful when you want to create a DBF quickly without matching, perhaps to do some reformatting before asking matchIT to process it. The field names and file layout must be the same before appending.

**Export Database:** exports a file to a choice of formats, with a new file name.

**Quit Database Utilities:** to return to Windows.

---

## Database Menu Options

All of these options ask you to select a database if one is not in use.

### Modify Structure

This option allows you to change the structure of any database (change the fields in a table).

### Undelete

If you select the Undelete option, all logically flagged records are recalled to the database, e.g. from when you flagged matches.

### Pack

Permanently deletes records from the table.

### Zap

Permanently deletes all records (not just logically deleted ones).

### Fix Header

This corrects a DBF file header where the number of records in the header is wrong, e.g. if you ran out of disk space during an Import

## Recreate Index

A DBF file cannot be used if it has a corrupt CDX index attached to it. This option will remove the index and then create a new one. It is the equivalent of deleting the CDX file through Windows Explorer and then using Reindex to index the DBF.

## Reindex

Recreates indexes for a DBF file (including matchIT's files, not just your Main Files).

## Browse Last/Reset Browse

These options allow you to change data, recall deleted records etc. In Database Utilities, unlike in View Table in matchIT, deleted records are visible but are denoted by a thick black line in the left margin. The Reset Browse option also makes the Browse window display revert to the default configuration, allowing you to set up a new view if you have a problem with the current view.

## Count Records

This option allows you to count the records in the database from the record that you are positioned on (for example, after Browsing) to the end of the file. If you have just opened the file, this will be the total number of records in the table.

---

# Field Menu Options

## Generate Unique Refs

Creates new unique references in the file, starting at the number you enter. This ensures the reference numbers are unique, for example if you have been having problems with matching. After selecting this option, you will need to redo any matching performed on the File.

## Check Unique Refs

Checks all the reference numbers (in a field called UNIQUE\_REF) are actually unique. If they are not, use generate unique references to recreate them (see above).

## Close up blank address lines?

If there are gaps in your address lines, either because of the original database layout or because matchIT has extracted, say, company names and zip codes, you can remove them using this option. It will move all address lines to the 'top' by filling Address1 first, then Address2, etc.

## Change Fields to Fit

Changes the width of all character fields in the Main File to the maximum width of the data in each field. This does not change or empty any of matchIT's key data fields.

## **Generate Addressee**

Creates a freeform name field from Prefix, Forenames and Surname – use this when the contents of Prefix, Forenames and Surname are not reliably the components of an individual's name e.g. Prefix = "The", Forenames = "Managing" and Surname = "Director".

---

# **Report Menu Options**

## **List Structure**

This option allows you to list (i.e. print out) the structure of any database.

## **Check Files**

This facility goes through the matchIT directory and all its sub-directories, attempting to open all of the database it finds. If there is an error opening a databases, this is reported to the screen, along with the name of the database, and the reason for the error. This can be extremely useful when there has been a hard disk crash, for instance, and a database (or index) has become corrupted. This option will be able to track it down straight away.

# Problems

---

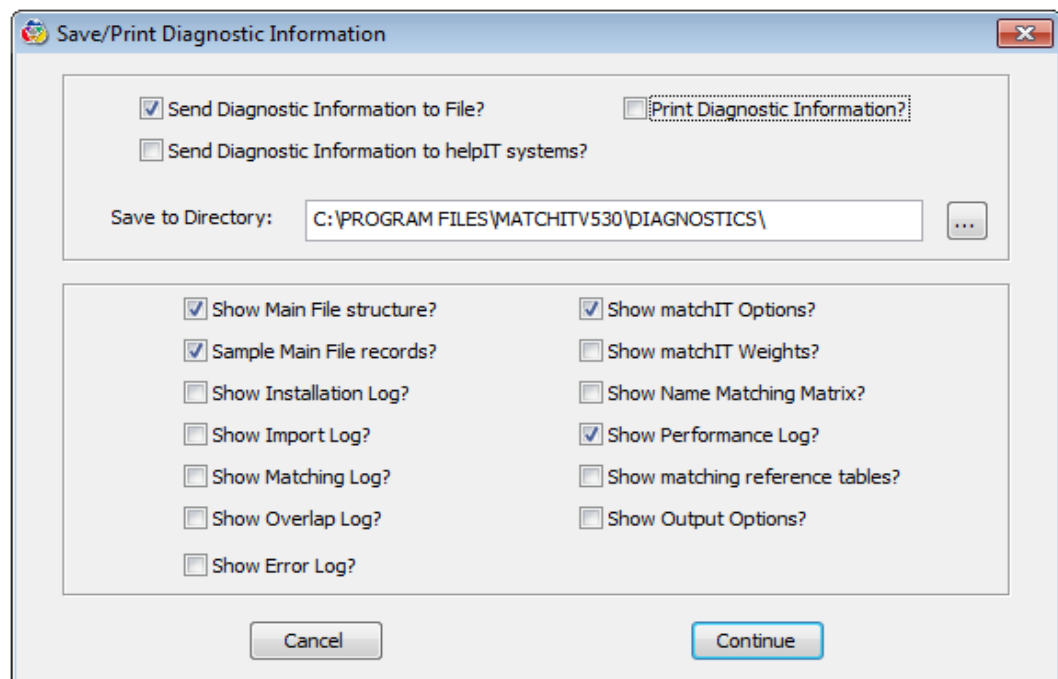
## Error Log

When an error occurs in matchIT, it is recorded in a log, along with some useful diagnostic information. You can examine the Error Log from the View menu. matchIT positions on the last error to occur – scroll up to see previous entries. Close this screen by pressing Esc or clicking the X in the top right corner. matchIT will then ask if you wish to print any of the entries – it will start with the last one.

When calling the support line, you may be asked to look up the program and line number recorded in this log. Also, not all errors are displayed in a message box on the screen – often the cause of the problem occurred earlier in operation. You should always scroll back in the error log, looking for the first record with the appropriate date and time.

---

## Print Diagnostic Information



From the Tools menu, this option allows you to easily send diagnostic information to a printer or file. If you send the report to file, it is advisable to send them to a clean directory – it may get a bit confusing otherwise. This allows you to simply see your current matching setup, the layout of your Main File, sample records and/or the logs matchIT produces. For example, these can help you work out why a matching run did not produce the expected results. These reports are:

- Main File Structure – the layout of the selected Main File
- Sample of Records – a dump of the first 100 and last 20 records in the selected Main File



- Installation Log – the date and time the installation started, and the files that were copied or replaced.
- Import Log – a record of the last import. If an import was aborted for whatever reason, the last record number will be shown – otherwise it will contain the number of records in the database.
- Matching Log and Overlap Log – The number of records in the database and the number of comparisons made while matching.
- Error Log – the contents of the MIERROR.DBF.
- matchIT Options – the contents of the PARAMS.DBF.
- matchIT Weights – the contents of the WEIGHTS.DBF.
- Name Matching Matrix – the contents of the NAMEPARM.DBF.
- Performance Log – the contents of the PERFORM.DBF.
- Matching Reference Table – the contents of the MATCHES.MDF.
- Output Options

---

## Solving Problems

### Error Messages

matchIT deals with errors by referring to a database of FoxPro error codes (MIACTION.DBF). it then takes the action indicated by the entry, in the database for that error. Full information about the error is recorded in the MIERROR database, this information can be vital for your support provider or your own PC support people to diagnose the problem. Each record in the MIERROR database is very large, so if the MIERROR.DBF grows to more than 100 records it is automatically cut back to the last 50 errors logged. The third database involved is MIPERSON.DBF. This contains two records; the first record contains the title, name and extension number of the on-site person responsible for supporting matchIT: you may change the details here by browsing the database and overkeying the information. The second contains details pertaining to your support provider, for reporting problems which may not be able to be resolved on-site.

If the error which occurs does not have a corresponding entry in MIACTION.DBF, the default error 99999 is used. You can update or add entries to MIACTION.DBF, to specify different treatment of the error. However, this should only be done on the advice of your support provider.

Accordingly, a list of error messages, their meaning and the action you should take is not printed here: in the event of an error, the relevant information will be displayed.

When the error display says "We'll carry on from where we can", matchIT waits a few seconds for a response, then carries on with the next step of the program. If you want to abort the process and return to the menu, press Escape.

## Problems Caused by Power Failure Etc.

Power failure or hardware/system software "glitches" causing data corruption are a common source of problems. This is usually during Import or Matching, as they are the longest duration processes. Any database the system is writing to at the time could be corrupted, giving the message

"NOT A TABLE"

when it is next used. The next line will contain the name of the database causing the problem e.g. MATCHES.DBF in the example in the previous section. If so, restore this file (which may be in one of the sub-directories of matchIT) from backup.

If you are not sure which file is corrupt, or have some problem starting matchIT, you can use the [Check Files](#) option in Database Utilities to find out which file(s) report problems.

You can selectively reinstall the versions of any files originally delivered: to do this, run the SETUP program on the installation CD (as for the initial installation) but add /X to the SETUP command e.g. run

D:SETUP /X

You will see a list of the installation files displayed on the screen. They are listed alphabetically by type i.e. all the DBF files are grouped together and all the FRX files are together etc. You need to select the file(s) you want to restore, and the directory you want to restore them to.

If the problem occurred during the Import run, the most likely database to be corrupted is the selected Main File. If you have modified the layout, there will be an earlier backup file in the DATABASE directory with the same name but with a file extension of BAK instead of DBF: rename it (in Windows Explorer) as \*.DBF; if there is no such file, copy the Main File from backup.

If the problem occurred during matching, the most likely databases to be corrupted are MATCHES.MDF, MERGES.MDF in the Main File directory, PERFORM.DBF in the DATABASE directory, or MATCHES2.DBF and/or SETS.DBF in the MATCHIT or REPORT directories (although any other database could have been corrupted, depending on the operation being performed). Copy files as necessary from backup, or the matchIT install disk. matchIT databases also require index files with an extension of CDX. In some circumstances, databases can be okay but index files corrupted. If a CDX is missing (or corrupt) matchIT will report the error.

"INDEX DOES NOT MATCH DATABASE FILE. RECREATE INDEX"

and/or

"DATABASE IS NOT ORDERED"

Index files can be recreated by using the Database Utilities Recreate Index option. Database Utilities can be entered by selecting the appropriate icon in the matchIT program Group in Windows, or by selecting the Database Utilities option from the matchIT Tools menu.

If you can't load matchIT at all, try entering Database Utilities (from the program group). Then choose Check Files, from the Report menu.

When you have recovered all the corrupted files, you will need to start the run again from the beginning of the step at which the problem occurred.

## Matching Problems

### Overview of Matching Problems

When reporting matches or overlap between files, matchIT looks up the full details for each record involved by using its unique reference number as stored in the Matches or Merges database.

When investigating problems with matching, before doing anything else, browse the Main File and check that the imported data looks okay, including the derived fields such as NAME, NAME1 etc. The Key fields are fairly obscure, but they should not in general be blank. If they are, or if e.g. the NAME2 field is blank, it could be because you have not allocated the right field names to the data (or the Intelligent Setup Wizard has not correctly identified the fields). You should check in particular that the right names have been used for people's names – usually ADDRESSEE for a name keyed all in one field and PREFIX, FORENAMES (or INITIALS), SURNAME when they are split up.

### Too Few Matches or Scores Too Low

Possible causes of these problems are:

- the Minimum Score to Report is too high
- the Weights are poor, or are placed on un-normalized fields such as Addressee
- the primary Match Keys you have used have caused matchIT not to look at some potential duplicates e.g. you have used NAME\_KEY + ZIP in one step, instead of ZIP in one step and NAME\_KEY or NAME\_KEY + LEFT(ZIP,5) in another step, or you have used an un-normalized field as a primary match key, such as Addressee
- you may have Match on Location set on in "[Matching Setup](#)" when you don't want to use it. If you want to consider matches based on e.g. contact and company names irrespective of location (address and zip code), you should uncheck this box.
- although you did more than one Find pass through the data, with different keys, you said "Yes" to "Is this a new Analysis" on the second pass, when you should have said "No."

If you still can't resolve the problem, find two records which should be reported as duplicates and contact your support team or your support provider.

### Too Many Matches or Scores too High

Some of the checks above are worth looking at, in case the problem is the reverse of that described above. You may also benefit from using primary Match Keys that do not allow some of the false matches to be reported (e.g. where records are being reported because they match on name and have a blank zip code, but the addresses are different, use LEFT(ZIP,5) + NAME1 starting at zip codes beginning with 'A', instead of NAME1 + LEFT(ZIP,5).

If you are dealing with foreign data (not from an English-speaking country), you may need to add common words to the [Names and Words](#) table to stop matchIT from paying any or too much attention to them when comparing records e.g. add Weg as an **Address** word for Holland and the Scandinavian countries.

If this does not solve the problem, see the section below.

## Totally False Matches Being Reported

Possible causes of this are:

### (a) Unique References are not Unique

If when you merge two databases and then View Matches or View Overlap, records are displayed with no similarities whatsoever, it is possible that the records do not have unique entries in the UNIQUE\_REF field. You can check the unique references by using Database Utilities, Check Unique Refs. If this field was not allocated by matchIT on Import, rename your input field as some other name (URN will do) and define a new field for UNIQUE\_REF and matchIT will allocate references that are unique.

---

When you import two databases for merging, be sure to start the next reference number in the second database higher than the last record number in the first database e.g. if the unique reference number of the last record in the first database is 5000, the next record number of the second database needs to be greater than 5000.

---

If you have merged databases together and forgotten to give them unique references when originally importing them, you can use the Database Utilities option [Generate Unique Refs](#) to regenerate them. You must then Find Matches or Find Overlap again to find the matches for the new reference numbers.

If this happened in a Job Script, make sure that you set the Next Reference Number in the Options (Input Options) for each step, so that each database has a unique range of references, or use the Multiple File Wizard which ensures uniqueness.

### (b) Inappropriate Report

Alternately, the problem could be due to having selected the wrong report. When choosing a report, make sure you select one appropriate to the options you have defined. If using one of matchIT's predefined reports, a sets report, for example, must contain the word 'SETS' in its name. Similarly, a pairs report must contain 'PAIRS' and an overlap report, 'MERGE'. Also, if you have found matches to business level, check you have chosen Business in the Report Format drop down list (View Matches dialog).

If you are using a report that you have modified, the report may be corrupt. It is worthwhile checking whether you have the same problem using the standard Business or Residential report, as delivered.

### (c) Indexing Problems

Otherwise, it could be caused by an indexing problem. Check this by selecting Browse Imported Records from the Import menu and ordering it on UNIQUE REF. If the unique reference numbers are not progressive the Index is corrupt. Solve this by using the Database Utility option, Reindex to reindex the Main File(s).

### (d) Find matches before you view them

matchIT may display completely false matches, with no similarities whatsoever if you select View Matches before you Find Matches. The reason is that matchIT retains information from the last matching runs that took place for a Main File in that directory.

---

## Frequently Asked Questions

The Frequently Asked Questions option is located in matchIT's Help menu. The FAQ page is updated regularly.

---

## Technical Support

If you are unable to find the answers you need in the Online Help or on our web site (especially in the "Frequently Asked Questions" area) or the documentation provided, please contact our support desk.

# Further Information

---

## Getting Started Guide

The matchIT Getting Started Guide is supplied to help new users become familiar with matchIT's main functions. We recommend that all new users work through this guide to gain familiarity with the matchIT environment and basic use of the system. If you don't have a hard copy, you can print the Getting Started Guide as it is available in Adobe Acrobat PDF format from the matchIT Help menu – you can obtain the Acrobat Reader software from Adobe's web site, [www.adobe.com](http://www.adobe.com).

---

## Online Help

More detail on some topics is given in the Online Help, to provide further information about advanced use of matchIT and the many parameters which can be manipulated. This is recommended for users who are familiar with matchIT and wish to learn about its advanced features, as well as for referencing when you want to configure matchIT for a specific task.

---

## Additional Modules/Licenes

matchIT can be easily expanded to accommodate different requirements. Some of these additional features you may have already noticed from sections of this manual. To find the level of matchIT installed, choose about matchIT from the Help menu.

Additional user licenes are also available, at a reduced rate for each additional licene.

For further information or to discuss your requirements, please contact your supplier (see "[Contact Us](#)" below).

---

## Contact Us

### US Locations

#### Texas Office

Website: [www.helpIT.com](http://www.helpIT.com)

Mailing address: helpIT systems inc  
600 W 28th Str, Ste 201  
Austin, TX 78705, USA

Support: +1 866 matchIT (866 628 2448)  
Main: +1 866 332 7132  
Fax: +1 866 532 0386

Support e-mail: [support.us@helpIT.com](mailto:support.us@helpIT.com)  
Sales e-mail: [sales@helpIT.com](mailto:sales@helpIT.com)

# Appendix

## Appendix A - Field Names & Usage

The section after this lists field names by their type of usage.

| Field Name | Width | Description   | Examples  | Input    | Matching | Mailsort | Notes  | Generated  |
|------------|-------|---|---|----------|----------|----------|--|--|
| ADDRESS1   |       | The first or only line of address                                 | Address1 can contain the whole address e.g. with each line separated by a comma | Yes      | Yes      | Yes      | You must have at least one address line for matching and for Mailsort.   | Cased or replaced by data from Postal Address File |
| ADDRESS2-9 |       | The second and subsequent lines of address                        |   | Optional | Optional | Optional | matchIT does not expect any structure to the address, so it is usually best to label all the address lines as Address1 through AddressN (maximum of 9 lines), even if you know that e.g. the third address line is the town and the fourth the county. | Cased or replaced by data from Postal Address File |
| ADDRESSSEE |       | Free form personal name in one field, as used in addressing mail. | MR G.C. SMITH<br>Geoff Smith Esq.<br>Mr G. Smith &<br>Miss S. Brown             | Optional | Optional | No       | If this field mostly contains personal names, with some company names or job titles, label it Addressee. This field can be generated from Prefix,  | Cased or generated from Prefix, Forenames, Surname |



|            |    |  |   |    |             |    | Forenames and Surname.                                     |   |
|------------|----|--|---|----|-------------|----|--|---|
| ADD_KEY    | 8  | This is a key derived by matchIT for use in matching, to pick up matches where postcode does not match or it is non-UK data.<br>By default, it is an 8 byte field, of which the first four characters represent the phonetic key of the town/city and the second four characters represent the street. | "bkymlymt" for a phonetic key of "The Cottage", 8 Lime-Tree Close, Gt. Bookham, Leatherhead, Surrey.<br><br>THECOTTAGE8LIMET-REECLOSEGTBOOKHAMLEATHERHEADSURREY for a non-phonetic key. | No | Recommended | No | See "Use Fast Address Key" in the Online Help.             | Yes   |
| BASE_SCORE | 10 | BASE_SCORE is the lowest matching score for a matching pair or a group of matching pairs.  | 105<br>98<br>130  | No | No          | No | A group of matching records will have the same BASE_SCORE. | Generated from the matchIT Weights table  |
| CARRIER    | 4  | Enhances data by adding the Carrier Route Code to records run through the addressIT module.  | C002<br>C045  | No | No          | No |  | Generated when the "Add Route Codes (CRRT)" option is turned on within the addressIT module |

|         |    |  |  |          |          |    |  |   |
|---------|----|--|--|----------|----------|----|--|---|
| CASSKEY | 20 | A unique address key is generated for each record when it is run through addressIT. The key is generated regardless of the record being a pass or failure. | A3CGCM9FHJBF<br>BPR1<br>A0ZZZZM3PPF6P<br>564 | No       | Optional | No | This field is created when the "Use USPS unique address key as additional matchkey" option is turned on within the addressIT module. | Generate a unique key from the returned ZIP+4 coding which is useful in enhancing the matching keys and results |
| CCODE   | 10 | Enhances data by adding County Code (FIPS) information to records run through the addressIT module.  | 053<br>125                                   | No       | No       | No |  | Generated when the "Add County Code (FIPS)" option is turned on within the addressIT module                     |
| CNAME   | 50 | Enhances data by adding the County name to records run through the addressIT module.   | DAVIDSON<br>LUCAS                            | No       | No       | No |  | Generated when the "Add County Name" option is turned on within the addressIT module                            |
| COMPANY |    | A company or business name.  |  | Optional | Optional | No | matchIT can move some company names from the Addressee or an address line to the Company field.                                      | Cased or moved from Addressee or address  |
| CONGDIS | 2  | Enhances data by adding  | 05<br>13                                     | No       | No       | No |  | Generated when the "Add   |

|          |        |   |                                    |          |          |          |  |   |
|----------|--------|---|------------------------------------|----------|----------|----------|--|---|
|          |        | the Congressional District to records run through the addressIT module.                       |                                    |          |          |          |  | Congressional District" option is turned on within the addressIT module |
| CONTACT  | 40 min | This is a form of the person's name that is suitable for addressing envelopes.                | Mr S Brown<br>Dr J A Baker MSc     | No       | No       | No       |  | Generated from the individual's name                                    |
| CORRCODE | 8      | Provides an informational code that describes why/what was address standardized for a record. | ART3<br>BLRT<br>D                  | No       | No       | No       | This field is only populated if the record was successfully address standardized.                                  | Generated by matchIT when the addressIT module is turned on             |
| COUNTRY  | 30     | Country   | USA<br>United Kingdom<br>Australia | Optional | No       | Optional | matchIT can move or copy countries from an address line to the Country field. Mailsort processing uses this field. | Cased or generated from address lines                                   |
| COUNTY   | 30     | UK County   |                                    | Optional | No       | No       | matchIT can move or copy valid UK counties from an address line to the Town field.                                 | Cased or generated from address lines                                   |
| COY_KEY  | 5      | Match key field consisting by default   |                                    | No       | Optional | No       | This field widens the choice of Match Keys   | Yes   |

|            |    |   |   |          |          |    |  |   |
|------------|----|---|---|----------|----------|----|--|---|
|            |    | of the phonetic key of the first key word in the business name.                                 |   |          |          |    | if you are matching on both people and company names in the same run.  |   |
| COY_NAME   | 40 | Standardized form of the business name in upper case, used for matching.                        | IBM,,<br>SMITH,KLINE,BE<br>ECHAM<br>MINISTRY,DEFE<br>NCE, | No       | Yes      | No | Stored as follows:<br>Surname,<br>First Forename (or initial),<br>Other forenames (or initials).<br>Each of these will be separated by the Name Delimiter. | Yes   |
| DEL_PRI    | 10 | DEL_PRI is set to the Deletion Priority of each record in a match set upon deletion.            |   | No       | Optional | No | For more information, see Deletion Priorities.   | Yes   |
| DEPARTMENT |    | Department name   |   | Optional | No       | No | No special processing by matchIT other than casing.  | Can be cased  |
| DPBAR      | 3  | Enhances data by adding the Delivery Point Barcode to records run through the addressIT module. | 494<br>756  | No       | No       | No |  | Generated when the "Add Delivery Point Barcodes (DPBC)" option is turned on within the addressIT module |
| DPV        | 6  | Enhances data by adding the Delivery Point Validation   | YNN<br>NN<br>DN   | No       | No       | No | Delivery Point Validation is now a requirement of CASS certification   | Generated by matchIT when the addressIT module  |

|            |    |   |                                    |          |          |    |   |   |
|------------|----|---|------------------------------------|----------|----------|----|---|---|
|            |    | n<br>informati<br>on<br>generated<br>by the<br>addressIT<br>module.   |                                    |          |          |    | .   | is turned<br>on   |
| ERRORCODE  | 2  | Provides an informational code that describes why a record failed the address standardization process.          | 8<br>2                             | No       | No       | No | If no ERRORCODE was generated the record is has been address standardized . The field is only populated for failed records.                       | Generated by matchIT when the addressIT module is turned on |
| FLAG       | 20 | Populated during Import or Generate Keys for use by the Data Summary and View Records By Category menu options. |                                    | No       | No       | No | Each position in the FLAG field specifies a different property for that record – the properties and values are listed at the end of this section. | Yes   |
| FOOTNOTES  | 8  | Provides an informational code that gives the specifics of the generated DPV field.                             | AAN1<br>AAM3                       | No       | No       | No |   | Generated by matchIT when the addressIT module is turned on |
| FORENAMES  |    | Forenames (or Christian names) or initials in one field.  | J, JR, J R, John Robert,<br>John R | Optional | Optional | No | matchIT will generate Forenames from information contained in an Addressee field if present.  | Cased or generated from Addressee                           |
| FORENAMES2 |    | Forenames for   | Similar to FORENAMES               | No       | Optional | No | matchIT will  | Generated from  |

|            |  |   |   |          |          |    |  |                                       |
|------------|--|---|---|----------|----------|----|--|---------------------------------------|
|            |  | second name.  |   |          |          |    | generate Forenames2 from the second name contained in an Addressee field if present.                                 | Addressee                             |
| IMPADD1-9  |  | The imported address lines that were run through address standardization (addressIT).       |   | Optional | Optional | No | If running your file through addressIT, matchIT will re-label your original address lines as IMPADD1, IMPADD2, etc.. | Yes                                   |
| IMPZIP     |  | The imported Zip code that was run through address standardization (addressIT).             |   | Optional | Optional | No | If running your file through addressIT, matchIT will re-label your original zip code as IMPZIP.                      | Yes                                   |
| INITIALS   |  | Initials of either just the middle forename(s), or of all the forenames.                    | Where the name of the person is John R Smith:<br><br>JR or J R if FORENAMES is not present or empty.<br><br>R if FORENAMES contains John. | Optional | Optional | No | If Forenames contains initials, they will be moved into the INITIALS field if present.                               | Generated from Addressee or Forenames |
| INITIALS 2 |  | Initials of either just the middle forename(s), or of all the forenames, for a second name. | As for INITIALS   | Optional | Optional | No |  | Generated from Addressee              |
| JOB_TITLE  |  | A job title or departme   |   | Optional | Optional | No | matchIT can move some job titles or  | Cased or moved from                   |

|            |      |   |                |                |    |    |  |   |
|------------|------|---|----------------|----------------|----|----|--|---|
|            |      | nt name.  |                |                |    |    | department names from the Addressee or an address line to the Job_Title field. | Addressee or address  |
| LOT        | 5    | Enhances data by adding the Line of Travel Information to records run through the addressIT module.   | 0356A<br>0108A | No             | No | No |  | Generated when the "Add Line Of Travel Information (LOT)" option is turned on within the addressIT module |
| MAILING_ID | 10   | This field will be set to the campaign identifier entered in the Output Campaign Options window, for every record included in the output file, or for which a label was printed or letter produced. |                | User specified | No | No | matchIT Campaign only  |   |
| MAIL_DATE  | Date | This field will be set to the mailing date entered in the Output options window, for every record included in the   |                | User specified | No | No | matchIT Campaign only  |   |

|           |                    |  |  |    |          |    |   |     |
|-----------|--------------------|--|--|----|----------|----|---|-----|
|           |                    | output file, or for which a label was printed or letter produced.  |  |    |          |    |   |     |
| MATCH_REF | Same as Unique_Ref | When you Flag Matches, MATCH_REF is populated with the UNIQUE_REF of the record that is retained from every set of matching records (a "duplicate group"). Alternatively, Group Matches from the matching menu just populates MATCH_REF. | If records 124, 318 and 960 are in the same match set and following the normal deletion rules, record 318 is deemed to be the record to keep, MATCH_REF will be set to 318 for all 3 records in the set. | No | Optional | No | For records that are not part of match sets, the MATCH_REF is set to the UNIQUE_REF.<br><br>MATCH_REF is not populated by merge/purge processing unless you use the Multiple File Wizard. | Yes |
| NAME      | 40                 | Standardized form of the personal name in upper case, used for matching.   | KELLY,JOHN,PA<br>TRICK<br>SMITH,G,C<br>TREVOR-ROPER,<br>HUGH,<br>FISCHER,HANS,<br>&<br>BRAUN,MARINA,   | No | Yes      | No | Stored as follows:<br>Surname,<br>First<br>Forename<br>(or initial),<br>Other<br>forenames<br>(or initials).<br>Each of these will be separated by the Name Delimiter.                    | Yes |
| NAME1     | 5                  | Standardized, usually phonetic, form of the surname or first key word in the   | dymym<br>D545<br>DENHOLM<br>depending on the phonetic matching option chosen.  | No | Yes      | No | This is used as a component of Match Keys for either Personal (individual, family or contact) or  | Yes |



|             |   |  |                  |    |          |    |   |     |
|-------------|---|--|------------------|----|----------|----|---|-----|
|             |   | company name.  |                  |    |          |    | Business matching.  |     |
| NAME2       | 5 | Standardized, usually phonetic, form of the first forename, or its initial or the second key word in the company name. | Similar to NAME1 | No | Yes      | No | For personal matching, this can be replaced by an equivalent form of the forename e.g. Anthony instead of Tony, or a phonetic key of Anthony.   | Yes |
| NAME2-FOUND | 1 | An indicator of whether the first forename in the Input record is in the NAMES table.                                  |                  | No | Yes      | No | If the first forename in the Input record is in the NAMES table for the sex, NAME2FOUND will be set to "Y". If it seems to be inconsistent with the SEX or PREFIX for that record, it will be set to "X". | Yes |
| NAME3       | 1 | Standardized, usually phonetic, form of the second forename, or its initial or the third key word in the company name. |                  | No | Yes      | No | Defaults to one character wide so it matches "middle names" just on their initial.  |     |
| NAME_KEY    | 6 | Match key field consisting by default of NAME1 plus the first  |                  | No | Optional | No | This field makes the choice of Match Keys simpler.  | Yes |

|          |        |   |  |          |          |     |   |  |
|----------|--------|---|--|----------|----------|-----|---|--|
|          |        | character of NAME2  |  |          |          |     |   |  |
| POSTCODE | 8 min  | Usually contains a full UK postcode.  | GU14 7BQ<br>W1A 1AA<br>E3 5HD<br>KT228DY | Optional | Optional | Yes | matchIT can extract (i.e. move) valid UK postcodes from an address line to the Postcode field.  | From address lines or from Postal Address File |
| PREFIX   | 10 min | Personal title  | Mr<br>Mrs<br>Dr<br>Professor             | Optional | Optional | No  | matchIT will generate Prefix from information contained in an Addressee field if present; otherwise it will try to deduce it from the forenames if present i.e. Mr or Ms. | Cased or generated from Addressee              |
| PREFIX2  | 10 min | Personal title for second name  | Similar to PREFIX                        | No       | Optional | No  | matchIT will generate Prefix2 from the second name contained in an Addressee field if present.  | Generated from Addressee                       |
| PREMISE  | 10 min | The premise number part of the address – this is the building number, not the apartment or unit number if there is one. | 260<br>2A<br>12-14                       | Optional | Optional | No  | matchIT can move or copy some premise numbers from an address line to the Premise field.  | Cased or generated from address lines          |
| QUAL     | 10 min | A qualificati   | B.Sc., ARCS, BCom                        | Optional | No       | No  | matchIT will  | Optional                                       |

|                |           |   |                             |              |          |    |  |   |
|----------------|-----------|---|-----------------------------|--------------|----------|----|--|---|
|                |           | on or qualificati<br>ons.   |                             |              |          |    | generate<br>Qualificatio<br>n from<br>information<br>contained in<br>an<br>Addressee<br>or Surname<br>field if<br>present. |   |
| QUAL_A<br>DDR  | 2         | Address<br>quality<br>score   | 3<br>9<br>5                 | Optio<br>nal | No       | No | matchIT<br>assigned<br>quality<br>score for<br>address<br>information.<br>See <a href="#">Address<br/>Quality</a> .        | Generate<br>d from<br>address<br>informati<br>on.   |
| QUAL_O<br>RG   | 2         | Organizat<br>ion<br>quality<br>score  | 99<br>50<br>05              | Optio<br>nal | No       | No | matchIT<br>assigned<br>quality<br>score for<br>Organizatio<br>n<br>information.<br>See<br>Organizatio<br>n Quality..       | Generate<br>d from<br>Organiza<br>tion<br>informati<br>on.  |
| QUAL_IN<br>DIV | 2         | Name<br>quality<br>score  | 8<br>1<br>6                 | Optio<br>nal | No       | No | matchIT<br>assigned<br>quality<br>score for<br>Name<br>information.<br>See <a href="#">Name<br/>Quality</a> .              | Generate<br>d from<br>Name<br>informati<br>on.  |
| QUAL_E<br>MAIL | 2         | Email<br>quality<br>score   | 9<br>0<br>2                 | Optio<br>nal | No       | No | matchIT<br>assigned<br>quality<br>score for<br>Email<br>information.<br>See <a href="#">Email<br/>Quality</a> .            | Generate<br>d from<br>Email<br>informati<br>on.   |
| REST_PH<br>ONE | 10<br>min | This is the<br>local part<br>of the<br>telephone<br>number,<br>obtained<br>by<br>stripping<br>out the<br>area code<br>(Std_code<br>) , spaces,<br>punctuati<br>on | 360070 in (01372)<br>360070 | Optio<br>nal | Optional | No |  | Can be<br>derived<br>from the<br>TELE-<br>PHONE<br>field. It<br>is useful<br>as a<br>match<br>key<br>either on<br>its own<br>or in<br>conjuncti |

|            |           |   |                         |          |          |    |   |  |
|------------|-----------|---|-------------------------|----------|----------|----|---|--|
|            |           | characters and characters after the local number such as extension numbers.   |                         |          |          |    |   | on with other fields                               |
| SALUTATION | 40 min    | This is a form of the person's name that is suitable for the top of the letter.   | Dear Mr Brown           | No       | No       | No |   | Generated from the individual's name               |
| SET_DUPS   | 5 numeric | If flagging match sets, SET_DUPS will contain the number of duplicates in a match set i.e. the number of records in the set less 1. |                         | No       | Optional | No | This field will be set to 0 if the record is unique, > 0 if the record is part of a match set.                | Yes  |
| SEX        | 1         | The gender of the personal name, if present.  | M, F or blank           | Optional | Yes      | No | matchIT uses this field in Individual matching if the corresponding Matching Option is set.                   | Generated from PREFIX or FORENAME, if not provided |
| STATE      | 30        | Non-UK State or Province.   |                         | Optional | No       | No | matchIT can move or copy non-UK states that are in its look-up table from an address line to the State field. | Cased or generated from address lines              |
| STD_CODE   | 7         | This is the area code for the   | 01372 in (01372) 360070 | Optional | Optional | No |   | Can be derived from the                            |

|            |        |   |   |          |          |    |  |                                   |
|------------|--------|---|---|----------|----------|----|--|-----------------------------------|
|            |        | telephone number.   |   |          |          |    |  | TELEPHONE field                   |
| SUFFIX     | 10 min | A title in a separate field following the surname.  | Esq, Jr   | Optional | Optional | No | matchIT will generate Suffix from information contained in an Addressee or Surname field if present.   | Optional                          |
| SURNAME    |        | The surname, typically when the name is split into component parts of Prefix, Forename and Surname. | Smith, van der Valk                             | Optional | Optional | No | matchIT will generate Surname from information contained in an Addressee field if present.   | Cased or generated from Addressee |
| TELEPHONE  |        | Telephone number  | 01372 360070<br>(01372) 360 070<br>01372-360070 | Optional | Optional | No | matchIT can split telephone numbers into two parts: STD_CODE for the area code and REST_PHONE for the local part of the number. The user can then effectively use REST_PHONE for matching. | No                                |
| UNIQUE_REF | 15 max | This field must be a unique key to the imported Main File record and must be of character type.     |   | Optional | Yes      | No | If you don't have unique reference numbers in the input file, matchIT allocates them sequentially.   | Optional                          |

|     |        |   |   |          |          |    |   |                    |
|-----|--------|---|---|----------|----------|----|---|--------------------|
| ZIP | 10 min | Usually contains a non-UK zip or other postal code. | US: 60010, 60010-5238 Australia: 2060<br>Canada: N1P4N4 | Optional | Optional | No | matchIT can move or copy some non-UK zip (postal) codes from an address line to the Zip field | From address lines |
|-----|--------|---|---|----------|----------|----|---|--------------------|

## Appendix B - Flag Field

| Pos | Flag Name   | Values   |
|-----|---|--|
| 1   | Exclusion Status<br>(see Note at bottom of the table) | <b>X</b> if exclusion words are found,<br><b>blank</b> otherwise   |
| 2   | Company Extracted                                     | <b>C</b> if company name has been extracted  |
| 3   | Company Acronym                                       | This is set to <b>1,2</b> or <b>3</b> if any part of the company name is an acronym  |
| 4   | Job Title/ Department                                 | <b>J</b> if job title extracted,<br><b>D</b> if department extracted   |
| 5   | Verified Postcode                                     | <b>V</b> if postcode was verified OK   |
| 6   | Extracted Postcode                                    | <b>E</b> if postcode was extracted OK  |
| 7   | Reserved  |  |
| 8   | Generated Prefix status                               | <b>P</b> - generated prefix,<br><b>Q</b> - changed prefix,<br><b>S</b> - used supplied prefix<br><b>blank</b> - no personal name processing  |
| 9   | Salutation status                                     | <b>S</b> - default salutation generated<br><b>G</b> - non-default (success!) salutation generated<br><b>blank</b> - no salutation field  |
| 10  | Original Initial                                      | Set to the first letter of the input forename field  |
| 11  | Original Initial #2                                   | First letter of second input forename, if any  |
| 12  | Second Name Sex                                       | Set to sex of second name if supplied & possible to calculate  |
| 13  | Foreign status  | <b>F</b> if record is foreign  |
| 14  | Postcode vs. Town Flag                                | <b>X</b> if postcode disagrees with post town  |
| 15  | Key Generation Method                                 | If Phonetic Address Key was used:<br><b>B</b> - business keys used,<br><b>I</b> - personal keys used<br>If Fast Address Key was used:<br><b>C</b> - business keys used,<br><b>J</b> - personal keys used |

|    |                |   |
|----|----------------|---|
| 16 | Premise status | <b>X</b> if premise extracted,<br><b>C</b> if premise copied  |
| 17 | Zip status     | <b>X</b> if zip extracted,<br><b>C</b> if zip copied          |
| 18 | Town status    | <b>X</b> if town extracted,<br><b>C</b> if town copied        |
| 19 | County status  | <b>X</b> if county extracted,<br><b>C</b> if county copied    |
| 20 | Country status | <b>X</b> if country extracted,<br><b>C</b> if country copied. |

---

There is a setting in Basic Parameters dictating how to treat exclusions. If it is set to Delete, these records will be deleted on Import. If it is set to Mail, they will not be deleted, but will have an 'X' placed in their Flag field.

---



## Appendix C - NCOA Return Codes

| Code   | Description   | Address How |   |
|--------|---|-------------|---|
| A      | <b>COA Match</b> - The input record matched to a COA record. A new address could be furnished. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | Y           | D |
| 6<br>6 | <b>Daily Delete</b> – The input record matched to a business, individual or family type COA record with an old address that is present in the daily delete file. The presence of an address in the daily delete file means that a COA with this address is pending deletion from the COA master file and that no mail may be forwarded from this address. This return code may be returned regardless of the processing mode, matching logic or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode. | N           | S |
| 0<br>0 | <b>No Match</b> - The input record COULD NOT BE matched to a COA record. A new address could not be furnished. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: When processing in any mode and this return code is received it is required to attempt the match again using the next level of matching logic allowed by the processing mode.  | N           | D |
| 0<br>1 | <b>Found COA: Foreign Move</b> – The input record matched to a COA record but the new address was outside the USPS delivery area. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | N           | D |
| 0<br>2 | <b>Found COA: Moved Left No Address (MLNA)</b> – The input record matched to a COA record, but the new address was not provided to USPS. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved then no other matching attempts are permitted regardless of the PROCESSING mode.   | N           | D |
| 0<br>3 | <b>Found COA: Box Closed No Order (BCNO)</b> – The Input record matched to a COA record containing an old address of PO BOX, which has been closed without a forwarding address provided. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | N           | D |
| 0<br>4 | <b>Cannot match COA: Street Address with Secondary</b> – In the STANDARD mode utilizing Family matching logic the input record was a potential match to a family type COA record with an old address that contained secondary information. The input record does not contain secondary information. The record is a ZIP + 4 street level match. This address match situation requires individual name matching logic to obtain a match and individual names do not match. Please Note: This   | N           | D |

|    |   |   |   |
|----|---|---|---|
|    | return code is only obtained when processing in the STANDARD mode using Family matching logic.  |   |   |
| 05 | <b>Found COA: New 11-digit DPBC is Ambiguous</b> – The input record matched to a COA record. The new address on the COA record could not be converted to a deliverable address because the DPBC represents more than one delivery point. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.   | N | D |
| 06 | <b>Cannot Match COA: Conflicting Directions: Middle Name Related</b> – There is more than one COA record for the match algorithm and the middle names or initials on the COAs are different. Therefore, a single match result could not be determined. This return code is only obtained when using individual matching logic. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | N | D |
| 07 | <b>Cannot Match COA: Conflicting Directions: Gender Related</b> – There is more than one COA record for the match algorithm and the genders of the names on the COAs are different. Therefore, a single match result could not be determined. This return code is only obtained when using individual matching logic. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.   | N | D |
| 08 | <b>Cannot Match COA: Other Conflicting Instructions</b> – The input record was a potential match to two COA records. The two records were compared and due to differences in the new addresses, a match could not be made. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.   | N | D |
| 09 | <b>Cannot Match COA: High-rise Default</b> – The input record was a potential match to a family COA record from a High-rise address ZIP + 4 coded to the building default. This address match situation requires individual name matching logic to obtain a match and individual names do not match. Please Note: This return code is only obtained when processing in the STANDARD mode using Family matching logic.   | N | D |
| 10 | <b>Cannot Match COA: Rural Default</b> – The input record was a potential match to a family COA record from a Rural Route or Highway Contract Route address ZIP + 4 coded to the route default. This address situation requires individual name matching logic to obtain a match and individual names do not match. Please Note: This return code is only obtained when processing in the STANDARD mode using Family matching logic.  | N | D |
| 11 | <b>Cannot Match COA: Individual Match: Insufficient COA Name for Match</b> – There is a COA record with the same surname and address but there is insufficient first/middle name information on the COA record to produce a match using individual matching logic. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual Logic, discontinue the Individual logic sequence and go straight to the FAMILY matching logic. | N | D |
| 1  | <b>Cannot Match COA: Middle Name Test Failed</b> – The input record   | N | S |

|        |  |   |   |
|--------|--|---|---|
| 2      | was a potential match to a COA record. A match cannot be made because the input name contains a conflict with the middle name or initials on the COA record. This return code is only obtained when using individual matching logic. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.   |   |   |
| 1<br>3 | <b>Cannot Match COA: Gender Test Failed</b> – The input record was a potential match to a COA record. A match cannot be made because the gender of the name on the input record conflicts with the gender of the name on the COA record. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual logic, discontinue the Individual logic sequence and go straight to FAMILY matching logic.  | N | S |
| 1<br>4 | <b>Found COA: New Address Would Not Convert at Run Time</b> – The input record matched to a COA record. The new address could not be converted to a deliverable address. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | N | S |
| 1<br>5 | <b>Cannot Match COA: Individual Name Insufficient</b> – The input record was a potential match to a COA record that contains a first initial and middle initial/name [ex. C M Smith or C Mary Smith]. A match cannot be made because the input middle initial/name is missing or does not equal the middle initial/name on the COA. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual logic, discontinue the Individual logic sequence and go straight to FAMILY matching logic.   | N | S |
| 1<br>6 | <b>Cannot Match COA: Secondary Number Discrepancy</b> – The input record was a potential match to a street level COA record. However, a match is prohibited based on one of the following reasons: 1) There is conflicting secondary information on the input and COA record; 2) the input record contained secondary information and matched to a family record that does not contain secondary information. In item 2, this address match situation requires individual name matching logic to obtain a COA match and individual names do not match. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.       | N | S |
| 1<br>7 | <b>Cannot Match COA: Other Insufficient Name</b> – The input record was a potential match to a COA record that contains a full first name and full middle name. The input middle initial/name is missing or different from the middle name on the COA. A match cannot be made because the first name on the COA was truncated (drop-n flag) and the middle names must be equal in order to make this match. This return code is only obtained when using individual matching logic. Please Note: When processing in the STANDARD mode and this return code is received utilizing Individual Logic, discontinue the Individual logic sequence and go straight to FAMILY matching logic. | N | S |
| 1<br>8 | <b>Cannot Match COA: General Delivery</b> – The input record was a potential match to a COA record from a General Delivery address. This address situation requires individual name matching logic to obtain a   | N | D |

|        |   |   |   |
|--------|---|---|---|
|        | match and individual names do not match. Please Note: This return code is only obtained when processing in the STANDARD mode using Family matching logic.   |   |   |
| 1<br>9 | <b>Found COA: New Address not ZIP+4 coded or New address primary number not DPV confirmable</b> – There is a change of address on file but the new address cannot be ZIP + 4 coded and therefore there is no 11-digit DPBC to store or return, or the new address primary number cannot be confirmed on DPV. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode. | N | D |
| 2<br>0 | <b>Cannot Match COA: Conflicting Directions after re-chaining</b> – Multiple COA records were potential matches to the input record. The COA records contained different new addresses and a single match result could not be determined. This return code may be returned regardless of the processing mode, matching logic, or COA type. Please Note: If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | N | D |
| 7<br>7 | <b>ANK: ANK will not return the actual new address</b> - ANK will however provide users a return code indicating a probable move occurred in months 19 - 48, along with the move-effective date. You should suppress these records from your database or flag these records for deletion and not mail to them   | N | D |
| 9<br>1 | <b>COA Match: Secondary Number dropped from COA</b> – The input record matched to a COA record. The COA record had a secondary number and the input address did not. Please Note: This return code is derived from Individual and business matching logic only. If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | Y | S |
| 9<br>2 | <b>COA Match: Secondary Number Dropped from input address</b> – The input record matched to a COA record. The input address had a secondary number and the COA record did not. The record is a ZIP + 4 street level match. Please Note: This return code is derived from individual and business matching logic only. If this return code is achieved, no other matching attempts are permitted regardless of the PROCESSING mode.  | Y | S |

## Appendix D - Cass Certification Return Codes

These are codes given if your address could not be certified. These codes will be in the field "ncoaResult".

| Code  | Description  |
|-------|--|
| Blank | The address has been successfully coded.   |
| 1     | The address is coded but undeliverable (i.e. on side of street known to contain no houses).                          |
| 2     | The ZIP code was not found and the city and state cannot be used to determine a geographical area to search.         |
| 3     | Coding would result in changing both ZIP and city. This is illegal for PO BOX and route type addresses.              |
| 4     | The best match would result in too many suspicious changes.  |
| 5     | The street was identified as an alias but was out of the range restricted for that alias.                            |
| 6     | No street address was given.   |
| 7     | There are no street name matches in the given ZIP code or in any geographically-related ZIP code.                    |
| 8     | The street may contain superfluous components which cannot be discarded with confidence                              |
| 9     | The house number could not be matched.   |
| 10    | The best match was made to a ZIPMOVE record but was not an exact match.  |
| 11    | A ZIPMOVE match was made but no exact match could be found in the new ZIP.   |
| 12    | The Early Warning System indicates that an exact match will become available in the next database update.            |
| 13    | There are multiple matches with the same degree of confidence. This may indicate an inconsistency in the USPS data.  |
| 14    | Incorrect suffix, directional, street name, or unit resulted in multiple matches with the same degree of confidence. |
| 15    | Incorrect ZIP, city, or urbanization resulted in multiple matches with the same degree of confidence.                |
| 16    | A corrected field was too long to fit into the supplied field.   |
| 17    | Media Error. The database could not be read because of a hardware or system problem.                                 |

---

## Appendix E - NCOA Processing Codes

### RETURN CODES FOR NCOA PROCESSING

The following Return Codes will appear on the NCOA Processing Summary Report:

#### PRE-PROCESSES PERFORMED:

N = None

Y = Yes but with no data modifications

D = Yes, data modifications from sources other than postal data

P = Yes, data modifications from postal data only (ie: ZIP+4, DPV)

B = Yes, data modifications from postal and other sources

#### CONCURRENT PROCESSES PERFORMED

N = None

Y = Yes but with no data modifications

D = Yes, data modifications from sources other than postal data

P = Yes, data modifications from postal data only (ie: ZIP+4, DPV)

B = Yes, data modifications from postal and other sources

#### POST-PROCESSES PERFORMED

N = None

Y = Yes but with no data modifications

D = Yes, data modifications from sources other than postal data

P = Yes, data modifications from postal data only (LACSLink™)

B = Yes, data modifications from postal and other sources

#### STANDARD OUTPUT RETURNED

Y = All NCOALink

required output returned to client

N = Post-processes modified return information (ie: updates applied to list)

B = Post-processes modified return information; however, separate file containing all required output data was also returned

#### MATCHING LOGIC APPLIED

S = Standard (Business, Individual and Family matches allowed)

I = Individual only

B = Business only

C = Individual and Business only

R = Individual and Family only

#### **DATA RETURNED**

C = COA Data Returned (including footnotes and processing statistics)

F = Footnotes (no COA data included; may include processing statistics)

S = Statistics only (no COA data or footnotes provided)

#### **CLASS OF MAIL**

Alphanumeric. Class of mail to be used for mailings produced from customer mailing list.

A = First-Class only

B = Periodicals only

C = Standard Mail only

D = Package Services only

E = First-Class & Periodicals

F = First-Class & Standard Mail

G = First-Class & Package Services

H = Periodicals & Standard Mail

I = Periodicals & Package Services

J = Standard Mail & Package Services\

K = First-Class, Periodicals & Standard Mail

L = First-Class, Periodicals & Package Services

M = First-Class, Standard Mail & Package Services

N = Periodicals, Standard Mail & Package Services

O = First-Class, Periodical, Standard Mail, Package Services

---

## Appendix F - Correction Codes

The correction codes are used to describe what was done to the address in the coding process. Each coded record will be assigned a string of one or more characters. The user may assign any size field to hold the correction codes. If the field is too short, then the codes will be truncated without error. Simply add the field "ncoaCorrections" to your list.

| CODE | DESCRIPTION                         |
|------|-------------------------------------|
| A    | Normal street match                 |
| B    | PO BOX match                        |
| C    | Route type match                    |
| D    | 'Unique ZIP' match                  |
| E    | 'Small town' match                  |
| F    | Alias match                         |
| G    | 'Highrise alternate' match          |
| H    | Firm match                          |
| I    | Highrise match                      |
| J    | Highrise default match              |
| K    | Route default match                 |
| L    | Street name corrected               |
| M    | Street suffix corrected             |
| N    | Predirectional corrected            |
| O    | Postdirectional corrected           |
| P    | City corrected                      |
| Q    | State corrected                     |
| R    | ZIP corrected                       |
| S    | Urbanization corrected              |
| T    | ZIP+4 corrected                     |
| U    | House number corrected              |
| V    | Unit number corrected               |
| W    | Secondary unit designator corrected |
| X    | Firm corrected                      |
| Y    | Street swapped with firm            |
| Z    | Street swapped with alternate       |



|   |   |
|---|---|
| 0 | Dual address changed to PO BOX                |
| 1 | Dual address street match                     |
| 2 | Input city is not preferred but is acceptable |
| 3 | Street standardized                           |
| 4 | Unit not verified                             |
| 5 | Leftovers found                               |
| 6 | ZIPMOVE match                                 |
| 7 | LACSLINK match                                |
| 8 | SuiteLink match                               |

---

## Appendix G - DPV Return Codes

The DPV field consists of three characters and returns information in the following format:

The DPV field is 6 characters wide; it enhances data by adding the Delivery Point Validation information generated by the addressIT module. The placement of the character code indicates which process was performed.

A) DPV Match Indicator (First position in field):

Blank Address was not assigned a Zip+4 and therefore no DPV processing was performed.

Y Address was DPV confirmed for both primary and (if present) secondary numbers.

D Address was DPV confirmed for primary number only, and Secondary number information was missing.

S Address was DPV confirmed for primary number only, and Secondary number information was present but unconfirmed.

N Both Primary and (if present) Secondary number information failed to DPV Confirm. (These are non-deliverable records)

B) DPV CMRA (Commercial Mail Receiving Agency) Indicator (Second position in field):

Blank Address was not assigned a Zip+4 and therefore no DPV processing was performed.

Y Address was found in CMRA table.

N Address was not found in CMRA table.

C) DPV False Positive Indicator (Third position in field):

Blank Address was not assigned a Zip+4 and therefore no DPV processing was performed.

Y Address was found in False Positive table.

N Address was not found in False Positive table.

D) DPV Vacant Indicator (Fourth position in field):

Blank Address not presented to hash table

Y Address was found in Vacant table. (A delivery point was active but is currently vacant, usually for more than 90 days and not currently receiving deliveries)

N Address was not found in False Positive table.

## **USPS Standardized Footnotes**

### **Footnotes Reporting CASS Zip+4 Certification**

AA – Input address matched to the ZIP+4 file.

A1 – Input address not matched to the ZIP+4 file.

### **Footnotes Reporting DPV Validation Observations**

BB – Matched to DPV (all components).

CC – Primary number matched to DPV, but secondary number not matched (present but invalid).

N1 – Primary number matched to DPV, but high-rise address missing secondary number.

M1 – Primary number missing.

M3 – Non-postal Primary number invalid.

P1 – Input Address RR or HC Box number Missing.

P3 – Input Address PO, RR, or HC Box number Invalid.

F1 – Input Address Matched to a Military Address.

G1 – Input Address Matched to a General Delivery Address.

U1 – Input Address Matched to a Unique ZIP Code.

### **Footnotes Reporting CMRA Observation**

A commercial mail-receiving agency (CMRA) is a private business that acts as the mail-receiving agent for specific clients by providing a delivery address and other services. If the address matches to a CMRA location one of the following footnotes will appear.

RR – Matched to CMRA.

R1 – Matched to CMRA but Secondary Number not Present.