Data Validation State Web Software
Version 1.1

Tax Application Tutorial

U.S. Department of Labor
Employment and Training Administration
Office of Workforce Security
Unemployment Insurance Program

November 2007

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About This Tutorial

This document provides a tutorial for the tax application of the Data Validation (DV) State Web Software Version 1.1.

Technical Support

If any problems are encountered with the software, contact the Office of Workforce Security (OWS) Technical Support Staff (Hotline) at 1-800-473-0188 or send an email to hotline@uis.doleta.gov.

Software Training

The Minnesota Training Center offers training on the Data Validation State Web Software. Check current offerings at http://www.tc.state.mn.us/calendar.html. You can register for courses online, by email (wanda.burth@state.mn.us) or by calling the training center at 651-297-3393.

Typographic Conventions

This document uses the following typographic conventions.

Visual Cue	Meaning
1 **2**	Sequenced steps to follow when completing a task
Black bold type	Button
Blue type	Box title
Purple underlined type	Links on the software that you can click on
Blue underline type	Web or email address
Italics	Documents, screen names and menu options
	Indicates where to click on the software screen
	Note with additional information
	Tip

Software Requirements

To use the Data Validation State Web Software you will need a computer with Internet Explorer Version 6.0 or later.

You will also need a user name and a password that you can obtain from your system administrator.

In order to perform data validation you need to load extract files into the software. Specifications on how to build these extract files are available in *Appendix F, UI Tax Record Layouts* of the *ETA Handbook 361- B Tax*. All extract files to be loaded into the software must be copied to the "/opt/dv/data/" directory in your state SUN server. Extract file names must have a .txt extension and contain no spaces.

Fixes and New Features Included in Version 1.1

The following fixes and enhancements were incorporated in the Tax application of the Data Validation State Web Software Version 1.1:

Feature Type	Description
Fixed Problems in Prior Release(s)	Transmission functionality has been fixed to disallow transmission of incomplete results. Load function has been fixed so that a load doesn't get aborted when a row in the extract file contains a missing value or contains a value in a field that should be blank. FIV samples in Tax Population 1 have been fixed to be randomly selected. Sorts have been fixed for Tax Population 2. Time-lapse calculation has been fixed for Tax Population 3. Other minor fixes, like label corrections, etc., have been completed.

Feature Type	Description
Enhancements	When a population is loading, all the other functions have been locked for that loading population. The 'import' function for all other Benefit and Tax populations, has also been locked. All other functions are available for the other populations.
	Sizes of some fields have been increased to accommodate state codes.
	Added submission date stamp to all submissions. The submission date stamp will be used to distinguish among submissions made or picked up on the same day.
	Added last import and last transmit dates to Main Menu for each population.
	Modified the Tax application so that RV, Sorts, and FIVs are submitted to the National Office as a set. The application first checks that all validations have been completed and then gives the user the option to submit the population as a set.
	Added N/A and Score columns in the tax application for the data element sorts. Number of Cases column is now calculated by the application.
	Comments size has been increase to 512 characters. Separate comments are now available for Report Validation, Data Element Validation, and Wage Item Validation.
	Report Validation of Dollars and Counts has been combined into one screen.
New Specifications	Duplicate detection criteria have been revised for some Benefits and Tax populations.
	E-mail features were added to Notify the National Office: • when a state submits any data, and • when any data are missing from the Data Pick-up module

Introduction

The Data Validation Program

States are required to file a series of standardized reports on their Unemployment Insurance (UI) operations with the Employment and Training Administration (ETA) of the U.S. Department of Labor (DOL). Reports covered by the data validation program are required on a monthly or quarterly basis.

These reports are used to establish the volume of activity conducted by state UI administrations and are a factor in establishing funding levels. They provide information about state compliance with UI requirements. They also provide information about the amount of benefits paid, the number of claimants served and other information useful in measuring the U.S. economy and projecting trends.

Since state programs differ significantly within established parameters and states utilize a variety of accounting and data processing arrangements, the issue of the comparability among state reports has emerged. State reporting requirements are standardized, but states use a variety of reporting procedures and must interpret reporting requirements within the context of their own laws and accounting conventions.

The UI Data Validation (DV) program was established in an attempt to identify and address discrepancies in reported numbers. The program requires that states recreate reported numbers independently from their reporting process and compare these numbers with actual numbers reported to DOL. States must address any discrepancies found that exceed the established error tolerance. The DV program also requires that states examine a sample of reported cases to verify that the correct information is being counted.

The Data Validation State Web Software facilitates the validation process and generates standardized outputs that document the state data validation results.

The data validation process is divided into two main validation processes: Report Validation (RV) and Data Element Validation (DEV). RV verifies that reported numbers in ETA reports are accurate, i.e., that the process the state uses to count transactions is correct. DEV refers to the investigation of samples of records to establish that the information in individual records is accurate and conforms to federal reporting requirements, i.e., that the state is counting the right transactions.

The Tax validation system uses "minimum" samples, called "File Integrity Validation" or FIV samples, which consist of two records per sub-population within an extract file. The sample frame for each sample consists of a set of specific sub-populations within a given extract file. Records included in a sample

are displayed along with the data elements to be validated in a data entry screen. Investigators review each record, identify any elements found to be erroneous, and data-enter this information into the system. In Tax, even one error causes a population sample set to fail.

The software also provides a sort utility for Populations 1 – 4; for Population 5, the sort utility isn't available. It tests whether any secondary codes or EAN values support the primary codes (such as A for Active or C for Contributory employers) used to classify extracted transactions. Sorts pass if fewer than 2% of the sorted transactions involve discrepancies.

The Wage Item Validation component of DV requires validation of incoming information provided by employers pertaining to wages paid to individuals on a quarterly basis (Wage Records). This information is not included in extract files. Validation of wage record information requires a review of incoming information and a comparison of reported numbers included in the ETA 581 Report count with re-constructed counts. This information is key-entered into the software and forwarded to DOL.

Definitions

Certain terms used in the validation process have a specialized meaning within the context of the DV program:

1. *Extract Files*. These files consist of information *extracted* from state production databases. This information is organized into rows and columns that represent state's UI transactions. They are used as input for the DV software.

2. *Record Layouts*. These documents provide detailed information on how to build the extract files. They can be found in the software (see Viewing the Record Layouts section) or in *Appendix F, Record Layouts* of the *ETA Handbook 361- B, UI Tax Employer Contributions Data Validation Handbook.*

3. *Module 3*. This State-specific document maps the data elements in the record layouts and samples to elements in individual state systems.

4. *Populations*. Populations are sets of state transactions specific to a particular activity. For example, Population 5 concerns Field Audits, reported on lines 501 and 502 of the EYA 581 report. An extract file must be constructed for each population.

5. *Subpopulation*. Each record in a given population is assigned to a specific subpopulation. For example, in Tax Population 5, Large Employer Change

audits are assigned to Subpopulation 5.1, and Large Employer No-change audits to Subpopulation 5.2. Records in subpopulations are used to reconstruct reported counts.

Navigating the System

The DV software is a web-based application with certain characteristics that the user should be aware of.

- *Multiple users*. The software supports multiple, concurrent users. However, it was not designed to allow, for example, update of a single table by multiple users at the same time.

- *Time Out*. You will be automatically logged out from the application if you are inactive for more than 59 minutes. To maintain your session hit a keystroke or move your mouse. You should perform "save" operations frequently if there is a danger of work being lost due to inactivity. During the extract loading operation, the time-out parameter is set to four hours, to allow large extract files to be loaded without interruption.

- *Exit from Screens*. The user can exit from a secondary window within the application through use of the "X" in the upper right corner of the window. Be aware that the "X" at the extreme upper corner of a primary screen will exit the user from the entire application. This will require the user to sign on again and may result in lost data.

- *Use of the **Back** button*. The Internet browser has a **Back** button that allows the user to return to a previous screen. Users should be aware that use of this button may result in unexpected results. This problem can be avoided by using the links on the software screens that were designed to navigate to previous screens. For example, the Home link at the bottom of a screen will take you back to the *Benefits Selection Criteria* screen.

- *<Control End> and <Control Home>*. <Control End> will take you immediately to the bottom of any screen and <Control Home> to the top.

- *Print Function*. To print screens, use the print function on your browser or, if available, the print button at the bottom of the screen. Some screen sizes exceed the width of a portrait print. In this case try the landscape option on your printer. You can also try copying the screen to Word, Excel or some other utility and print from there. System administrators should be able to assist you if you encounter problems.

- *Save* and *Save As Functions*. Use the **Save** button to save data in the DV application. Saved data for a given population are overwritten when a new extract file for that population is loaded. The **Save As** button allows you to save a screen shot of the current software screen, outside the DV software. Screen shots saved outside the application are not affected by loading new extract files. The **Save As** button can be used to save screen shots of summary reports and DEV worksheets to satisfy audit requirements.

- *Help functions*. The application has <u>Help</u> links on certain screens. Click on this link to display information relevant to the data or functions available on the screen.

Logging On

To log on to the data validation software, follow the next steps.

1 Go to your state Unemployment Insurance *Applications Menu* screen, select Data Validation, and then select Main Login.

2 On the *Data Validation* login screen, enter your User Name. Example: dv3

Screen shots in this tutorial might look different (fonts and colors) from your screen due to your desktop and browser settings.

3 Enter your Password**.**

DATA VALIDATION

User Name	dv3
Password	••••••

Benefits ○ Tax ◉

Login   Clear Query

> User name and password are assigned by your state system administrator.

> Passwords are case-sensitive, i.e., the operator must use capitals letters if this is part of the password.
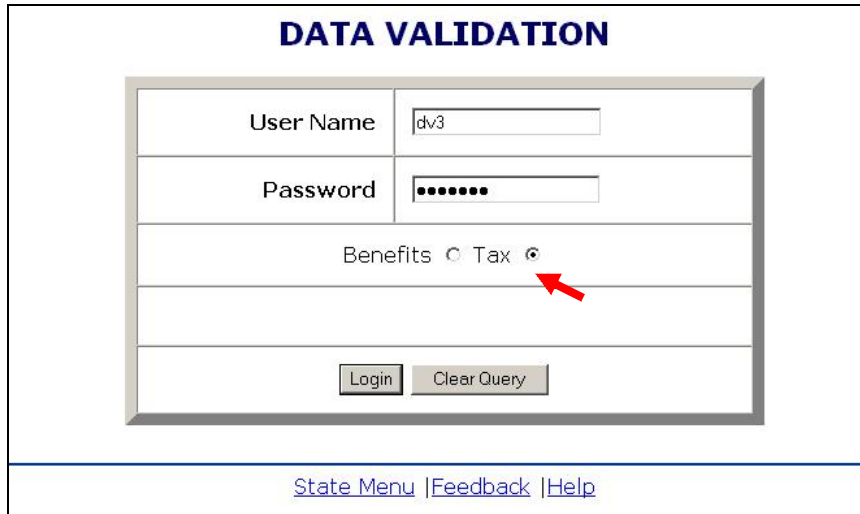
The State Menu link at the bottom of the screen returns you to the state menu. The Feedback link accesses contact information for technical problems. The Help link accesses information on all available functions on the screen.

4 Select **Tax** if is not already selected (Benefits is selected by default)

5 Click on the **Login** button.

6 You should see the *Tax Selection Criteria* screen.

DATA VALIDATION - TAX ℹ

Tax Selection Criteria

Report Quarter	[▼] Year [ ]
Population	[▼]
Report Due Date	[ ] 🔢
Choose Function	[▼] Go

Login Feedback Help

The Login link at the bottom of the screen will take you back to the login screen. Click on Report Quarter, Year, Population, Report Due Date, and Choose Function for additional information on these parameters.

Viewing the Record Layouts

In order to use the data validation software, you need to have an extract file which contains the required data for the reporting period you want to validate. The data in the file should be extracted from your state production system in accordance to the specifications described in *Appendix F, UI Tax Record Layouts,* of the Data Validation handbook. You will need 5 extract files; one for each tax population.

The extract files specifications, or record layouts, are also available in the software. To view them, follow the next steps.

1 On the *Tax Selection Criteria* screen, click on the Population link.

2 To see the record layout of a population click on the population's link.

The record layout for the population will be displayed.

Importing an Extract File

To validate the parts of the report covered by a population, you must first import the population extract file to the software. To import an extract file, follow the next steps.

1 Select a population from the Population drop–down menu.

When you select a population, on the lower left corner of the screen you will see the last date this population was imported. If you have never imported this population it will display "Never".

If you have already imported the population, you will see the last day it was imported and the user that imported it. You will also see the last date results were transmitted to DOL.

2 Select the Report Quarter and enter the Year for the reporting period you want to validate.

3 If you are loading Population 2, you need to enter a Report Due Date, using MM/DD/YYYY format. For all other populations skip this step. The report due date is a state-designated date after which the state assesses penalty or late charges to employers.

You can also click on the calendar icon on the right of the Report Due Date to select report due date from a calendar.
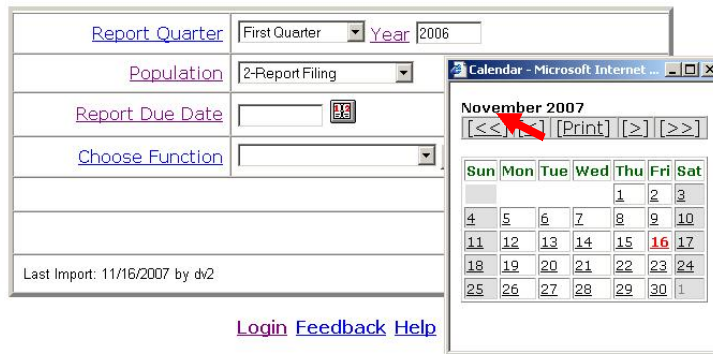
Use the double arrows on the calendar to scroll through years and the single arrows to scroll through months and then click on the day you want to use as start or end date.
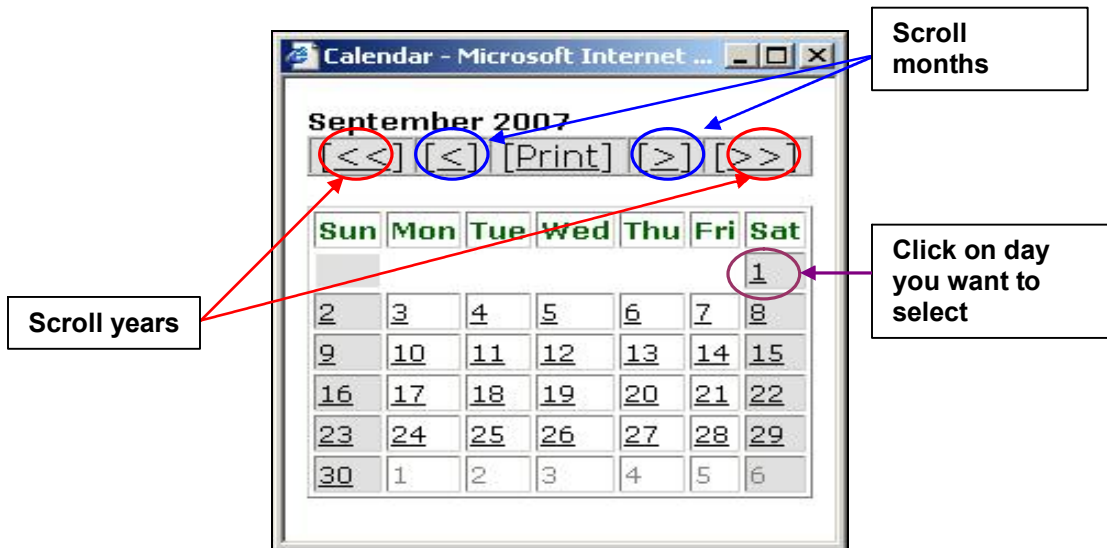
> The time period entered or selected should be the same used to construct the extract file you are going to load.

The report quarter, year, and report due date (Population 2 only) are needed only for the import function. Once a population is loaded, the user may choose any other function without entering these dates.

4 Select *Import Data* from the Choose Function drop-down menu and click **Go.**

DATA VALIDATION - TAX ℹ️

Tax Selection Criteria

Report Quarter	First Quarter ▾ Year	2006
Population	1-Active Employers ▾	
Report Due Date		🔢
Choose Function	▾ Go	

Import Data
View Validation Counts
View Report Validation
View Source Table
View Samples
View Wage Item Validation
View Data Element Sorts
View Import Messages
View Errors

Last Import: 11/16/2007 by dv2   Last Transmit: Never

5 Enter the full path where the file is located and the name of the extract file into the Import From Extract File box (example: /opt/dv/data/pop1-Tax-200301.txt).

DATA VALIDATION - TAX ℹ️

Population 1

Report Date	
Report Quarter	1
Year	2003
Import From Extract File	ata/pop1-Tax-200301.txt

Import   Clear Query   Cancel

Home Feedback Help

The **Clear Query** button on the bottom of the screen will reset the Import From Extract File box. The **Cancel** button will take you back to the *Tax Selection Criteria* screen.

> All extract files must be copied to the /opt/dv/data/ directory, hence the path name will always be /opt/dv/data/*filename.txt*. This directory was created on the Sun servers exclusively for data validation use.

> The software will only accept files in *text* format. File names cannot contain spaces and must end in ".txt".

6 Click on the **Import** button to load the extract file into the system.

<div style="text-align:center">

DATA VALIDATION - TAX ⓘ

Population 1

Report Date	
Report Quarter	1
Year	2003
Import From Extract File	ata/pop1-Tax-200301.txt

[Import] [Clear Query] [Cancel]

Home Feedback Help

</div>

This will take you to the *Import Messages* screen for information on the loading procedure.

IMPORT MESSAGES

for user dv3

Loading Tax population 3. Started @ Mon Nov 26 15:39:24 EST 2007
Rows processed: 1000, Errors: 1000 for tax population 3 Still loading..
Rows processed: 2000, Errors: 2000 for tax population 3 Still loading..
Rows processed: 3000, Errors: 3000 for tax population 3 Still loading..
Rows processed: 4000, Errors: 4000 for tax population 3 Still loading..
Rows processed: 5000, Errors: 5000 for tax population 3 Still loading..
Rows processed: 5000, Errors: 5000 for tax population 3. Checking data this may take a few minutes…
Rows processed: 5000, Total Errors: 5000 for tax population 3
Load of tax population 3 ended @: Mon Nov 26 15:39:43 EST 2007

Cancel Import

Home Feedback Help

On this screen you can see which user is loading the population, the start and end times of the load, the number of errors found in the file, and the total number of rows processed (including records in error).

Incoming extract files are subjected to various tests to identify 1) syntax errors, 2) logic errors, and 3) duplicate records.

For large files, a new import message line will appear for each 5,000 records.

Load times vary depending on the number of records in the extract file. The time-out parameter is set to four hours while the software is loading to allow ample time for loading large files. Most populations complete loading within a few minutes. Load times are affected by the size of the file, the population being loaded, and the number of error conditions encountered during the load.

The software allows different populations to be resident in the application at the same time, but not two data sets for the same population.

If the same population is loaded a second time, the new data set will over-write the former. Re-loading the same extract file will produce identical results for report validation, but different samples.

While the file is loading you can go back to the *Tax Selection Criteria* screen and access screens for other populations. You cannot, however, load another population or access any of the screens of the population being loaded. A message in red will appear on the screen letting you know that the population is being load and the user that is loading it.
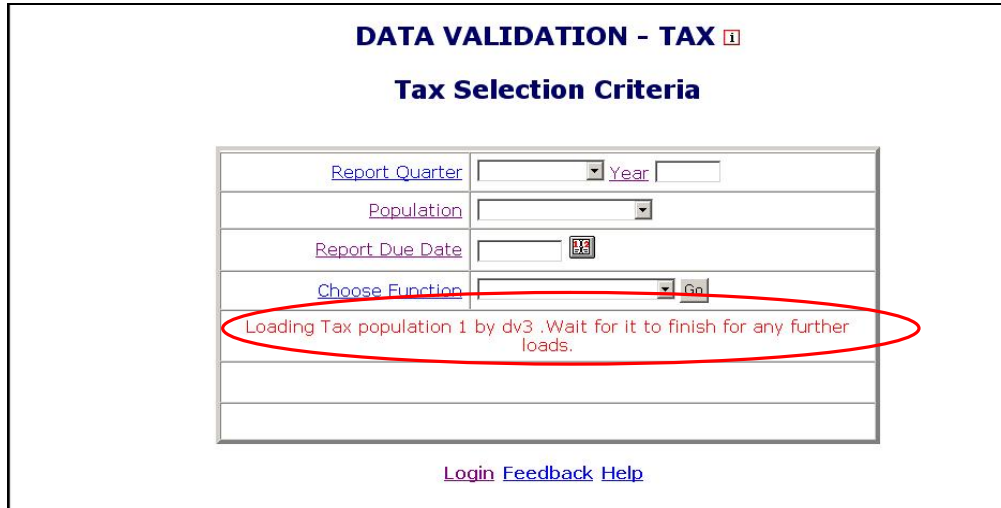
In addition, the Population drop down menu will not display the population being loaded and the Choose Function drop down menu will not display *Import*.

To return to the *Import Messages*, select *View Import Messages* from the Choose Function drop-down menu on the *Tax Selection Criteria* screen. You don't need to select a Population.
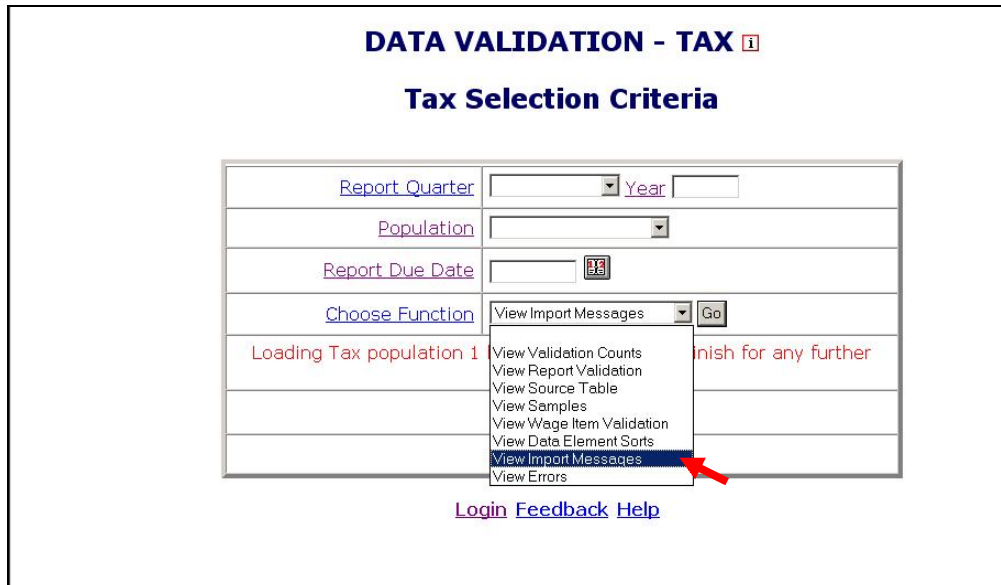
> Messages displayed on the *Import Messages* screen are available during the loading operation, but are not available after the file has been loaded and the operator has left this screen. Information about previous population loads is not available. Users have the option of printing this screen when it is displayed, for future reference.

Cancelling a Load

To cancel a load in progress, follow the next steps.

1 To cancel a load in progress, click the **Cancel Import** button on the *Import Messages* screen.

IMPORT MESSAGES

for user dv3

Loading Tax population 1. Started @ Fri Nov 16 11:27:57 EST 2007

Rows processed: 1000, Errors: 0 for tax population 1 Still loading..

Rows processed: 2000, Errors: 0 for tax population 1 Still loading..

Rows processed: 3000, Errors: 0 for tax population 1 Still loading..

Rows processed: 4000, Errors: 0 for tax population 1 Still loading..

Rows processed: 5000, Errors: 0 for tax population 1 Still loading..

Cancel Import

Home Feedback Help

You should see the time when the population was cancelled.

IMPORT MESSAGES

for user dv3

Rows processed: 4000, Errors: 0 for tax population 1 Still loading..

Rows processed: 4800, Total Errors: 0 for tax population 1

Load of tax population 1 cancelled @: Fri Nov 16 11:43:26 EST 2007

Home Feedback Help
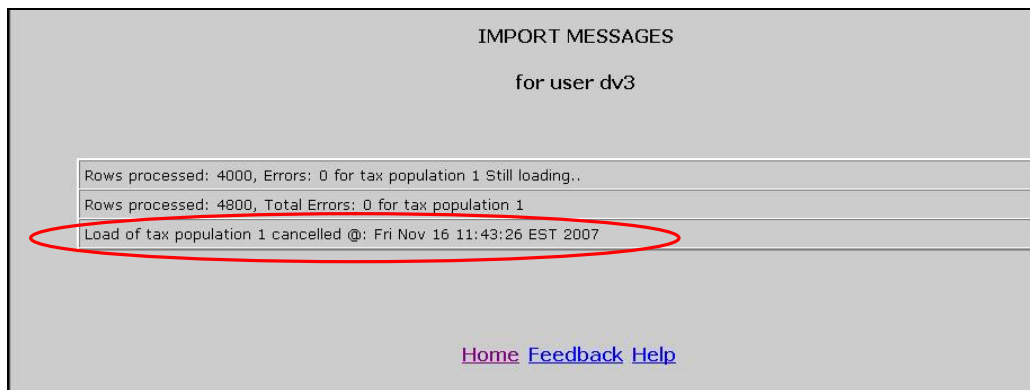
When you return to the *Tax Selection Criteria* screen, using the Return to Menu link, you will see a message in red indicating that the load was cancelled and the *Last Import* date will display "Cancelled."

When you cancel a load, the only screen available for the population for which the load was cancelled is the *Errors* screen.

If you are loading a large file and the number of errors is excessive, you don't need to wait until the load finishes to check the type of errors you are getting. Instead, cancel the load and check the *Errors* screen. You will be able to see the errors that were processed up to the point where you cancelled the load.

Viewing Errors

When extract files are loaded, the software reads each record to ensure that all fields are valid with reference to specifications provided in the *ETA Handbook 361- B Tax*.

There are three kinds of error conditions detected during the import and loading process:

Syntax errors. This refers to records that are not formatted according to instructions in the population-specific record layouts. Example: alpha characters in the social security number field or dollars field.

Parsing errors. This refers to records that cannot be assigned to a subpopulation because the values in the fields do not match the required criteria for any of the subpopulations.

Duplicate records. This refers to records that are found to be duplicates based on the criteria described in *Appendix E, UI Tax Duplicate Detection Criteria*.

All records with errors are loaded to the *Errors* table. Records in the *Errors* table are not included in any of the validation screens and hence cannot be validated. You should inspect these records and determine whether the extract file was not constructed correctly or there is a problem in the state database from which the data was extracted. If the extract file was not constructed correctly, fix the file and load it again. If the problem is in your state database--for example a field is not being captured--your office needs to take steps to fix it.

The *Errors* screen allows the user to view the records that were found to have errors during the loading operation. To view the *Errors* screen follow the next steps.

1 In the *Tax Selection Criteria* screen, select the Population for which you want to see the errors table.

2 Select *View Errors* from the Choose Function drop-down menu and click **Go.**

The *Errors* screen displays records with errors along with an error message for each record.

The Errors screen displays 100 records at a time. To see the next 100 records, click on the Next link at the bottom of the screen. This link is visible only when there are more than 100 records. If the loaded file contains more than 1,000 errors only the first 1,000 can be viewed, and the software will display a red message to inform you of this.

When a file is loaded with no errors, the Errors screen displays "No Rows Found" in red.

Viewing Duplicate Records

Duplicate errors are displayed in the *Errors* screen along with all other errors, but can be viewed separately by accessing the *Duplicate Detection Report* screen. Access this screen as follows:

1 Click on the Duplicate Detection Report link at the bottom of the *Errors* screen.

The *Duplicate Detection Report* screen displays duplicates only.

Like in the *Errors* screen, the screen displays only 100 records at a time. To see the next 100 records, click on the Next link at the bottom of the

screen. This link is visible only when there are more than 100 records. If the loaded file contains more than 1,000 duplicates only the first 1,000 can be viewed, and the software will display a red message to inform you of this.

To go back to the *Errors* screen click on the All Errors link at the bottom of the screen.

When a file is loaded with no duplicates, the Duplicate Detection Report screen displays "No Rows Found" in red.

Viewing the Source Table

The *Source Table* displays all the records that were successfully loaded to the application. To access the *Source Table* follow the steps below.

1 From the *Tax Selection Criteria* screen select a Population that has been loaded.

2 Select *View Source Table* from the Choose Function drop-down menu and click **Go**.

The *Source Table* screen displays the number of errors found during the loading process and the error rate at the bottom of the screen. You can access the *Errors* screen from the *Source Table* screen by clicking on the Show Errors link at the bottom of the screen.

The *Source Table* screen displays 100 records at a time. To see the next 100 records, click on the Next link at the bottom of the screen. This link is visible only when there are more than 100 records. If the table contains more than 1,000 records only the first 1,000 can be viewed.

163	000885731	400695	S	N	12/20/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
165	000887257	400700	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
167	000892349	302549	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
168	000894212	400719	S	Y	11/03/2004	65187.00	65186.00	0.00	1.00	0.00	46871.00	46871.00	0
169	000898254	400726	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
170	000899278	302574	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
171	000905257	400741	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
180	000925743	400803	S	N	12/20/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
181	000934216	400826	S	N	12/20/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
182	000940098	400844	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
183	000943696	400849	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
184	000945964	400854	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
185	000951699	302621	L	N	12/20/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
186	000960682	400867	S	N	12/20/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
188	000969139	400873	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
189	000987180	400879	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
190	000988261	400880	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
191	001001213	401183	S	N	12/20/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
192	001001510	401186	S	N	11/03/2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0

Show Errors   Next
Errors: 372 Error Rate: 48.5%

Home Feedback Help

If no record was successfully loaded, the *Source Table* screen displays a warning message in red.

SOURCE TABLE
Tax Population 4

Accounts Receivable

OBS	Employer Account Number	Employer Type	Transaction Date	Established Date	Employer Report Quarter	Due Date	Transaction Type	Amount Established in R Q	Liquidated	Uncollectible	Removed	Balance at End of R Q	Age Rece

No Rows Found! Please check import errors and re-import.

Show Errors
Errors: 38080 Error Rate: 100%

Home Feedback Help

Viewing Validation Counts

The *Validation Counts* screen displays all the subpopulations in the population and the number of records from the extract file that were assigned to each subpopulation. To view the Validation Counts screen, follow the next steps.

1 From the *Tax Selection Criteria* screen select a Population that has been loaded.

2 Select *View Validation Counts* from the Choose Function drop- down menu and click on **Go**.

The screen shows the subpopulations, the report cells they validate, the field values records must have to be assigned to them, and the count of records the software assigned to each.

3 Click on the subpopulation number to view records that were parsed into that subpopulation.

You can print the screen by clicking on the **Print** button at the bottom of the screen.

The screen displays 100 records at a time. To see the next 100 records, click on the Next link at the bottom of the screen. This link is visible only when there are more than 100 records.

4 Click on the "X" in the upper right hand corner of the screen to close the screen and return to the Validation Counts screen.
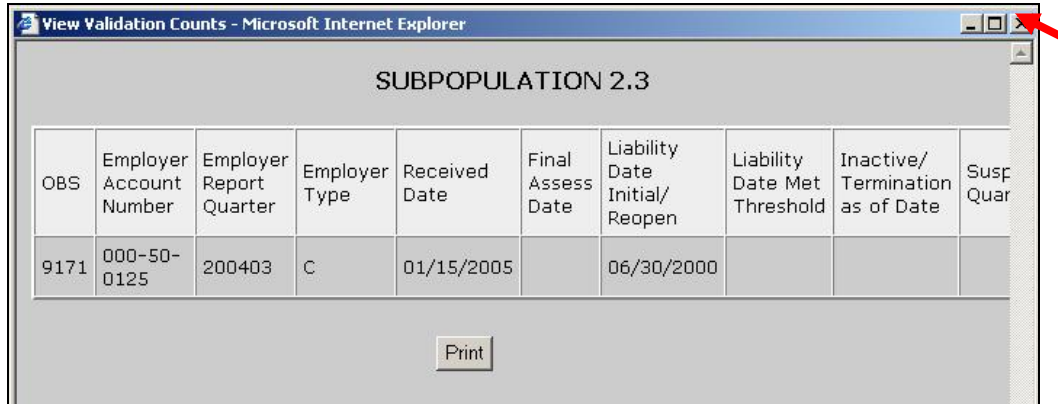
Viewing the Report Validation Screen

Report validation (RV) consists of establishing the extent to which reported numbers match report counts reproduced through the data validation process. This comparison process is automated and does not require additional input from state staff once an extract file has been successfully loaded to the system.

The software retrieves reported numbers from the state UI database and compares them to the validation numbers derived from the extract files. Percent errors and pass/fail scores are displayed for each report cell or item. A report cell or item passes validation if the percent error is 2% or less, except for cells which are used for Government Performance and Results Act (GPRA) measures, which should have a percent error of 1% or less (i.e. report cells 581- 301-14 and 581-301-14 in Population 3). If all items pass, the population passes report validation; otherwise, it fails.

The *Report Validation* screen displays the results of report validation. To display the screen follow the steps below.

1 From the *Tax Selection Criteria* screen select a Population that has been loaded.

2 Select *View Report Validation* from the Choose Function drop- down menu and click on **Go**.

The *Report Validation* screen displays each report cell in the population, its description, validation count (derived from extract file), reported count (retrieved from the UI database), count difference, count difference as a percent of validation count, and whether the report cell passes or fails validation. It also displays cumulative counts for groups of report cells along with a pass/fail score for that group. Population 1-3 shows a summary data for reported counts, population 4 will show reported dollars, and population 5 will show both reported counts and reported dollars. At the bottom of the screen are the status indicators for RV, Sorts, and FIV. The failure of even one count shown on the table will result in the RV Status to be Fail.

To save a screen shot of the Report Validation screen outside the software, follow the next steps.

1 Select *Save As* form the drop-down menu *File* on the top left corner of your browser.
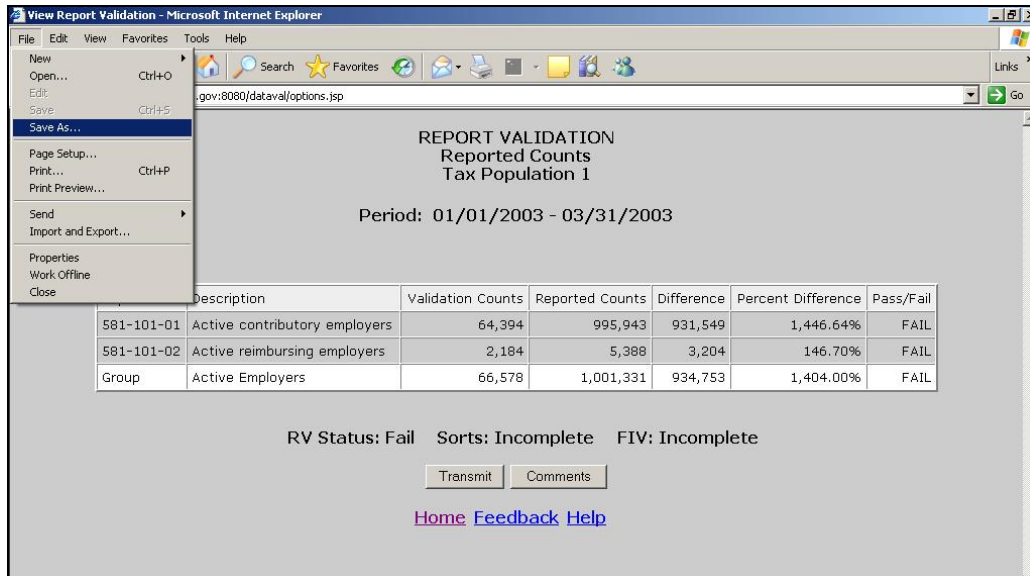
2 Select the location where you want to save the screen shot and write in the File Name box the name you want to give the file.
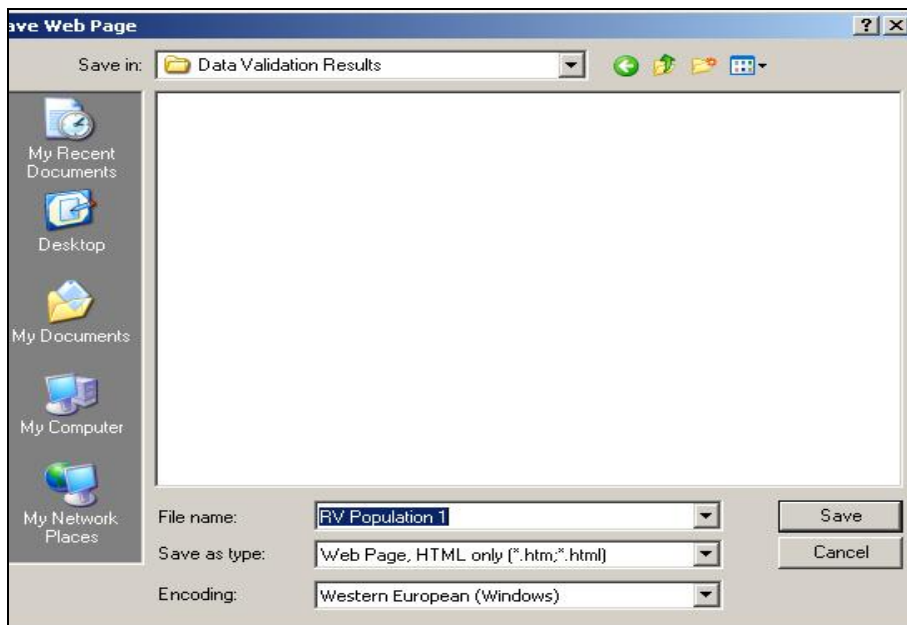
Viewing Samples

Tax Data Element Validation (DEV) to analyze tax extract files has two parts: File Integrity Validation (FIV), the investigation of minimum samples; and Data Element Sorts validation. The RV of a population is not valid unless the population does pass all applicable DEV tests.

The samples drawn by the software consist of two records per sub-population. Because the samples are so small, to pass this aspect of DEV all sampled records must be free of errors.

To view the samples of a population follow the next steps.

1 From the *Tax Selection Criteria* screen select a Population that has been loaded.

2 Select *View Samples* from the Choose Function drop-down menu and click on **Go**.

3 On the *Samples* screen, click on the sample link located on the *Sample ID* column.

The *Sample Validation* screen displays the sample records that are to be investigated. The number and description of the sample are displayed at the top of the screen.

This screen is used to enter the results of the investigation. The step numbers on the headers of the columns refer to the steps in *Module 3* of the data validation handbook.

Printing Sample Worksheets

Before you start investigating each record in a sample it is recommended that you print the worksheets for all records. You can annotate validation results in these worksheets and later enter all results in the *Sample Validation* screen. To print the worksheets follow the next steps.

1 Click the **Print Worksheets** button. This button is displayed at the top and bottom of the Sample Validation screen. Click on either button.

2 Start Row and End Row boxes will be displayed at the bottom of the screen. Enter the range of rows that you want to print and click **Go**. For example, enter "1" in Start Row and "2" in End Row and click **Go**, to print sample worksheets for rows 1 to 2.

To print the worksheet of only one record, enter the row number of the record in the Start Row and End Row boxes. For example, to print the record in the second row, enter "2" in both the Start Row and End Row boxes.

The worksheets display the records with all fields and corresponding values in portrait orientation.

3 Scroll to the end of the screen and click on **Print Preview.**

If instead of printing you want to add more records to print, click on **Get More Rows**.

(Step 33D) Contributions Over Reported	0.0	Pass
20 (Step 33E) Contributions Reconciliation Amount	0	Pass

Print Preview   Get More Rows...

Start Row: 3   End Row: 4   Go

Start Row and End Row boxes will be displayed at the bottom of the screen. Enter the range of rows that you want to add and click **Go**. Then click on **Print Preview**.

4 Click **Print** on the left top corner of the screen.

5 Select a printer and click **Print**.
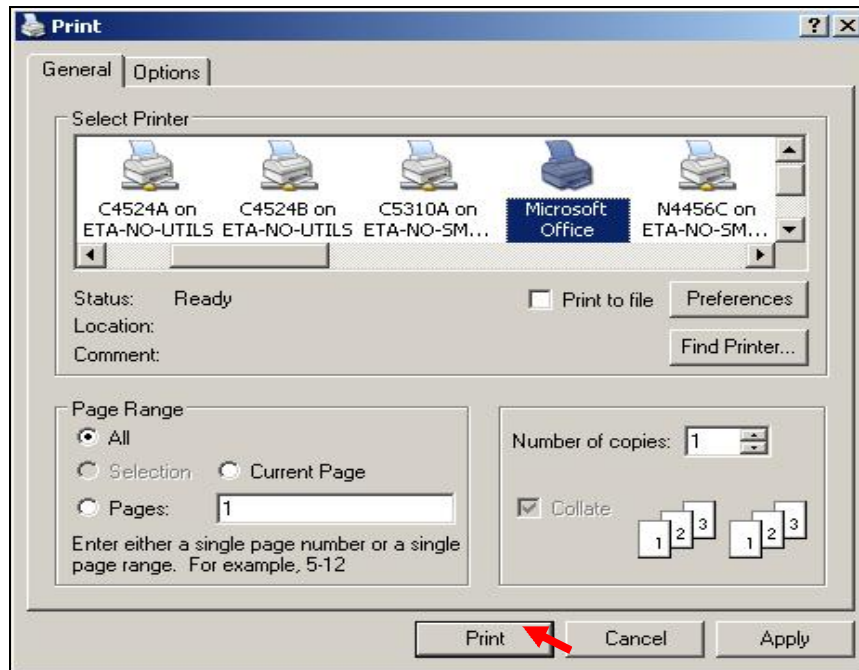
> You can keep worksheets for samples you submit to the DOL as evidence of the work done, in case you are subject to an Office of Inspector General (OIG) audit.

Entering Sample Results

After you investigate each record, you need to enter the results of the validation into the software. To enter your results, go to the *Sample Validation* screen of the sample you are investigating and follow the next steps.

1 For each data element, go to the box next to it, click on the drop down menu and select pass or fail according to your findings.

If all elements in a record have passed you don't have to enter results individually for each data element. You can instead click on the Pass Row box at the beginning of the row and all boxes for that row will be filled with "Pass".

For a record that has only a few elements failed and the rest of the elements passed, you can select "Fail" for the elements that failed and then check the Pass Row box at the beginning of the row to change the remaining blank boxes to "Pass".

If all of the records within the sample have passed all data elements you can select the Check All box on the top left corner of the table to change all blank boxes to "Pass".

You can enter "Fail" for the elements that have failed for the whole sample and then click on Check All box to change the remaining blank boxes to "Pass".

2 Click **Save** to save all entered results. When you click **Save** the software will display a summary of your results at the bottom of the screen, including the number of cases reviewed and the number of cases in error.

The status of the sample will also be displayed on the *Report Validation* screen.

The Save As button displayed at the top and bottom of the *Sample Validation* screen can be used to save a screen shot of your results outside the software. To do this, follow the next steps.
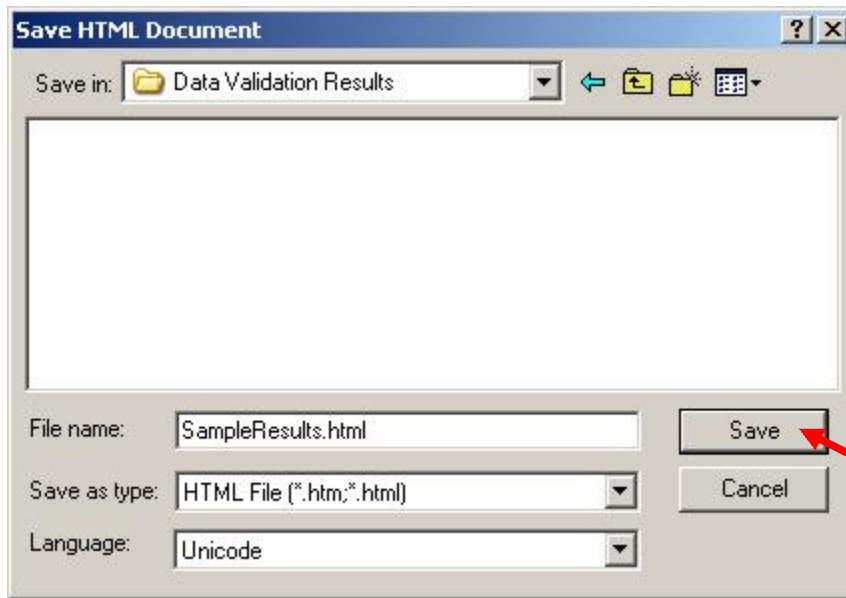
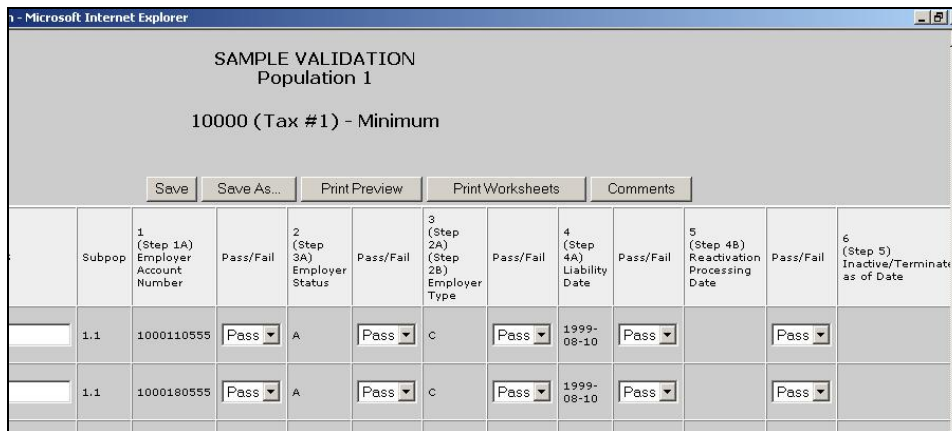**3** Click on **Save As**.

4 Select the location where you want to save the screen shot and write in the File name box the name you want to save the file with. Click on **Save**.

5 When you finish entering and saving your sample validation results, close the *Sample Validation* screen by clicking the ***X*** in the upper right-hand corner.

Viewing Data Element Sorts

The purpose of data element sorts validation is to determine whether the generic primary codes used to assign transactions (e.g. C (Contributory) and R (Reimbursing) in Populations 1 and 2) are accurately supported by state-specific secondary codes or specific ranges of employer account numbers (EANs). If a state's database does not have more than one state-specific code for a given generic code, or does not use EAN ranges, these tests do not apply. Also these tests do not apply to Population 5.

A data element passes sort validation if no more than 2% of the sorted transactions include an incorrect state-specific code. For detailed information on data element sort validation check Module 2.3 of the tax handbook.

The following table illustrates the relationship between tax populations, sorts, and sub-populations. The *Test Data Element* column identifies the data element used by the software to perform the sort.

Tax Populations, Sorts and Sub-populations

Population	Sort	Subpopulations Examined	Test Data Element
1	S1.1	1.1 (Contributory Employers)	EAN
1	S1.2	1.2 (Reimbursing Employers)	EAN
1	S1.3	1.1 + 1.2 (All employers)	Employer Status Indicator
1	S1.4	1.1 (Contributory Employers)	Employer Type Indicator
1	S1.5	1.2 (Reimbursing Employers)	Employer Type Indicator
2	S2.1	2.1 – 2.8 (Contributory Employers)	EAN
2	S2.2	2.9 – 2.16 (Reimbursing Employers)	EAN
2	S2.3	2.1 – 2.8 (Contributory Employers)	Employer Type Indicator
2	S2.4	2.9 – 2.16 (Reimbursing Employers)	Employer Type Indicator
3	S3.1	3.1 – 3.3 (New Status Det.)	Status Determination Type
3	S3.2	3.4 – 3.6 (Successor Status Det.)	Status Determination Type
3	S3.3	3.7 (Inactivation Det.)	Status Determination Type
3	S3.4	3.8 (Termination Det.)	Status Determination Type
4	S4.1	4.1, 4.9 (Establishment Transaction)	Transaction Type Indicator
4	S4.2	4.2, 4.10 (Liquidation Transaction)	Transaction Type Indicator
4	S4.3	4.3, 4.4, 4.11, 4.12 (Uncollectible Transactions)	Transaction Type Indicator

The software has two different sorting methods to determine which employers or transactions are out of range: query and frequency distribution. The query is available for EANs and the frequency distribution for all other data elements. The next sections will explain each method in detail.

To access the *Data Element Sorts* screen follow the next steps.

1 From the *Tax Selection Criteria* screen select a Population that has been loaded.

2 Select *View Data Element Sorts* from the Choose Function drop-down menu and click **Go**.

The *Data Element Sorts* screen displays each data element to be sorted, the corresponding step in Module 3 that is used to validate it, and the number of cases to be validated. Each data element has a sort number assigned to it., e.g S1.1. The sort numbers are displayed as links that you click to access the sorting function.

DATA ELEMENT SORTS
Tax Population 1

Check if N/A	Sort ID	Sort Number	Sort Key	Step/Rule in Handbook	# of Cases	# of Errors	Pct of Errors	Status
☐	100	S1.1	EAN – Contributory	1A/1	12			
☐	110	S1.2	EAN – Reimbursing	1A/1	0			
☐	120	S1.3	Employer Status – Active	3A/1	12			
☐	130	S1.4	Employer Type – Contributory	2A/1	12			
☐	140	S1.5	Employer Type – Reimbursing	2B/1	0		0.00	
					Data Element Sorts Status:			Pass

Save   Comments

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Entering Data Element Sorts Results

To enter results for data element sorts follow the next steps.

1 If your state does not have secondary codes for the data element, you cannot do sort validation for that data element. In that case, click on the N/A box next to the data element.

DATA ELEMENT SORTS
Tax Population 1

Check if N/A	Sort ID	Sort Number	Sort Key	Step/Rule in Handbook	# of Cases	# of Errors	Pct of Errors	Status
☑	100	S1.1	EAN – Contributory	1A/1				N/A
☐	110	S1.2	EAN – Reimbursing	1A/1	178			
☐	120	S1.3	Employer Status – Active	3A/1	388			
☐	130	S1.4	Employer Type – Contributory	2A/1	210			
☐	140	S1.5	Employer Type – Reimbursing	2B/1	178			
					Data Element Sorts Status:			Incomplete

Save   Comments

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The data element is disabled and the *Status* column displays "N/A".

2 If your state has secondary codes for the data element or assigns EAN ranges to contributory and reimbursing employers, click on the sort number link. For example, click on <u>S1.1</u>.

If the data element is EAN, you will get a query screen. For other data elements you will get a screen showing a frequency distribution of codes.

Query Screen

If your state assigns a certain range of EAN numbers to contributory employers and another range to reimbursing employers, you can query against the EANs in your extract file to determine if there are any numbers out of range.

3 Select the type of query you want to execute and the parameters for the query. The software offers three possible queries: starts with, ends with and is between.

Starts with retrieves all employers whose EANs begin with the sequence you identify. For example, to get all the records with an EAN starting with, 325, click the *starts with* option, enter 325 in the first box.

Ends with retrieves all employers whose EAN ends with the sequence you identify. For example, to get all the records with an EAN ending in 1230, click the *ends with* option, and enter 1230 in the first box.

Is Between allows you to specify a range starting with an EAN value in the first box and an ending value in the second box. The query returns the set of employers that falls within the specified range. For example, to get all the records with an EAN between 3000 and 50222, click the *is between* option, enter 3000 in the first box and 50222 in the second box.
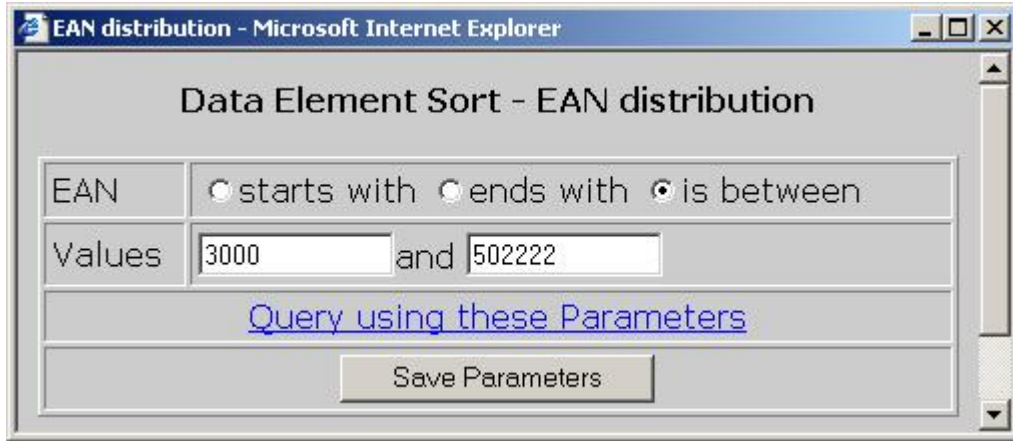
4 Click on <u>Query using these Parameters</u> link.

The software displays a screen with all records that satisfy the query parameters. The total number of records retrieved equals the number in the *Row #* column of the last record retrieved.

> If the number returned by the query exceeds 10,000, the software displays the first 10,000, beginning with the lowest EAN. To determine the total number of records in such a case requires repeated queries to using the *is between* function, starting with EAN+1 from the preceding query.

If you query for valid values, for example if your state's EANs always start with 4, and you query for those records, then the records the software retrieves are all correct. In this case, compare the number of records retrieved with the number of cases in the *Data Element Sort* screen.

The difference between these numbers equals the number of records that have an incorrect EAN, i.e. the number of errors. For example, if you retrieved 4 correct records using the query and the number of cases is 12, then there are 8 records in error.

If you query for invalid values, for example if all EANs in your state can end in any digit but 9 and you query for all EANs ending in 9, then the total number of records retrieved equals the number of errors.

In some cases you might want to execute multiple queries to find the number of errors. For example, if the EANs in your state should be between 007900000 to 007999999, then you can query for records above the upper limit and below the lower limit of your state's EAN range, i.e. run a query for records beginning with 000000000 and ending with 007899999, and another query for 008000000 and above. Add the number of records returned by both queries to get the total number of errors.

Frequency Distribution Screen

If your state has multiple codes for active employers, employer type, or types of transactions, you can determine which records have an incorrect code by looking at their frequency distribution of codes.

5 After you click on the sort number link of a data element that is not an EAN, a window will come up showing a frequency distribution of all codes. Look at all the codes and determine whether these are correct. Add up all the counts of incorrect codes to determine the total number of errors for the data element you are validating.

For example, in the previous screen, if you are validating Inactive codes and 315 and 316 are not Inactive codes in your state system, then you have a total of 11 (8+3) errors for Inactive.

> The *Data Element Distribution* screen shows a frequency distribution for all data elements. Clicking on S2.3 or S2.4, for example, brings up the same screen, because the frequency distribution is for all codes.

6 To view all records that were counted for a code, click on the code link.

The software can only display the first 10,000 records.

After you determine how many errors you have for a data element, either by querying or by using the codes frequency distribution, you need to enter that number in the *Data Element Sorts* screen. To do this, follow the next steps.

7 Enter the number of records in error for the data element you are validating, in the *# of Errors* field on the *Data Element Sorts* screen.

8 Click the **Save** button at the bottom of the screen.

9 You will get a pop up window confirming that you have saved the data. Click **OK**.

The software calculates the percentage of errors and determines whether the data element passed sort validation.

The software will also update the *Data Element Sorts Status*.

If you haven't completed all the sorts, the status would display "Incomplete". In order to submit results to the DOL, you first need to complete all sorts, by either entering the number of errors or checking the N/A box, and click **Save**.

When you complete and save all sorts for a population, the status field will display Pass or Fail.

The status for sorts will also be displayed on the *Report Validation* screen.

REPORT VALIDATION
Reported Counts
Tax Population 3

Period: 04/01/2003 - 06/30/2003

Report Cell	Description	Validation Counts	Reported Counts	Difference	Percent Difference	Pass/Fail
581-301-14	Total New	1,070	29,085	28,015	2,618.22%	FAIL
581-301-15	New,<=90 days	688	25,242	24,554	3,568.90%	FAIL
581-301-16	New, <=180 days	849	26,244	25,395	2,991.17%	FAIL
581-301-17	Total Successor	600	694	94	15.67%	FAIL
581-301-18	Successor,<=90 days	392	451	59	15.05%	FAIL
581-301-19	Successor<=180 days	489	539	50	10.22%	FAIL
581-301-20	Inactivations & Terminations	1,807	32,504	30,697	1,698.78%	FAIL
Group	Status Determinations	3,477	62,283	58,806	1,691.29%	FAIL

RV Status: Fail   Sorts: Pass   FIV: Incomplete

[Transmit]   [Comments]

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Viewing the Wage Item Validation Screen

Wage item validation consists of reviewing counts of wage record transactions which appear on the ETA 581 report to verify their accuracy. A wage record is the listing of an individual's earnings in covered employment. Employers are required to provide this information to the Unemployment Insurance program four times per year.

To validate wage items you need to compare counts from the ETA 581 with reconstructed counts produced under controlled conditions. You should test that every wage item is counted and that the count does not include corrections (counted twice), incomplete wage records or duplicate records. You can find a detailed explanation in *Module 5* of *the ETA Handbook 361- B Tax.*

To enter wage item validation results into the software follow the next steps.

1 Select *View Wage Item Validation* from the Choose Function drop-down box on the *Tax Selection Criteria* screen and click **Go**.

2 Select the method used to select wage records, i.e. Batch or Representative Time Periods.

If you have never entered results before you might get a screen with no wage items.

If you have previously entered results, you will see these. Wage items do not get overwrite when you load extract files and are not dependant on any population.

3 To add a wage item. Click on the **Add Wage Item** button located at the bottom of the screen.

4 In the *Add Wage Items for Validation* pop up window enter the information for the wage item you want to add and click **Save Wage Item**.

The Period field must be formatted as DD/MM/YYYY and must correspond to the period being validated. Enter the counts for the applicable time period that are reflected in a given ETA 581 Report in the Batch Count field. Enter the recount for that category in the Batch Recount field.

When you save the item, the *Wage Item Validation* screen displays the item added and calculates the Difference between the Batch Count and Batch Recount fields, the Total Errors, the Percentage of Errors and whether the item Pass/Fail validation. Information entered in the Missing ID Count, Missing Amount Count and Double Count fields is for diagnostic purposes only and does not contribute to the percent of error calculations.

Repeat this procedure to ensure that you have validated wage items for every mode your state's employers use to submit them.

5 To update any field of a wage item, other than the Mode field, click on the field box you want to edit and edit the field. Then click the **Save** button at the button of the screen to save your changes.

You cannot update the Mode field. Instead you need to delete the wage item and add a new one with the correct Mode.

6 The delete a wage item click on the **Delete** button next to the wage item, located on the Delete Wage Item? column.

A pop up window will be displayed to confirm your request. Click **OK** to delete the item or **Cancel** if you don't want to delete it.

7 After you finish entering your validation results, click the **Save** button at the button of the screen to save your work.

Submitting Results to DOL

Adding Comments

You can add individual comments to your RV, sorts, sample and wage items results before transmitting them to DOL by using the **Comments** buttons on the *Report Validation*, *Data Element Sorts*, *Sample Validation,* and *Wage Item Vali*dation screens. To add comments, follow the steps below.

1 Click on the **Comments** button.

In the *Report Validation* screen, the **Comments** button is located at the bottom of the screen.

In the *Data Element Sorts* screen, the **Comments** button is displayed at the bottom of the screen.

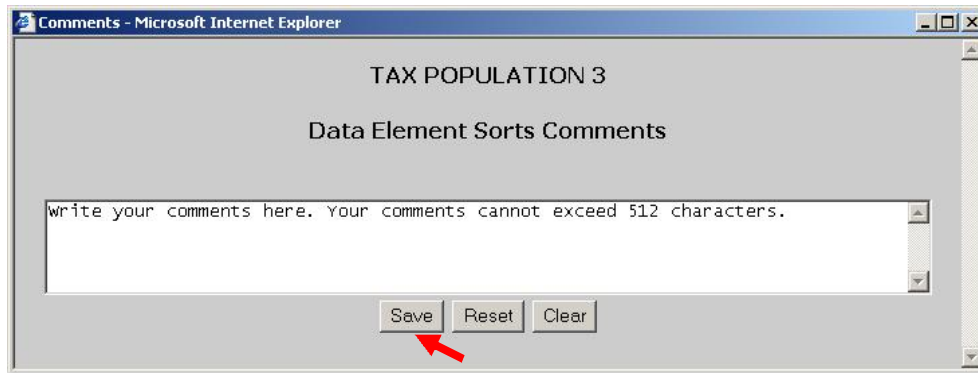In the *Sample Validation* screen, the **Comments** button is displayed at the top and bottom of the screen. Click on either one.
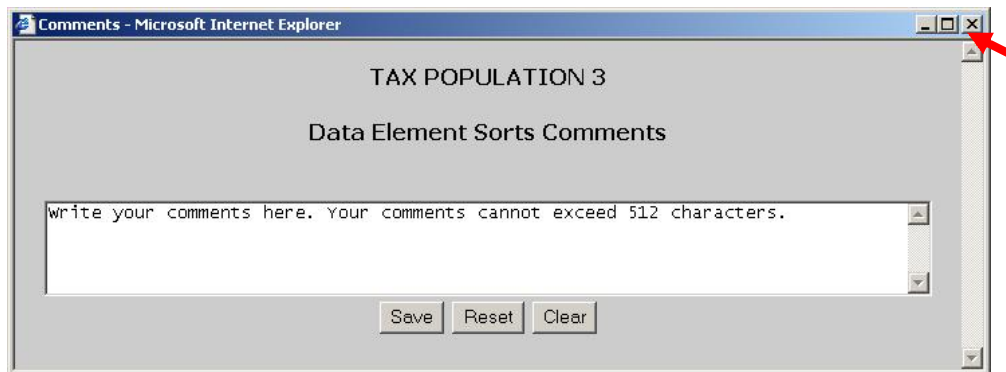

In the *Wage Item Validation* screen, the **Comments** button is displayed at the top and bottom of the screen. Click on either one.

2 Write your comments in the comment box and click **Save**. You have a limit of 512 characters.

3 Close the comments window by clicking on the X located on the top right corner of the window.

The **Clear** button at the bottom of the *Comments* screen will erase the comment box. The **Reset** button will erase any additional comments written after the comments were last saved.

Transmitting Results

After you complete report, sorts, sample, and wage item validations, you can transmit the results to DOL with or without comments. Only completed results can be transmitted. RV, sample and sorts results for each population are transmitted as a set to the DOL.

> You may choose not to submit the results of a validation exercise, but keep in mind that any results resident in the software for a given population will be lost when a new extract file for that population is imported and overwrites prior data.

> When you transmit results to DOL, only summary information and comments are transmitted. Detailed information from individual records is not transmitted to DOL. This means that sensitive information, such as EANs, stays at the state level.

Transmitting Population Results

You can transmit population validation results to DOL using the **Transmit** button at the bottom of the *Report Validation* screen. When you transmit, reports, sorts and sample results for the population are transmitted. Submissions are transferred to DOL overnight, so they will be received the next day. To submit results along with comments saved if any, follow the next steps.

1 Click on the **Transmit** button. The **Transmit** button is located at the bottom of the *Report Validation* screen.

581-301-18	Successor,<=90 days	9	114	105	1,166.67%	FAIL
581-301-19	Successor<=180 days	10	223	213	2,130.00%	FAIL
581-301-20	Inactivations & Terminations	8	384	376	4,700.00%	FAIL
Group	Status Determinations	25	1,008	983	3,932.00%	FAIL

RV Status: Fail   Sorts: Pass   FIV: Incomplete

[Transmit]   [Comments]

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The software will first verify that all validations have been completed for that population. If not, the software will warn you with the following message pop up window and will not allow you to submit results.
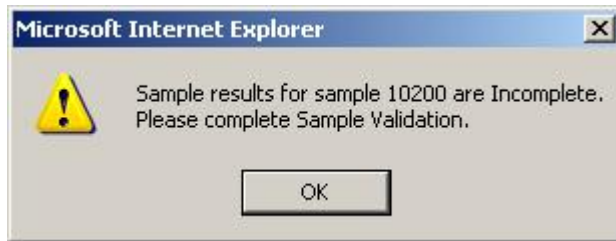
If all validations have been completed you will see the following pop up window.
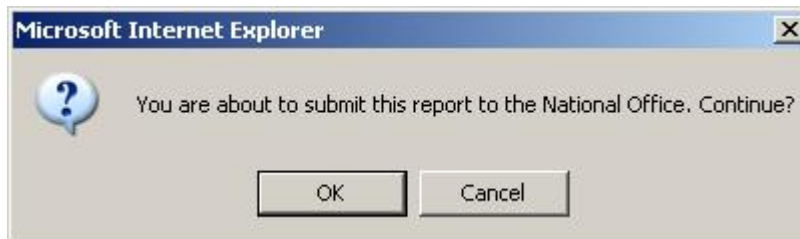
2 Click **OK** on the pop up window if you want to transmit the results. Click **Cancel** if you don't.
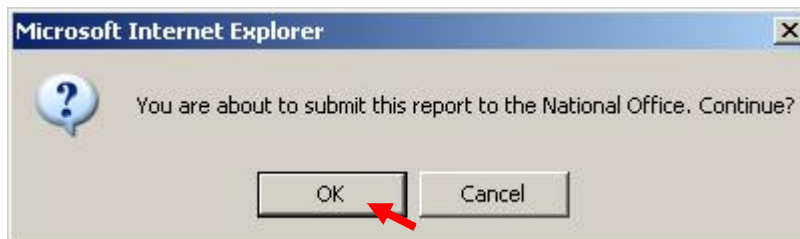
You will get a pop up window confirming your action. Click **OK**.

When you return to the *Tax Selection Criteria* screen, when you select a population the *Last Transmit* date should reflect the date when you last transmitted the results to DOL. If you have never submitted results the field would display "Never".

Transmitting Wage Item Validation Results

You can transmit wage item validation results to DOL using the **Transmit** button at the bottom of the *Wage Item Validation* screen. To transmit wage item validation results follow the next steps.

1 Click on the **Transmit** button. The **Transmit** button is located at the bottom of the *Wage Item Validation* screen.
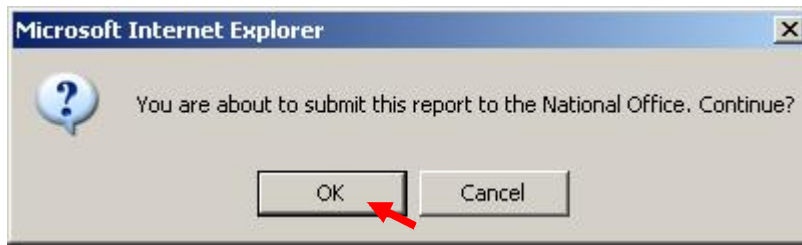
2 Click **OK** on the pop up window if you want to transmit the results. Click **Cancel** if you don't.

You will get a pop up window confirming your action. Click **OK**.