

# UNIVERSITY *of* HOUSTON SYSTEM



## PeopleSoft Data Validation Errors Processing Guide

A large, 3D-style pyramid with a rainbow color gradient from red at the top to purple at the bottom. It has a reflection on the surface below it.

*Guide: UHS Data Validation*

# Introduction

When the efficiency of a process is reliant on the availability of accurate information, this means that the **input of accurate data in the first instance (the source business area) is vital**. Data validation is defined as the inspection of collected data for completeness and reasonableness, and the elimination of erroneous values. Data Validation is the only way to ensure that the information captured is accurate. Running Data Validation at the **source data capture instance is key** to efficient subsequent use of that source data; if validation does not take place at the source business area data instance, the subsequent administrative cost of resolving the error at a later stage can be significant (including costly fines that can be possibly assessed for inaccurate state/federal reporting).

Data Validation ensures your data is complete, accurate, reliable and ready for downstream use and reporting (internally and externally). In the Data Validation process, information stored in source tables are verified against specific customer requirements coded into routines to assess the veracity of the information. This process serves to reduce or eliminate uncertainty for our community of internal and external users, so that they have confidence in the validity of the data being used.

In computer systems applications, data validation is the process of ensuring that a program operates on clean, correct and useful data. It uses routines, often called "validation rules" or "check routines", that check for correctness, meaningfulness, and security of data that are input to the system. Incorrect data validation can lead to data corruption or security vulnerability.

## Overview

A validation process involves two distinct steps: (a) Validation Check and (b) Post-Check Action. The validation routines coded in the 'UHS Data Validation' feature in PeopleSoft perform the first step **Validation Check**. Users who receive the errors notification report generated by the validation check perform the second step **Post-Check Action**.

The Data Validation module in PeopleSoft is a custom application that was created with the goal of facilitating proactive correction of data anomalies to ensure the reporting of accurate and reliable data. In addition to the critical benefit of proactively capturing data integrity issues, another key benefit provided by this functionality is providing transparency to management of the data anomalies within their business areas.

The functionality generates audit reports of data identified as needing review and/or correction that are emailed to business owners and other parties of interest. Users receiving the reports are expected to correct the identified errors within the 'Clean-up Cycle Commitment' time.

## CHAPTER 1 – Requesting an Audit

Running Data Validation at the **source data capture instance is key** to efficient subsequent use of that source data; if validation does not take place at the source business area data instance, the subsequent administrative cost of resolving the error at a later stage can be significant (including costly fines that can be possibly assessed for inaccurate state/federal reporting).

Business areas are encouraged to evaluate their business processes and make a determination if use of a Data Validation audit would complement components of their business processes. Requests for an audit are submitted to the EMPS/ES departments for development and set up of the audit.

The PeopleSoft UHS Data Validation feature utilizes SQC/SQR functionality for coding the validation rules (check routines), and setup pages for coordinating the layout, interfaces, security, scheduling, and recipients of the validation reports.

The process for requesting a Data Validation audit entails:

- Users evaluate current business processes for identifying areas that would be complemented by use of a data integrity audit. This stage will likely also entail preliminary consultations with Institutional Reporting, EMPS and ES.
- User submits an Enhancement Request.
- User fills out a Data Validation specifications form for approved enhancement requests.
- A meeting is scheduled for verifying the specifications, and demoing the functionality if needed.
- Confirmed specifications are submitted to ES for development of the audit, and EMPS completes the setup.
- Users test the audit.
- The audit is migrated into the Production database for use.

## CHAPTER 2 – Processing UHS Data Validation Errors

Data Validation errors identified by an SQC audit will need to be reviewed and cleaned by business owners within the ‘**Clean-up Cycle Commitment**’ time. Processing UHS Data Validation errors entail the below steps.

### Errors Notification

Recipients identified on the specification form will receive an email notification containing a summary report in pdf format identifying the number of errors captured by each audit. Included in the email is a hyperlink to the page in PeopleSoft for viewing and resolving the errors.

1. To view the summarization counts of errors by each audit click on the pdf attachment in the email notification. To navigate to the page in PeopleSoft to begin reviewing and resolving the errors click on the hyperlink at the end of the email notification (if you are not already logged into PeopleSoft you will be prompted to log in).

Figure 1: Sample Email Notification



Figure 2: Sample Summary Report (uhiraud2\_7339612.pdf)

Date:	31-AUG-2012	<b>Student Administration Data Validation Stats</b>		
Program:	UHIRAUD2.SQR	Institution: 00730		
Data User:	Coleman, Marie A	Term: 1880		
Module:	SA			
<hr/>				
Program	Data Audit Procedure	Errors	Overrides	Last Updated
SA1	UHM_UGRD_RESIDENCY_ERRORS	583	0	08/31/2012
SA1	UHM_UGRD_DISC_APPL	26	0	07/18/2012
SA1	UHM_UGRD_MULTIPLEAPPS	2	0	07/20/2012

### Reviewing and Cleaning Errors

Clicking on the hyperlink in the email notification will direct you to the **User Audit Stats** page (navigation: **Main Menu** → **UHS Data Validation** → **Use** → **User Audit Stats**). Summarized on the page will be statistics for each audit you have security access to, audits you have not been granted access to will not be displayed on the page.

Statistics per institution and term included on the page are: a count of errors identified for each audit, a count of overrides identified for each audit, and the last date the validation process ran for each audit. Also included on the page are command buttons ‘**Clean up Data**’ (for reviewing itemized errors and resolving them) and ‘**Run Audit**’ (for initiating an on-demand/ad-hoc data validation run control process).

Figure 3: User Audit Stats Page

Navigation: Favorites | Main Menu > UHS Data Validation > Use > User Audit Stats

User Audit Stats

Program Code SA1      Institution 00730  
Term 1910

	Audit	Errors	Overrides	Last Updated	Clean up Data	Run Audit
1	Discontinued Applicants - Undergrad	1	24	01/02/2014	Clean up Data	Run Audit
2	Duplicate Applications - Undergrad	0	0	01/07/2014	Clean up Data	Run Audit
3	Residency - Newly Admitted Undergrads	46	0	01/03/2014	Clean up Data	Run Audit

- To see the detailed list of specific errors for an audit (and begin work on clearing them), click on the 'Clean up Data' command button for that audit row. You will be directed to the Audit Override page.

Figure 4: Audit Override Page

Navigation: Favorites | Main Menu

Audit Override

Program SA1      Institution 00730      Term 1910  
Audit Residency - Newly Admitted Undergrads

Run Audit Process   Refresh   Clean up Instruction

	Override	Emplid	Name	Effective Term	Residency	County	State	Country	Citizenship
1	<input type="checkbox"/>	0818320	Viveros, Lady Stephanie	1900	INT			COL	COL
2	<input type="checkbox"/>	0956607	Valdez, Mariana	1910	INT			MEX	MEX
3	<input type="checkbox"/>	0962310	Karovalia, Aamish Mehaboob	1910	INT			IND	IND
4	<input type="checkbox"/>	1025571	Jivani, Aaqib Anwar	1910	INT			IND	IND
5	<input type="checkbox"/>	1026691	Nguyen, Minh Tam Thi	1910	INT			VNM	VNM
6	<input type="checkbox"/>	1044563	Gonzalez, Olivia	1910	INT			MEX	MEX
7	<input type="checkbox"/>	1061814	Hernandez, Brenda A	1910	INT			USA	MEX
8	<input type="checkbox"/>	1071337	Kamiti, Rose N	1910	INT			KEN	KEN
9	<input type="checkbox"/>	1071756	Rodriguez, Oscar	1910	INT			COL	COL

- Click on the 'Clean up Instruction' command button to view and confirm information about the audit and what steps you should take to resolve the errors. It is important to review the instructions for guidance on correctly resolving the error. Click on the 'Return' command button when finished reading the instructions.

Figure 5: Sample Audit Instruction

#### Audit Instruction

This data validation identifies undergraduate students and newly enrolled students who enroll at UH with residency errors in state of residence, county of residence, country of residence, residency determination, and/or whose admit term is different than the residency effective term.

**Cleanup Instructions:**

There are residency data errors for this student. Review Apply Texas Application data to determine the correct county, state and country of residency.

If the student is deemed a Resident on Residency Official 1: Texas should be populated as the state of Residency on Residency Official 2, the county of residency should be completed in Residency Official 2 and the country of residency should be USA.

If the student is deemed as Not Texas Resident on Residency Official 1, a state other than Texas should be populated as the state of residency on Residency Official 2. For Not Texas Residents, the county should not be populated. The country of residency should be USA.

If the student is deemed as International on Residency Official 2, only the country of residency should be populated in Residency Official 2. In the Application Maintenance page, Biographical Details tab, click on the Citizenship link in the bottom right corner. Make sure that citizenship information is populated for the country of residency.

If uncertainties exist for residency determination, make the student a Not Texas Resident. Because students can appeal residency determination, it is best to err on the side of caution.

4. For each itemized error in the page, perform the applicable action(s) to correct the error. If it is determined that the error should be overridden, click on the Override checkbox for that item. **Note: each error item identified should be reviewed and analyzed, an item checked as overridden should still have been analyzed prior to checking the override.** Items checked as being overridden remain in the historical tracking for management review.
5. After completing working the list of errors, you can either wait for the next scheduled automated run of the audit or initiate an on-demand run of the audit to get an updated list of errors. Errors that have been cleaned will no longer show on the work list. To run the audit on-demand, click on the **'Run Audit Process'** command button. You will be directed to Process Scheduler where you can monitor the process run for completion. After the process completes, navigate back to the **User Audit Stats** page to view the updated errors list.



## **Contact Information**

(UHS) Marie Coleman: [macolem3@central.uh.edu](mailto:macolem3@central.uh.edu) ; (713) 743-9762

(UHM) Susan Moreno: [semoreno@central.uh.edu](mailto:semoreno@central.uh.edu) ; (713) 743-0640