Issue Resolution Log
TeamCBTek

1. The tab order was not always logical. This is part of the 508 compliance test.

(Fixed) Fixed tab ordering scheme for all windows. Tabs will go from left to right followed by top to bottom.

2. The text associated with the program controls does not always appear to be readable by accessibility software. You can see the limitations if you run Microsoft Narrator (see the accessibility features in windows) and try to use the software.

(Fixed) Although I had numerous issues trying to get Microsoft Narrator to work correctly, when I downloaded the free NVAccess (NVDA) screen reader, everything worked flawlessly. I was even able to use the Microsoft Anna voice that was used in Narrator.

3. It was not clear how to get out of the preview and report areas using the keyboard. This pertains to the requirement that the software must be navigable using a keyboard.

(Fixed) The preview areas can now be exited using the tab key and the "full-screen" report has been removed.

4. Some portions of the source code did not have sufficient commenting to understand the general purpose of the code. Detailed commenting is not necessary, especially if the code is self-explanatory in relation to other functions that have been commented. If you believe commenting is not necessary for a portion of the code then include a note explaining this point in the submission description file.

(Fixed) Documentation has been added for utilitly classes and for various RAT-STATS classes. The code was written to be self – documenting.

5. The following issues were identified with the unrestricted attribute appraisal module

    a. Changing the universe size applies the restriction on the sample size text box without waiting for the users to leave the cell. As a result, if a user first enters the sample size and then the universe size, the sample size is set to the first digit typed in the universe size text box (the same goes for the COI box).

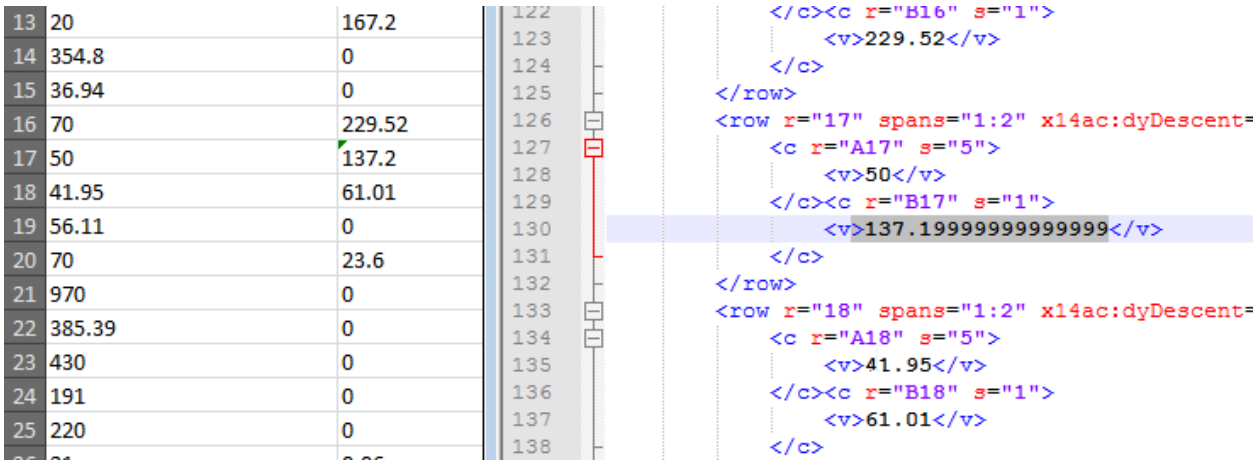
    (Fixed) : I added a validation console to this module. The user may now enter any of the input values in any order they desire. The validation console will detect when there is an issue.

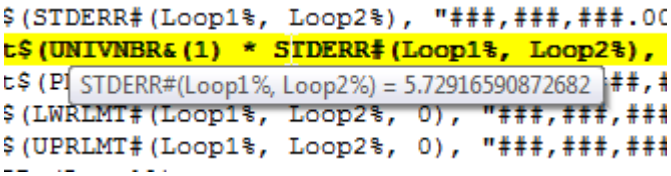
6. The following issues were identified in the combined unrestricted variable appraisal module

a. The numbers in the preview box are not always correct. For example it might display 0.199999999 when the input was .2.

(Fixed) See the screen shot below. What's seen in the Excel GUI is not necessarily what's stored in the xlsx file. I extracted "Examplez10-Input-AdjustIfErrorDetected.xlsx" to a folder and opened the "sheet1.xml" . This file contains all the data stored in the sheet.

Some of the numbers are stored with the trailing 9's in the xlsx but are displayed (rounded) with only one or two decimal places in Excel. The values we are getting are actually matching the XLSX. Nevertheless, we have implemented some code to round these values when they are being displayed in the preview GUI.





b. The module does not output the kurtosis.

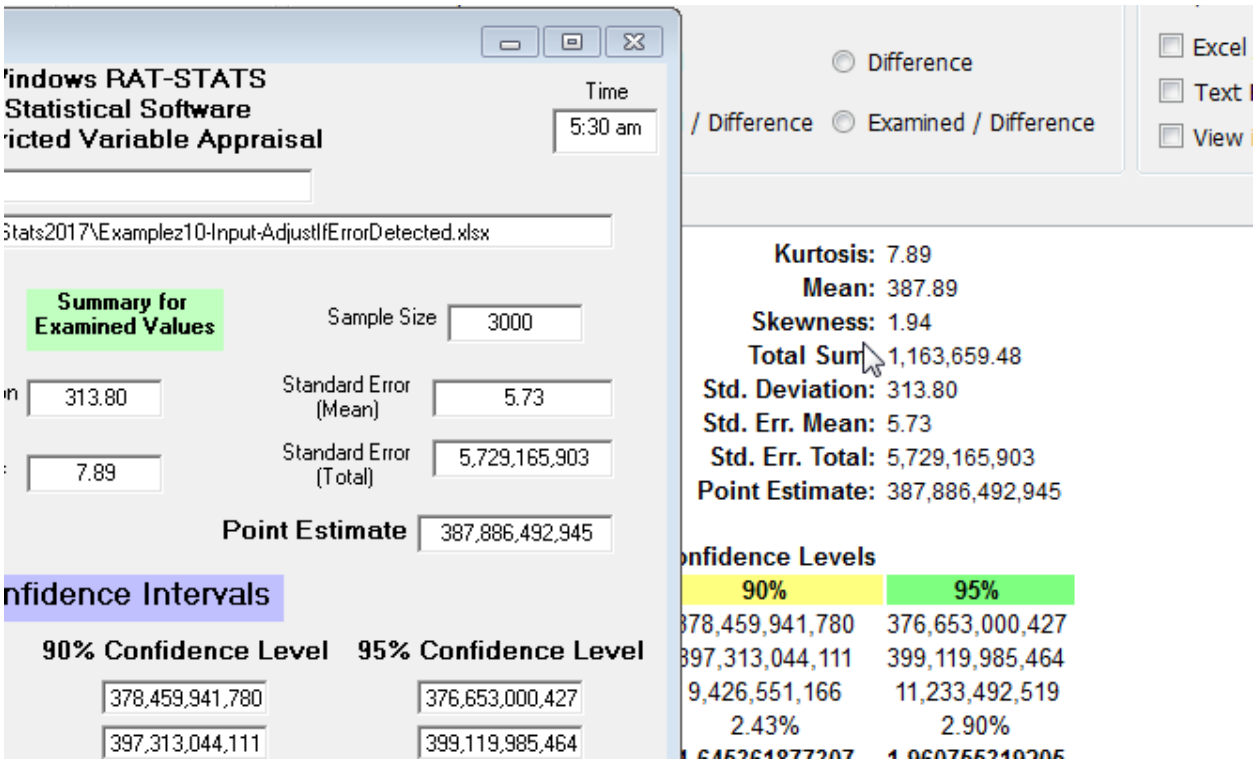
(Fixed) VBA example for this module did not include calculation for kurtosis so I copied the one from stratified variable appraisal.

c. When the point estimate is negative the precision is not calculated in a meaningful way (I believe RAT-STATS sets it to zero in this case)

(Fixed) Precision is now set to zero when point estimate is less than 0

d. There were several cases where the standard error total was off by .01. I did not identify any cases where the point estimate or confidence intervals were off.

(Fixed) The Standard Error needed to be rounded instead of truncated in the final output. Fixing this allowed the two programs to match:



e. RAT-STATS allows for space delimited text files (with consecutive spaces treated as a single delimiter). The present entry only allows for comma delimited text files. This difference must be resolved or explained more directly in the difference explanation file.

(Fixed) Support has been added to import tab and space delimited files with extensions dat, txt and ssv

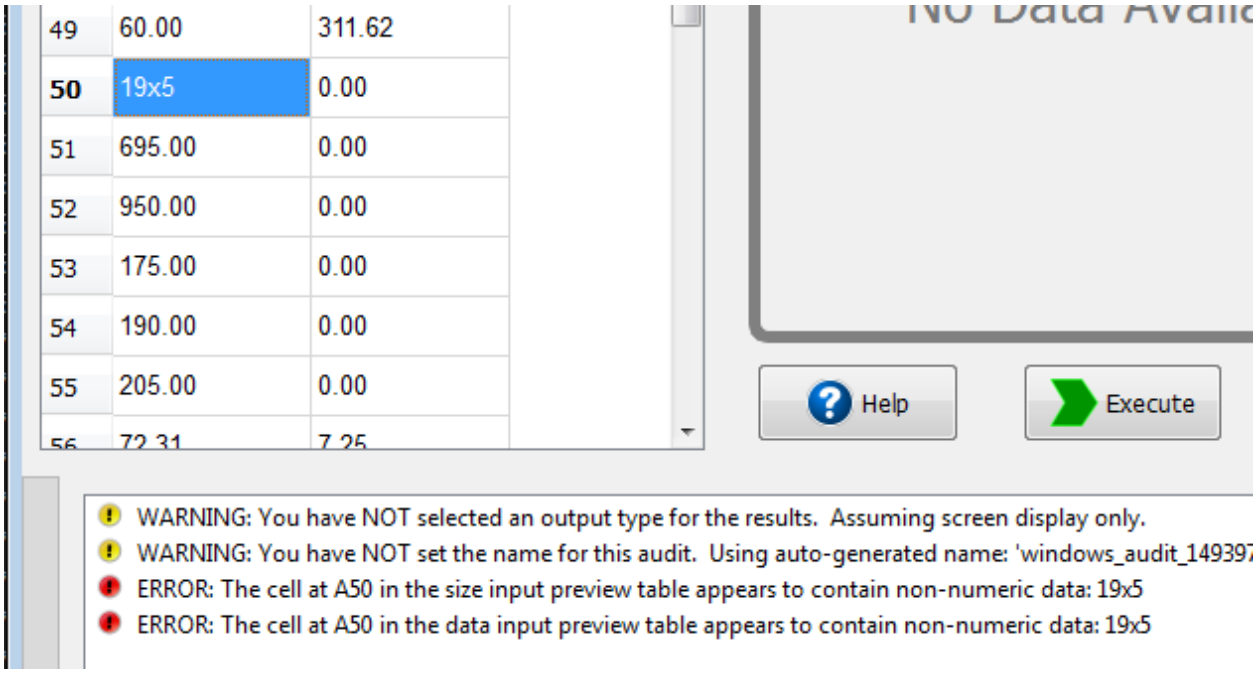
7. The following issues were identified in the stratified variable appraisal module

a. The output did not include strata labels (e.g., Stratum 1, Stratum 2, Stratum 3) to identify which output is associated with each stratum.

(Fixed) The output sheets are labeled correctly

b. Program converted the entry 19x5 in the universe cell to 19. It was able to identify characters in the sample results data.

(Fixed) Validation console will now display any issues with preview tables



c. Issue with the calculation of precision in a case with one zero response in one stratum (the issue was for the individual stratum precision not the overall precision).

(Fixed) This issue has been fixed

d. RAT-STATS allows for space delimited text files (with consecutive spaces treated as a single delimiter). The present entry only allows for comma delimited text files. This difference must be resolved or explained more directly in the difference explanation file.

(Fixed) Support has been added in the form of .dat / .txt input files

8. The following issues were identified with the simple random sample module

a. The "Spares" and "Random" labels are currently incorrect. This can be fixed by changing "Random" to "Spares" and "Spares" to "Original Sample" (or similar term). As an explanation, the spares are in random order because the user may not review them all. The original sample is in sequential order for convenience. The fact that the original sample is not in random order does not cause issues because the user reviews them all.

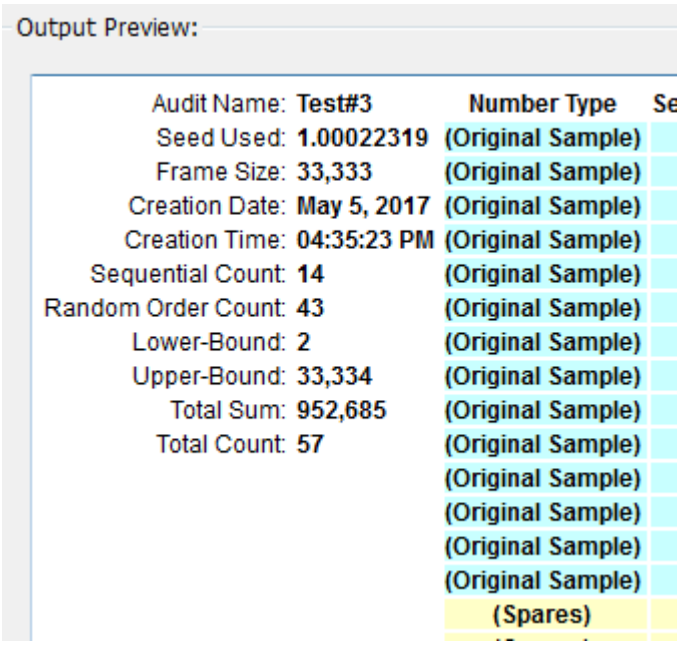
(Fix) Changed output labels as mentioned above

b. Software freezes when more samples are pulled than items in the universe (should throw and error rather than crashing or freezing).

(Fix) Added condition to validation console for this scenario. Prevents user from executing function until issue is fixed.

c. The module rounds the seed in the output to two digits after the decimal. This works for seeds generated by the program because the lower digit is truncated when the see is used. The approach; however, doesn't work with smaller numbers when there are more than two digits after the decimal.

(Fix) Changed output label to always show at least 12 digits after decimal for seed (minus trailing zeros)



Below are a few additional differences from RAT-STATS that do **not** constitute errors given the specification document and the referenced RAT-STATS User Manual and Companion Manual:

1. The variable appraisal modules are unable to import*.xls files.

   (Fix) Added support for importing XLS files

2. The software output the variable appraisals across multiple files.

   (Fix) Added support for saving all variable appraisals to single XLS file.

3. In some but not all modules the software appends the audit name to the file name.

   (Fix) This has been fixed by moving to single (XLS) output file. Tab, space and CSV multi-sheet outputs are merged into a single sheet then saved to a single file.

4. The windows of the software in some cases can be undocked and closed.

   (Fix) Un-docking/closing abilities have been disabled