

Central Recordkeeping Agency, NSDL



Document on installation and usage of File Merger Utility (FMU) Version 1.0

Preface

One of the main functions of PAO/CDDO in Central Civil Ministries (equivalent entities in other Accounting Formation) is submission of the Subscribers' pension contribution details to CRA. The PAO/CDDO shall consolidate the pension contribution details of all the Subscribers linked to various DDO's which are mapped to the concerned PAO/CDDO. For this purpose, a PAO/CDDO has to prepare DDO wise Subscribers' Contribution File (SCF) and upload it to NPSCAN system. This SCF will contain various details such as PRAN of the Subscriber, DDO Registration Number, month of contribution, amount of the Subscriber contribution, amount of Government contribution etc. In order to enable the PAO/CDDO to prepare SCF, CRA has provided a utility called File Preparation Utility (FPU). CRA has also provided a File Validation Utility (FVU) to validate the file. Though, PAO/CDDO user has the option to use the FPU or its own software to generate SCF, for uploading in NPSCAN, the SCF has to be validated through FVU. FVU checks consistency of the file so as to minimize rejections at the NPSCAN system. NPSCAN system will not accept any SCF which is not passed through FVU.

To facilitate the PAO/CDDO to prepare a consolidated SCF of all its linked DDOs, CRA has developed a File Merger Utility (FMU). FMU will provide PAO/CDDO with the option of merging all the files generated by File Preparation Utility (FPU) provided by individual DDOs. This document details the usage of File Merger Utility (FMU) in preparation and upload of Subscriber Contribution File (SCF) in the NPSCAN/CRA system.

File Merger Utility (FMU):

FMU is a standalone utility. It will provide PAO/CDDO with the option of merging all the files generated by File Preparation Utility (FPU) provided by individual DDOs. The output of this merging function will be a single consolidated file in '.fpu' format. This merged file can be opened by PAO/CDDO using FPU and then prepare the file which should be validated through File Validation Utility (FVU). The minimum hardware and software requirements for installing and operating the FMU are the same as required for FPU and FVU. These details are available in the Standard Operating Procedure (SOP) on Contribution Upload available in our website 'www.npscra.nsdl.co.in'.

Procedure for Installing FMU on PAO's/CDDO's local machine

FMU is a standalone JAVA based utility which can be easily installable on a desktop machine. The steps for installation are given below:

- 1) PAO/CDDO User (henceforth referred as User) shall access the CRA website www.npscra.nsdl.co.in, download the FMU and save it on the local machine.
- 2) After downloading, on navigating to the folder where the FMU is saved, a ".JAR" file will be displayed to the PAO/CDDO User.

- 3) To open the FMU saved on the local machine, User will have to double click on the “FMU.JAR” file
- 4) It is imperative that the User will have to install JAVA 1.5 (J2SE 1.5) on the machine where the FMU is to be installed. If this particular version of JAVA is not installed on this machine, then the FMU will not be operational. JAVA can be freely downloaded from the website ‘www.java.com’.
- 5) On downloading the utility, the icon as displayed below in figure 1 will be shown to the User.

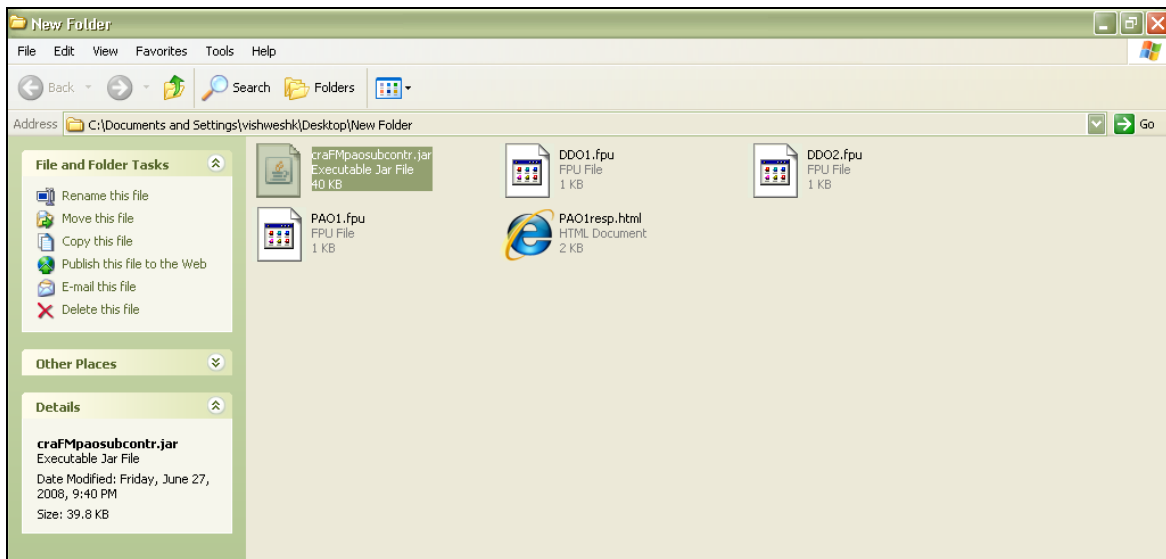


Figure 1

Usage of FMU:

Prerequisites:

- DDOs will prepare SCF using File Preparation Utility (FPU) provided by CRA (for more details, please refer to the Standard Operating Procedure (SOP) on Contribution Upload.)
- DDOs will forward the ‘.fpu’ files to the concerned PAO. DDOs to ensure that the ‘.fpu files’ submitted should have the same PAO Registration Number allotted by CRA.
- The User has to place all the DDO wise ‘.fpu’ files in a single a folder. An illustration of the same is given below in figure 2. This folder should contain only ‘.fpu’ files.

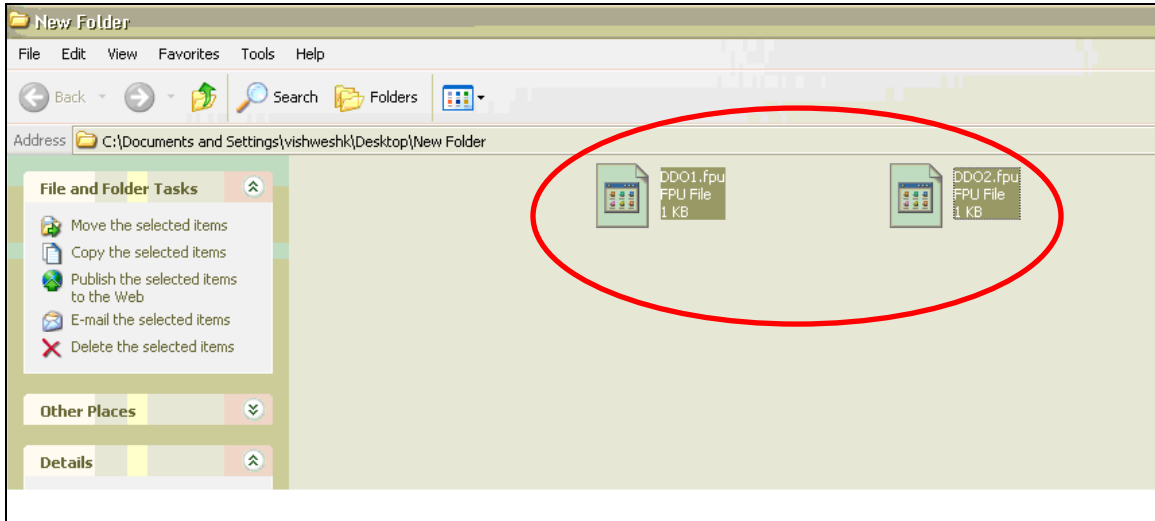


Figure 2

Merging of DDO wise SCF using FMU:

Following are the steps for merging of the DDO wise SCF using FMU:

1. The User has to double click on the FMU icon. On execution of the FMU, the following screen as shown in figure 3 will be displayed to the User.

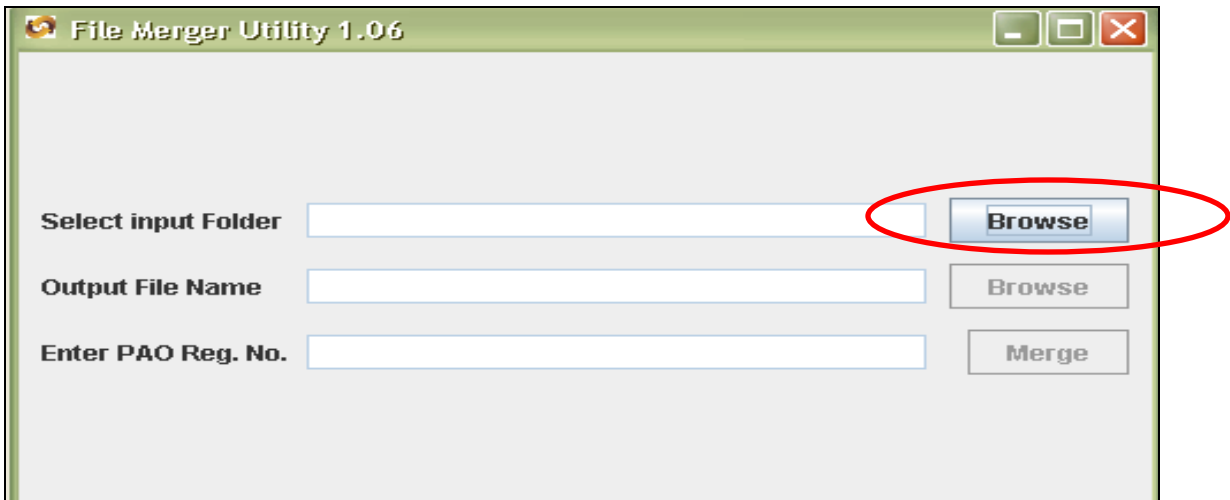


Figure 3

1. The User has to select the input folder (as shown in figure 3 above). If the location of the file is not known to the User, the User has an option to click on the "Browse" option and select the location of the folder to be input as shown below in figure 4.

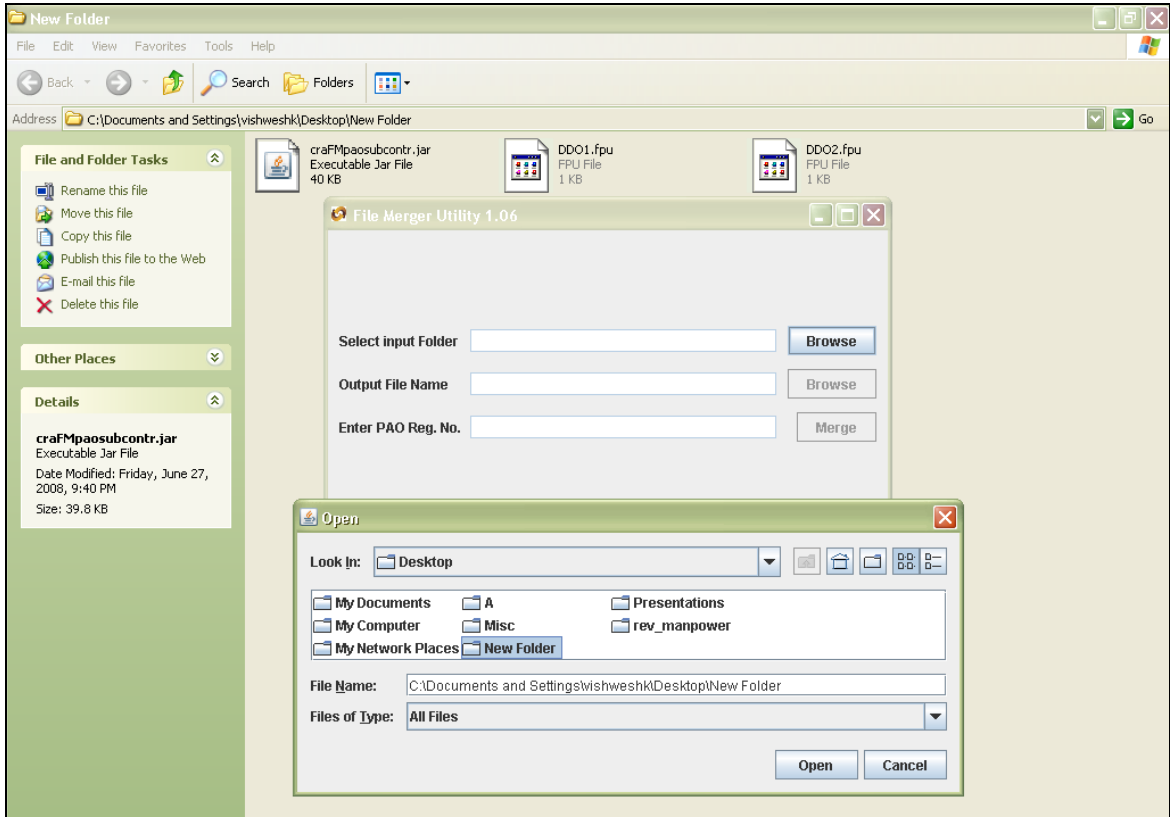


Figure 4

2. Once the input folder is selected, the User has to enter the location and name of the desired output file as shown below in figure 5.

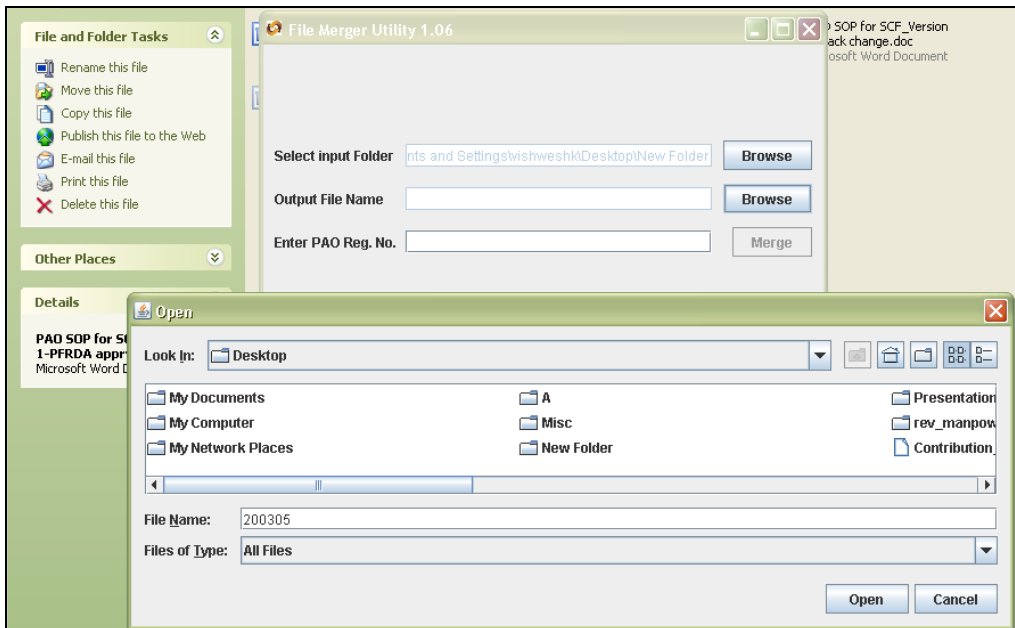


Figure 5

3. On selecting the desired output path with name, the User has to enter the PAO Registration Number in the column mentioned in FMU as shown below in figure 6.

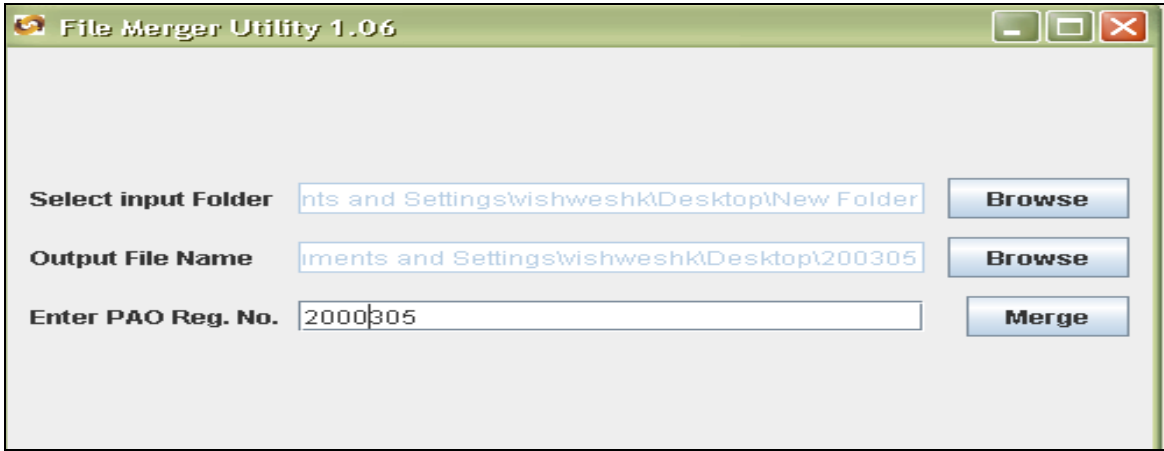


Figure 6

4. On entering the PAO registration number, the User has to click on the “Merge” button in order to execute the utility.
5. On successful creation of the file, FMU will display a message as shown in figure 7.

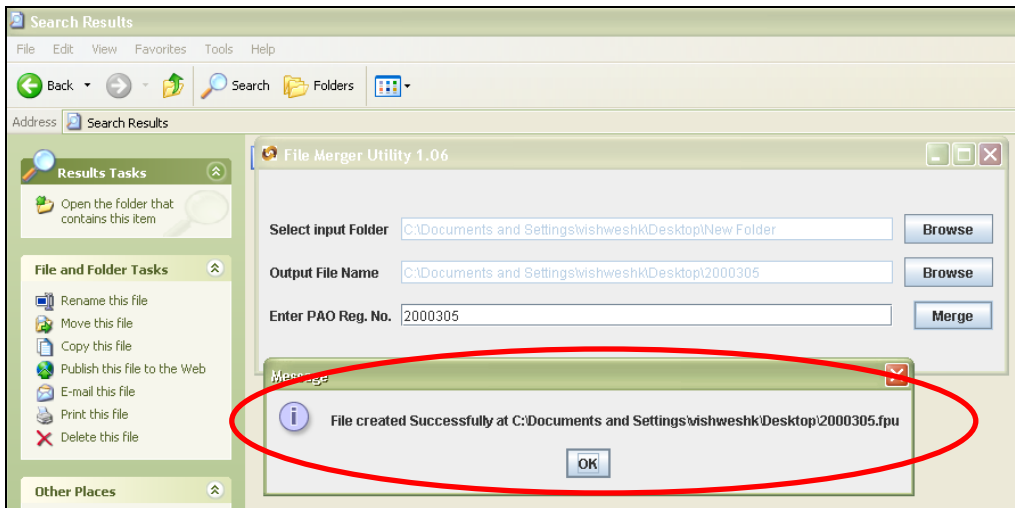


Figure 7

6. The output file with .fpu extension will be generated with FPU version and hash added within the file. It will be saved in the output file name specified within the folder selected by the User. A response file in HTML format will also be generated in the same folder.
7. For creating a ‘.txt’ file, the User has to open this merged ‘.fpu’ file.
8. On opening the file, the User can verify the SCF as shown below in figure 8.

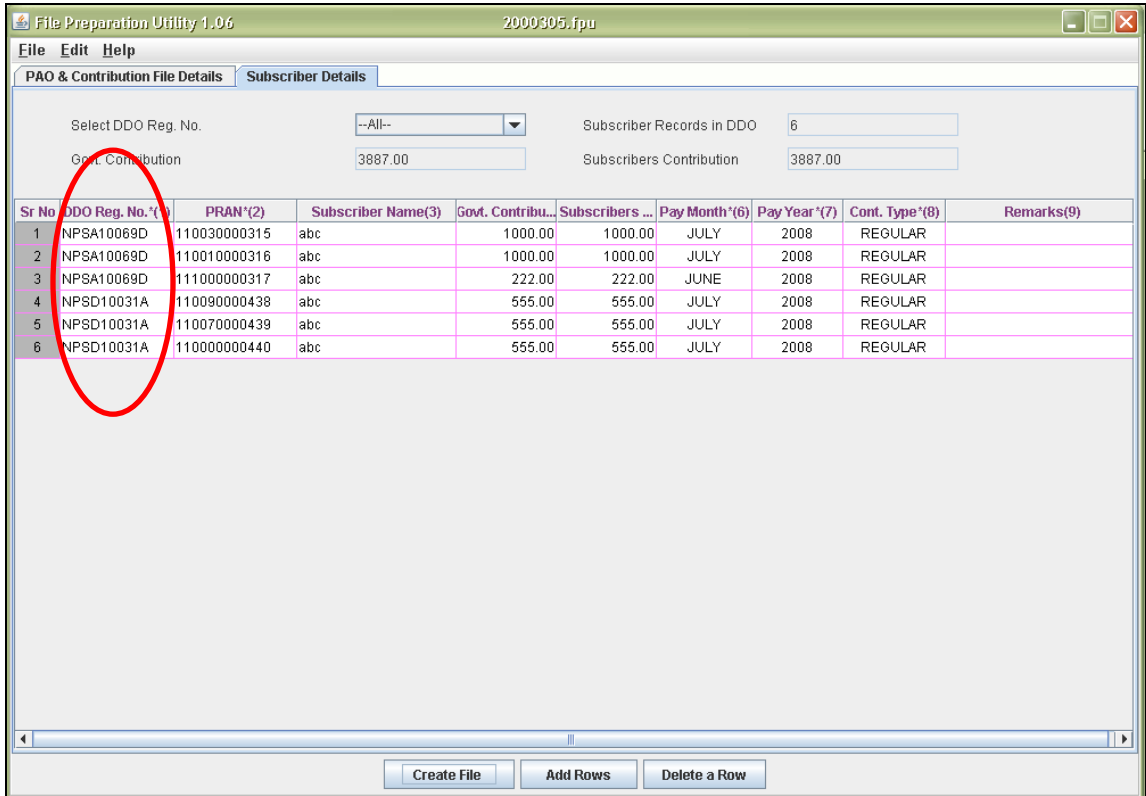


Figure 8

9. On successful verification, the User can create the file by clicking on the “Create” button in the FPU.
10. The ‘.txt’ file created using FPU has to be validated through FVU.
11. On successful validation through FVU, the User can upload the SCF to the NPSCAN.
12. The response file which gets generated along with .fpu file will give a summary of the merged DDO files along with DDO registration number, number of PRAN contained in each file, total subscriber contribution and total government contribution, as shown in figure 9.

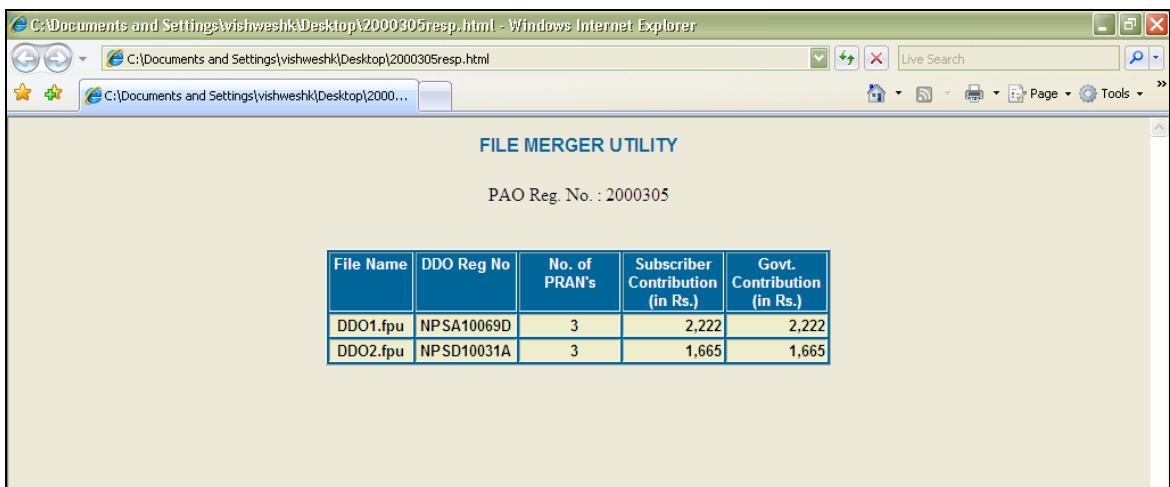


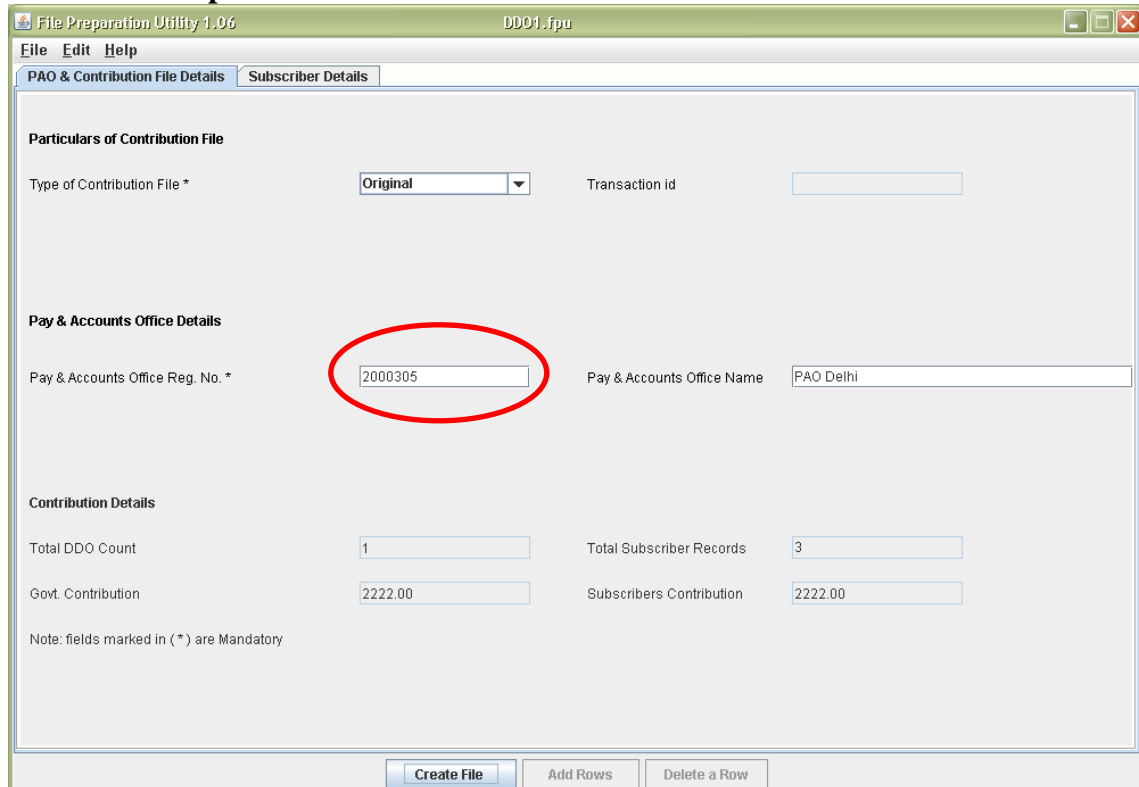
Figure 9

13. In case of error, ‘.fpu file’ and ‘response file’ will not be generated. An error file in .HTML format containing three fields i.e., File name, error code and error description will be generated.

Validations at FMU

14. FMU will check whether all the files to be merged are having '.fpu'. If one or more files fail the check then the utility will stop further processing and give an error message.
15. FMU will perform hash level validation to check whether the FPU files have been modified after generation through FPU.
16. FMU will check the FPU version of each file. FMU will check whether all the files have been generated using the same version of FPU.
17. FMU will check whether PAO Registration Number of individual files is same as that provided as input at the time of merging. If one or more files fail the check, then the utility will stop further processing and give an error message.
18. In case the PAO registration number input by the DDO(s) is different, the FMU will generate an error file. Let us consider an example to make things more clear. File name DDO1.fpu has the PAO registration number 2000305 and file DDO2.fpu has the PAO registration number 2000316 as shown below in figures 10 and 11 respectively.

File 1: DDO1.fpu



The screenshot shows the File Preparation Utility 1.06 interface for DDO1.fpu. The 'PAO & Contribution File Details' tab is active. The 'Particulars of Contribution File' section includes 'Type of Contribution File *' set to 'Original' and an empty 'Transaction id' field. The 'Pay & Accounts Office Details' section shows 'Pay & Accounts Office Reg. No. *' as '2000305' (circled in red) and 'Pay & Accounts Office Name' as 'PAO Delhi'. The 'Contribution Details' section shows 'Total DDO Count' as '1', 'Total Subscriber Records' as '3', 'Govt. Contribution' as '2222.00', and 'Subscribers Contribution' as '2222.00'. A note at the bottom states 'Note: fields marked in (*) are Mandatory'. Buttons for 'Create File', 'Add Rows', and 'Delete a Row' are at the bottom.

Figure 10

File 2: DDO2.fpu

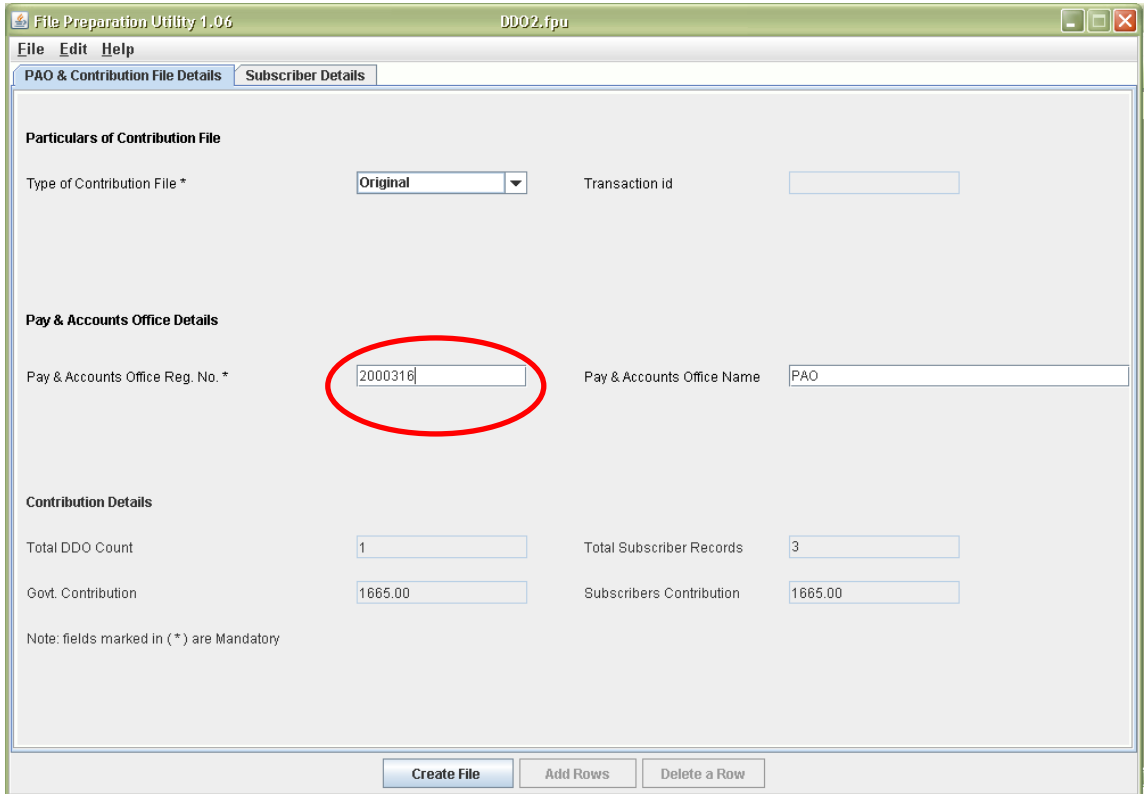


Figure 11

As shown in the above figures, in figure 10, the PAO registration number is entered as 2000305 and in figure 11 the PAO registration number is entered as 2000316. If these two files are merged using the FMU, FMU will not accept these files and will display an error message as shown below in figure 12. Further, an error file containing the error message as given in figure 13 will also be generated.

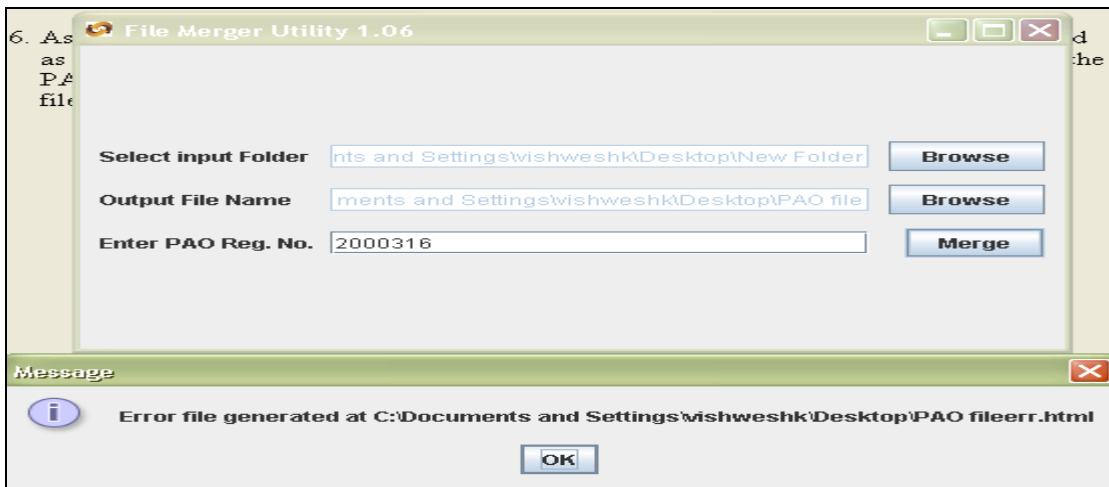


Figure 12

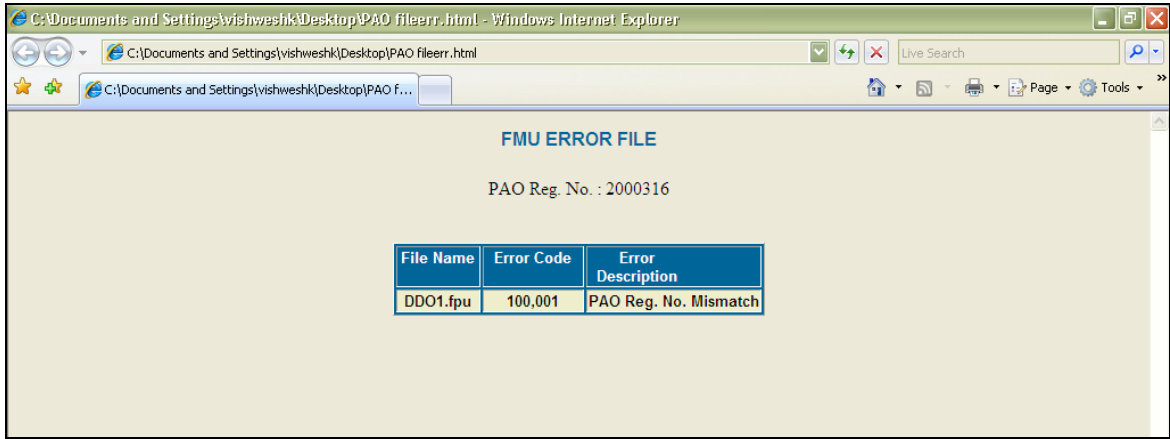


Figure 13

General guidelines:

- Merger utility will provide merging facility for regular files and not correction files. Even if a single file within the folder is a correction file then file merging process will fail.
- All the files present in the folder selected for merging will be considered by FMU.
- A file which is already merged earlier can be part of the input files.
- Even if the file prepared by DDO is incomplete, the files will be merged to a single file. When the PAO opens the merged file using FPU it will allow him to edit any of the record details. FPU will perform other control checks while creating a text (.txt) file
