

The provided document is an Operations Control Language (OCL) program, `AP100.oc136.txt`, used in IBM midrange systems (e.g., AS/400 or iSeries) for Accounts Payable (A/P) voucher entry and editing. Below is an explanation of the process steps, followed by a list of external programs called and tables (files) used.

Process Steps of the RPG .OCL Program

The OCL program orchestrates the A/P voucher entry and edit process, handling validation, file management, and user interaction for regular A/P transactions, freight invoices from the LMS system, or other entry methods. Here's a breakdown of the steps:

1. Initial Validation and Inventory Check:

- The program checks if an inventory process (`INTSZZ`) is in progress by evaluating `DATAF1-?9?INTSZZ`.
- If true, it displays messages indicating that the inventory process is ongoing, instructs the user to try again later, pauses for user input (press 0 to cancel), and branches to the `END` tag, halting execution.
- This prevents A/P voucher posting during specific inventory processes to avoid data conflicts.

2. Wire Transfer (WT) Handling:

- The program checks if the transaction involves a wire transfer (`?3?/WT`).
- If true, it sets `P20` to `'APWT?WS?'` and adds a local data field at offset 198 with `'WT*** WIRE TRANSFER ***'`.
- If false, it sets `P20` to `'APTR?WS?'` and clears the data field at offset 198.
- This distinguishes wire transfer transactions from regular A/P transactions.

3. LMS Freight Invoice vs. Regular A/P Check:

- The program determines whether the process is for freight invoices imported from the LMS system or regular A/P transactions.
- **Rule:** If an A/P transaction file (`?9??20?`) exists, LMS processing is not allowed.
- If the A/P transaction file does not exist, the program displays a selection screen (`AP100S`) for the user to choose between LMS automatic processing or regular A/P entry.
- If the LMS file (`DATAF1-?9?LMS?WS?`) exists, the program deletes the A/P transaction file (`APTXXWS?`) using `GSDELETE`.

4. User Selection for Entry Method:

- The program loads the `AP100S` screen to allow the user to select the entry method:
 - **ARGLMS:** Triggers the `AP125` program for LMS processing (with parameter `N`) and branches to `END`.
 - **PAPER:** Triggers the `AP125` program for paper-based A/P entry (with parameter `P`) and branches to `END`.
 - **FLEXI:** Triggers the `AP106` program for flexible entry and branches to `END`.
 - **CANCEL:** If the user cancels (`?L'129,6'?/CANCEL`), the program branches to `END`.
- If the A/P transaction file exists (`?F'A,?9?APTR?WS?'?/00000000`) or `DATAF1-?9??20?` is true, the program skips to the `AROUND` tag, bypassing the selection screen.

5. File and Index Creation:

- If the A/P transaction file (?9??20?) does not exist, the program creates it using **BLDFILE** with 500 records, 404 bytes each, and specific key fields.
- It also builds an index for the A/P transaction file (?9?APTX?WS?) with keys at positions 12, 5, 385, and 20.
- For the inventory transaction holding file (**INTZH1**), it builds an index if it exists (**DATAF1-?9?INTZH1**).
- If the job cost file (**JCCOST**) exists, it creates a file with 999,000 records, 256 bytes each.

6. File Definitions for AP100:

- The program defines multiple files for the **AP100** program, including **APTRAN**, **APTRANX**, **APTRNX**, **AOPEN**, **AOPENH**, **AOPNHC**, **APCONT**, **APDATE**, **APVEND**, **APVENDX**, **GLMAST**, **JCCOST**, **GSTABL**, **POFILE**, **POADDR**, **APINVH**, **APHSTHC**, **INFIL1**, **INTZH1**, **POPROJ**, **SA5FIUD**, **SA5FIUM**, **SA5MOUD**, **SA5MOUM**, **BICONT**, **GSCTUM**, **FRCINH**, and **FRCFBH**.
- These files are opened with shared access (**DISP-SHR**) and extended as needed (e.g., **EXTEND-100** for **APTRAN**).
- The program then runs **AP100** for voucher entry.

7. Post-Entry Processing:

- If the A/P transaction file is empty (?F'A, ?9??20?' ?/00000000), the program branches to **END**.
- It sets local variables at offsets 135 (?WS?) and 221 (?9??20?).
- It deletes and rebuilds the A/P check transaction file (**APCT?WS?**) with 500 records, 80 bytes each.

8. Voucher Transaction Edit (AP110):

- The program loads **AP110** for editing A/P voucher transactions.
- It defines files like **APTRAN**, **APCONT**, **APCHKR**, **APCHKT**, **APTRNX**, **GLMAST**, **AOPNHC**, **APINVH**, **GSTABL**, **APSTAT**, **APVEND**, **INFIL1**, and **INTZH1**.
- It overrides the printer file (**APLIST**) to output to **QUSRSYS/APEDIT** or **QUSRSYS/TESTOUTQ** based on the ?9?/G condition.
- The program runs **AP110** to edit transactions.

9. Prepaid Check Edit (AP115):

- If the LMS file (**DATAF1-?9?LMS?WS?**) exists or the A/P check transaction file (**APCT?WS?**) is empty, the program skips to **NOPPD**.
- Otherwise, it loads **AP115** for prepaid check editing, defining files like **APCHKT**, **APCHKTX**, **APCHKR**, and **APCONT**.
- It overrides the printer file (**APLIST**) similarly and runs **AP115**.

10. Purchase Order Edit (Skipped):

- The program explicitly skips the purchase order edit section by branching to **END**.
- If executed, it would:
 - Sort the A/P transaction file (?9??20?) into ?9?APPO?WS? using **#GSORT** with specific sort criteria (company, P/O number, entry sequence).

- Load **AP120** for A/P and purchase order voucher editing, using files like **APTRAN**, **APTRANH**, **APCONT**, and **POFILE**.

11. Program Termination:

- The program clears all local variables (**LOCAL BLANK-*ALL**) and ends execution at the **END** tag.

External Programs Called

The OCL program invokes the following external programs:

1. **AP100S**: Displays the selection screen for choosing the entry method (LMS, paper, or flexible).
2. **AP100**: Handles A/P voucher entry.
3. **AP106**: Processes flexible A/P entry (triggered by **FLEXI** selection).
4. **AP110**: Edits A/P voucher transactions.
5. **AP115**: Edits prepaid checks.
6. **AP120**: Handles A/P and purchase order voucher editing (skipped in this execution).
7. **AP125**: Processes LMS or paper-based A/P entry (triggered by **ARGLMS** or **PAPER** selection).
8. **#GSORT**: Sorts the A/P transaction file for purchase order editing (skipped).

Tables (Files) Used

The program references the following files (tables), primarily opened with shared access (**DISP-SHR**):

1. **APTRAN**: A/P transaction file (**?9??20?**).
2. **APTRANX**: Alternate A/P transaction file (**?9??20?**).
3. **APTRNX**: A/P transaction index file (**?9?APTX?WS?**).
4. **APOPEN**: A/P open items file (**?9?APOPEN**).
5. **APOPENH**: A/P open items history file (**?9?APOPENH**).
6. **APOPNH**: A/P open items history control file (**?9?APOPNH**).
7. **APCONT**: A/P control file (**?9?APCONT**).
8. **APDATE**: A/P date file (**?9?APDATE**).
9. **APVEND**: A/P vendor file (**?9?APVEND**).
10. **APVENDX**: A/P vendor index file (**?9?APVENX**).
11. **GLMAST**: General ledger master file (**?9?GLMAST**).
12. **JCCOST**: Job cost file (**?9?JCCOST**).
13. **GSTABL**: General system table (**?9?GSTABL**).
14. **POFILE**: Purchase order file (**?9?POFILE**).
15. **POADDR**: Purchase order address file (**?9?POADDR**).
16. **APINVH**: A/P invoice history file (**?9?APINVH**).
17. **APHSTHC**: A/P history control file (**?9?APHSTHC**).
18. **INFIL1**: Inventory file 1 (**?9?INFIL1**).
19. **INTZH1**: Inventory transaction holding file (**?9?INTZH1**).
20. **POPROJ**: Purchase order project file (**?9?POPROJ**).
21. **SA5FIUD**: Sales file (unknown purpose, possibly related to financial updates) (**?9?SA5FIUD**).
22. **SA5FIUM**: Sales file (unknown purpose, possibly related to financial updates) (**?9?SA5FIUM**).
23. **SA5MOUD**: Sales file (unknown purpose, possibly related to monthly updates) (**?9?SA5MOUD**).

24. **SA5MOUM**: Sales file (unknown purpose, possibly related to monthly updates) (?9?SA5MOUM).
 25. **BICONT**: Business intelligence control file (?9?BICONT).
 26. **GSCTUM**: General system control table (unknown purpose) (?9?GSCTUM).
 27. **FRCINH**: Freight invoice history file (?9?FRCINH).
 28. **FRCFBH**: Freight feedback history file (?9?FRCFBH).
 29. **APCHKR**: A/P check register file (?9?APCHKR).
 30. **APCHKT**: A/P check transaction file (?9?APCT?WS?).
 31. **APCHKTX**: Alternate A/P check transaction file (?9?APCT?WS?).
 32. **APSTAT**: A/P status file (?9?APSTAT).
 33. **APPO?WS?**: Sorted A/P purchase order file (used by #GSORT, temporary).
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Summary

The **AP100.oc136.txt** OCL program manages the A/P voucher entry and edit process, ensuring no conflicts with inventory processes, handling wire transfers, and allowing user selection between LMS freight invoices, paper-based, or flexible A/P entry. It creates and indexes necessary files, runs appropriate programs (**AP100**, **AP106**, **AP110**, **AP115**, **AP125**, **#GSORT**), and skips purchase order editing. The program uses a comprehensive set of files to store transaction, vendor, inventory, and financial data, ensuring proper integration with the broader A/P system.