POSTING INVOICES TO A/R IN C.O.P.

Introduction

The Post Invoices To A/R application transfers all transactions that were previously created in Order Entry into the A/R Open Item File. In addition it sends this information to other A/R applications such as the Customer File Maintenance and Salesman File Maintenance applications. This application also updates numerous files in COP and I/M. Consequently the result of posting serves to automatically adjust the balance that a given customer owes your business. It also affects the cost of sales, and other related variables recorded in the customer, salesman and inventory files.

Two Phased Posting

Elliott COP posting process uses a two-phased posting method. This means certain files will be posted during phase 1 while other files will be updated in phase 2. The reason for two-phased posting is because there's a limitation of 30 open Btrieve files in the DOS system manager. Currently, there are about 50 files that are opened in the posting procedure. In the previous release (V6.0), files were opened and closed as needed to keep the number of open files under 30 at any given time. However, TTS did not work with this process and therefore we had to disable TTS.

After the V6.7 release, we adopted the two-phased posting method. In the first phase certain files are updated directly (and therefore are required to be open during phase 1), and the information to update the other files is written to the CP0305BT file (and therefore does not require opening the other files during phase 1). During the second phase posting, the system will read from the CP0305BT and update the files that were not updated in the phase I. By using this method, we ensure during both phase I and phase II the number of open files is under 30 and there is no need to open and close files as needed. Therefore, TTS for COP posting will work with V6.7.

The CP0305BT file serves as a bridge between phase 1 and phase II. Most of the files that were skipped in phase I and deferred to phase II are files that requiring a write operation (adding new records) since write operations can be deferred to phase II without causing any update inconsistency problems.

Currently, the First Phase updates 21 files including the *CP0305BT* and the Second phase updates 24 files from the *CP0305BT* file.

POSTING SEQUENCE.

PHASE 1

Phase I File Opening - all phase one files are opened.

Phase I File Updating: For each invoice, the system will update the following files in the designated sequence:

1. AROPNFIL - A/R OPEN ITEM FILE
2. IMLFTRXS - I/M LIFO-FIFO FILE
3. IMITMIDX - I/M ITEM FILE
4. IMINVLOC - I/M INVENTORY LOCATION FILE
5. IMBININV - I/M BIN INVENTORY FILE
6. IMLSTRXS – I/M SERIAL LOT TRANSACTION FILE
7. CPORDLS – COP ORDER SERIAL/LOT FILE (DELETE)
8. Update BOMP Component Items - (IMITMIDX & IMINVLOC)
9. CPORDLIN – COP ORDER LINE ITEM FILE (REWRITE)
10. IMATPFIL – I/M AVAILABLE TO PROMISE FILE
11. Update Kit/Feature Items – (IMITMIDX & IMINVLOC)
12. CPINVHDR – COP INVOICE HEADER FILE
13. ARSLMFIL – A/R SALESMAN FILE
14. ARCODES – A/R CODES FILE (TAX RECORD)
15. ARSTLFIL – A/R SALES TAX LIABILITY FILE
16. ARCUSFIL – A/R CUSTOMER FILE (Balance, Sales/Cost PTD & YTD)
17. ARCUSFIL – A/R CUSTOMER FILE (Cash Thru COP)
18. AROPNFIL – A/R OPEN ITEM FILE (Cash Thru COP)
19. CPORDHDR- COP ORDER HEADER FILE (Mark Order as Posted)
    CP305BT - BATCH FILE TO UPDATE THE SECOND PHASE.

Phase I File Closing - all phase one files are closed.

GLJNLHST – G/L GENERAL JOURNAL HISTORY

PHASE 2

Phase II File Opening - all phase two files are opened.

Phase II File Updating: For each record in the CP0305BT file, the system will update the files in the following list:

1. ARDISFIL – A/R DISTRIBUTION FILE (Accounts Receivable)
2. JOBHIST – S/M JOB HISTORY FILE (FOR ARDISFIL)
3. VTSREG – VERTEX REGISTER FILE (SALES)
4. CPHSTTRX – COP SALES HISTORY TRX FILE

5. CPRSNYER – COP REASON YEAR FILE
6. CPRSNCYR – COP REASON CUST YEAR FILE
7. IMINVTRX – I/M INVENTORY TRANSACTION AUDIT FILE
8. IMBINFIL – I/M BIN MASTER FILE
9. INBINHST – I/M BIN HISTORY FILE
10. IMSERREF – I/M SERIAL REFERENCE FILE
11. IMBINREF – I/M BIN REFERENCE FILE
12. IMLSHST – I/M SERIAL/LOT HISTORY FILE
13. CPLSTRXS – COP SERIAL/LOT FILE
14. IMDISFIL – I/M DISTRIBUTION FILE
15. JOBHIST – S/M JOB HISTORY FILE (FOR IMDISFIL)
16. CPINVLIN – COP INVOICE LINE ITEM FILE
17. NOTE – S/M NOTE FILE (CPINVLIN)
18. CPINVOPT – COP INVOICE OPTION FILE
19. VTSREG – VERTEX REGISTER FILE (ARKANSAS & FRT)
20. NOTE – S/M NOTE FILE (FOR CPINVHDR)
21. CPPOREF – COP PO REFERENCE FILE
22. ARCOMDUE – COP SALES HISTORY TRX FILE
23. ARDISFIL – A/R DISTRIBUTION FILE (Cash – Accounts Receivable)
24. ARDISFIL – A/R DISTRIBUTION FILE (Cash – Cash Account)

Phase II File Closing - all phase two files are closed.

PHASE I Files

1. **AROPNFIL (AR OPEN ITEM FILE) –** Contains a record for each transaction posted to a Customer's account. Invoices, Checks, Credit Memos, Debit Memos and Finance Charges will be part of this file.

2. **IMLFTRXS (LIFO – FIFO TRANSACTION FILE) –** Contains a record for each transaction that has been entered when LIFO or FIFO has been chosen. Each record contains the item no., cost, quantity, document no., date and time.

3. **IMITMFIL (I/M ITEM INDEX) –** Contains a record for every item entered through Item File Maintenance. This is the master file for inventory items. Each record contains item no., description, price, cost and all pertinent information concerning each item.

4. **IMINVLOC (INVENTORY LOCATION FILE)** – Contains a record for an item that is located at a warehouse location/s other than the default warehouse. This file contains records entered through Inventory Location Control.

5. **IMBININV (BIN INVENTORY FILE) –** This file contains the detailed bin information for transaction and stock records.

6. **IMLSTRXS (LOT/SERIAL TRANSACTION FILE) –** Contains a record for each transaction entered through Inventory Transaction Processing with a Lot or Serial number assigned to it. Each record contains item no., location, date sold, effective and expiration dates, cost, qty on hand and allocated, purchase order no, and vendor no.

7. **CPORDLS (ORDER SERIAL/LOT FILE)** – The serial number of each line item is recorded in this file. Therefore, you can have multiple serial numbers with each line item.

9. **CPORDLIN (COP ORDER LINE ITEM FILE- REWRITE) –** This file contains information concerning each item that was entered on an order. This file contains information that is entered on the second screen in the Order Entry; Add, Change, Delete Orders.

10. **IMATPFIL (I/M AVAILABLE TO PROMISE FILE)** – This file contains all the Available To Promise records. This includes both requirement and replenishment record like PO, Sales Order, BOMP Production Orders and SFC Work Orders. This file is the basis for Available To Promise Inquiry and Report. This is like a mini- MRP system in a real time format. This file can be resynchronized by using, Generate Available To Promise File Utility.

12. **CPINVHDR (COP INVOICE HEADER FILE) –** This is a mirroring file of CPORDHDR (COP ORDER HEADER FILE). Once a sales order is invoiced and posted, the header information will be transferred to this file.

13. **ARSLMFIL (SALESMAN FILE) - Contains** a record for each Salesperson used by the Package. Maintains commission percentages for each salesperson by Customer type and maintains sales and commission totals period to date and year to date.

14. **ARCODES (A/R CODES FILE - TAX RECORD) –** Contains a record for each of the **following** codes used by the package: Ship Via Codes, Terms Codes, and Tax Codes.

15. **ARSTLFIL (A/R SALES TAX LIABILITY FILE)** –This file contains the detail sales tax information and will be printed with Sales Tax Liability Report. It is useful for state sales tax auditing purpose.

16. **ARCUSFIL (A/R CUSTOMER FILE)** - Contains a record for each Customer. Maintains detailed information about the Customer such as period to date and year to date sales and costs, as well as maintaining credit history.

17. **ARCUSFIL (A/R CUSTOMER FILE: CASH)** - Contains a record for each Customer. Maintains detailed information about the Customer such as period to date and year to date sales and costs, as well as maintaining credit history.

18. **AROPNFIL (A/R OPEN ITEM FILE - Cash) –** Contains a record for each transaction posted to a Customer's account. Checks, Invoices, Credit Memos, Debit Memos and Finance Charges will be part of this file.

20. **CPORDHDR (COP ORDER HEADER FILE)** – This file contains general information for each order entered such as order number, billing and shipping information, salesman information. This file contains the first screen of the information in Order Entry; Add, Change and Delete Orders.

CLOSING PROCEDURE

20. **GLJNLHST (G/L GENERAL JOURNAL HISTORY) -** Any posting procedures performed from A/R, A/P, P/R, J/C, COP, I/M, P/O, or A/D which post transactions to the Distribution to G/L File(s), their records are created in this file with a History Number Total Amount posted, Package Code and Journal Code Number.

Phase II Files

1. **ARDISFIL (A/R DISTRIBUTION FILE TO G/L FILE) –** Contains a record for every distribution to an account made during the posting application.

2. **JOBHIST (JOB HISTORY FILE**: **For ARDISFIL)** – Contains a record for each distribution that is posted to a specific job.

3. **VTSREG (VERTEX REGISTER FILE (SALES))** –
You will only update this file if you are using Vertex Sales Tax service. Data update to this files go through a different procedure for preparing

4. **CPHSTTRX (COP SALES HISTORY TRX FILE)** -This file contains a record for each (invoice, credit memo) posted from the Post Invoices to A/R files. These records will later be posted to the permanent Sales History file in the summary form. Each record in the file represents one line item on a posted (invoice, credit memo).

5. **CPRSNYER (COP REASON YEAR FILE) –** It is also known as "COP USER DEFINED CODE". This file gets updated as user posts invoice with

line items containing user defined code. Data is referenced by User defined Code/Year. Sales and cost information are recorded in a monthly bucket format.

6. **CPRSNCYR (COP REASON CUSTOMER YEAR FILE)-** It is also known as "COP USER DEFINED CODE/CUSTOMER YEAR FILE". This file gets updated as user posts invoices with line items containing user defined code. Data is referenced by User Defined Code/Customer/year. Sales and Cost information are recorded in a monthly bucket format.

7. **IMINVTRX (INVENTORY TRANSACTION AUDIT FILE) –** Contains a record for every addition, change, and deletion made to transaction though on line Inventory Transaction Processing. If "Online Update Inventory Trx?" is set to "N" in the I/M Setup application, this file contains records for every transaction affecting on-hand Inventory quantities. This file contains Beginning Balances for an item, if they were set. This file may be purged at the user's discretion.

8. **IMBINFIL (BIN MASTER FILE)** - This file will be used if you are using Multi Bin Enhancement. It contains all Bin Master records that are referenced in the Item file or Inventory Location File.

9. **IMBINHST (BIN HISTORY FILE)** – This file contains the history information for Multi Bin enhancement.

10. **IMSERREF (I/M SERIAL NO. REFERENCE FILE) –** This file is used for strengthening IMLSTRXS file. With this file, the system can detect where a duplicate serial number is being received, by either checking the item number and serial number, or serial number only. It also allows users to inquire stock serial record by using either item number + serial number only. This file can be resynchronized by using, Generate Serial Cross Reference File Utility.

11. **IMBINREF (BIN NO CROSS REFERENCE FILE) –** This file is used for Serial No. function. User may optionally cross reference a serial number and, for example, a box. Later on, as a box is shipped, by identifying the box id, all the serial number in that box can be retrieved by serial number only.

12. **IMLSHST (I/M HISTORY SERIAL/LOT FILE) -**This file contains history information for all serial numbers. This includes receiving, issuing, shipping and production. Serial History can be retrieved by the item number and serial number. Alternatively, it can be retrieved by serial number only.

13. **CPLSTRXS (COP SERIAL/LOT FILE)** – Contains a record for each Serial/Lot component for which a parent line item, from posted invoices, was a non-stocked and controlled item.

14. **IMDISFIL (I/M DISTRIBUTION TO G/L FILE) –** Includes finished goods and cost of goods sold distributions (formerly posted to the A/R Distribution to G/L File). The I/M Distribution File will only be updated from the COP if the cost of goods sold flag in the COP Setup is yes. If "Online Update Inventory Trx?" is set to "N" in the P/O Setup, distributions entered in the Receiving Processing application will be written to this file.

15. **JOBHIST (S/M JOB HISTORY FILE (FOR IMDISFIL) –**

16. **CPINVLIN (COP INVOICE LINE ITEM FILE) –** This is a mirroring file of (CPORDLIN (COP ORDER LINE ITEM FILE). Once a sales order is invoiced and posted, the line item information will be transferred to this file.

17 **NOTE (S/M NOTE FILE: For CPINVLIN) –** This file contains the information for unlimited Notes. This include the unlimited for customer, item, vendor, employee, order, invoice…etc.

18. **CPINVOPT (COP LINE INVOICE OPTION FILE)** – This is a mirroring file of CPORDOPT (COP ORDER OPTION FILE). Once a sales order is invoiced and posted, the kit or feature/option information will be transferred to this file.

19. **VTSREG (VERTEX REGISTRATION FILE –ARKANSAS & FRT) -**

20 **NOTE (S/M NOTE FILE: For CPINVHDR) –** This file contains the information for unlimited Notes. This include the unlimited for customer, item, vendor, employee, order, invoice…etc.

21. **CPPOREF (COP PO REFERENCE FILE)** – This file contains the PO reference information for each sales order and index in a format so it may be used to (1) Check duplicate PO for each sales order by PO No only, Customer and PO No, or Customer, Ship-To and PO No. (2) Lookup a Sales Order by PO No only, or Customer and PO No. This file can be resynchronized by using generate PO reference file utility.

22. **ARCOMDUE (AR COMISSION DUE FILE)** – Contains all Commission amounts due to a Salesperson related to Sales.

23 **ARDISFIL (A/R DISTRIBUTION FILE: HEADER) –** Contains a record for every distribution to an account made during the posting application.

24 **ARDISFIL (A/R DISTRIBUTION FILE: CASH) –** Contains a record for every distribution to an account made during the posting application.

What Should I Do When My Posting Process Crashes?

A posting crash may be caused by network connection failure, a server crash, power failure, file corruptions, or even software problems…etc. First, you have to fix the error condition. For example, if the cause is a corrupted file, then you should rebuild the corrupted file by using the export and import procedure. After that, the next step depends on whether T.T.S is enabled or not.

IF TTS IS ENABLED

In this case all you have to do is to perform the posting again.

IF TTS IS DISABLED

In this case we have to determine at which Phase the Posting was terminated.

1. **If the Posting Failed During the *First Phase***

   Perform the posting again. After the posting, check to see if there is an entry in the posting journal which indicates:

   "The following orders can not be posted for duplicate"

   If you don't have it, you are lucky. You don't have to do anything. If you do, then you have two possible solutions:

   - **Quick & Simple Solution:** Delete the corresponding record from AROPNFIL file (A/R Menu, Maintenance, A/R Open Item Load). Perform the posting again. You may have certain inconsistent postings that you need to fix at the month end. (For example, your AR Distribution may be out of balance).
   - **Complicated Solution:** Delete the correspond record from AROPNFIL. Perform the posting again. Find out where exactly the posting was stopped. Reverse the updates that the system has made, manually. If there's a way to purge the record through system, then purge it manually. Otherwise, use an outside utility to delete or fix the record.

2. **If the Posting Failed During the *Second Phase***

   All you have to do is perform a posting again. Most likely, everything should work out fine. In some unlikely event, your AR or IM distribution may be out of balance, which you will have to fix manually at the month end.

How To Determine Whether the Posting Failure Occurred in Phase I or Phase II?

How do we know where the posting stopped and which are the files that have been updated?

To know where the posting was interrupted we have *two* options:

(i) **Check the Sales Journal Report**
This report is printed during the *Phase I Posting*. If this report is completed, you will be able to see the posting total at the bottom of the Report. If the total are there Phase I posting was completed and most likely the posting failure occurred during Phase II. On the other hand, if you don't see the total on the Posting Journal, then the failure happened during phase I.

(ii) **Check the Pre-Post Edit List**
If there is nothing on the list when you print this edit list, then Phase I posting was completed and the failure is at phase II. If there are some records on the edit list waiting to be posted, then the Phase I posting was not completed.

What is TTS?

TTS provides a way to do a roll back in case there is an interruption during updating of files. In case of interruption, it rolls back to the state before the posting of the current invoice was started. This is a great feature to improve data integrity. The System does this by using a "Start TTS" and "End TTS" command. For example, the following is a typical Invoice Posting routine:

```
Read Next Invoice Record
While Not End Of File
        Start TTS
        Write to A/R Open Item File
        Write to….
        Write to….
        Mark Invoice as Posted
        End TTS
        Read Next Invoice Record
Next
```

Once TTS is started, the system will update and save a roll back copy in a temporary area every time a change occurs. When an "End TTS" command is received, the system will release the roll back copy since the system has declared the update as successful. In the case the "End TTS" command is not declared when there's a network failure or workstation failure, the system will detect that an unfinished TTS

is still active when Elliott is started again, and thus terminate the TTS and roll back the changes to the state before the "Start TTS" command.

Enabling TTS may prolong the posting (since it needs to save to a temporary roll back area). However, it will give you the additional security. Enabling TTS will also allow you to perform real time posting - posting while other users are in the system performing processing.

However, there are certain situations when you should not use TTS features: (1) G/L Final Year End Processing, (2) I/M Physical Count Posting, (3) Any situation a single transaction consists of thousands of updates. (i.e. an I/M receiving transaction with 2000 serial numbers). In these situations, it is likely you will crash the file server if you turn on TTS. Therefore, you need to remember to turn off TTS in your company setup before proceeding with these operations. You can turn the TTS back on when these operations are done.

TTS is supported in both DOS Elliott and NWSM. However, with NWSM it will only support TTS for a Btrieve database.

One of the confusing parts of COP posting with TTS is that sometimes users may think that TTS is not working when a posting failure takes place. Since COP posting is broken down into two phases, the updates may appear to be in an inconsistent state. For example, if you turned on TTS and the posting fails at the 2nd phase of the posting, it is possible that AROPNFIL has been updated (in phase I) while ARDISFIL has not been updated (in phase II) yet. This is because the update to ARDISFIL is stored in the *CP0305BT* file and will be written to ARDISFIL when phase II is completed. This is normal with a two-phase posting and you do not need to be concerned with it. In the case of a posting failure, if you have TTS turned on, all you have to do is to perform a posting one more time for the failure condition to be corrected.