DRUG ACCOUNTABILITY/ INVENTORY INTERFACE (DA)

TECHNICAL MANUAL/ SECURITY GUIDE

Version 3.0
October 1997

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Department of Veterans Affairs
V*ISTA* System Design & Development

Revision History

The table below lists changes made since the initial release of this manual. Each time this manual is updated, the Title Page lists the new revised date and this page describes the changes. Either update the existing manual with the Change Pages document, or replace it with the updated manual.

Note: The Change Pages document may include unedited pages needed for two-sided copying. Only edited pages display the patch number and revision date in the page footer.

Date	Revision Pages	Patch Number	Description
06/03	All	PSA*3*26	Updated manual to current Standards. Left Appendix C as is since it is a document in itself. Added new routines and deleted PROCOMM PLUS Prime Vendor information in Appendix B and throughout the manual.
02/02	iia-iib; v-(vi); 9-20; (25)-26b.	PSA*3*21	Add Revision History pages iia and iib; Update Table of Contents; Revise sections to add new routines related to setting up/editing a pharmacy location, selecting from multiple divisions, editing verified invoice data, and updating the Drug File, Revise sections to add a new File, DA Upload (#58.812), Revise sections to add new options to delete unprocessed invoices and edit verified invoices; Update Software Product Security section to reflect new file and to add information on mail groups. Unchanged pages included for two-sided copying as needed.
10/97			Original Released Technical Manual.

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Preface

Version 3.0 of the Drug Accountability/Inventory Interface (DA) software provides functionality to maintain a perpetual inventory of drugs. Interfacing with the Generic Inventory Package (GIP) or the prime vendors' invoice data increments drug balances in pharmacy locations and master vaults. Pharmacy's dispensing software packages pass dispensing data to DA V. 3.0 then decrements the drug balances in pharmacy locations. The DA V. 3.0 software package is intended for pharmacists, pharmacy technicians, and pharmacy procurement agents who are familiar with the prime vendor or GIP ordering process.

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Table of Contents

1. INTRODUCTION 1

2. ORIENTATION 3

3. IMPLEMENTATION AND MAINTENANCE 5

3.1. INSTALLATION 5
3.2. DATA FLOW 5
3.3. RESOURCE REQUIREMENTS 6
3.4. SITE PARAMETERS 7
3.5. HARDWARE REQUIREMENTS 7
3.6. DISK STORAGE 7

4. ROUTINE LIST 9

5. FILE LIST 13

5.1. GIP INTERFACE FILES 13
5.2. PRIME VENDOR INTERFACE 14
5.3. FILE DESCRIPTIONS 14

6. EXPORTED OPTIONS 17

6.1. MENUS 17
6.1.1. GIP Interface 17
6.1.2. Prime Vendor Interface 17
6.2. OPTIONS 18

7. ARCHIVING AND PURGING 21

7.1. ARCHIVING 21
7.2. PURGING 21

8. CALLABLE ROUTINES 21

9. EXTERNAL RELATIONS 21

10. INTERNAL RELATIONS 23

11. PACKAGE-WIDE VARIABLES 23

12. SOFTWARE PRODUCT SECURITY 23

12.1. LEGAL REQUIREMENTS 23
12.2. SIGN-ON EVENT 23
12.3. ELECTRONIC SIGNATURES 23
12.4. SECURITY KEYS USED IN DA 24

12.5. FILE SECURITY 25
12.6. MAIL GROUPS 25

13. GLOSSARY 27

14. APPENDIX A - XTMP("PSAPV") GLOBAL LAYOUT 29

14.1. ^XTMP("PSAPV",CTRL#,"IN") – INVOICE DATA 29
14.2. XTMP("PSAPV",CTRL#,"IT",LINE ITEM#) – LINE ITEM DATA 29
14.3. XTMP("PSAPV",CTRL#,"IT",LINE ITEM#, "SUP") – SUPPLY LINE ITEM DATA 30

15. APPENDIX B - INVOICE FILE WITH FORMATTING ERRORS 31

16. APPENDIX C - ASC X12 ELECTRONIC DATA INTERCHANGE DRAFT SPECIFICATIONS 33

1. Introduction

Drug Accountability/Inventory Interface (DA) Version 3.0 provides functionality that interfaces with prime vendor invoice data. It provides Pharmacy with the capability to match National Drug Codes (NDC) in the invoice data to NDC in the DRUG file (#50). The invoice data is uploaded, processed, and verified. Version 3.0 also provides the capability to transfer drugs between pharmacy locations and tracks those transfers.

IMPORTANT:

Once verified (prime vendor interface) or received (GIP interface), the drug balances are incremented in the pharmacy location and/or master vault. The invoiced drug's order unit is compared to the ORDER UNIT field (#12) in the DRUG file (#50) and the dispense units per order unit is compared to the DISPENSE UNITS PER ORDER UNIT field (#15) in the DRUG file (#50). If the order unit and dispense units per order unit are the same, the NDC (#31), PRICE PER ORDER UNIT (#13), and PRICE PER DISPENSE UNIT (#16) fields in the DRUG file (#50) may be updated.

The following condition must be met to update the NDC field (#31).

- If the invoice NDC is different from the NDC field (#31), the NDC field (#31) is overwritten with the invoiced NDC.

The following condition must be met to update the PRICE PER ORDER UNIT field (#13) and PRICE PER DISPENSE UNIT field (#16).

- If the invoiced price per order unit is different than the PRICE PER ORDER UNIT field (#13), the PRICE PER ORDER UNIT field (#13) is overwritten with the new prorated price per order unit. The PRICE PER DISPENSE UNIT field (#16) is also overwritten with the new prorated price per dispense unit.

This technical manual provides additional information for package coordinators, supervisors, and Information Resource Management (IRM) Staff. Users who are not familiar with Veterans Health Information Systems and Technology Architecture (**V***IST***A**) software may also wish to refer to documentation for VA Kernel.

Note: The Security Guide information has been included in this manual under the Software Product Security section.

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2. Orientation

Within this documentation, several notations need to be outlined.

- Menu options will be italicized.
  Example: *Drug Accountability Menu* indicates a menu option.

- Screen prompts will be denoted with quotation marks around them.
  Example: "DATE:" indicates a screen prompt.

- Responses in bold face indicate what the user is to type in.
  Example: If the displayed transfer information is correct, enter **YES**.

- Text centered between arrows represents a keyboard key that needs to be pressed in order for the system to capture a user response or move the cursor to another field. **<Enter>** indicates that the Enter key (or Return key on some keyboards) must be pressed. **<Tab>** indicates that the Tab key must be pressed.
  Example: Press **<Tab>** to move the cursor to the next field.
  Press **<Enter>** to select the default.

- **Note**: Indicates especially important or helpful information.

- Options are locked with a particular security key. The user must hold the particular security key to be able to perform the menu option.
  Example: This option is locked by the PSA ORDERS key.

- **?**, **??**, **???** One, two, or three question marks can be entered at any of the prompts for on-line help. One question mark elicits a brief statement of what information is appropriate for the prompt. Two question marks provide more help, plus the hidden actions and three question marks will provide more detailed help, including a list of possible answers, if appropriate.

- ^ Up Caret (arrow or a circumflex) and pressing **<Enter>** can be used to exit the current option.

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3. Implementation and Maintenance

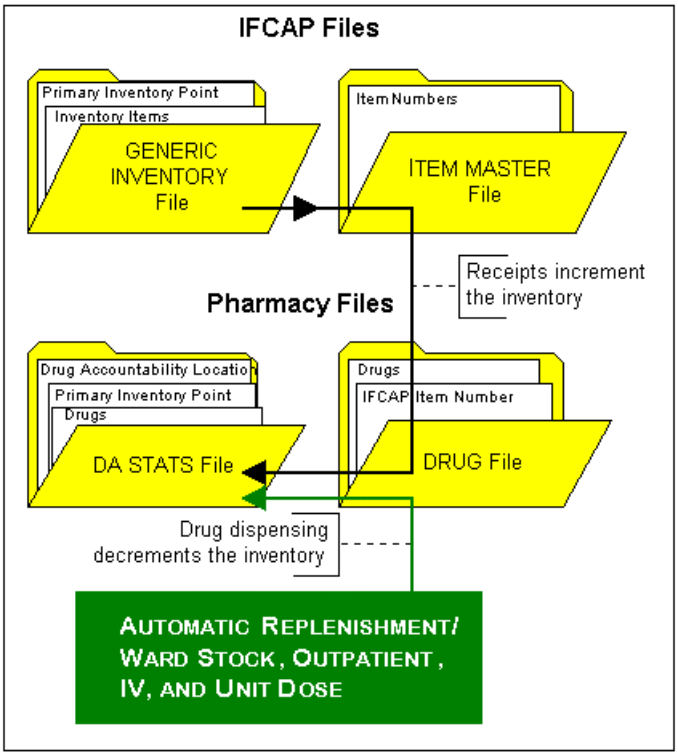
3.1. Installation

For installation of the DA Version 3.0 **V***IST***A** software package, please refer to the Installation Guide.

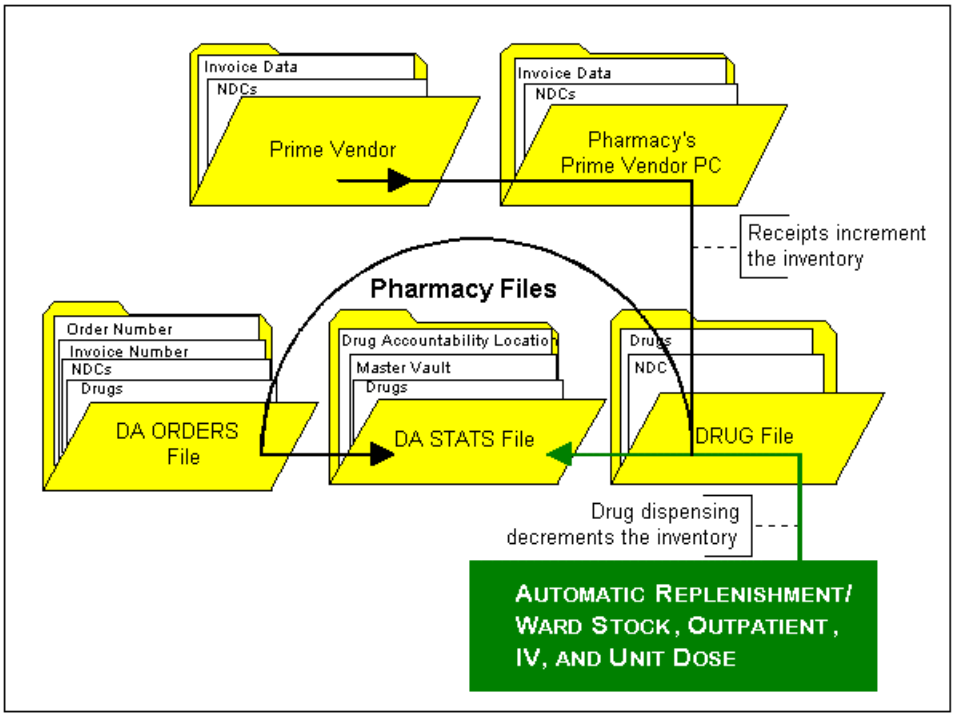
If the site will be interfacing with the prime vendor's invoice data, contact the prime vendor to obtain their invoice data software and installation instructions.

3.2. Data Flow

GIP Interface Data Flow



Prime Vendor Data Flow



3.3. Resource Requirements

Version 3.0 of the DA package requires, at least, the following VA software applications and commercial package.

VISTA Software Package	**Minimum Version Required**
Controlled Substances (CS)	3.0 (Must be patched up to and including Patch PSD*3.0*6)
Kernel	8.0
Kernel Toolkit	7.3
MailMan	7.1
VA FileMan	21.0
National Drug File (NDF)	3.16
Pharmacy Data Management (PDM)	1.0
☑ Inpatient Medications	4.5 (Must be patched up to and including Patch PSJ*4.5*44)
☑ Automatic Replenishment/Ward Stock	2.3
● Outpatient Pharmacy	6.0 (Must be patched up to and including Patch PSO*6.0*155)

☑ If the site will be setting up an Inpatient and/or Combined (Inpatient/Outpatient) pharmacy location, these software packages must be installed to collect unit dose and IV dispensing data.

- If the site will be setting up an Outpatient and/or Combined (Inpatient/ Outpatient) pharmacy location, this software package must be installed to collect prescription data.

3.4. Site Parameters

There are no site parameters to be set.

3.5. Hardware Requirements

The facility must support a port-to-port connection between the **V***IST***A** system and the prime vendor PC system.

3.6. Disk Storage

The DA V. 3.0 contains 128 routines. These routines require approximately 5 kilobytes of disk space.

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4. Routine List

This section contains an alphabetized routine list and a description of each routine for DA Version 3.0.

Routine List and Routine Descriptions

Routine Names	Routine Descriptions
PSABRKU1	Upload and Process Prime Vendor Invoice Data
PSABRKU2	Automatic processing of invoices
PSABRKU3	Upload and Process Prime Vendor Invoice Data - CONT'D
PSABRKU4	Upload and Process Prime Vendor Invoice Data - CONT'D
PSABRKU5	Upload and Process Prime Vendor Invoice Data - CONT'D
PSABRKU6	Upload and Process Prime Vendor Invoice Data - CONT'D
PSABRKU8	Upload and Process Prime Vendor Invoice Data Utility
PSACON	Display Connected Drug and Procurement History
PSACON1	Display Connected Drug and Procurement History - CONT'D
PSACON2;	Display Connected Drug and Procurement History - CONT'D
PSACONW	Display Connected Drug and Procurement History - CONT'D
PSACOST	Invoice Cost Summary
PSACREDO	Outstanding Credits
PSACREDR	Credit Resolution
PSADA	Pharmacy Location Lookup Utility
PSADAI	Drug Balances by Location
PSADJ	Balance Adjustments
PSADJI	Balance Initialization
PSADJR	Balance Adjustments History
PSADRU	Drugs Not Found in Linked Inventory
PSADRUG	Add/edit Pharmacy Location drugs
PSADRUGP	Enter/Edit a Drug
PSAENT	Set Up/Edit a Pharmacy Location
PSAENTO	Set Up/Edit a Pharmacy Location - CONT'D
PSAENVIR	Environment Check
PSAGIP	DA receiving from GIP
PSAGIP1	DA receiving from GIP - CONT'D
PSAHIS	Drug Transaction History
PSAHIS1	Drug Transaction History - CONT'D
PSALEVEL	Enter/Edit Stock and Reorder Levels
PSALEVRP	Stock and Reorder Report
PSALFA	Automated DRUG/ITEM MASTER file Link by Federal Stock Number (FSN)
PSALFM	Controlled Connection by FSN Match
PSALFS	Report Potential FSN Matches

Routine Names	Routine Descriptions
PSALNA	Automated DRUG/ITEM MASTER file Link by NDC
PSALND	Report Potential NDC Matches
PSALNM	NDC Duplicates Report (ITEM MASTER file)
PSALOC	Set Up/Edit a Pharmacy Location
PSALOC1	Set Up/Edit a Pharmacy Location
PSALOC2	Set Up/Edit a Pharmacy Location
PSALOCO	Set Up/Edit a Pharmacy Location
PSALOG	Unposted Procurement History
PSALOG0	Unposted Procurement History - CONT'D
PSALOG1	Unposted Procurement History - CONT'D
PSALOG1H	Unposted Procurement History - CONT'D
PSALOG2	Post Drug Procurement History
PSALOG3	Post Drug Procurement History - CONT'D
PSALOGON	Logon Utility
PSAMON	Monthly Summary
PSAMON1	Monthly Summary - CONT'D
PSANAC	Populate Pharmacy Location with Inventory Items
PSANDC	NDC Duplicates Report
PSANDF	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSANDF1	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAOP	Outpatient Dispensing (Single Drug)
PSAOP1	Outpatient Dispensing (Single Drug) & (All Drugs)
PSAOP2	Outpatient Dispensing (All Drugs)
PSAOP3	Nightly Background Job
PSAOP4	Outpatient Dispensing (Single Drug) & (All Drugs) - CONT'D
PSAORDP	Print Orders
PSAORDP1	Print Orders - CONT'D
PSAORDP2	Print Orders - CONT'D
PSAPOST	Post Init
PSAPROC	Process Uploaded Prime Vendor Invoice Data
PSAPROC1	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC2	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC3	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC4	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC5	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC6	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC7	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC8	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPROC9	Process Uploaded Prime Vendor Invoice Data - CONT'D
PSAPSI	IV Dispensing (Single Drug)
PSAPSI1	IV Dispensing (Single Drug) & (All Drugs)
PSAPSI2	IV Dispensing (All Drugs)
PSAPSI3	Nightly Background Job
PSAPSI4	IV Dispensing (Single Drug) & (All Drugs)

Routine Names	Routine Descriptions
PSAPSI5	Nightly Background Job - CONT'D
PSAPUR	Nightly Background Job - CONT'D
PSAPV	Processor and Verifier
PSAREC	Receiving Directly into Drug Accountability
PSAREC1	Receiving Directly into Drug Accountability - CONT'D
PSAREORD	Nightly Background Job - CONT'D
PSAREPV	Invoice Review
PSAREV	Purchase Order Review
PSAREVC	Control Point Transaction Review
PSAREVD	Drug Receipt History Review
PSARIN	Loadable Inventory Items Report
PSARWS	Collect Ward Stock Data
PSASIG	Transfer Signature Sheet
PSATI	Single Drug Match
PSATRAN	Transfer Drugs between Pharmacies
PSATRAN1	Transfer Drugs between Pharmacies - CONT'D
PSAUDP	Nightly Background Job - CONT'D
PSAUNI	Unlinked Drugs in the ITEM MASTER file
PSAUNL	Connect Unlinked DRUG/ITEM MASTER file Entries
PSAUNM	Report of Unlinked DRUG/ITEM MASTER file Entries
PSAUP	Upload and Process Prime Vendor Invoice Data
PSAUP1	Upload and Process Prime Vendor Invoice Data - CONT'D
PSAUP2	Upload and Process Prime Vendor Invoice Data - CONT'D
PSAUP3	Upload and Process Prime Vendor Invoice Data - CONT'D
PSAUP4	Upload and Process Prime Vendor Invoice Data - CONT'D
PSAUP5	Upload and Process Prime Vendor Invoice Data - CONT'D
PSAUP6	Upload and Process Prime Vendor Invoice Data - CONT'D
PSAUTL	GIP Utility
PSAUTL1	Prime Vendor Invoice Data Utility
PSAUTL2	Upload and Process Prime Vendor Invoice Data Utility
PSAUTL3	Upload and Process Prime Vendor Invoice Data Utility – CONT'D
PSAUTL4	Verify Invoices Utility
PSAVER	Verify Invoices
PSAVER1	Verify Invoices - CONT'D
PSAVER2	Verify Invoices - CONT'D
PSAVER3	Verify Invoices - CONT'D
PSAVER4	Verify Invoices - CONT'D
PSAVER5	Verify Invoices - CONT'D
PSAVER6	Verify Invoices - CONT'D
PSAVER7	Verify Invoices - CONT'D
PSAVER8	Multiple Division Selection
PSAVERA	Change verified invoice data
PSAVERA1	Edit previously verified invoices

Routine Names	Routine Descriptions
PSAVERA2	Edit previously verified invoices #2
PSAVERA3	Record Transaction & Update DRUG file
PSAVIN	Report of Inventory items' link to DRUG file
PSAVIN1	Physical Inventory Balance Review
PSAVIN2	Compares Prices (DA/GIP)
PSAVINC	Update Prices
PSAWARD	Set Up/Edit a Pharmacy Location

5. File List

This package requires 23 files in addition to those of the Kernel and other files to which it points. Information about all files, including these can be obtained by using the VA FileMan to generate a list of file attributes.

5.1. GIP Interface Files

File Numbers	File Names
42	WARD LOCATION
50	DRUG
50.8	IV STATS
51.5	ORDER UNIT
52	PRESCRIPTION
52.6	IV ADDITIVES
52.7	IV SOLUTIONS
58.1	PHARMACY AOU STOCK
58.5	AR/WS STATS
58.8	DRUG ACCOUNTABILITY STATS
58.81	DRUG ACCOUNTABILITY TRANSACTION
58.812	DA UPLOAD
58.84	DRUG ACCOUNTABILITY TRANSACTION TYPE
59	OUTPATIENT SITE
59.4	INPATIENT SITE
59.7	PHARMACY SYSTEM
410	CONTROL POINT ACTIVITY
441	ITEM MASTER
442	PROCUREMENT & ACCOUNTING TRANSACTIONS
445	GENERIC INVENTORY
445.2	INVENTORY TRANSACTION

5.2. Prime Vendor Interface

File Numbers	File Names
42	WARD LOCATION
50	DRUG
50.8	IV STATS
51.5	ORDER UNIT
52	PRESCRIPTION
52.6	IV ADDITIVES
52.7	IV SOLUTIONS
58.1	PHARMACY AOU STOCK
58.5	AR/WS STATS
58.8	DRUG ACCOUNTABILITY STATS
58.81	DRUG ACCOUNTABILITY TRANSACTION
58.812	DA UPLOAD
58.84	DRUG ACCOUNTABILITY TRANSACTION TYPE
58.811	DRUG ACCOUNTABILITY ORDER FILE
59	OUTPATIENT SITE
59.4	INPATIENT SITE
59.7	PHARMACY SYSTEM
8980	KERMIT HOLDING

5.3. File Descriptions

58.8 DRUG ACCOUNTABILITY STATS FILE

This file contains data associated with the Pharmacy Drug Accountability Stats location. Entries in this file may be edited but not deleted. Entries in this file should NOT be edited directly using VA FileMan.

This file is designed to be shared between the DA V. 3.0 module and the Controlled Substances V. 3.0 module of the Pharmacy software. The Controlled Substances V. 3.0 module will recognize a location as a Narcotic Area of Use (NAOU). The menu *Inactivate NAOU* [PSD INACTIVATE NAOU] option is used to inactivate NAOUs no longer in use. The menu *Inactivate NAOU Stock Drug* [PSD INACTIVATE NAOU STOCK DRUG] option is used to inactivate drugs no longer stocked within that NAOU.

INPUT TEMPLATE(S):	PRINT TEMPLATE(S):
PSAENT	PSAINV
PSAGIP	

58.81 DRUG ACCOUNTABILITY TRANSACTION FILE

This file contains the data associated with drug accountability transactions. This file design is to share between the DA V. 3.0 module and the Controlled Substances V. 3.0 module. Entries in this file should NOT be edited directly for Controlled Substances V. 3.0 use. The CS V. 3.0 module contains all appropriate checks for this file's use.

58.812 DA UPLOAD

This file contains Supply Items and Order Units used in matching uploaded Prime Vendor invoice data.

The user inputs the name of a supply item and the item's corresponding Vendor Stock Number (VSN). When an item is uploaded from the vendor, the DA V. 3.0 software attempts to identify the item by the NDC. If a match cannot be found, the entries in this file will be checked.
By storing the supply items, the user does not have to identify the item on the invoice as a supply item each time it is uploaded.

The Prime Vendor ships drugs in a variety of order unit sizes. In some instances, the order unit on an invoiced item does not match the order unit in the facility's files. When this occurs the user has to perform a manual match on the item.

By entering the order unit sent by the Prime Vendor to the order unit in **V***IST***A**, the matching can be performed automatically during the upload process.

58.84 DRUG ACCOUNTABILITY TRANSACTION TYPE FILE

This file contains the standard types of transactions utilized in the pharmacy DA V. 3.0 package. This file is shared between the DA V. 3.0 module and the Controlled Substances V. 3.0 module. This is a standard file exported by both the Controlled Substances V. 3.0 and DA V. 3.0 modules and additional entries should not be added. Existing data will be merged.

Note: Data comes with this file and overwrites the existing data.

58.811 DRUG ACCOUNTABILITY ORDER FILE

This file contains prime vendor pharmacy orders with all adjustments. The prime vendor invoice data is uploaded from the prime vendor. All data is processed and verified before it increments the drug balances in DA pharmacy locations.

None XTMP("PSAPV")

This temporary file holds the uploaded invoice data that has not been processed. When the data is processed, it is moved to the DRUG ACCOUNTABILITY ORDER file (#58.811). If data in this file is not processed or more data is not added to this file for 16 days, a MailMan message is sent to holders of the PSA ORDERS key. The message states that if the invoices are not processed in four calendar days or if more invoices are not uploaded in four calendar days, the invoices in the file will be deleted. If the data remains unprocessed and data is not added to the file for five more days, all data in the file is deleted. (See Appendix A for the field layout.)

6. Exported Options

6.1. Menus

This package exports the menus. The main menu is *Drug Accountability Menu* [PSA DRUG ACCOUNTABILITY MENU] option.

Example: Drug Accountability Menu

```
1      GIP Interface Menu ...
2      Prime Vendor Interface ...
```

6.1.1. GIP Interface

If the site will only interface with the Generic Inventory Package (GIP), the *GIP Interface Menu* [PSA GIP INTERFACE MENU] option must be distributed to Chief of Pharmacy or a designee. It contains the following menus.

Example: GIP Interface Menu

```
1      Connection Menu (DRUG file/ITEM MASTER file) ...
2      Pharmacy Location Maintenance Menu ...
3      Receipts Menu ...
4      Dispensing Menu ...
5      Maintenance Reports Menu ...
```

6.1.2. Prime Vendor Interface

If the site will interface with the prime vendor invoice data, the *GIP Interface Menu* [PSA GIP INTERFACE MENU] option and *Prime Vendor Interface menu* [PSA PRIME VENDOR INTERFACE] option must be distributed. Most drugs will be purchased from the prime vendor. For the drugs that cannot be purchased from the prime vendor, it is necessary to interface with the Generic Inventory Package to receive them into pharmacy location and/or master vault. Therefore, the main menu of *Drug Accountability Menu* [PSA DRUG ACCOUNTABILITY MENU] option must be distributed to Chief of Pharmacy, or a designee, plus the purchasing agent in Pharmacy.

6.2. Options

This package exports the following options.

OPTION	MENU TEXT
PSA ACTIVE DRUGS/ITEM FILE	Active, Unlinked Drugs in the ITEM MASTER file
PSA BALANCE ADJUSTMENTS	Balance Adjustments Locked by the PSAMGR key
PSA BALANCE ADJUSTMENTS REPORT	Balance Adjustments History
PSA BALANCE INITIALIZE	Balance Initialization
PSA COMPARISON REPORT	DRUG file/ITEM MASTER file Comparison Report
PSA CONNECTION MENU	Connection Menu (DRUG file/ITEM MASTER file)
PSA CP TRANSACTION REVIEW	Control Point Transaction Review
PSA CREDIT RESOLUTION	Credit Resolution Locked by the PSAMGR key
PSA DELETE INVOICES	Delete Un-processed Invoices
PSA DISPENSING MENU	Dispensing Menu
PSA DISPLAY CONNECTED DRUG	Display Connected Drug and Procurement History
PSA DISPLAY LOCATION	Drug Balances by Location
PSA DRUG ACCOUNTABILITY MENU	Drug Accountability Menu
PSA DRUG DISPLAY	Drug Transaction History
PSA DRUG ENTER/EDIT	Enter/Edit a Drug
PSA DRUG HISTORY	Drug Receipt History Review
PSA DRUG INQUIRE	Inquire/Compare DRUG file/ITEM MASTER file
PSA DRUGS NOT IN INVENTORY	Drugs Not Found in Linked Inventory
PSA EDIT VERIFIED INVOICE	Edit Verified Invoices
PSA FSN AUTO LOOP	Automated DRUG/ITEM MASTER file Link by FSN
PSA FSN CONTROL LOOP	Controlled Connection by FSN Match
PSA FSN MENU	FSN Menu
PSA FSN REPORT	Report Potential FSN Matches
PSA GIP COMPARE	Physical Inventory Balance Review
PSA GIP CONT BAL UPDATE	Update Prices
PSA GIP DISCREPANCIES	Compare Prices (DA/GIP)
PSA GIP INTERFACE MENU	GIP Interface Menu
PSA GIP LINK REPORT	Report of Inventory Items' Link to DRUG file
PSA GIP LOCATION MENU	Pharmacy Location Maintenance Menu
PSA GIP MAINTENANCE RPT MENU	Maintenance Reports Menu
PSA GIP MENU	Inventory Interface

OPTION	MENU TEXT
PSA GIP POPULATE	Populate Pharmacy Location with Inventory Items
PSA GIP REPORT	Loadable Inventory Items Report
PSA GUI UPLOAD	UPLOAD UTILITY
PSA INVOICE COST SUMMARY	Invoice Cost Summary
PSA INVOICE REVIEW	Invoice Review
PSA IV ALL DRUGS	IV Dispensing (All Drugs)
PSA IV ALL LOCATIONS	All Location Dispense/Purge
PSA IV SINGLE	IV Dispensing (Single Drug)
PSA LOCATION EDIT	Set Up/Edit a Pharmacy Location
PSA MONTHLY SUMMARY	Monthly Summary
PSA MSG RECIPIENTS	Setup Mail Message Recipients
PSA NDC AUTO LOOP	Automated DRUG/ITEM MASTER file Link by NDC
PSA NDC CONTROL LOOP	Controlled Connection by NDC Match
PSA NDC DUPLICATE REPORT	NDC Duplicates Report (ITEM MASTER file)
PSA NDC MENU	NDC Menu
PSA NDC REPORT	Report Potential NDC Matches
PSA OP ALL DRUGS	Outpatient Dispensing (All Drugs)
PSA OP SINGLE	Outpatient Dispensing (Single Drug)
PSA ORDERS ALERT	Prime Vendor Processing/Verifying Alerts at Signon
PSA ORDERS MENU	Orders Menu Locked by the PSA ORDERS key
PSA OUTSTANDING CREDITS	Outstanding Credits
PSA POSTED DRUG REPORT	Posted Drug Procurement History
PSA PRIME VENDOR INTERFACE	Prime Vendor Interface Menu
PSA PRINT ORDERS	Print Orders Locked by the PSA ORDERS key
PSA PROCESS PRIME VENDOR DATA	Process Uploaded Prime Vendor Invoice Data Locked by the PSA ORDERS key
PSA PROCESSOR AND VERIFIER	Processor and Verifier Locked by the PSA ORDERS key
PSA PURCHASE ORDER REVIEW	Purchase Order Review
PSA PV DRUG ENTER/EDIT	Enter/Edit a Drug
PSA PV LOCATION MENU	Pharmacy Location Maintenance Menu
PSA PV MAINTENANCE RPT MENU	Maintenance Reports Menu
PSA RECEIPT MENU	Receiving Menu
PSA RECEIPTS MENU	Receipts Menu
PSA RECEIVING	Receiving Directly into Drug Accountability
PSA SINGLE DRUG MATCH	Single Drug Match
PSA STOCK & REORDER LEVEL RPT	Stock and Reorder Level
PSA STOCK AND REORDER LEVELS	Enter/Edit Stock and Reorder Levels
PSA TRANSFER DRUGS	Transfer Drugs Between Pharmacies

OPTION	MENU TEXT
	Locked by the PSAMGR key
PSA TRANSFER SIGNATURE SHEET	Transfer Signature Sheet
PSA UNLINKED LOOP	Connect Unlinked DRUG/ITEM MASTER file Entries
PSA UNLINKED REPORT	Report of Unlinked DRUG/ITEM MASTER file Entries
PSA UNPOST PROCUREMENT HISTORY	Unposted Procurement History
PSA UPLOAD PRIME VENDOR DATA	Upload and Process Prime Vendor Invoice Data Locked by the PSA ORDERS key
PSA VERIFY INVOICES	Verify Invoices Locked by the PSA ORDERS key

7. Archiving and Purging

7.1. Archiving

At present, the DA V. 3.0 package does not provide for archiving of its data.

7.2. Purging

The DRUG ACCOUNTABILITY TRANSACTION file (#58.81) and the DRUG ACCOUNTABILITY ORDER file (#58.811) are purged by the same nightly job of *All Location Dispense/Purge*, [PSA IV ALL LOCATIONS] option. All transactions greater than 120 days in the DRUG ACCOUNTABILITY TRANSACTION file (#58.81) are purged. The orders in the DRUG ACCOUNTABILITY ORDER file (#58.811) are purged if they are greater than the number of days in the DRUG ACCOUNTABILITY STATS file's (#58.8) DAYS TO KEEP INVOICE DATA field (#35) or greater than 120 days if the field is blank. This job should be scheduled to run during non-peak hours to lessen the impact on system operations. Once scheduled, this job will reschedule to run again every 24 hours.

8. Callable Routines

None of the DA V. 3.0 package routines are designed for calling outside of the package.

9. External Relations

DA V. 3.0 has IA agreements with Automatic Replenishment/Ward Stock, Controlled Substances, Inpatient Medications, Outpatient Pharmacy, National Drug File, Pharmacy Data Management, and Kernel. For complete information regarding the IA agreements for DA V. 3.0, please refer to the *DBA* [DBA] menu option on FORUM and then the *Integration Agreements* option.

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10. Internal Relations

This package does not require a Standards and Conventions Committee (SACC) agreement.

11. Package-Wide Variables

This package does not contain any package-wide variables.

12. Software Product Security

12.1. Legal Requirements

This package does not impose any additional legal requirements on the user, nor does it relieve the user of any legal requirements.

12.2. Sign-On Event

Prime Vendor Processing/Verifying Alerts at Signon
[PSA ORDERS ALERT]

The *Prime Vendor Processing/Verifying Alerts at Signon* [PSA ORDERS ALERT] option checks to see if there are any invoices that need to be processed or verified by a user that holds the PSA ORDERS key. If so, a message is displayed when the user signs on the system stating the number of invoices the user needs to process and/or verify.

12.3. Electronic Signatures

Electronic signatures may be established in two ways. The IRM service can enter a code for the user. Alternately, the *Electronic Signature code Edit* [XUSESIG] option is provided by Kernel for the user to accomplish this task. In Kernel V. 8, the *Electronic Signature code Edit* [XUSESIG] option has been tied to the *User's Toolbox* [XUSERTOOLS] submenu, for easy access by all users.

12.4. Security Keys used in DA

The security keys listed below control the access necessary to operate the DA V. 3.0 software.

GIP Interface

The following keys should be assigned to the Chief of Pharmacy or a designee.

PSAMGR	This security key locks the *Balance Adjustments* [PSA BALANCE ADJUSTMENTS] option, *Credit Resolution* [PSA CREDIT RESOLUTION] option, and the *Transfer Drugs Between Pharmacies* [PSA TRANSFER DRUGS] option.

Prime Vendor Interface

The following keys should be assigned to the Chief of Pharmacy or a designee.

PSAMGR	This security key locks the *Balance Adjustments* [PSA BALANCE ADJUSTMENTS] option, *Credit Resolution* [PSA CREDIT RESOLUTION] option, and the *Transfer Drugs Between Pharmacies* [PSA TRANSFER DRUGS] option.
PSA ORDERS	This security key locks the *Orders Menu* [PSA ORDERS MENU] option.

This key should be assigned to the Pharmacy purchasing agent.

PSA ORDERS	This security key locks the *Orders Menu* [PSA ORDERS MENU] option.

12.5. File Security

This package requires 23 files in addition to those of the Kernel and other files to which it points, for example, the PATIENT file (#2). Information about all files, including these can be obtained by using the VA FileMan to generate a list of file attributes.

FILE NUMBERS	File Names	DD	RD	WR	DEL	LAYGO
58.8	DRUG ACCOUNTABILITY STATS	@	@	@	@	@
58.81	DRUG ACCOUNTABILITY TRANSACTION	@	@	@	@	@
58.811	DRUG ACCOUNTABILITY ORDER	@	@	@	@	@
58.812	DA UPLOAD	@	@	@	@	@
58.84	DRUG ACCOUNTABILITY TRANSACTION TYPE	@	@	@	@	@
50	DRUG	@				

12.6. Mail Groups

DA V. 3.0 uses two mail groups for transferring information to the user.

PSA NDC UPDATES

This mail group is accessed to determine the personnel who should be notified by the DA V. 3.0 software when an item's price or NDC has changed.

PSA REORDER LEVEL

This mail group contains the personnel who are to receive the message generated for the drugs whose stock level has fallen below the reorder level. Previously, anyone holding the PSA ORDERS key would receive this message.

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13. Glossary

DA	Acronym for **D**rug **A**ccountability/Inventory Interface V. 3.0.
FSN	Acronym for **F**ederal **S**tock **N**umber.
GIP	Acronym for **G**eneric **I**nventory **P**ackage that automatically generates purchase orders and manages inventory.
Master Vault	An inventory location created to store a select group of controlled substances and track their balance and activity.
Pharmacy Location	An inventory location created to store a select group or all of non-controlled drugs to track their balance and activity.
Prime Vendor	A vendor who is on contract with the VA to be the main supplier of drugs.
Process Invoices	To process invoices, the prime vendor's invoice data is matched to the data in **V***IST***A** and the data is validated. Matching is accomplished by comparing the line item data on the invoice with its entry in the DRUG file (#50). Validating is accomplished by confirming the quantity received verses the quantity invoiced. Anyone holding the PSA ORDERS key can process the invoice.
V*IST***A**	Acronym for **V**eterans Health **I**nformation **S**ystems and **T**echnology **A**rchitecture.
XTMP file	The XTMP file is a temporary file that holds the uploaded invoices that have not been processed. The invoice data remains in this file up to 21 days.

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14. Appendix A - XTMP("PSAPV") Global Layout

14.1. ^XTMP("PSAPV",CTRL#,"IN") – Invoice data

Piece 1	Invoice Date
Piece 2	Invoice Number
Piece 3	Order Date
Piece 4	Order Number
Piece 5	Delivery Date Requested
Piece 6	Invoice's Delivery Date
Piece 7	Pharmacy Location IEN – File #58.8 IEN
Piece 8	Invoice Status ("OK"= Uploaded no errors "P"= Processed, ""=Uploaded with errors)
Piece 9	"CS" if at least 1 item is a CS
Piece 10	"ALL CS" if all items are CS
Piece 11	Date Drugs Received
Piece 12	Master Vault IEN -- File #58.8 IEN
Piece 13	"SUP" if all supplies items on invoice

14.2. XTMP("PSAPV",CTRL#,"IT",LINE ITEM#) – Line Item Data

Piece 1	Quantity
Piece 2	Unit of Measure ~ FILE #51.5 IEN
Piece 3	Unit Price
Piece 4	NDC ~ # with same NDC ~ Different Vendor Stock Number (VSN) ~ "1" if overwrite
Piece 5	VSN ~ # with same VSN ~ Different NDC
Piece 6	File #50 IEN
Piece 7	File #50 SYNONYM IEN ~ New SYNONYM?
Piece 8	Adjusted Quantity
Piece 9	Adjusted Quantity DUZ
Piece 10	Adjusted Quantity Date
Piece 11	Adjusted Quantity Reason
Piece 12	Adjusted File #51.5 IEN
Piece 13	Adjusted Order Unit DUZ
Piece 14	Adjusted Order Unit Date
Piece 15	Adjusted File #50 IEN
Piece 16	Adjusted File #50 IEN DUZ
Piece 17	Adjusted File #50 IEN Date
Piece 18	Line Item Status (""=Uploaded With Errors, "OK"= Uploaded Without Errors, "P" = Processed)
Piece 19	"CS" if item is a CS

Piece 20	Dispense Units per Order Unit
Piece 21	Reorder Level
Piece 22	Invoice's. Price per Order Unit Correct?
Piece 23	File Price per Order Unit
Piece 24	Price per Order Unit DUZ
Piece 25	Price per Order Unit Date
Piece 26	Universal Product Code (UPC) ~ # with same UPC ~ Different UPC
Piece 27	Stock Level

14.3. XTMP("PSAPV",CTRL#,"IT",LINE ITEM#, "SUP") – Supply Line Item Data

Piece 1	DUZ
Piece 2	Date
Piece 3	"SUPPLY ITEM" or Supply item description

15. Appendix B - Invoice file with formatting errors

The data is sent from the prime vendor in the Accredited Standards Committee (ASC) X12 release 3.2 formatting for an invoice transaction (set #810). The formatting specifications document is *ASC X12 Electronic Data Interchange Draft Specifications for Prime Vendor Interface with Decentralized Hospital Computer Program*. It is part of the contract between the VA and the prime vendor. The DA V. 3.0 software checks the INVOICE.DAT formatting to assure formatting rules have been followed. There are many rules that may cause an error.

Many different errors may be listed under the "ERROR MESSAGES:" section on the screen.

In the following table, the reason the error message was displayed and the actions needed to fix the error are listed.

Problem Explanation	Action
INVOICE.DAT contains data out of sequence, missing data, and/or incorrect data.	1. DO NOT upload more data until this problem is resolved. 2. Record or screen print the errors. 3. Call the prime vendor and report all errors. 4. Instruct the prime vendor to create a new corrected INVOICE.DAT file. 5. Delete INVOICE.DAT and INVCRC.DAT from the PCs root directory. 6. When the corrected data is ready, retrieve the invoice data from the prime vendor again. 7. Upload the new invoice data.

In the following table, the reason the error message was displayed and the action needed to fix the error are listed.

Problem Explanation	Action
The data element or segment terminator in INVOICE.DAT is null. They can never be null.	1. DO NOT upload more data until this problem is resolved. 2. Call the prime vendor and report the error. 3. Instruct the prime vendor to create a new corrected INVOICE.DAT file. 4. Delete INVOICE.DAT and INVCRC.DAT from the root directory on Pharmacy's prime vendor PC. 5. When the corrected data is ready, retrieve the invoice data from the prime vendor again. 6. Select the *Upload and Process Prime Vendor Invoice Data* [PSA UPLOAD PRIME VENDOR DATA] option again to upload the new invoice data.

The software looks at the uploaded unprocessed and processed invoices to see if the incoming invoices have already been received. If so, the invoice number, invoice date, order number, order date, and invoice status is displayed.

```
There are no valid invoices to process.
```

Problem Explanation	Action
All of the invoices that were just uploaded were previously uploaded and/or processed. There are no invoices to process.	Do nothing.

16. Appendix C - ASC X12 Electronic Data Interchange Draft Specifications

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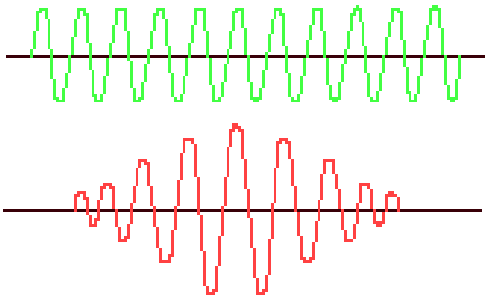

ASC X12
Electronic Data Interchange
Draft Specifications

for Prime Vendor Interface

with Decentralized Hospital Computer Program (DHCP)

May 1995

Department of Veteran Affairs
Information Systems Center
Birmingham, Alabama

Table of Contents

1. Purpose 1

2. Overview 1
2.1 Statement of Intent 1
2.2 Scope and Audience 1

3. General Specifications 2
3.1 Segment Requirement Designators 2
3.2 Data Element 2
A. Data Element Types 2
B. Data Element Length 2

3.3 Data Element Descriptions 3
Table 1: Interchange Control Header (ISA) 3
Table 2: Functional Group Header (GS) 5
Table 3: Transaction Set Header (ST) 6
Table 4: Beginning Segment for Invoice (BIG) 7
Table 5: Reference Numbers (REF) 8
Table 6: Name (N1) 9
Table 7: Additional Name Information (N2) 9
Table 8: Address Information (N3) 10
Table 9: Geographic Location (N4) 10
Table 10: Terms of Sale/Deferred Terms of Sale (ITD) -- Optional segment 11
Table 11: Date/Time Reference (DTM) 12
Table 12: Baseline Item Data (Invoice) (IT1) 13
Table 13: Transaction Totals (CTT) 15
Table 14: Transaction Set Trailer (SE) 16
Table 15: Functional Group Trailer (GE) 16
Table 16: Interchange Control Trailer (IEA) 17

3.4 Implementation and Control Structure 18
A. Implementation 18
B. Control Structure 18
C. Segment Layout 19

3.5 Transaction Set 810 Examples 20
Example 1: Template of a Transaction Set 20
Example 2: Mock Transaction Set 21

ASC X12, Electronic Data Interchange
Prime Vendor Interface Specifications

1. Purpose

This document specifies an interface to the Decentralized Hospital Computer Program (DHCP) based on the ASC X12 Protocol for Electronic Data Interchange (EDI). It is the intent that this interface form the basis for creating export files compatible with the DHCP Prime Vendor Interface. Outlined are the segments and data elements which will be used by all prime vendors to export Invoice data to such an interface. The segments and data elements which are used from the 810 transaction set will still be in strict accordance with the ASC X12 Standard as set forth in the Draft Version 3 Release 2. It is the responsibility of the Department of Veteran Affairs, Birmingham Information Systems Center (ISC) to update these guidelines for the 810 transaction set as it pertains to the prime vendor. The following information is provided as a specific guide, however, the vendor shall refer to ASC X12 Version 3 Release 2 documentation for details concerning the general rules and standards of the ASC X12 810 transaction set.

2. Overview

2.1 Statement of Intent

Birmingham Information Systems Center (ISC) plans to implement a generic interface to DHCP for prime vendors exporting invoice files to be used within DHCP. The vendor will continue to provide the normal paper invoices and related documents as agreed upon prior to this interface. The file format will adhere to the ASC X12 Standard, Draft Version 3 Release 2 and the guidelines as set forth in this document. This form of EDI seems to be prevalent within the health care industry and the method for exchange of information will be compatible in the future should the Department of Veterans Affairs decide to implement interactive EDI.

2.2 Scope and Audience

This document describes the file format for electronic invoicing data as exported by prime vendors. It is intended for use by vendors offering proposals concerning prime vendor contracts and provides guidelines on the specific data and data format required for a successful interface with DHCP.

3. General Specifications

3.1 Segment Requirement Designators

M = Required by the ASC X12 Version 3 Release 2 Standard or as a part of the Prime Vendor Interface specifications.
R = Required by DHCP
O = Optional

3.2 Data Element

A. Data Element Types
AN = String containing letters, digits, spaces, and/or special characters
DT = Date
ID = Identifier
N = Numeric
R = Decimal
TM = Time

B. Data Element Length
The Data Element length is the range, minimum to maximum, of the number of character positions available to represent the data element.

3.3 Data Element Descriptions

Table 1: Interchange Control Header

Sample: ISA^00^ ^00^ ^ZZ^ 999999 ^ZZ^588 ^950214^1005^U^00200^900456789^0^P^>~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
ISA01	I01.	**Authorization Information Qualifier** This qualifier identifies the type of information in the Authorization information.	M	ID	2/2	00 - No Authorization Information Present
ISA02	I02	**Authorization Information** This information is used for additional identification or authorization of the sender or the data in the interchange.	M	AN	10/10	Leave blank
ISA03	I03	**Security Information Qualifier** This qualifier is used for identifying the type of information in the security information	M	ID	2/2	00 - No Security Information Present
ISA04	I04	**Security Information** This is used for identifying the security information about the sender of the data in the interchange.	M	AN	10/10	Leave blank
ISA05	I05	**Interchange ID Qualifier** This qualifier indicates the system (or method) of code structure used to designate the sender or receiver ID element that is being qualified.	M	ID	2/2	ZZ - Mutually Defined
ISA06	I06	**Interchange Sender ID** This is the identification code of the sender.	M	AN	15/15	Dunn & Bradstreet number or vendor telephone number
ISA07	I05	**Interchange ID Qualifier** This qualifier indicates the system (or method) of code structure used to designate the sender or receiver ID element that is being qualified.	M	ID	2/2	ZZ - Mutually Defined
ISA08	I07	**Interchange Receiver ID** This is the identification code of the receiver of the data.	M	AN	15/15	588 or Customer Account Number
ISA09	I08	**Interchange Date** This is the date in YYMMDD format	M	DT	6/6	

Table 1: Interchange Control Header - Continued

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
ISA10	I09	**Interchange Time** Time is expressed in 24-hour clock time (HHMMSS). The time range is 000000 through 235959.	M	TM	4/4	
ISA11	I10	**Interchange Control ID** This code identifies the agency responsible for the control standard used by the message.	M	ID	1/1	U - U.S. EDI Community of ASC X12, TDCC, & UCS
ISA12	I11	**Interchange Version Number** This is the version number of the interchange control segments.	M	TM	5/5	00200 - Standard Issued as ASNI X12.5 - 1987
ISA13	I12	**Interchange Control Number** This number uniquely identifies the interchange data to the sender. Note: This is the same number as in the IEA02 data element.	M	N	9/9	
ISA14	I13	**Acknowledgment Requested** This is sent by the sender to request an interchange acknowledgment.	M	ID	1/1	0 - No acknowledgment requested
ISA15	I14	**Test Indicator** This indicates whether data enclosed by this interchange envelope is test or production.	M	ID	1/1	P - Production
ISA16	I15	**Sub-element Separator** Reserved for future expansion in separating data element subgroups. It must be different from the data element separator.	M	AN	1/1	

Table 2: Functional Group Header

Sample: GS^IN^999999^588^950214^1005^012345678^X^003020~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
GS501	479	**Functional ID Code** This code identifies a group of application related transaction sets.	M	ID	2/2	IN - Invoice
GS02	142	**Application Sender's Code** This code identifies the party sending the transmission. The codes are agreed to by the trading partners.	M	AN	2/15	Dunn & Bradstreet number or vendor telephone number
GS03	124	**Application Receiver's Code** This code identifies the party receiving the transmission. The codes are agreed to by the trading partners.	M	AN	2/15	588 or Customer Account Number
GS04	373	**Date** The date is in YYMMDD format.	M	DT	6/6	
GS05	337	**Time** Time is expressed in 24-hour clock time (HHMMSS). The time range is 000000 through 235959.	M	TM	4/6	
GS06	28	**Group Control Number** This is an assigned number that is initiated and maintained by the sender. . Note: This is the same Group Control Number as in the GE102 data element.	M	N	1/9	
GS07	455	**Responsible Agency Code** This is used with data element GS08 to identify the issuer of the standard.	M	ID	1/2	X - Accredited Standards Committee X12
GS08	480	**Version/Release/Industry Identifier Code** This indicates the version, release, subrelease, and industry identifier (including GS and GE segments) of the EDI standard being used.	M	AN	1/12	003020 - Draft Standards Approved by ASC X12 though June 1991.

Table 3: Transaction Set Header (ST)

Sample: ST^810^000000022~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
ST01	143	**Transaction Set ID Code** This code is a unique identification of a transaction set.	M	ID	3/3	810 - X12.2 Invoice
ST02	329	**Transaction Set Control Number** The control number is assigned by the originator for the transaction set. The entry a four-digit number with leading zeros beginning with 0001 at the start of a new entry. It increments by one (+1) for every transaction set exported on that business day. Note: This is the same control number as in the SE02 data element	M	AN	4/9	

Table 4: Beginning Segment for Invoice (BIG)

Sample: BIG^950214^201^950214^P2O01~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
BIG01	245	**Invoice Date** This is the invoice issue date.	M	DT	6/6	
BIG02	76	**Invoice Number** The number is the identifying number assigned by issuer.	M	AN	1/22	
BIG03	323	**Purchase Order Date** This date is assigned by the Department of Veterans Affairs.	R	DT	6/6	
BIG04	324	**Purchase Order Number** This is the identifying purchase order number as assigned by the Department of Veterans Affairs .	R	AN	1/22	
BIG05 thru BIG07		not used				

Table 5: Reference Numbers (REF)

Sample: REF^CR^23201~
REF^TJ^102030~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
REF01	128	**Reference Number Qualifier** The code qualifies the reference number.	M	ID	2/2	CR - Customer Reference Number TJ - Federal Taxpayer's Identification Number
REF02	127	**Reference Number** If the Reference Number Qualifier REF01 is **CR**, enter the customer account number. If the Reference Number Qualifier is **TJ**, enter the federal taxpayer's identification number.	R	AN	1/30	
REF03		not used				

Table 6: Name (N1)

Sample: N1^BY^VA MEDICIAL CENTER^21^RA1000C00~
N1^DS^DRUGS DISTRIBUTOR INC.^21^KA1000R00~
N1^ST^VA MEDICAL CENTER^21^JR1000P00~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
N101	98	**Entity Identifier Code** This identifies an organizational entity or a physical location.	M	ID	2/2	BY - Buying Party (purchaser) DS - Distributor ST - Ship To
N102	93	**Name** This is a free-form name.	R	AN	1/35	
N103	66	**Identification Code Qualifier** This designates the system/method of code structure used for Identification Code (67).	R	ID	1/2	21 - Health Care Industry ID Number
N104	67	**Identification Code** This code identifies the party (as indicated in data element N103)	R	ID	2/17	Health Industry Number (HIN) of the Buying Party (BY), Distributor (DS), and Ship To (ST)

Table 7: Additional Name Information (N2) -- This segment is optional if N3 contains data.

Sample: N2^DEPARTMENT OF VETERANS AFFAIRS~
N2^DEPARTMENT OF VETERANS AFFAIRS^~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
N201	93	**Name** This is a continuation of the free-form name in N201.	R	AN	1/35	
N202	93	**Name** This is a continuation of the free-form name in N201.	O	AN	1/35	

Table 8: Address Information (N3) -- This segment is optional if N2 contains data.

Sample: N3^123 VETERANS BLVD.~
N3^456 DRUG LANE~
N3^123 VETERANS BLVD.^RECEIVING DEPT.~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
N301	166	**Address Information**	M	AN	1/35	
N302	166	**Address Information**	O	AN	1/35	

Table 9: Geographic Location (N4)

Sample: N4^LOUISVILLE^KY^40202~
N4^LEXINGTON^KY^40601~
N4^LOUISVILLE^KY^40202~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
N401	19	**City Name** This is free-form text for the city name.	M	AN	2/19	
N402	156	**State or Province Code** This is the standard U.S. two letter state abbreviation.	M	ID	2/2	
N403	116	**Postal Code** This code defines international postal. Note: The U.S. zip code is either 5 digits or 5 digits + 4 digits separated by a dash (e.g., 231434595)	M	ID	4/9	
N404-N406		not used				

Table 10: Terms of Sale/Deferred Terms of Sale (ITD) -- Optional segment.

Sample: ITD^14^^^950301^15^950302^16^34.67~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
ITD01	336	**Terms Type Code** This identifies the type of payment terms.	O	ID	2/2	14 - Previously Agreed Upon
ITD02		not used				
ITD03	338	**Terms Discount %** This is the terms of the discount percentage, expressed as a percent, available to the purchaser if an invoice is paid on or before the Terms Discount Due Date.	O	R	1/6	
ITD04	370	**Terms Discount Due Date** This is the date payment is due if the discount is to be earned. The date is in YYMMDD format.	O	DT	6/6	
ITD05	351	**Terms Discount Days Due** This is the number of days in the terms discount period by which payment is due if the terms discount is earned.	O	N	1/3	
ITD06	446	**Terms Net Due Date** This is the date when the total invoice amount becomes due.	O	DT	6/6	
ITD07	386	**Terms Net Days** This is the number of days until the total invoice amount is due (discount is not applicable).	O	N	1/3	
ITD08	362	**Terms Discount Amount** This is the total amount of the terms discount.	O	N	1/10	
ITD09 thru ITD15		not used				

Table 11: Date/Time Reference (DTM)

Sample: DTM^002^950210~
DTM^035^950212~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
DTM01	374	**Date/Time Qualifier** This specifies the type of date and/or time.	M	ID	3/3	002 - Delivery Requested 035 – Delivered
DTM02	373	**Date** This is in YYMMDD format.	R	DT	6/6	
DTM03 & DTM05		not used				

Table 12: Baseline Item Data (Invoice) (IT1)

Sample: IT1^1^12^CC^9.32^DS^ND^00032227780^VN^46789~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
IT101	350	**Assigned Identification** The ID consists of alphanumeric characters assigned for differentiation within a transaction set. Note: This data element contains the line item number in order of appearance on the invoice. The format is positive numbers with no decimal places.	R	AN	1/11	
IT102	358	**Quantity Invoiced** The quantity is the number of units involved.	M	R	1/10	
IT103	355	**Unit of Measure Code** This code identifies the basic unit of measure as follows: AM Ampoule BG Bag BI Bar BO Bottle BX Box CC Cubic Centimeter KA Cake CN Can CH Container CA Case CT Carton DI Dispenser DR Drum EA Each GA Gallon GR Gram JR Jar KG Kilogram LB Pound ME Milligram ML Milliliter OZ Ounce PK Package PH Pack (PAK) PT Pint QT Quart RA Rack RL Roll ST Set TY Tray TB Tube VI Vial	M	ID	2/2	See the data element's description.
IT104	212	**Unit Price** This is the price per unit of product.	M	R	1/14	

Table 12: Baseline Item Data (Invoice) (IT1) - Continued

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
IT105	639	**Basic Unit Price Code** This identifies the type of unit price for an item.	R	ID	2/2	DS - Discount
IT106	235	**Product/Service ID Qualifier** This identifies the type or source of the descriptive number used in the Product/Service ID (IT107).	R	ID	2/2	ND - National Drug Code (NDC)
IT107	234	**Product/Service ID** This is an identifying number for a product or service as indicated by IT106. Enter the product's national drug code.	R	AN	12/12	
IT108	235	**Product/Service ID Qualifier** This code identifies the type or source of the descriptive number used in the Product/Service ID (IT109).	R	ID	2/2	VN - Vendor's Item Number
IT109	234	**Product/Service ID** This is an identifying number for a product or service as indicated by IT108. Enter the vendor's item number.	R	AN	1/30	
IT110	235	**Product/Service ID Qualifier** This identifies the type or source of the descriptive number used in the Product/Service ID (IT111) for medical supplies.	R	ID	2/2	UP - UPC Consumer Package Code
IT111	234	**Product/Service ID** This is an identifying number for a product or service as indicated by IT110. Enter the product's consumer package code for medical supplies.	R	AN	1/30	
IT112 thru IT125		not used				

Table 13: Transaction Totals (CTT)

Sample: CTT^2^^^^^^CLOSED~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
CTT01	354	**Number of Line Items** This is the total number of IT1 line items in the transaction set.	M	N	1/6	
CTT02 thru CTT06		not used				
CTT07	352	**Description** This description is the purchase order status. If all items on the purchase order have been shipped, enter the word **Closed**. If items on the purchase order are outstanding, enter the word **Partial**.	R	AN	1/80	Closed Partial

Table 14: Transaction Set Trailer (SE)

Sample: SE^23^000000022~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
SE01	96	**Number of Included Segments** This is the total number of segments in the transaction set including ST and SE segments.	M	N0	1/6	
SE02	329	**Transaction Set Control Number** The control number is assigned by the originator for the transaction set. Note: This is the same control number as in the ST02 data element.	M	AN	4/9	

Table 15: Functional Group Trailer

Sample: GE^1^012345678~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
GE01	97	**Number of Transaction Sets Included** This is the total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this element. There is only one transaction set of 810.	M	ID	1/6	1
GE02	28	**Group Control Number** This is the assigned number that is initiated and maintained by the sender. Note: This is the same Group Control Number as in the GS06 data element.	M	No	1/9	

Table 16: Interchange Control Trailer

Sample: IEA^1^900456789~

Reference		Data Element				
Designator	No.	Name and Description	Requirement Designator	Type	Length	Code
IEA01	I16	**Number of Included Functional Groups** This is the number of functional groups included in a transmission. There is only one transaction type.	M	N	1/5	1
IEA02	I12	**Interchange Control Number** This uniquely identifies the interchange data to the sender. Note: This is the same number as in the ISA13 data element.	M	N	9/9	

3.4 Implementation and Control Structure

A. Implementation

The vendor will provide the export file as described in this document. This export file should be available to DHCP, in the user's personal computer operating system, no later than 7:00 A.M. (VAMC site local time) of the scheduled delivery day of the confirmed invoice transaction. This will allow for the information to be processed into DHCP in a timely manner. This file will be located in the Root Directory (i.e., C:\) and will be named INVOICE.DAT. If more than one invoice is to be exported for the same business day or if the file already exists from previous exports, subsequent transaction sets will be appended to the INVOICE.DAT file. A file containing the Cyclical Redundancy Check (CRC) value of the export file (INVOICE.DAT) will also be exported as outlined below. This file will also be in the Root Directory on the user's PC. The CRC value will be recalculated and a new .CRC file will be created in place of the previous one every time a new transaction set is appended to the INVOICE.DAT file. It will be named with the same 8 character name as the export file and have an extension of .CRC (i.e., INVOICE.CRC). The following is the format for the CRC file:

INVOICE.DAT^2043^CRC~

Where INVOICE.DAT is the export file name and 2043 is the CRC value. This file <u>will not</u> contain any other data whatsoever.

NOTE: This does not preclude the vendor from providing the normal paper invoices and related documents as agreed upon prior to this interface.

B. Control Structure

The INVOICE.CRC file will use the caret (^) as the data element delimiter and the tilde (~) as the segment line terminator followed by a carriage return. In the INVOICE.DAT file, the data element delimiter and segment line terminator are defined in the ISA segment. Segments do not have to be terminated by a carriage return. The transaction set should look like the sample on page 21. Segment lines cannot exceed 245 characters each. All other rules of ASC X12 Draft Version 3 Release 2 apply.

C. Segment Layout

```
ISA <-------------------------------------------------------------------
GS <-------------------------------------------------                    |
ST <---------------------------                  |                       |
BIG                          |                   |                       |
REF                          |                   |                       |
N1                           |                   |                       |
N2                           |                   |                       |
N3                           | I                 | G                     |
N4                           | N                 | R                     | I
ITD                          | V                 | O                     | N
DTM                          | O                 | U                     | T
IT1 <--                      | I                 | P                     | E
...        | line items      | C                 |                       | R
IT1 <--                      | E                 | O                     | C
CTT                          |                   | F                     | H
SE <---------------------------                  |                       | A
ST <---------------------------                  | I                     | N
BIG                          |                   | N                     | G
REF                          | I                 | V                     | E
N1                           | N                 | O                     |
N2                           | V                 | I                     | D
N3                           | O                 | C                     | A
N4                           | I                 | E                     | T
ITD                          | C                 | S                     | A
DTM                          | E                 |                       |
IT1 <--                      |                   |                       |
...        | line items      |                   |                       |
IT1 <--                      |                   |                       |
CTT                          |                   |                       |
SE <---------------------------                  |                       |
GE <-------------------------------------------------                    |
IEA <-------------------------------------------------------------------
```

3.5 Transaction Set 810 Examples

Electronic Invoice Transaction Set 810
(As Used for the Prime Vendor Interface)

The Prime Vendor sends one electronic invoice (INVOICE NUM) to a VA facility's pharmacy. The pharmacy is using the Tax Identification Number to uniquely identify the vendor, the product's National Drug Code (NDC) to cross-reference with the vendor's product item number, and the UPC Consumer Code to uniquely identify a medical supply. Data Element values in quotes (i.e., "PO NUM") are symbolic in nature and are not intended as the literal representation of valid data as in Example 1. Example 2 is a sample of what actual data might look like.

Example 1: Template of a Transaction Set

```
ISA^00^ ^00^ ^ZZ^"DUNN & BRADSTREET#"^ZZ^588 ^950214^
1005^U^00200^"INTERCHANGE CONTROL #"^0^P^>~
GS^IN^"DUNN & BRADSTREET#"^588^950214^1005^"GROUP CONTROL #"^X^003020~
ST^810^"TRANACTION SET CONTROL #"~
BIG^950214^"INVOICE#"^950214^"PURCHASE ORDER#"~
REF^CR^"CONSUMER REFERENCE #"~
REF^TJ^"VENDOR'S FEDERAL TAX ID#"~
N1^BY^"BUYING PARTY NAME"^21^"HEALTH INDUSTRY ID#"~
N2^"BUYING PARTY NAME CONT."^"BUYING PARTY NAME CONT."~
N3^"ADDRESS INFO"^"ADDRESS INFO"~
N4^"CITY NAME"^"STATE CODE"^"ZIP CODE"~
N1^DS^"DISTRIBUTOR NAME"^21^"HEALTH INDUSTRY ID#"~
N2^"DISTRIBUTOR NAME CONT."^"DISTRIBUTOR NAME CONT."~
N3^"ADDRESS INFO"^"ADDRESS INFO"~
N4^"CITY NAME"^"STATE CODE"^"ZIP CODE"~
N1^ST^"SHIP TO NAME"^21^"HEALTH INDUSTRY ID#"~
N2^"SHIP TO NAME CONT."^"SHIP TO NAME CONT."~
N3^"ADDRESS INFO"^"ADDRESS INFO"~
N4^"CITY NAME"^"STATE CODE"^"ZIP CODE"~
ITD^14^^^"PAYMENT DATE"^15^"PAYMENT DUE DATE"^16^"TOTAL AMT"~
DTM^002^"DELIVERY REQUESTED DATE"~
DTM^035^"DELIVERY DATE"~
IT1^1^12^CC^9.32^DS^ND^"NDC#"^VN^VENDOR ITEM #^UP^
"UPC CONSUMER CODE"~
IT1^2^10^CA^21.50^DS^ND^"NDC#"^VN^VENDOR ITEM #^UP^
"UPC CONSUMER CODE"~
CTT^2^^^^^^CLOSED~
SE^23^"TRANSACTION SET CONTROL#"~
GE^1^"GROUP CONTROL #"~
IEA^1^"INTERCHANGE CONTROL #"~
```

Example 2: Mock Transaction Set

```
ISA^00^      ^00^      ^ZZ^999999      ^ZZ^588            ^
950214^1005^U^00200^900456789^0^P^>~
GS^IN^999999^588^950214^1005^012345678^X^003020~
ST^810^000000022~
BIG^950214^201^950214^P2O01~
REF^CR^23201~
REF^TJ^102030~
N1^BY^VA MEDICIAL CENTER^21^RA1000C00~
N2^DEPARTMENT OF VETERANS AFFAIRS~
N3^123 VETERANS BLVD.~
N4^LOUISVILLE^KY^40202~
N1^DS^DRUGS DISTRIBUTOR INC.^21^KA1000R00~
N3^456 DRUG LANE~
N4^LEXINGTON^KY^40601~
N1^ST^VA MEDICAL CENTER^21^JR1000P00~
N2^DEPARTMENT OF VETERANS AFFAIRS^~
N3^123 VETERANS BLVD.^RECEIVING DEPT.~
N4^LOUISVILLE^KY^40202~
ITD^14^^^950301^15^950302^16^34.67~
DTM^002^950210~
DTM^035^950212~
IT1^1^12^CC^9.32^DS^ND^00032227780^VN^46789~
IT1^2^10^CA^21.50^DS^ND^00181053725^VN^878212~
CTT^2^^^^^^CLOSED~
SE^23^000000022~
GE^1^012345678~
IEA^1^900456789~
```

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