



RESOURCE AND PATIENT MANAGEMENT SYSTEM

IHS ScriptPro Interface (APSS)

Technical Manual

Version 1.0
January 2006

Office of Information Technology
Albuquerque, New Mexico

PREFACE

The purpose of this manual is to provide technical information about the Pharmacy ScriptPro Interface (APSS) package.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	IMPLEMENTATION AND MAINTENANCE	2
2.1	System Requirements.....	2
2.2	System Configuration.....	2
3.0	ROUTINES	3
3.1	Routine List with Descriptions.....	3
4.0	FILES	4
4.1	File List	4
4.2	File Access	4
4.3	Cross References	4
4.4	File Definition	4
4.5	ScriptPro Commands.....	5
5.0	INTERNAL RELATIONS	7
6.0	EXTERNAL RELATIONS	8
6.1	Published Entry Points.....	8
6.2	Exported Options	8
7.0	SECURITY KEYS	9
8.0	ARCHIVING AND PURGING	10
9.0	GENERATING ONLINE DOCUMENTATION	11
9.1	%INDEX.....	11
9.2	Inquire Option	12
9.3	List File Attributes	12
10.0	SAC REQUIREMENTS / EXEMPTIONS	14
11.0	GLOSSARY	15
12.0	CONTACT INFORMATION	17

1.0 Introduction

This manual provides IHS site managers with a technical description of the IHS Pharmacy ScriptPro Interface package routines, files, menus, cross references, globals, and other necessary information required to effectively manage the system.

All routines and files are namespaced starting with the letters “APSS.”

2.0 Implementation and Maintenance

2.1 System Requirements

- Outpatient Pharmacy v7

2.2 System Configuration

The following steps must be performed to enable the interface:

- 1) Create an entry in the DEVICE file that represents the physical connection to the ScriptPro device and enter it in the DEVICE field of the APSS PARAMETERS file.
- 2) Make the following entries in the APSS CONTROL file.
 - a. EXT INTERFACE HAS DRUG LOGIC (#800) field
 - i. S X=\$\$CHKDRUG^APSSSPRO(RX)
 - b. EXT INTERFACE CALL LOGIC (#900) field
 - i. D EP1^APSSSPRO(RX,\$G(REPRINT),.SGY)
- 3) Set the value of the EXTERNAL INTERFACE field in the OUTPATIENT SITE NAME file to a 1 or 2.
- 4) If the list of drugs to be sent via the interface is to be restricted, then enter the allowable drugs into the APSS DRUG file and set the RESTRICT TO APSS DRUG FILE field in the APSS PARAMETERS file to YES.
- 5) Set the LINK ACTIVE field in the APSS PARAMETERS file to YES.

3.0 Routines

3.1 Routine List with Descriptions

Routine	Description
APSSSPRO	Handles the request to output prescription information to the ScriptPro device.

Figure 3-1: Table of routines and descriptions

4.0 Files

4.1 File List

File Number	File Name
9009033.3	APSS COMMAND
9009033.2	APSS DRUG
9009033.1	APSS PARAMETERS

Figure 4-1: Table of file numbers and file names

4.2 File Access

File Number	Global	DD	RD	WR	DEL	LAYGO
9009033.3	^APSSCOMD(@	@	@	@	@
9009033.2	^APSSDRUG(@	@	@	@	@
9009033.1	^APSSPARM(@	@	@	@	@

Figure 4-2: File access table

4.3 Cross References

This package uses standard FileMan cross references.

4.4 File Definition

File: APSS COMMAND				
Global: ^APSSCOMD(
File Number: 9009033.3				
FIELD #	FIELD NAME	SUBSCRIPT	PIECE	TYPE
.01	COMMAND NAME	D0,0	1	F
1	DATA TAG (9009033.31)			
.01	DATA TAG	D0,1,D1,0	1	F
.02	SEQUENCE	D0,1,D1,0	2	N
.03	FILE/FIELD	D0,1,D1,0	3	F
.04	FORMAT	D0,1,D1,0	4	F
1	TRANSFORM	D0,1,D1,1	1	M
2	DESCRIPTION (9009033.312)			
.01	DESCRIPTION	D0,1,D1,2,D2,0	1	W

Figure 4-3: File definition table

File: APSS DRUG				
Global: ^APSSDRUG(
File Number: 9009033.2				
FIELD #	FIELD NAME	SUBSCRIPT	PIECE	TYPE
.01	NAME	D0,0	1	P:50
.02	QUANTITY LIMIT	D0,0	2	N

File: APSS DRUG				
Global: ^APSSDRUG(
File Number: 9009033.2				
FIELD #	FIELD NAME	SUBSCRIPT	PIECE	TYPE
.03	DEACTIVATION	D0,0	3	D

Figure 4-4: File definition table

File: APSS PARAMETERS				
Global: ^APSSPARM(
File Number: 9009033.1				
FIELD #	FIELD NAME	SUBSCRIPT	PIECE	TYPE
.01	FACILITY	D0,0	1	P:9999999.06
.02	LINK ACTIVE	D0,0	2	S
.03	DEVICE	D0,0	3	P:3.5
.04	SIG LINE LENGTH	D0,0	4	N
.05	RESTRICT TO APSS DRUG FILE	D0,0	5	S
.06	PROMPT TO SEND	D0,0	6	S
.07	LOG TRANSMISSION	D0,0	7	S
1	LOCATION PRIORITY			
.01	LOCATION	D0,1,D1,0	1	P:44
.02	PRIORITY	D0,1,D1,0	2	N

Figure 4-5: File definition table

4.5 ScriptPro Commands

The FILL command is the only command supported in this version. The FILL command will transmit the following variable names and associated data to the device.

Variable Name
Chronic Medication
Dispense Units
Dispensed Drug NDC
Dispensed Drug Name
Dispensed Qty
Fill Date
Fill Priority Indicator
Instructions/SIG
Message Date / Time Stamp
Patient ID
Patient Name
Pharmacist Initials

Variable Name
Physician Name
Refills Remaining
Retail Price
Safety Cap Indicator
Script Number
Technician Name

Figure 4-6: Table of variable names

5.0 Internal Relations

There are no menu options to be assigned to users in this package.

6.0 External Relations

The following published entry points and options are delivered with this package.

6.1 Published Entry Points

Routine	Description
EP1^APSSSPRO	This is the main entry point and is called via the EXT INTERFACE CALL LOGIC field in the APSP CONTROL file.

Figure 6-1: Table of published entry points

6.2 Exported Options

There are no options delivered with this package.

7.0 Security Keys

No security keys are delivered with this package.

8.0 Archiving and Purging

There is no purging or archiving functionality delivered with this package.

9.0 Generating Online Documentation

This section describes a few methods to generate technical documentation. These include, but are not limited to, the following:

- %INDEX
- Menu Management
- Inquire Option
- Print Option File
- VA FileMan
- Data Dictionary Utilities
- List File Attributes

Typing ? at the “Select . . . Option” prompt will provide online technical information.

- A single question mark (?) lists all options that can be accessed from the current option.
- Two question marks (??) list all options accessible from the current one, showing the formal name and lock for each.
- Three question marks (???) display a brief description for each option in a menu.
- An option name preceded by a question mark (?OPTION) shows extended help, if available, for that option.

For a more exhaustive listing of options and further information about other utilities that supply online technical information, consult the Kernel Reference manual.

9.1 %INDEX

This option analyzes the structure of a routine to determine in part if the routine adheres to RPMS programming standards. The %INDEX output can include the following components:

- Compiled list of errors and warnings
- Routine listing
- Local variables
- Global variables
- Naked globals
- Label references
- External references

Running %INDEX for a specified set of routines, allows users to discover any deviations from RPMS programming standards that exist in the selected routines and

to see how routines interact with one another (i.e., which routines call or are called by other routines).

To run %INDEX for the APSS package, type the APSS namespace at the Routine(s)? prompt.

9.2 Inquire Option

This menu management option provides the following information about a specified option:

- Option name
- Menu text
- Option description
- Type of option
- Lock (if any)

In addition, all items on the menu are listed for each menu option.

Print Option File

This utility generates a listing of options from the Option file (#19). Users can choose to print all of the entries in this file or specify a single option or range of options. For a list of APSS options, refer to the Exported Options section of this manual.

9.3 List File Attributes

This VA FileMan option allows users to generate documentation pertaining to files and file structure. Using the standard format of this option yields the following data dictionary information for a specified file:

- File name and description
- Identifiers
- Cross-references
- Files pointed to by the file specified
- Files that point to the file specified
- Input, print, and sort templates

In addition, the following applicable data is supplied for each field in the file:

- Field name, number, title, and description
- Global location
- Help prompt
- Cross-references

- Input transform
- Date last edited
- Notes

Using the Global Map format of this option generates an output that lists the following information:

- All cross-references for the file selected
- Global location of each field in the file
- Input, print, and sort templates

10.0 SAC Requirements / Exemptions

There are no exemptions to the SAC standards for this version.

11.0 Glossary

Callable Entry Points	Places in a routine that can be called from an application program.
Entry Point	Entry point within a routine that is referenced by a “DO” or “GOTO” command from a routine internal to a package.
File	A set of related records or entries treated as a single unit.
FileMan	The database management system for RPMS.
Global	In MUMPS, global refers to a variable stored on disk (global variable) or the array to which the global variable may belong (global array).
INDEX (%INDEX)	A Kernel utility used to verify routines and other MUMPS code associated with a package. Checking is done according to current ANSI MUMPS standards and RPMS programming standards. This tool can be invoked through an option or from direct mode (>D ^%INDEX).
Kernel	The set of MUMPS software utilities that function as an intermediary between the host operating system and application packages. The Kernel provides a standard and consistent user and programmer interface between application packages and the underlying MUMPS implementation. These utilities provide the foundation for RPMS.
Menu	A list of choices for computing activity. A menu is a type of option designed to identify a series of items (other options) for presentation to the user for selection. When displayed, menu-type options are preceded by the word “Select” and followed by the word “option” as in Select Menu Management option: (the menu’s select prompt).
Namespace	A unique set of 2 to 4 alpha characters that are assigned by the database administrator to a software application.
Option	An entry in the Option file. As an item on a menu, an option provides an opportunity for users to select it, thereby invoking the associated computing activity. Options may also be scheduled to run in the background, non-interactively, by TaskMan.

Routine	A program or sequence of instructions called by a program that may have some general or frequent use. MUMPS routines are groups of program lines that are saved, loaded, and called as a single unit via a specific name.
Up-Hat (^)	A circumflex, also know as a “hat” or “caret,” that is used as a piece delimiter in a global. The up-hat is denoted as “^” and is typed by pressing Shift+6 on the keyboard.

12.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk by:

Phone: (505) 248-4371 or
(888) 830-7280

Fax: (505) 248-4363

Web: <http://www.rpms.ihs.gov/TechSupp.asp>

Email: ITSCHelp@mail.ihs.gov