



#### RESOURCE AND PATIENT MANAGEMENT SYSTEM

# Clinical Scheduling for Windows (BSDX)

**Technical Manual** 

Version 2.0 May 2008

Office of Information Technology (OIT) Division of Information Resources Albuquerque, New Mexico

### PREFACE

The purpose of this manual is to provide technical information about the Clinical Scheduling for Windows (BSDX) package. The BSDX package is has the following features:

- MS Windows user interface
- Graphical patient, clinic and resource scheduling
- Tightly linked to RPMS patient and clinic data
- Graphical resource and clinic availability scheduling
- Printing and WYSIWYG Print Preview of clinic schedules
- Graphical patient check-in linked to RPMS/PCC+ check-in
- Reschedule and manipulate appointments using standard Windows cut/paste or drag/drop metaphors
- Schedule multiple appointments during a time block
- Store and retrieve clinic availability patterns
- View schedules for multiple clinics simultaneously

### SECURITY

The BSDX uses security keys to limit user's ability to change system set-up parameters and patient information. In other words, not all BSDX options are available to all users. Contact your site administrator to determine or change your security keys.

### **RULES OF BEHAVIOR**

All RPMS users are required to observe HHS and IHS Rules of Behavior regarding patient privacy and the security of both patient information and IHS computers and networks.

## TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	ORIENTATION	2
3.0	IMPLEMENTATION AND MAINTENANCE	3
	<ul><li>3.1 System Requirements</li><li>3.2 Package-wide Variables</li></ul>	3 3
4.0	MENU DIAGRAM	4
5.0	ROUTINES	5
6.0	FILES AND TABLES	6
	<ul> <li>6.1 File List</li> <li>6.2 File Access</li> <li>6.3 Cross References</li> <li>6.4 Table File</li> </ul>	6 7
7.0	INTERNAL RELATIONS	14
8.0	EXTERNAL RELATIONS	15
	<ul><li>8.1 Published Entry Points</li><li>8.2 Exported Options</li></ul>	
9.0	SECURITY KEYS	16
10.0	ARCHIVING AND PURGING	17
11.0	GENERATING ONLINE DOCUMENTATION	18
	11.1 %INDEX 11.2 List File Attributes	
12.0	SAC REQUIREMENTS AND EXEMPTIONS	20
13.0	GLOSSARY	21
14.0	CONTACT INFORMATION	27

## 1.0 Introduction

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

All routines, files, options, and keys are namespaced starting with the letters BSDX. The file number range for this package is 9002018–9002018.99.

## 2.0 Orientation

The BSDX package has no RPMS server menu options. The only RPMS server preparation specifically needed to run BSDX is to install the KIDS package and assign appropriate the BSDXZ keys to users. The rest of the package runs on the PC client and can be managed from there. See the Installation Manual for details on server and client installation and configuration.

Interaction of BSDX with the RPMS system is accomplished entirely via the use of Remote Procedure Calls (RPCs). All RPCs in this package begin with the letters BSDX.

2

## 3.0 Implementation and Maintenance

BSDX provides a Windows interface for the PIMS scheduling software and is designed to interoperate with existing PIMS schedules. See the Installation Manual for detailed information on how to link Windows schedules with existing RPMS schedules.

### 3.1 System Requirements

- Cache version 5.0
- Kernel version 8
- BMXNet version 2.0
- PIMS version 5.3 patch 1003

### 3.2 Package-wide Variables

There are no package-wide BSDX variables in the RPMS system.

## 4.0 Menu Diagram

There are no RPMS menus in the BSDX system. Client menus are discussed in detail in the BSDX User Manual.

## 5.0 Routines

#### Table 5-1 Routines and Descriptions

Routine	Description
BSDX01	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX02	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX03	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX04	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX05	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX06	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX07	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX08	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX09	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX11	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX12	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX13	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX14	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX15	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX16	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX17	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX18	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX19	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX20	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX21	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX22	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX23	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX24	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX25	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX26	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX27	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX28	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX29	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX2E	ENVIRONMENT CHECK FOR WINDOWS SCHEDULING
BSDX30	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX31	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX32	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX33	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX34	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS
BSDX35	IHS/OIT/HMW - WINDOWS SCHEDULING RPCS

## 6.0 Files and Tables

#### 6.1 File List

#### Table 6-1 File Numbers and Names

File Number	File Name
9002018.3	BSDX ACCESS BLOCK
9002018.38	BSDX ACCESS GROUP
9002018.39	BSDX ACCESS GROUP TYPE
9002018.35	BSDX ACCESS TYPE
9002018.5	BSDX APPLICATION
9002018.4	BSDX APPOINTMENT
9002018.1	BSDX RESOURCE
9002018.2	BSDX RESOURCE GROUP
9002018.15	BSDX RESOURCE USER

### 6.2 File Access

#### Table 6-2 File Access

FILE (#)	GL	RD	WR	LYG	DD	DEL
9002018.3	^BSDXAB(	@	@	@	@	@
9002018.38	^BSDXAGP(	@	@	@	@	@
9002018.39	^BSDXAGTP(	@	@	@	@	@
9002018.35	^BSDXTYPE(	@	@	@	@	@
9002018.5	^BSDXAPPL(	@	@	@	@	@
9002018.4	^BSDXAPPT(	@	@	@	@	@
9002018.1	^BSDXRES(	@	@	@	@	@
9002018.2	^BSDXDEPT(	@	@	@	@	@
9002018.15	^BSDXRSU(	@	@	@	@	@

### 6.3 Cross References

	FILE: BSDX RE GLOBAL: ^BSD FILE #: 9002	XRES(		
FIELD #	FIELD NAME	SUBSCRIPT	PIECE	
.01	NAME X: B	D0,0	1	===== F
.02	1) S ^BSDXRES("B",\$E( INACTIVE	X,1,30),DA)=""	2	S
.03	S: 1:YES;0:NO; TIME SCALE	п	3	S
.04	S: 5:5;10:10;15:15;20:20;30 HOSPITAL LOCATION P: HOSPITAL LOCATION X: ALOC 1) S ^BSDXRES("ALOC",	Ш	4	Ρ
1.01	LETTER TEXT (9002018.11) LETTER TEXT	D0,1,D1,0	1	W
1201 .01	NO SHOW LETTER (9002018.11201 NO SHOW LETTER	) D0,12,D1,0	1	W
.01	CLINIC CANCELLATION LETTER (9 CLINIC CANCELLATION LETTER	002018.11301) D0,13,D1,0	1	W
.01	X: ASSOC	018.12001) D0,20,D1,0 0,"B",\$E(X,1,30),DA)="" ,\$E(X,1,30),DA(1),DA)="		P
	FILE: BSDX RESO GLOBAL: ^BSD FILE #: 9002	XRSU(		
FIELD # ===========	FIELD NAME	SUBSCRIPT	PIECE	
.01	RESOURCENAME P: BSDX RESOURCE X: B	D0,0	1	P
.02	1) S ^BSDXRSU("B",\$E() USERNAME P: NEW PERSON X: AC	X,1,30),DA)=""	2	Ρ
.03	<pre>1) S ^BSDXRSU("AC",\$E OVERBOOK S: 1:YES;0:NO;</pre>	(X,1,30),DA)=""	3	S
.04	MODIFY SCHEDULE	n	4	S
.05	S: 1:YES;0:NO; MODIFY APPOINTMENTS	"	5	S

FILE: BSDX RESOURCE GROUP GLOBAL: ^BSDXDEPT( FILE #: 9002018.2 FIELD # FIELD NAME SUBSCRIPT PIECE TYPE \_\_\_\_\_ .01 NAME D0,0 F 1 X: B 1) S ^BSDXDEPT("B",\$E(X,1,30),DA)="" .02 INACTIVATION DATE 2 D RESOURCE (9002018.21) 1 .01 RESOURCE D0,1,D1,0 1 P P: BSDX RESOURCE X: B 1) S ^BSDXDEPT(DA(1),1,"B",\$E(X,1,30),DA)="" X: AB 1) S ^BSDXDEPT("AB", \$E(X,1,30), DA(1), DA)="" FILE: BSDX ACCESS BLOCK GLOBAL: ^BSDXAB( FILE #: 9002018.3 FIELD # FIELD NAME SUBSCRIPT PIECE TYPE \_\_\_\_\_\_ RESOURCE D0,0 1 P .01 P: BSDX RESOURCE х: в 1) S ^BSDXAB("B",\$E(X,1,30),DA)="" .02 STARTTIME 2 D X: ARSCT^MUMPS 1) D XR4S^BSDX03(DA) 2) D XR4K^BSDX03(DA) .03 ENDTIME ... 3 D .04 SLOTS ш 4 Ν .05 ACCESS TYPE 5 Ρ P: BSDX ACCESS TYPE NOTE (9002018.31) 1 .01 NOTE D0,1,D1,0 1 W FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 SUBSCRIPT PIECE TYPE FIELD # FIELD NAME \_\_\_\_\_ .01 ACCESS TYPE NAME D0,0 F 1 X: B 1) S ^BSDXTYPE("B",\$E(X,1,30),DA)="" .02 INACTIVE 2 S S: 1:YES;0:NO; .03 DEPARTMENT NAME 3 Ρ P: BSDX RESOURCE GROUP DISPLAY COLOR F .04 4 .05 RED 5 Ν .06 GREEN 6 Ν .07 BLUE 7 N

**Technical Manual** 

8

	GLOBAL:	ACCESS GROUP * ^BSDXAGP( : 9002018.38		
FIELD #	FIELD NAME	SUBSCRIPT	PIECE	
.01	ACCESS GROUP	D0,0	1	F
	X: B 1) S ^BSDXAGP("E	3",\$E(X,1,30),DA)=""		
	GLOBAL:	ACCESS GROUP TYPE * ^BSDXAGTP( * 9002018.39		
FIELD #	FIELD NAME	SUBSCRIPT	PIECE	
.01	ACCESS GROUP P: BSDX ACCESS GROUP X: B	D0,0	1	P
.02	1) S ^BSDXAGTP(' ACCESS TYPE P: BSDX ACCESS TYPE	'B",\$E(X,1,30),DA)="" "	2	Ρ
	GLOBAL:	DX APPOINTMENT : ^BSDXAPPT( : 9002018.4		
FIELD # ==========	FIELD NAME	SUBSCRIPT	PIECE	
.01	STARTTIME X: B	D0,0	1	D
.02	1) S ^BSDXAPPT(' ENDTIME	'B",\$E(X,1,30),DA)=""	2	D
.03	CHECKIN	"	3	D
.04	AUXTIME	п	4	D
.05	PATIENT P: PATIENT	п	5	Ρ
	X: CPAT 1) S ^BSDXAPPT('	'CPAT",\$E(X,1,30),DA)=""		
.06	ACCESS TYPE ID	"	6	N
.07	RESOURCE P: BSDX RESOURCE	n	7	P
	X: ARSRC^MUMPS 1) D XR2S^BSDX03			
.08	2) D XR2K^BSDX03 DATA ENTRY CLERK	"	8	Ρ
.09	P: NEW PERSON DATE APPT MADE	п	9	D
1	NOSHOW	п	10	S
	S: 1:YES;0:NO;		_ 2	-
	REBOOK DATETIME	п	11	D
.11		"	12	D
12	CANCEL DATETIME			
.11 .12 .13	CANCEL DATETIME WALKIN S: y:YES;n:NO;	u	13	S

.01	NOTE	D0,1,D1,0	1	W
	F	TLE: BSDX APPLICATION GLOBAL: ^BSDXAPPL( FILE #: 9002018.5		
FIELD # =========	FIELD NAME	SUBSCRIPT	PIECE	TYPE
.01	MAJOR VERSION X: B	D0,0	1	F
.02 .03	1) S ^BS MINOR VERSION BUILD	DXAPPL("B",\$E(X,1,30),DA)="" " "	2 3	F D

Figure 6-1: Screen display of BSDX Cross-reference list

### 6.4 Table File

	FILE: BSDX RE GLOBAL: ^BSD FILE #: 9002	XRES (	
	FIELD NAME	SUBSCRIPT	
.01	NAME	D0,0	1 F
.02	INACTIVE	II	2 S
03	TIME SCALE	"	3 S
04	HOSPITAL LOCATION	"	4 P
.01	LETTER TEXT (9002018.11) LETTER TEXT	D0,1,D1,0	1 W
		, _ , , -	
201 .01	NO SHOW LETTER (9002018.11201 NO SHOW LETTER	) D0,12,D1,0	1 W
.01	CLINIC CANCELLATION LETTER (9 CLINIC CANCELLATION LETTER		1 W
		- , - , , -	
.01	ASSOCIATED RPMS CLINICS (9002 ASSOCIATED RPMS CLINICS		1 P
	FILE: BSDX RESO GLOBAL: ^BSD FILE #: 9002	XRSU(	
	FIELD NAME	SUBSCRIPT	PIECE TYPE
01	RESOURCENAME	D0,0	1 P
02	USERNAME	II	2 P
03	OVERBOOK	II	3 S
)4	MODIFY SCHEDULE	"	4 S
)5	MODIFY APPOINTMENTS	"	5 S
	FILE: BSDX RESOU GLOBAL: ^BSD FILE #: 9002	XDEPT(	
FIELD #	FIELD NAME	SUBSCRIPT	PIECE TYPE
.01	NAME		 1 F
.02	INACTIVATION DATE	D0,0 "	2 D
	RESOURCE (9002018.21)		
.01	RESOURCE	D0,1,D1,0	1 P
	FILE: BSDX ACCE GLOBAL: ^BS FILE #: 9002	DXAB (	
	FILE #• 9002		

.01 ACCESS TYPE NAME D0,0 .02 INACTIVE " .03 DEPARTMENT NAME "	===	F C C N F W	
.02 STARTTIME " .03 ENDTIME " .04 SLOTS " .05 ACCESS TYPE "  1 NOTE (9002018.31) .01 NOTE D0,1,D1,0  FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35  FIELD # FIELD NAME SUBSCRIPT PIE ====================================	2 3 4 5 1 CE	TYP	
.03 ENDTIME " .04 SLOTS " .05 ACCESS TYPE " 1 NOTE (9002018.31) .01 NOTE D0,1,D1,0 FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE ====================================	3 4 5 1 CE ===	TYF	
.03 ENDIME .04 SLOTS " .05 ACCESS TYPE " 1 NOTE (9002018.31) .01 NOTE D0,1,D1,0 FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	4 5 1 CE ===	N F W	Ţ
.04 SLOTS " .05 ACCESS TYPE " 1 NOTE (9002018.31) .01 NOTE D0,1,D1,0  FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35  FIELD # FIELD NAME SUBSCRIPT PIE	4 5 1 CE ===	F W	)
.05 ACCESS TYPE " 1 NOTE (9002018.31) .01 NOTE D0,1,D1,0 FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE	5 1 CE ===	F W	)
1 NOTE (9002018.31) .01 NOTE D0,1,D1,0 FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE ====================================	1 CE ===	Ŵ	
.01 NOTE D0,1,D1,0 FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	CE = = =	TYP	1
.01 NOTE D0,1,D1,0 FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	CE = = =	TYP	I
FILE: BSDX ACCESS TYPE GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	CE = = =	TYP	T
GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	===		
GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	===		
GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	===		
GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	===		
GLOBAL: ^BSDXTYPE( FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	===		
FILE #: 9002018.35 FIELD # FIELD NAME SUBSCRIPT PIE 	===		
FIELD # FIELD NAME SUBSCRIPT PIE 	===		
.01 ACCESS TYPE NAME D0,0 .02 INACTIVE " .03 DEPARTMENT NAME "	===		
.01 ACCESS TYPE NAME D0,0 .02 INACTIVE " .03 DEPARTMENT NAME "	===		
.01 ACCESS TYPE NAME D0,0 .02 INACTIVE " .03 DEPARTMENT NAME "	===		Έ
.01 ACCESS TYPE NAME D0,0 .02 INACTIVE " .03 DEPARTMENT NAME "			
.02 INACTIVE " .03 DEPARTMENT NAME "	-		
.02 INACTIVE " .03 DEPARTMENT NAME "		-	
.03 DEPARTMENT NAME "	1	F	
	2	S	5
	3	P	<b>)</b>
.04 DISPLAY COLOR "	4	F	,
.05 RED "	5	N	
.00 GREEN	6	N	
.07 BLUE "	7	N	1
FILE: BSDX ACCESS GROUP			
GLOBAL: ^BSDXAGP(			
FILE #: 9002018.38			
FIELD # FIELD NAME SUBSCRIPT PIE	CE	TYP	Έ
	===	====	:=
	1		
.01 ACCESS GROUP D0,0	1	F	
FILE: BSDX ACCESS GROUP TYPE			
GLOBAL: ^BSDXAGTP(			
FILE #: 9002018.39			
FIELD # FIELD NAME SUBSCRIPT PIE	an.	m	
FIELD # FIELD NAME SUBSCRIPT PIE	-	TYF	
		====	:=
	1	P	)
.01 ACCESS GROUP D0,0		P	
.01 ACCESS GROUP D0,0	1		
.01 ACCESS GROUP D0,0	1		
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE "	1		
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT	1		
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT(	1		
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT(	1		
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT	1		
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4	1 2	P	)
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE	1 2 CE	P	PE
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4	1 2 CE	P	PE
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE	1 2 CE ===	P TYP ====	) )E =
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE	1 2 CE	P	) )E =
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE	1 2 CE ===	P TYP ====	) ) )
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE 	1 2 CE ===	P TYP ====	) PE == ))
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE 	1 2 CE === 1 2 3	TYP ==== C C C	) ) ) )
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE 	1 2 CE === 1 2 3 4	TYP ==== D D D D	) FE ) ) ) )
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE 	1 2 CE 1 2 3 4 5	TYF ==== C C F F	PE == ) ) )
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE 	1 2 CE === 1 2 3 4	TYP ==== D D D D	PE == ) ) )
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE 	1 2 CE 1 2 3 4 5	TYF ==== C C F F	) E ) ) ) ) 1
.01 ACCESS GROUP D0,0 .02 ACCESS TYPE " FILE: BSDX APPOINTMENT GLOBAL: ^BSDXAPPT( FILE #: 9002018.4 FIELD # FIELD NAME SUBSCRIPT PIE 	1 2 CE = == 1 2 3 4 5 6	F TYF E E E E E F F N	PE == )) )) ) )

Technical Manual

-				
.09	DATE APPT MADE	II.	9 D	
.1	NOSHOW	II.	10 S	
.11	REBOOK DATETIME	п	11 D	
.12	CANCEL DATETIME	п	12 D	
.13	WALKIN	п	13 S	
1	NOTE (9002018.41)			
.01	NOTE	D0,1,D1,0	1 W	
	TTT. DCT	X APPLICATION		
		^BSDXAPPL(		
		9002018.5		
	LITE #.	9002018.5		
FIELD #	FIELD NAME	SUBSCRIPT	PIECE TYPE	
			==============	
.01	MAJOR VERSION	D0,0	1 F	
.02	MINOR VERSION	"	2 F	
.03	BUILD	"	3 D	
.18	EXPIRATION DATE	"	18 D	
Enter RETUR	N to continue or '^' to exi	t:		
FIELD # FIE	LD NAME	SUBSCRIPT	PIECE TYPE	
===========			=========================	
	DATE OF BIRTH	D0,0	19 D	
Enter RETUR	N to continue or '^' to exi	.t:		

Figure 6-2: Screen display of BSDX Table File listing

## 7.0 Internal Relations

There are no documented internal relations in BSDX.

## 8.0 External Relations

No special integration agreements exist between BSDX and any other package.

#### 8.1 Published Entry Points

No published entry points exist in BSDX.

#### 8.2 Exported Options

#### Table 8-1 Exported Options

Option Name	Description
BSDXRPC	This option hosts RPCs in the BSDX namespace. Windows Scheduling users must have access to this option to use Windows Scheduling.

## 9.0 Security Keys

#### Table 9-1 Security Keys

Key Name	Description
BSDXZMENU	All Windows Scheduling users must have this key to access the application.
BSDXZMGR	This key should be assigned to users who manage the overall Scheduling application. This key gives access to the Scheduling Management menu option in the client software.

## **10.0 Archiving and Purging**

There is no archiving and purging in this package.

## **11.0 Generating Online Documentation**

This section describes a few methods to generate Windows Scheduling system technical documentation. Online Windows Scheduling software technical documentation, in addition to that which is located in the help prompts throughout the Windows Scheduling package, can be generated through the use of several Kernel options. These include, but are not limited to, the following:

- %INDEX
- VA FileMan
- Data Dictionary Utilities
- List File Attributes

For further information about other utilities that supply online technical information, consult the DHCP Kernel Reference manual.

### 11.1 %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 Patient Registration package, type the AG namespace at the Routine(s)?> prompt.

## 11.2 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

v2.0

- 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

For a comprehensive listing of Patient Registration package files, please refer to the Files section of this manual (section 1.0).

## **12.0 SAC Requirements and Exemptions**

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

## 13.0 Glossary

Term	Definition
Archiving	The storing of historical or little-used data off-line (often on tape).
ASUFAC Number	Area Service Unit Facility; A unique identifier for each facility within IHS. A six-digit number comprised of 2 digits for Area, 2 digits for Service Unit, and 2 digits for Facility.
Banner	A line of text with a user's name and domain.
Browser	An interactive application that displays ASCII text on a terminal that supports a scroll region. The text can be in the form of a word-processing field or sequential local or global array. The user is allowed to navigate freely within the document.
Callable Entry Points	Places in a routine that can be called from an application program.
Cross-reference	An indexing method whereby files can include pre-sorted lists of entries as part of the stored database. Cross-references (x-refs) facilitate look-up and reporting.
Default Facility	A user selects a facility identification to work with patients registered to that facility.
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).
Health Record Number (HRN)	Each facility assigns a unique number within that facility to each patient. Each HRN with its facility identification "ASUFAC" make a unique identifier within all of IHS.

Term	Definition
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).
Init	Initialization of an application package. The initialization step in the installation process builds files from a set of routines (the init routines). Init is a shortened form of initialization.
Internal Entry Number (IEN)	The number used to identify an entry within a file. Every record has a unique internal entry number.
IRM	Information Resource Management. The IHS personnel responsible for information systems management and security.
Kernel	The set of MUMPS software utilities that function as an intermediary between the host operating system and application packages, such as Laboratory and Pharmacy. 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.
Official Registering Facility	A facility so designated that when HRNs are added/modified, those changes are sent to the central database. A Service Unit may have several satellites for which it is registering patients.

Term	Definition
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.
Patient Care Component (PCC)	The central repository for data in the Resource and Patient Management System (RPMS).
Queuing	Requesting that a job be processed at a later time rather than within the current session.
Remote Procedure Call (RPC)	An RPC is an entry in the REMOTE PROCEDURE file that points to specific M code to execute when called by an external Windows application.
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.
UCI	User Class Identification: a computing area.
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 " $^{n}$ " and is typed by pressing Shift+6 on the keyboard.
Utility	A callable routine line tag or function. A universal routine usable by anyone.
Variable	A character or group of characters that refers to a value. MUMPS recognizes 3 types of variables: local variables, global variables, and special variables. Local variables exist in a partition of the main memory and disappear at sign-off. A global variable is stored on disk, potentially available to any user. Global variables usually exist as parts of global arrays.
Archiving	The storing of historical or little-used data off-line (often on tape).

Term	Definition
ASUFAC Number	Area Service Unit Facility; A unique identifier for each facility within IHS. A six-digit number comprised of 2 digits for Area, 2 digits for Service Unit, and 2 digits for Facility.
Banner	A line of text with a user's name and domain.
Browser	An interactive application that displays ASCII text on a terminal that supports a scroll region. The text can be in the form of a word-processing field or sequential local or global array. The user is allowed to navigate freely within the document.
Callable Entry Points	Places in a routine that can be called from an application program.
Cross-reference	An indexing method whereby files can include pre-sorted lists of entries as part of the stored database. Cross-references (x-refs) facilitate look-up and reporting.
Default Facility	A user selects a facility identification to work with patients registered to that facility.
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).
Health Record Number (HRN)	Each facility assigns a unique number within that facility to each patient. Each HRN with its facility identification "ASUFAC" make a unique identifier within all of IHS.
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).

Term	Definition
Init	Initialization of an application package. The initialization step in the installation process builds files from a set of routines (the init routines). Init is a shortened form of initialization.
Internal Entry Number (IEN)	The number used to identify an entry within a file. Every record has a unique internal entry number.
IRM	Information Resource Management. The IHS personnel responsible for information systems management and security.
Kernel	The set of MUMPS software utilities that function as an intermediary between the host operating system and application packages, such as Laboratory and Pharmacy. 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.
Official Registering Facility	A facility so designated that when HRNs are added/modified, those changes are sent to the central database. A Service Unit may have several satellites for which it is registering patients.
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.
Patient Care Component (PCC)	The central repository for data in the Resource and Patient Management System (RPMS).

Term	Definition
Queuing	Requesting that a job be processed at a later time rather than within the current session.
Remote Procedure Call (RPC)	An RPC is an entry in the REMOTE PROCEDURE file that points to specific M code to execute when called by an external Windows application.
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.
UCI	User Class Identification: a computing area.
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.
Utility	A callable routine line tag or function. A universal routine usable by anyone.
Variable	A character or group of characters that refers to a value. MUMPS recognizes 3 types of variables: local variables, global variables, and special variables. Local variables exist in a partition of the main memory and disappear at sign-off. A global variable is stored on disk, potentially available to any user. Global variables usually exist as parts of global arrays.

## 14.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT User Support (IHS) by:

Phone:	(505) 248-4371 or
	(888) 830-7280
Fax:	(505) 248-4297
Web:	http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm
Email:	support@ihs.gov