



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Clinical Scheduling for Windows (BSDX)

Installation Guide and Release Notes

Version 2.0
May 2008

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

PREFACE

This manual provides information regarding only the release and installation of the Clinical Scheduling for Windows version 2.0 package.

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	RELEASE NOTES	1
2.0	INSTALLATION NOTES	2
2.1	General Information	2
2.2	Contents of Distribution.....	2
2.3	Required Resources	2
3.0	INSTALLATION ISSUES	4
3.1	Web-Based Deployment	4
3.2	Standard Client Deployment	4
4.0	INSTALLATION INSTRUCTIONS	5
4.1	Routines and Checksums	5
4.2	RPMS Server Installation.....	5
4.3	Application Server Installation.....	6
4.3.1	Web-based Client Deployment.....	6
4.4	Client Installation	6
4.4.1	Standard Client Deployment	7
4.4.2	Web-Based Client Deployment	8
5.0	SAMPLE INSTALLATIONS	9
5.1	RPMS Sample Installation	9
5.2	GUI Installation	13
5.2.1	Removing the IHS Clinical Scheduling WX GUI.....	13
5.2.2	Installing the IHS Clinical Scheduling WX GUI.....	15
6.0	INSTALLATION CONFIGURATION	19
7.0	CONTACT INFORMATION	20

1.0 Release Notes

This release consists of version 2.0 of IHS Clinical Scheduling for Windows (BSDX).

2.0 Installation Notes

Namespace: BSDX

Current Version: 2.0

Warning: Read entire notes file prior to attempting any installation.

2.1 General Information

- Make a copy of this distribution for offline storage.
- Print all notes/readme files.
- It is recommended that the terminal output during the installation be captured using an auxport printer attached to the terminal at which you are performing the software installation. This provides a printed audit trail if any problems should arise.

2.2 Contents of Distribution

- bsd0200.k
- bsd020u.pdf
- bsd020i.pdf
- bsd020t.pdf
- bsd020cliniSchedulLocal.zip
- bsd020cliniSchedulWeb.zip
- bsd0200.n

2.3 Required Resources

RPMS Server Requirements:

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

Client PC Requirements:

- Microsoft Windows 2000 or XP

- Microsoft .NET Framework version 1.1 or later.
- Microsoft Data Access Components (MDAC) current version

3.0 Installation Issues

BSDX contains components which run on the RPMS Server and components which run on the client PC. Installation of the server components is conventional and consists of a KIDS build. The BSDX client can be deployed on one of two ways:

- Web-based Client Deployment
- Standard Client Deployment

3.1 Web-Based Deployment

Web-based deployment involves storing the application on a web page and creating a shortcut on the client PC which points to the application on the web page. A setup application must still be installed initially on the client PC in order to grant permission for the client to execute software hosted on the web server. However, when new versions of the client software are released, the client PCs update themselves automatically. Thus, the advantage to web-based deployment is that fewer management resources are needed to maintain the software. The drawback to web-based deployment is that a web server must be available.

3.2 Standard Client Deployment

Standard client deployment refers to the conventional method of the installation of Windows software on a client PC using a setup application. New versions of the client software must also be installed on the PC when they are released. Use standard deployment if you are installing on a terminal server such as Citrix.

4.0 Installation Instructions

4.1 Routines and Checksums

Table 4-1 shows BSDX routines and corresponding checksums (*routine / checksum*).

Table 4-1. Routines and Checksums

Routine / Checksum	Routine / Checksum
BSDX01 / 11848175	BSDX20 / 1833785
BSDX02 / 5951296	BSDX21 / 2614749
BSDX03 / 860410	BSDX22 / 3124044
BSDX04 / 7592425	BSDX23 / 2529433
BSDX05 / 3013143	BSDX24 / 2814129
BSDX06 / 3209141	BSDX25 / 5824153
BSDX07 / 17378726	BSDX26 / 1365942
BSDX08 / 10754155	BSDX27 / 22370008
BSDX09 / 6507024	BSDX28 / 7656924
BSDX11 / 3107951	BSDX29 / 8002447
BSDX12 / 2505938	BSDX2E / 5506311
BSDX13 / 2814870	BSDX30 / 2078848
BSDX14 / 2347696	BSDX31 / 6266174
BSDX15 / 2022789	BSDX32 / 6681155
BSDX16 / 3659018	BSDX33 / 3991937
BSDX17 / 1056432	BSDX34 / 12315637
BSDX18 / 12468373	BSDX35 / 3348832
BSDX19 / 2600080	

4.2 RPMS Server Installation

1. On the RPMS Server, load and install bsdX0200.k file on the RPMS server and use the KIDS menu options.
2. Ensure that the BMXNet system is installed and that a BMXNet monitor process is running. BMXNet's Integrated Security feature allows users to connect to RPMS without having to re-specify ACCESS and VERIFY codes every time. For

this feature to work, set the INTEGRATED SECURITY field of the BMXNet monitor port to YES. See the BMXNet User and Installation manuals for details on BMXNet.

4.3 Application Server Installation

4.3.1 Web-based Client Deployment

To deploy the web-based client:

1. Create a new virtual directory to host the BSDX files using the Internet Information Server management tools. The permissions on this folder should be such that the files are accessible to all BSDX users.
2. Copy the bsdx0200CliniSchedWeb.zip into the new virtual directory on the web server and extract its contents into the virtual directory:
 - BMXNet.dll
 - BMXNet20.dll
 - CalendarGrid.dll
 - ClinicalScheduling.exe
 - ClinicalScheduling.exe.config
 - ClinicalSchedulingSetupWeb.msi
 - Dotnetfx.exe
 - MDAC_TYP.EXE
 - Setup.exe
 - Setup.ini

4.4 Client Installation

If you have an older version of the client, use the Windows Control Panel Add or Remove Software before installing this version. For sites with 10 or fewer clients to update, use the standard deployment, Otherwise use the web deployment. Web deployment of the Scheduling GUI requires minimal user interaction.

4.4.1 Standard Client Deployment

To deploy the standard client:

1. Copy the bsdx020CliniSchedLocal.zip into a centrally accessible network share directory and extract its contents:
 - ClinicalSchedulingSetupLocal.msi
 - Dotnetfx.exe
 - MDAC_TYP.EXE
 - Setup.exe
2. Log in to the client PC with administrator privileges.
3. Copy the following files to the client PC from the network share directory:
 - ClinicalSchedulingSetupLocal.msi
 - Dotnetfx.exe
 - MDAC_TYP.EXE
 - Setup.exe
4. Double click the dotnetfx.exe to install version 1.1 of the .NET runtime environment. If a later version of the .NET runtime environment is already installed on the client PC, then skip this step.
5. Double click the MDAC_TYP.EXE to install the Microsoft data access components. If a later version of the data access components is already installed on the client PC, then skip this step.
6. Install the scheduling software by executing setup.exe on the client PC.
7. Select **Everyone** and continue when prompted by the Select Installation Folder dialog box.
8. Run the Scheduling package as follows:
 - Select the Start button
 - Choose All Programs
 - Select IHS Clinical Scheduling WX
 - Double Click IHS Clinical Scheduling

4.4.2 Web-Based Client Deployment

To deploy the web-based client:

1. Log in to the client PC with administrator privileges.
2. Copy the following files to the client PC from the web server virtual directory:
 - dotnetfx.exe
 - MDAC_TYP.EXE
 - ClinicalSchedulingSetupWeb.msi
 - setup.exe
 - setup.ini
3. Run dotnetfx.exe to install version 1.1 of the .NET runtime environment. If a later version of the .NET runtime environment is already installed on the client PC, skip this step.
4. Run MDAC_TYP.EXE to install the Microsoft data access components. If a later version of the data access components is already installed on the client PC, then skip this step.
5. Install the scheduling support software by executing *setup.exe* on the client PC. When prompted for the Deployment Server, enter the address of your web server, e.g. `homedev.ihs.gov`. Do not enter a path.
6. Add a shortcut to the user's desktop by right-clicking the desktop and selecting New and Shortcut. When prompted for the location of the item (the URL: field of the shortcut), enter the fully-qualified `http://` pathname that the user would enter in their browser to link to the `clinicalScheduling.exe` file. For example, enter:
<http://mywebserver.ihs.gov/clinicalScheduling/ClinicalScheduling.exe>.

Note: Do *not* point the shortcut directly to a network file share. It is important that the shortcut URL be an `http` URL for the software to update itself automatically.

5.0 Sample Installations

This section shows sample installations for RPMS and GUI.

5.1 RPMS Sample Installation

Figure 5-1 shows a sample RPMS installation of the IHS Clinical Scheduling WX.

```
>D ^XUP

Setting up programmer environment
This is a TEST account.

Terminal Type set to: C-VT100

You have 447 new messages.
Select OPTION NAME: XPD MAIN          Kernel Installation & Distribution System

        Edits and Distribution ...
        Utilities ...
        Installation ...

You have 9 PENDING ALERTS
        Enter "VA to jump to VIEW ALERTS option

There is PRIORITY Mail!

Select Kernel Installation & Distribution System Option: Installation

        1      Load a Distribution
        2      Verify Checksums in Transport Global
        3      Print Transport Global
        4      Compare Transport Global to Current System
        5      Backup a Transport Global
        6      Install Package(s)
              Restart Install of Package(s)
              Unload a Distribution

You have 9 PENDING ALERTS
        Enter "VA to jump to VIEW ALERTS option

There is PRIORITY Mail!

Select Installation Option: Load a Distribution
Enter a Host File: Q:\bsdX0200.k

KIDS Distribution saved on Sep 27, 2007@15:25:12
```

```
Comment: IHS WINDOWS SCHEDULING version 2.0 KIDS build MJL
This Distribution contains Transport Globals for the following Package(s):
  BSDX 2.0
Distribution OK!
```

```
Want to Continue with Load? YES//
Loading Distribution...
```

```
Build BSDX 2.0 has an Enviromental Check Routine
Want to RUN the Environment Check Routine? YES//
  BSDX 2.0
Will first run the Environment Check Routine, BSDX2E
```

Hello, MICHAEL LOUGHRAN

Checking Environment for Install of Version 2.0 of IHS WINDOWS SCHEDULING.

Need at least VA FILEMAN 22.....VA FILEMAN 22.0 Present

Need at least KERNEL 8.....KERNEL 8.0 Present

Need at least PIMS 5.3.....PIMS 5.3 Present

Need PIMS*5.3*1003.....PIMS*5.3*1003 Is Present

Need at least BMX 2.....BMX 2.0 Present

ENVIRONMENT OK.

Use INSTALL NAME: BSDX 2.0 to install this Distribution.

- 1 Load a Distribution
 - 2 Verify Checksums in Transport Global
 - 3 Print Transport Global
 - 4 Compare Transport Global to Current System
 - 5 Backup a Transport Global
 - 6 Install Package(s)
- Restart Install of Package(s)
Unload a Distribution

You have 9 PENDING ALERTS
Enter "VA to jump to VIEW ALERTS option

There is PRIORITY Mail!

```
Select Installation Option: Install Package(s)
Select INSTALL NAME:   BSDX 2.0      Loaded from Distribution      Loaded from
Distribution 10/1/07@14:47:51
=> IHS WINDOWS SCHEDULING version 2.0 KIDS build MJL ;Created on Sep 27,
```

```
This Distribution was loaded on Oct 01, 2007@14:47:51 with header of
  IHS WINDOWS SCHEDULING version 2.0 KIDS build MJL ;Created on Sep 27, 2007@1
5:25:12
```

```
It consisted of the following Install(s):
  BSDX 2.0
```

```
Checking Install for Package BSDX 2.0
Will first run the Environment Check Routine, BSDX2E
```

```

                                Hello, MICHAEL LOUGHRAN

Checking Environment for Install of Version 2.0 of IHS WINDOWS SCHEDULING.

Need at least VA FILEMAN 22.....VA FILEMAN 22.0 Present

Need at least KERNEL 8.....KERNEL 8.0 Present

Need at least PIMS 5.3.....PIMS 5.3 Present

Need PIMS*5.3*1003.....PIMS*5.3*1003 Is Present

Need at least BMX 2.....BMX 2.0 Present

                                ENVIRONMENT OK.

Install Questions for BSDX 2.0

Incoming Files:

9002018.1 BSDX RESOURCE
Note: You already have the 'BSDX RESOURCE' File.

9002018.15BSDX RESOURCE USER
Note: You already have the 'BSDX RESOURCE USER' File.

9002018.2 BSDX RESOURCE GROUP
Note: You already have the 'BSDX RESOURCE GROUP' File.

9002018.3 BSDX ACCESS BLOCK
Note: You already have the 'BSDX ACCESS BLOCK' File.

9002018.35BSDX ACCESS TYPE
Note: You already have the 'BSDX ACCESS TYPE' File.

9002018.38BSDX ACCESS GROUP
Note: You already have the 'BSDX ACCESS GROUP' File.

9002018.39BSDX ACCESS GROUP TYPE
Note: You already have the 'BSDX ACCESS GROUP TYPE' File.

9002018.4 BSDX APPOINTMENT
Note: You already have the 'BSDX APPOINTMENT' File.

9002018.5 BSDX APPLICATION (including data)
Note: You already have the 'BSDX APPLICATION' File.
I will OVERWRITE your data with mine.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES// NO

Want KIDS to INHIBIT LOGONs during the install? YES// NO

Enter the Device you want to print the Install messages.
```

```
Enter a '^' to abort the install.
DEVICE: HOME//    VIRTUAL TERMINAL

Install Started for BSDX 2.0 :
      Oct 01, 2007@14:48:34
Build Distribution Date: Sep 27, 2007

Installing Routines:
      Oct 01, 2007@14:48:35

Installing Data Dictionaries:
      Oct 01, 2007@14:48:35

Installing Data:
      Oct 01, 2007@14:48:35

Installing PACKAGE COMPONENTS:

Installing SECURITY KEY
                                BSDX 2.0

Installing PROTOCOL

Installing REMOTE PROCEDURE

Installing OPTION
      Oct 01, 2007@14:48:35

Running Post-Install Routine: V0200^BSDX2E

Updating Routine file...

Updating KIDS files...

BSDX 2.0 Installed.
      Oct 01, 2007@14:48:36

NO Install Message sent
```

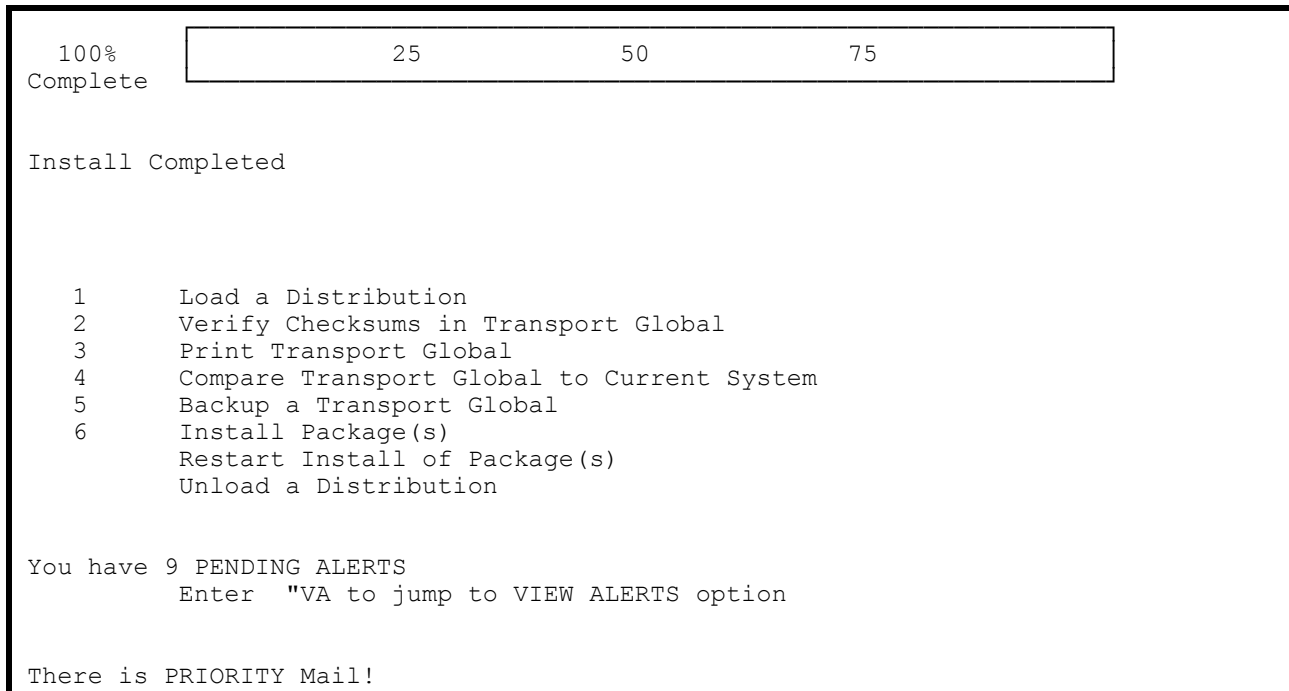


Figure 5-1 Sample BSDX Installation

5.2 GUI Installation

This section provides instructions for installing the IHS Clinical Scheduling WX GUI. If you already have installed the IHS Clinical Scheduling WX GUI, you must remove it before continuing. The section that follows provides instructions. If you have not previously installed the IHS Clinical Scheduling WX GUI, install it now as described in Installing the IHS Clinical Scheduling WX GUI on page 15.

5.2.1 Removing the IHS Clinical Scheduling WX GUI

This section provides instructions for removing a previously installed BSDX GUI.

To remove previous installations of the IHS Clinical Scheduling WX GUI:

1. Open the folder that contains the BSDX files you extracted and double click **ClinicalSchedulingSetupLocal.msi**.
2. Click **Remove IHS Clinical Scheduling WX** as shown in Figure 5-2.

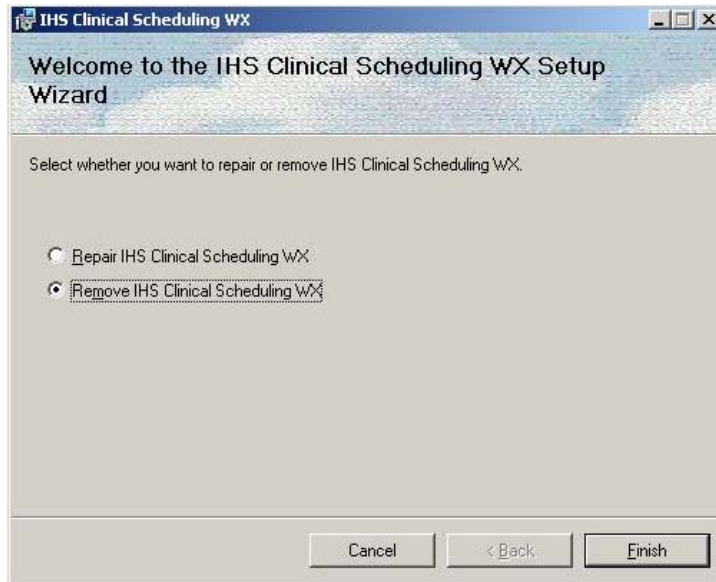


Figure 5-2. IHS Clinical Scheduling WX Setup Wizard

Figure 5-3 shows the progress bar as the IHS Clinical Scheduling WX is removed.

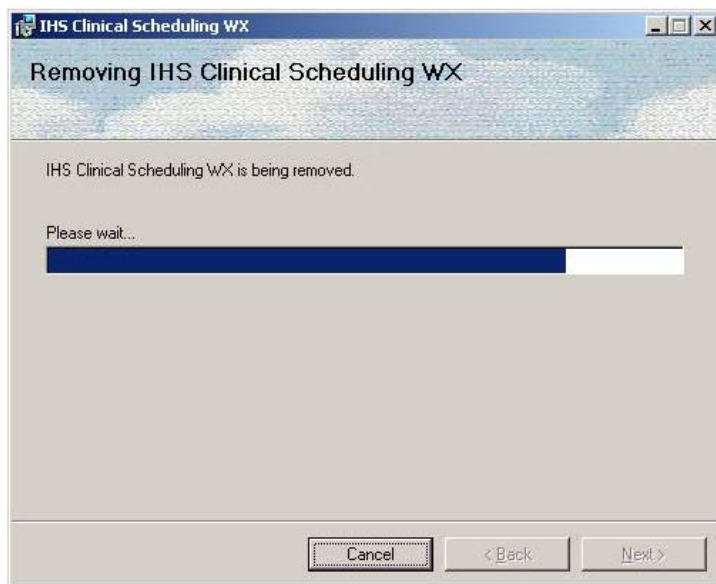


Figure 5-3 IHS Clinical Scheduling WX Setup Wizard showing removal progress

3. Click **Close** to exit when the IHS Clinical Scheduling WX is removed as shown in Figure 5-4.

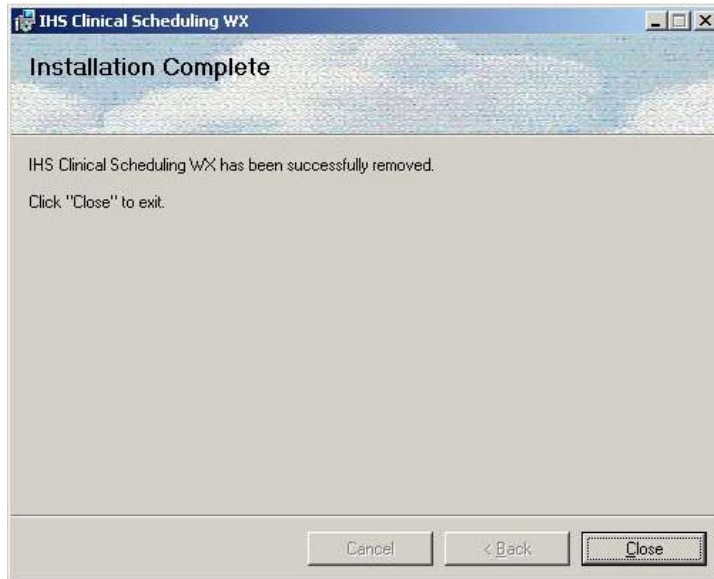


Figure 5-4 IHS Clinical Scheduling WX Setup Wizard showing removal is complete

4. Remove the IHS Clinical Scheduling WX shortcut from your desktop.

This completes the procedure for removing the IHS Clinical Scheduling WX GUI: The next section provides instructions for installing the new IHS Clinical Scheduling WX GUI.

5.2.2 Installing the IHS Clinical Scheduling WX GUI

This section provides instructions for installing IHS Clinical Scheduling. To complete this procedure, make sure you have transferred and extracted the necessary files as described in Web-Based Client Deployment on page 7. When you finish, instructions are also provided for creating a desktop shortcut.

To install the IHS Clinical Scheduling WX GUI:

1. Open the folder that contains the BSDX files you extracted and double click **ClinicalSchedulingSetupWeb.msi**. The dialog box shown in Figure 5-5 appears momentarily.

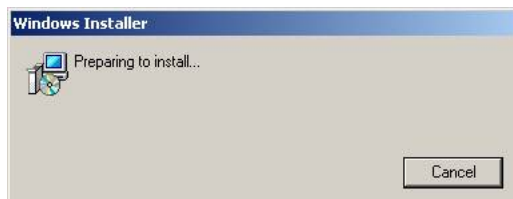


Figure 5-5 Windows Installer dialog box

Then the IHS Clinical Scheduling WX window shown in Figure 5-6 opens.

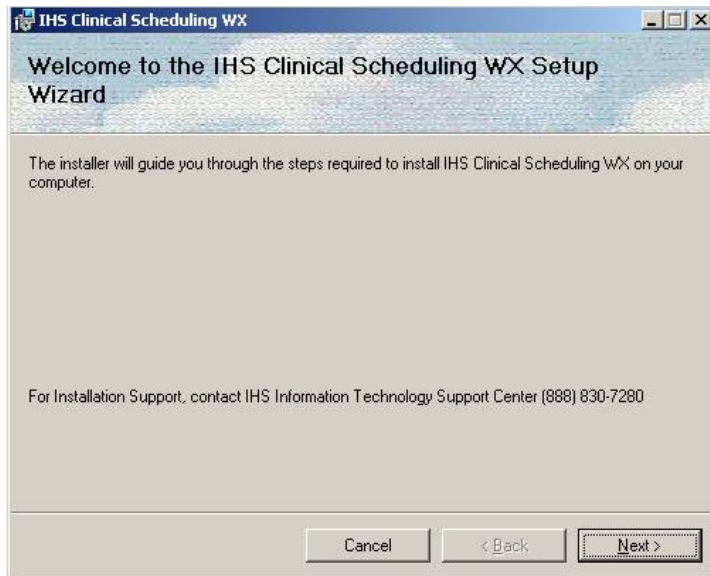


Figure 5-6 IHS Clinical Scheduling WX window

2. Click **Next** to start the installer.
3. Click **Next** in the window shown in Figure 5-7 to accept the default settings or make any necessary changes and then click **Next**.



Figure 5-7 IHS Clinical Scheduling WX window

4. Click **Next** in the window shown in Figure 5-8 to start the installation or click **Cancel** to exit without installing the GUI.



Figure 5-8 IHS Clinical Scheduling WX window

5. Click **Next** to start the installation process. Figure 5-9 shows the progress bar as the IHS Clinical Scheduling WX is installed.

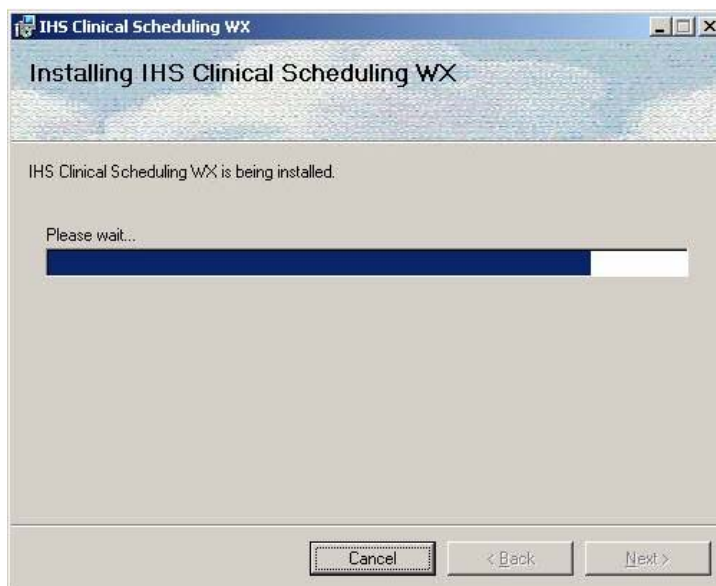


Figure 5-9 IHS Clinical Scheduling WX window

6. Click **Close** in window shown in Figure 5-10.

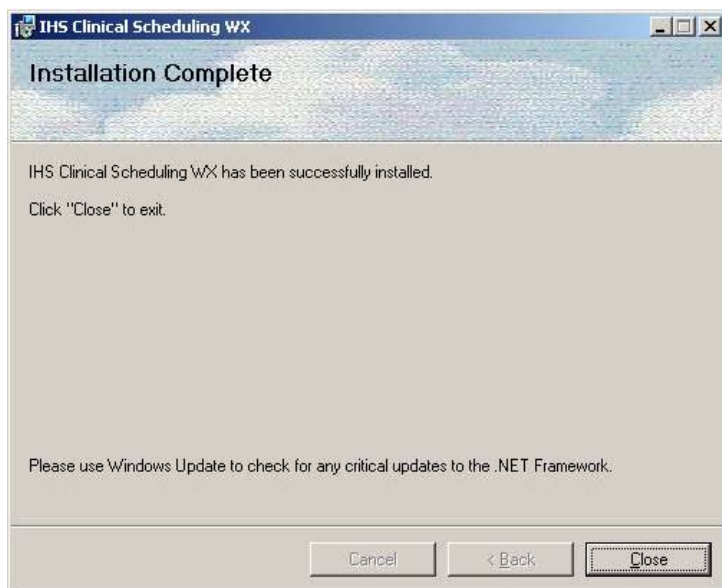


Figure 5-10 IHS Clinical Scheduling WX window

You can now add a desktop shortcut for the IHS Clinical Scheduling WX.

To add a shortcut to your desktop:

1. Click **Start** on your task bar.
2. Click **All Programs**.
3. Select **IHS Clinical Scheduling WX** and right-click on it.
4. Click **Send to** and then click **Desktop (create shortcut)**.

This completes the procedure for installing the IHS Clinical Scheduling WX GUI.

6.0 Installation Configuration

After installation, complete the following tasks to configure Windows Scheduling:

1. Using RPMS tools, assign the BSDXMENU security key. All scheduling users must have the BSDXZMENU security key.
2. Users who are also scheduling managers must have the BSDXZMGR key assigned. The BSDXZMGR key permits access to the Scheduling Management menu in the client application. This menu supports the creation of clinics and clinic groups, assignment of users to clinics, designation of user access, and other management activities. For further details, see the User Manual.
3. Make the BMXRPC and BSDXPRC menu options available to scheduling users. These options must be somewhere in the user's path, either as a secondary option or as members of a menu to which the user has access.
4. Use Scheduling Management to configure Resources (clinics), Users, Resource Groups, Access Types, and Access Type Groups. See the User Manual for detailed instructions.

7.0 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