



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Clinical Scheduling for Windows

(BSDX)

Installation Guide and Release Notes

Version 3.0
April 2011

Office of Information Technology (OIT)
Albuquerque, New Mexico

Preface

This manual contains the installation guide for Clinical Scheduling for Windows 3.0 package. Included are introduction and release notes that should be shared with all Scheduling users. Also included are installation instructions and a sample installation session.

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 Department of Health and Human Services and Indian Health Service (IHS) Rules of Behavior regarding patient privacy and the security of both patient information and IHS computers and networks.

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1.0 Release Notes

The following is a list of changes made to the IHS Clinical Scheduling for Windows (BSDX) for Version 3.0. This list does not provide detailed descriptions of all changes.

1.1 Appointment Scheduling

- **Restricting Times Appointments Can be Made:** The user can block out a segment of time to prevent a user from making appointments.
- **View Appointment Details:** Allows the user to view the Patient's Appointment details.
- **Deletion of Patient Check-In:** Allows the user to delete a check-in. Previously the user could only delete a check-in by using the Patient Information Management System (PIMS) program.
- **Patient Cancellation:** Cancelled appointments are shown in gray and are displayed by default. This feature can be turned off using the view menu and un-checking the display cancellation option.
- **Patient Booked for Multiple Resources:** If an appointment conflicts with another already scheduled appointment, the user is shown (in red) and the resource that conflicts in the **Patient Appointment** dialog box.
- **No Show Window:** Added a pop-up window that displays the number of no-shows for a patient when it exceeds the maximum allowed for that resource. The site determines the number of allowable no-shows and also the number of days before a patient is able to make another appointment. Walk-in appointments are excluded.
- **Patient Check Out:** Allows a patient to be checked out.
- **Checked in Patient Should be in Past:** Checked-in patient will not show up in the View appointments until the patients appointment is in the past. The user can select a check box to show all appointments for the patient or appointments in the past.
- **Overbooking:** The M or Master key allows the user to overbook past the maximum setup in the clinic **Overbooks/Day Maximum** field, while the regular overbook allows the user the ability to overbook up through the maximum.
- **Prevent Over Booking:** Allows the scheduler the ability to block out dates and times to prevent overbooking for all users, including those with the M or Master key.

- **Additional Scheduling Window:** Viewing Clinic appointments have been moved to a tabbed format. The original format was opening a new window for each clinic.
- **Cancelling and Rescheduling:** Able to change the clinic appointment times *without having to cancel* the appointment first.
- **Increase/Decrease Appointment Length:** Able to increase/decrease the appointment times by dragging the edge of the appointment.
- **Add Comments to Walk-In Appointments:** The user is able to add comments to a walk-in appointment.
- **Uncancel an Appointment:** The user has the ability to uncancel a cancelled appointment.

1.2 Printing

- **Printing Forms Appointment Letters:** Allows the user to print a routing slip and PCC Health Summary during the check-in process.
- **Print Routing Slips:** Added the ability to print routing slips.
- **Health Summary Report:** The Patients Health Summary can be viewed and printed.
- **View Patient's Appointments History:** Able to view and print the patient's appointment history.
- **Walk-In Report:** Added the ability to view and print the number of walk-ins for a patient.

1.3 Other

- **Patient Search by DOB:** Allows the user to search for a patient by their Birth date. Format is mm/dd/yyyy.
- **Click on the resource Group Name:** Resource Group name models the look and feel of Windows Explorer trees.
- **Limit Users:** Modified the software to only allow managers/administrators of Clinical Scheduling the ability to manipulate the graphical user interface (GUI). One example is overbooking.
- **Inactivate Wait List:** When a clinic becomes inactive, the user will be able to print the patient's names.

2.0 Installation Notes

- Namespace: BSDX
- Current Version: 3.0

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

- bsdX0300.k
- bsdX030u.pdf
- bsdX030i.pdf
- bsdX030t.pdf
- bsdX0300Client.zip
- bsdX0300ClientWeb.zip

2.3 Required Resources

2.3.1.1 RPMS Minimum Server Requirements

- Cache version 5.0
- Kernel version 8.0
- BMXNet version 2.0
- PIMS version 5.3 patch 1003
- RPC Broker version 1.1

2.3.1.2 Client PC Requirements

- Microsoft Windows 2000 or XP
- Microsoft .NET Framework 2.0 service pack 2 or later
- Microsoft Data Access Components (MDAC) current version

3.0 Installation Issues

BSDX contains components that are installed on the RPMS Server and components that run on the client personal computer (PC). Installation of the server components is conventional and consists of a Kernel Installation and Distribution System (KIDS) build. The BSDX client can be deployed using either:

- 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

The following table shows BSDX routines and corresponding checksums.

Routine/Checksum
BSDX01/11885923
BSDX02/6242096
BSDX03/860410
BSDX04/7592425
BSDX05/4907841
BSDX06/3209141
BSDX07/21915788
BSDX07A/5862716
BSDX08/24041155
BSDX09/6507024
BSDX11/3107951
BSDX12/2505938
BSDX13/2814870
BSDX14/2519021
BSDX15/2022789
BSDX16/3659018
BSDX17/1056432
BSDX18/12829348
BSDX19/2600080
BSDX20/1833785
BSDX21/2614749
BSDX22/3124044
BSDX23/2529433
BSDX24/2814129
BSDX25/18747744
BSDX25A/3041830
BSDX25B/2428782
BSDX26/3272407
BSDX27/22861457
BSDX28/9055610
BSDX29/8002447
BSDX30/2833102
BSDX31/6266174
BSDX32/7157095
BSDX33/4019387
BSDX34/12315637
BSDX35/3348832

Routine/Checksum
BSDX36/6316262
BSDX37/2508763
BSDX38/9172400
BSDX39/512705
BSDX3E/4537046
BSDX40/9939312
BSDX41/14641382
BSDX41A/26917442
BSDX41B/33453659
BSDX41C/27738542
BSDX41D/26007109
BSDX41E/29302816
BSDX41F/30283364
BSDX41G/19230649
BSDX41H/16830934
BSDX41I/35259942
BSDX41J/26344666
BSDX41K/21333792
BSDX41L/32556090
BSDX41M/17543057
BSDX41N/19371330
BSDX42/14802125
BSDX43/8230835
BSDX44/2343379
BSDXERR/227294
BSDX41P/6119137

4.2 RPMS Server Installation

1. On the RPMS Server, load and install the bsdX0300.k file 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 enables users to connect to RPMS without having to re-specify ACCESS and VERIFY codes every time.
3. 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 found at:
<http://www.ihs.gov/RPMS/index.cfm?module=home&option=documents>
 - a. Select the VA FileMan Option: inquire to File Entries
 - b. Select the BMXNET MONITOR PORT: ??
 - c. At the "STANDARD CAPTIONED OUTPUT? Yes//'" prompt, press Enter.

4.2.1 Example:

NUMBER: 2	PORT: 10909
ENABLED: YES	INTEGRATED SECURITY: NO

4.3 Client Installation

For sites with few clients to update, use the standard Client deployment. After the initial Web server setup, Web deployment of the Scheduling GUI requires minimal user interaction.

4.3.1 Standard Client Deployment

To deploy the standard client:

1. Copy the bsdx0300Client.zip into a centrally accessible network share directory and extract its contents:
 - IHSClinicalSchedulingClient.msi
 - NetFx20SP2_x86.exe
 - MDAC_TYP.EXE
 - Setup.exe
2. Log on to the client PC with administrator privileges.
3. Copy the following files to the client PC from the network share directory:
 - IHSClinicalSchedulingClient.msi
 - NetFx20SP2_x86.exe
 - MDAC_TYP.EXE
 - Setup.exe
4. Double-click the NetFx20SP2_x86.exe to install version 2.0 service pack 2 of the .NET runtime environment. If a later version of the .NET runtime environment is already installed on the client PC, 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, 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:
 - a. Click **Start**.
 - b. Select **All Programs**.
 - c. Select **IHS Clinical Scheduling WX**.
 - d. Double-click **IHS Clinical Scheduling**.

4.4 Web-Based Installation

4.4.1 Application Server Installation

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 and extract the bsdX0300ClientWeb.zip into the new virtual directory on the Web server. It includes the following files:
 - BMXNet.dll
 - BMXNet20.dll
 - CalendarGrid.dll
 - ClinicalScheduling.exe
 - ClinicalScheduling.exe.config
 - ClinicalSchedulingSetupWeb.msi
 - NetFx20SP2_x86.exe
 - MDAC_TYP.EXE
 - Setup.exe
 - Setup.ini

4.4.2 Web-Based Client Installation

To deploy the Web-based client:

1. Log on to the client PC with administrator privileges.
2. Copy the following files to the client PC from the Web server virtual directory:

- NetFx20SP2_x86.exe
 - MDAC_TYP.EXE
 - ClinicalSchedulingSetupWeb.msi
 - setup.exe
 - setup.ini
3. Run NetFx20SP2_x86.exe to install version 2.0 service pack 2 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, 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 (for example, 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 > Shortcut**.
 7. 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 the Client GUI.

5.1 RPMS Sample Installation

The following is 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:\ bsdX0300.k

KIDS Distribution saved on Sep 27, 2010@15:25:12
Comment: IHS WINDOWS SCHEDULING version 3.0 KIDS build SAT
This Distribution contains Transport Globals for the following Package(s):
BSDX 3.0
Distribution OK!

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

Build BSDX 3.0 has an Environmental Check Routine
Want to RUN the Environment Check Routine? YES//
BSDX 3.0
Will first run the Environment Check Routine, BSDX3E

```

```

Hello, MICHAEL LOUGHRAN
Checking Environment for Install of Version 3.0 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 3.0 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 3.0 Loaded from Distribution Loaded from
Distribution 10/1/10@14:47:51
=> IHS WINDOWS SCHEDULING version 3.0 KIDS build SAT ;Created on Sep 27,
2010@14:45:51

```

```

This Distribution was loaded on Oct 01, 2010@14:47:51 with header of
IHS WINDOWS SCHEDULING version 3.0 KIDS build SAT ;Created on Sep 27,
2010@14:45:52

```

```

It consisted of the following Install(s):
BSDX 3.0
Checking Install for Package BSDX 3.0
Will first run the Environment Check Routine, BSDX3E

```

```

Hello, MICHAEL LOUGHRAN
Checking Environment for Install of Version 3.0 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 3.0

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 3.0 :
Oct 01, 2010@14:48:34

Build Distribution Date: Sep 27, 2010

Installing Routines:
Oct 01, 2010@14:48:35

Installing Data Dictionaries:
Oct 01, 2010@14:48:35

Installing Data:
Oct 01, 2010@14:48:35

Installing PACKAGE COMPONENTS:

Installing SECURITY KEY

BSDX 3.0

Installing PROTOCOL

Installing REMOTE PROCEDURE

Installing OPTION
Oct 01, 2010@14:48:35
Running Post-Install Routine: V0200^BSDX3E

Updating Routine file...

Updating KIDS files...

BSDX 3.0 Installed.
Oct 01, 2010@14:48:36

NO Install Message sent

100% 25          50          75
Complete
```

```
Install Completed

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!
```

Figure 1. Sample BSDX Installation

5.2 GUI Installation

This section provides instructions for installing the IHS Clinical Scheduling WX. If you have not previously installed the IHS Clinical Scheduling WX, install it now as described in [Standard Client Deployment](#) for standard desktop client installation or [Installing the IHS Clinical Scheduling WX](#) for Web based client instructions.

Note: Installing a Clinical Scheduling 3.0 automatically removes a previous version of Clinical Scheduling.

If you have problems during the installation process, use Section 5.2.2 to uninstall the client and start over again with the GUI installation.

5.2.1 Installing the IHS Clinical Scheduling WX Web Server

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

To install the IHS Clinical Scheduling WX:

1. Open the folder that contains the BSDX files you extracted and double-click ClinicalSchedulingSetupWeb.msi. The Windows Installer dialog box appears momentarily.



Figure 2. Windows Installer dialog box

Then the IHS Clinical Scheduling WX Setup Wizard opens.

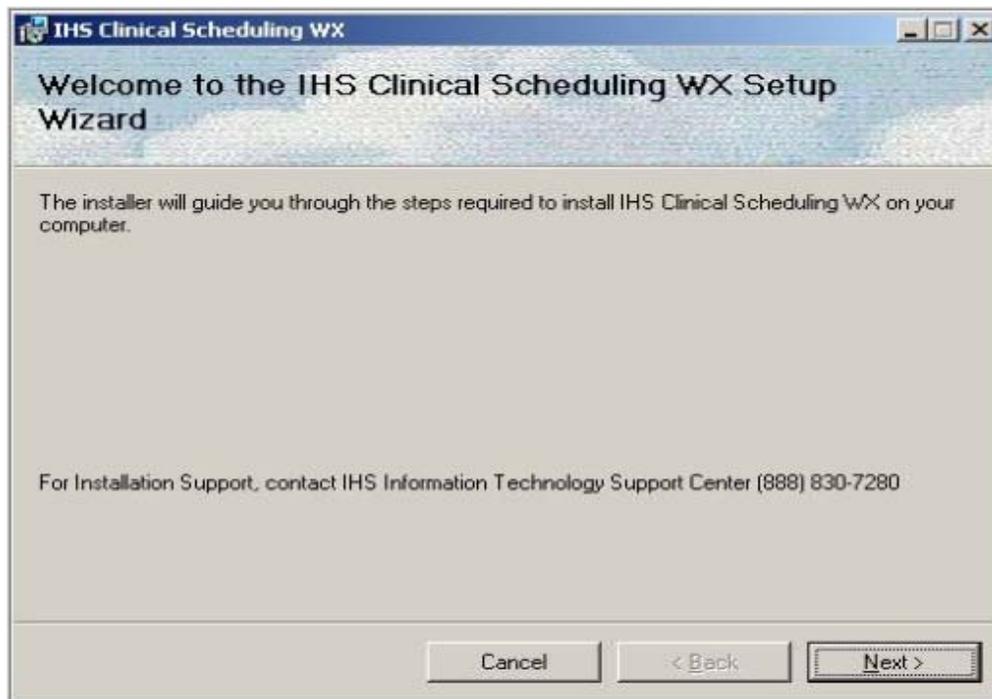


Figure 3. IHS Clinical Scheduling WX Setup Wizard window

2. Click **Next** to start the installer.
3. Click **Next** in the **Select Installation Folder** window to accept the default settings or make any necessary changes and then click **Next**.



Figure 4. Select Installation Folder window

4. Click **Next** in the **Confirm Installation** dialog box to start the installation, or click **Cancel** to exit without installing the GUI.

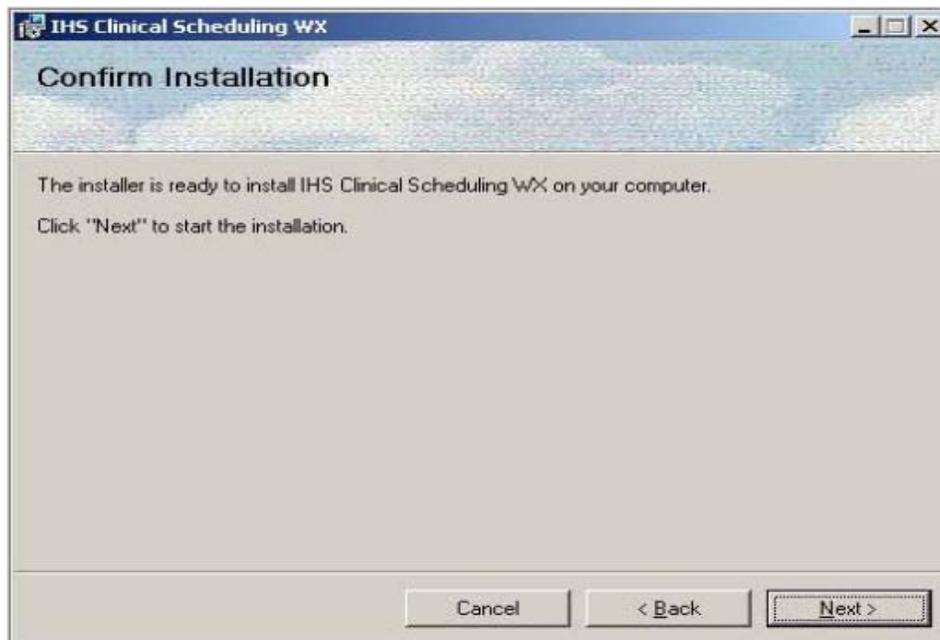


Figure 5. Confirm Installation dialog box

The progress bar in the **Installing IHS Clinical Scheduling WX** window shows the IHS Clinical Scheduling WX installation progress.

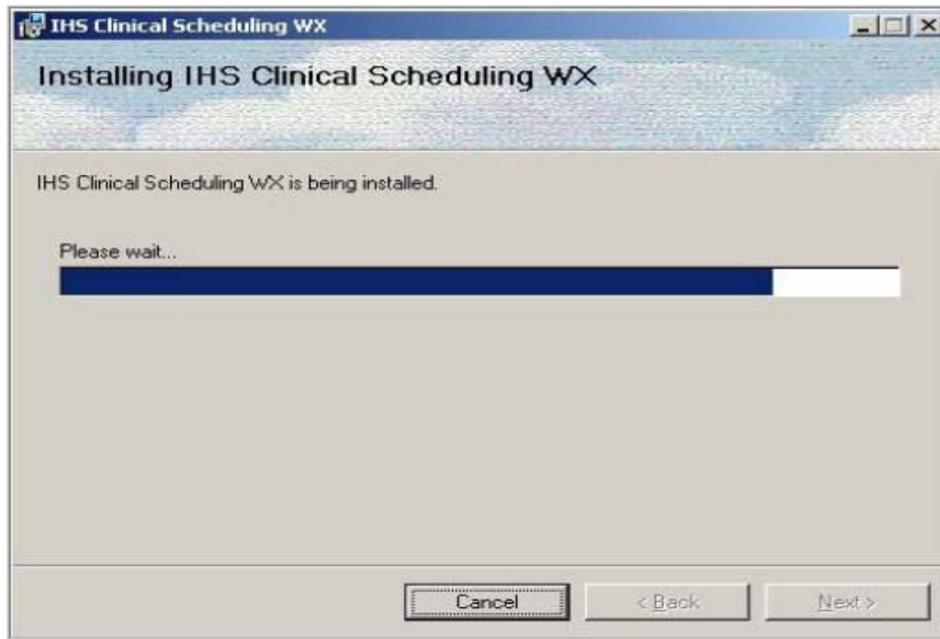


Figure 6. Installation Progress Bar

5. Click **Close** in the **Installation Complete** window.

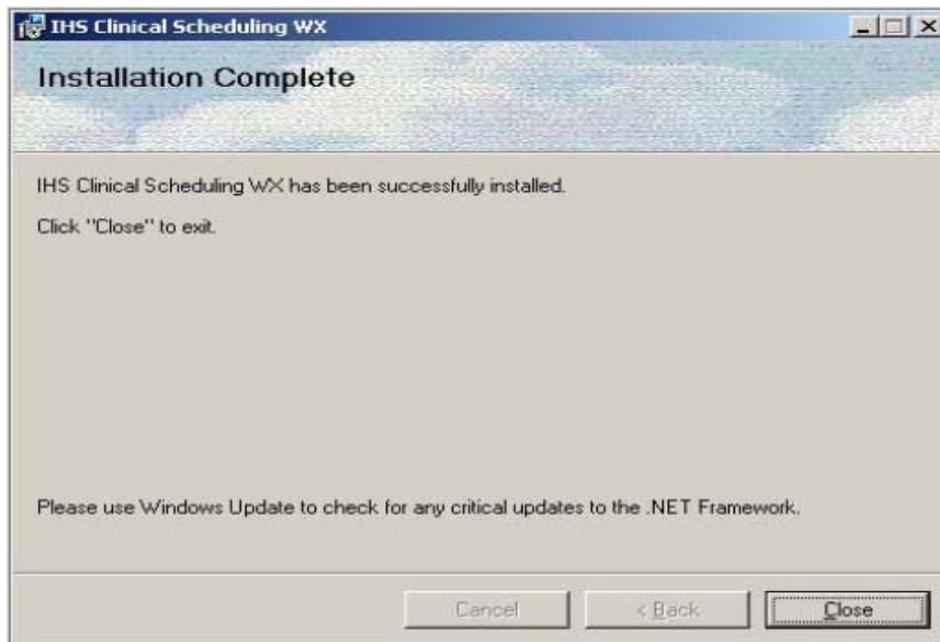


Figure 7. **Installation Complete** window

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.
4. Click **Send to**, and then click **Desktop** to create a shortcut.

5.2.2 Removing the IHS Clinical Scheduling WX

Note: Installing Clinical Scheduling 3.0 automatically removes a previous version of Clinical Scheduling.

To remove installations of the IHS Clinical Scheduling WX:

1. Open the folder that contains the BSDX files you extracted, and double-click IHSClinicalSchedulingClient.msi. The **IHS Clinical Scheduling WX Setup Wizard** window displays.
2. Click **Remove IHS Clinical Scheduling WX**, and then click **Finish**.

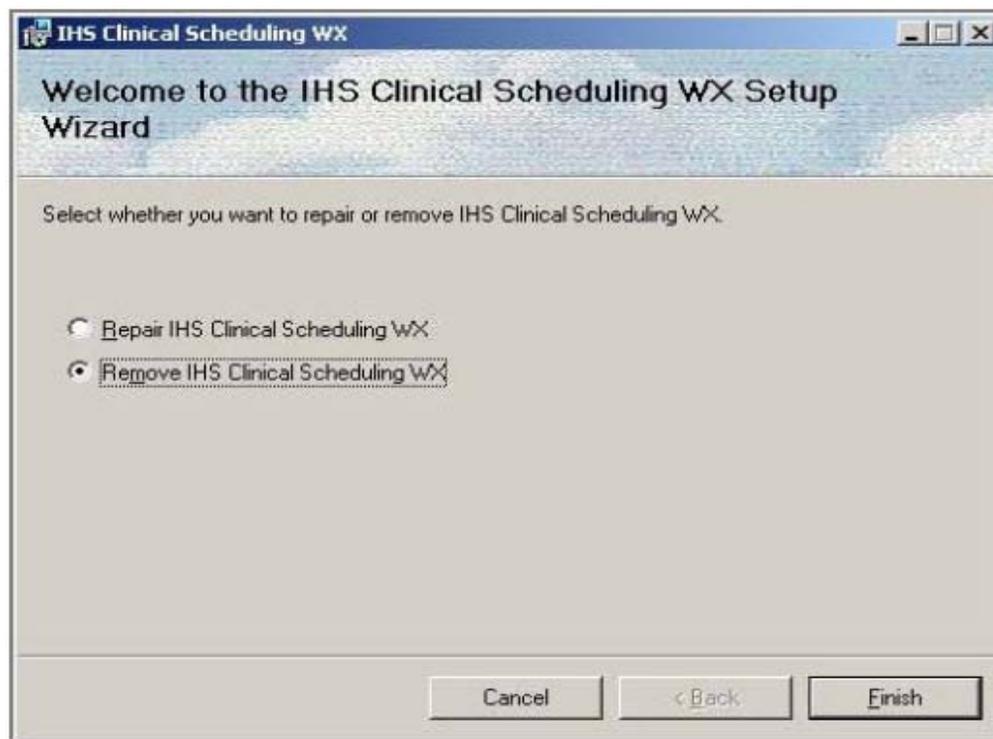


Figure 8. IHS Clinical Scheduling WX setup wizard

3. The following shows the progress bar as the IHS Clinical Scheduling WX is removed.

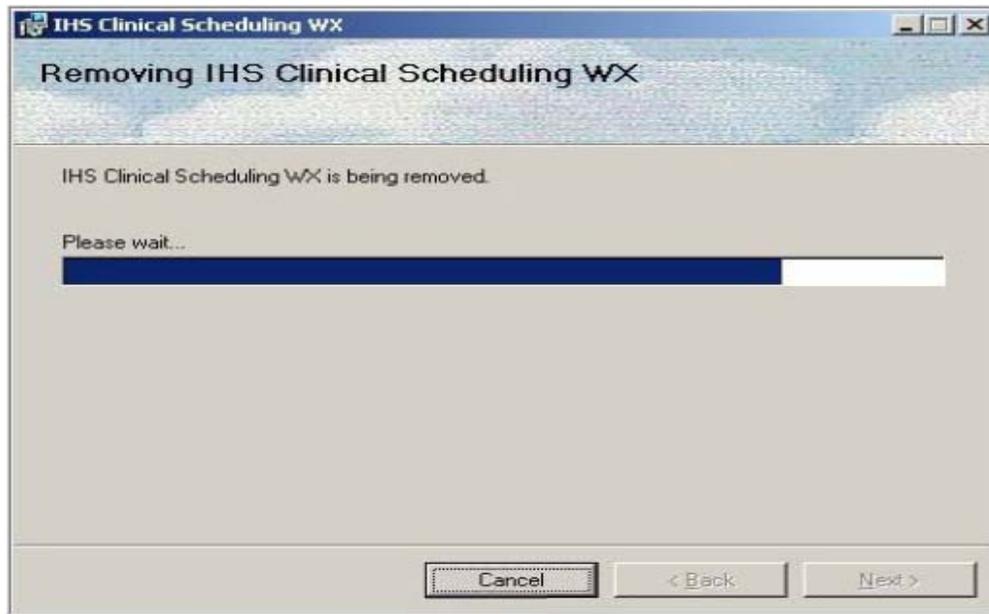


Figure 9. IHS Clinical Scheduling WX Setup Wizard–Removal Progress

4. Click **Close** to exit when the IHS Clinical Scheduling WX is removed.

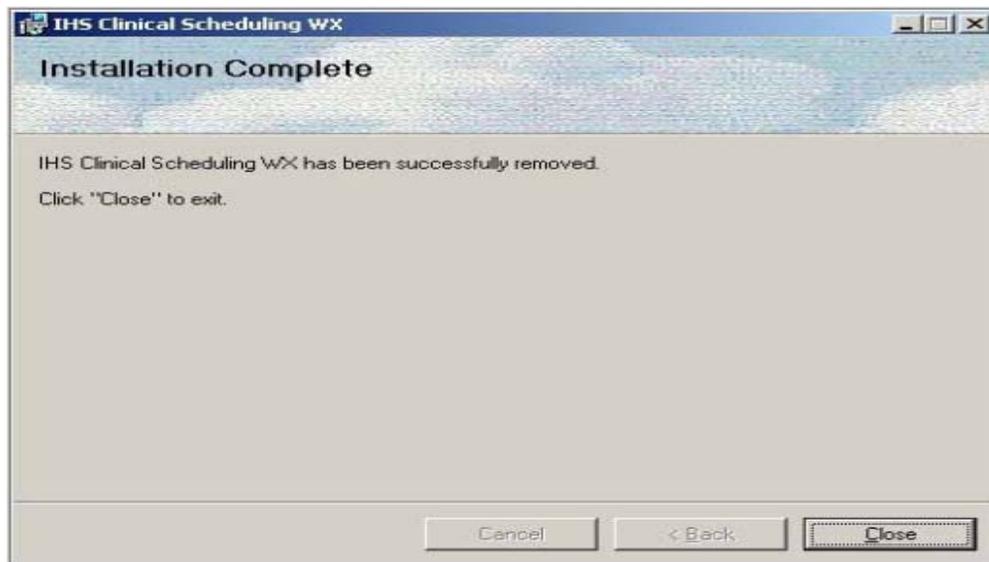


Figure 10. IHS Clinical Scheduling WX Setup Wizard showing removal is complete

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

6.0 Installation Configuration

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

1. Using RPMS Key Management, assign the BSDXZMENU security key to the user. 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. See the *Clinical Scheduling for Windows User Manual* for detailed instructions.
3. Add the **BMXRPC** and **BSDXRPC** options to the user's Secondary Menu Option field using the User Management (EUSR), Edit Existing User option.
4. Use **Scheduling Management** to configure the following:
 - Resources (clinics)
 - Users
 - Resource Groups
 - Access Types
 - Access Type Groups

See the *Clinical Scheduling for Windows User Manual* for detailed instructions.

Contact Information

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

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

Fax: (505) 248-4363

Web: <http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm>

E-mail: support@ihs.gov