



IQmanager®

Version 10.2

Operation Manual

Notice

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To see the most current version of this manual, visit technicallibrary.midmark.com.

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Important Information

Safety Symbols



DANGER

*Indicates an imminently hazardous situation that will result in serious or fatal injury.
This symbol is used only in the most extreme conditions.*



WARNING

Indicates a potentially hazardous situation that could result in serious injury.



Caution

*Indicates a potentially hazardous situation that may result in minor or moderate injury.
It may also be used to alert against unsafe practices.*



Equipment Alert

Indicates a potentially hazardous situation that could result in equipment damage.

Physician's Responsibility

When enabled, instruments that run through the IQmanager® software can provide interpretations; these interpretations are for the exclusive use of licensed Physicians or personnel under their direct supervision. The suggested interpretation and the numerical and graphical results should be examined with respect to the patient's overall clinical condition.

Final analysis should always be determined and verified by a Physician. Proper administration of the test is the Physician's responsibility, as is making a diagnosis, obtaining expert opinions on the results, and implementing the correct treatment, if indicated.

Related Documents

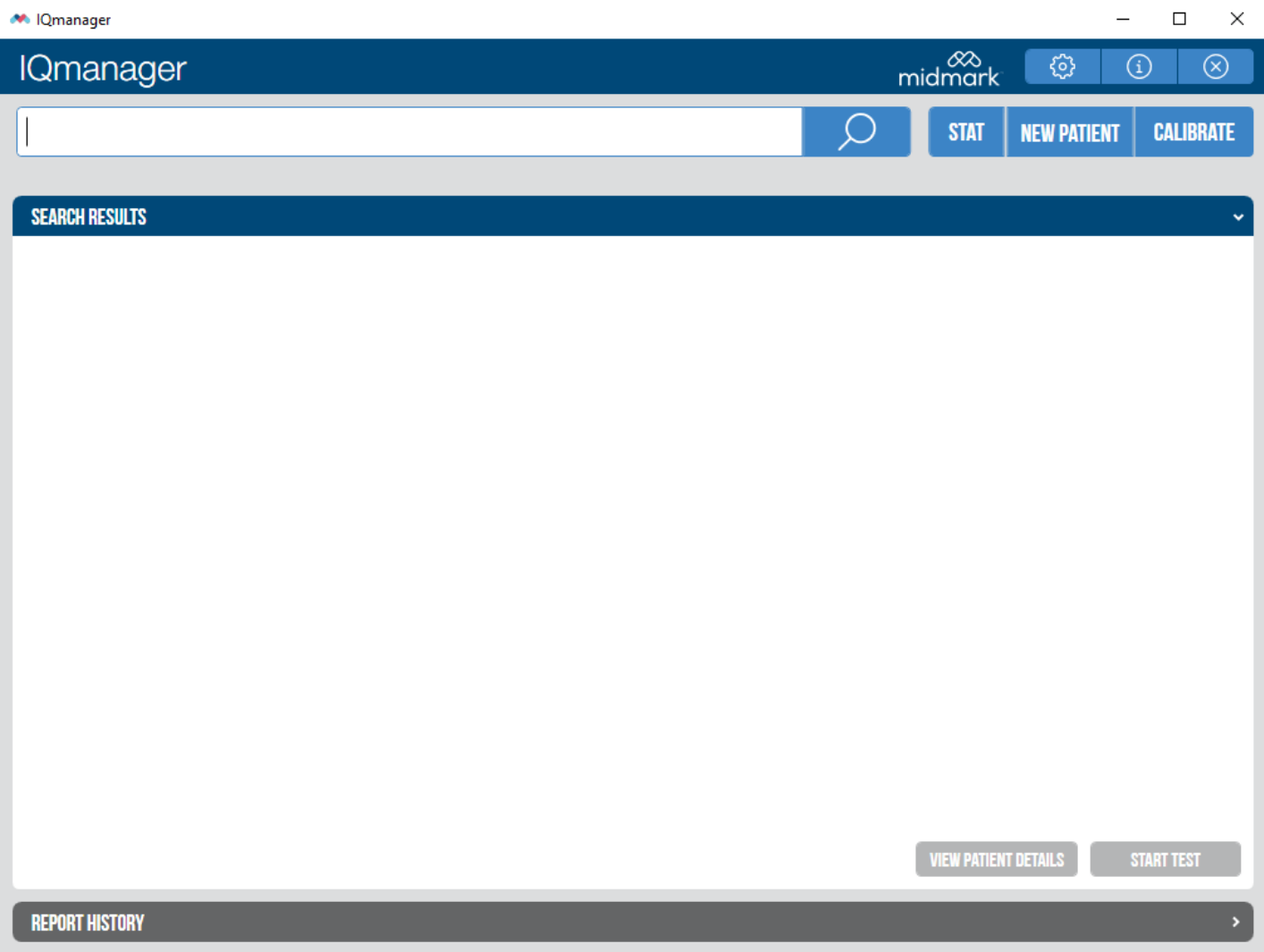
- Midmark IQecg® Operation Manual
(Part Number: 48-78-0002)
- Midmark® Digital ECG Operation Manual
(Part Number: 003-10563-00)
- Midmark Digital Spirometer Operation Manual
(Part Number: 56-78-0001)
- Midmark IQvitals® Zone™ User Guide
(Part Number: 22-78-0002)
- Midmark® Digital Vital Signs Device Operation Manual
(Part Number: 21-78-0001 or 003-10599-00 depending upon model)
- Midmark® 800 Digital Vital Signs Device User Guide
(Part Number: 003-10718-00)
- Thin Client Manual
(Part Number: 61-78-0001)

All product Operation Manuals can also be downloaded from midmark.com. For additional information, contact [Midmark Technical Service](#).

Overview

Introduction

This Operation Manual is designed as a comprehensive guide to educate the user on the operation and functions of the IQmanager®. IQmanager® Diagnostic Workstation Software serves as a patient data management utility, organizing all tests performed using Midmark digital diagnostic devices, including IQecg®, Midmark Digital Spirometer, and Midmark Digital Vital Signs Device. This software also organizes and stores digital information captured via digital, electronic weight scales.



Note

For specifications and operational information on Midmark devices, including IQecg®, Midmark Digital Spirometer, and IQvitals®, please refer to the respective Operation Manuals for each device. See [“Related Documents”](#).

Computer Date Information

IQmanager® calculates the patient's age by using the current date from the computer and the patient's birth date as entered by the operator. Since the patient's age is vital to producing appropriate diagnostic statements, it is important that the computer's date is accurate. Contact the system administrator for assistance with this function.

Necessary Computer Skills

This Operation Manual is written for a user capable of using Microsoft® Windows®-based applications, has some understanding of PC operations, and is familiar with the basic operations of Windows®.

For technical questions, please contact [Midmark Technical Service](http://kb.midmark.com). A self-help web-based portal is also available at kb.midmark.com.

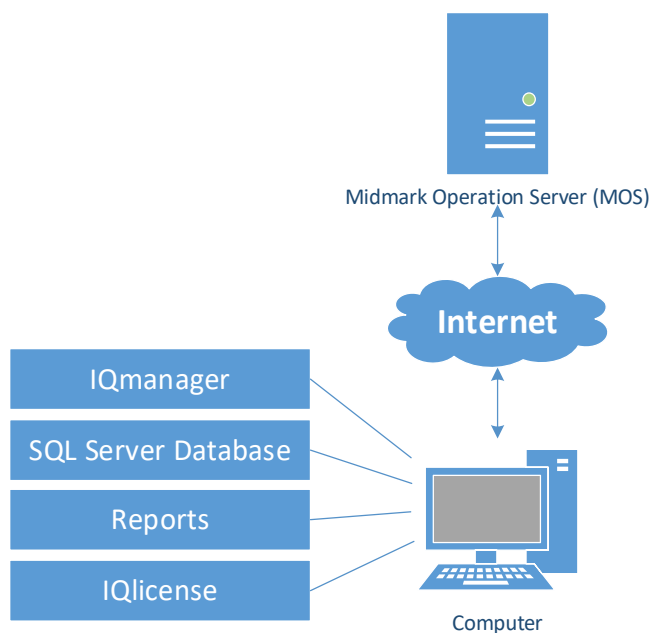
Technical Overview

Standalone and Client/Server Setups

The IQmanager® software requires a database, license management software (IQlicense®), and a location to store reports to operate. This section will explain how best to deploy the IQmanager® software in your organization.

Choosing Between Standalone and Client/Server Setups

When first deploying the IQmanager® software, you will need to determine how it will be installed across your organization. If you will only have one computer that the test data will be acquired and edited from, you will install IQmanager® as Standalone software where the database, license management software, and the location to store the reports are all located on that one computer.



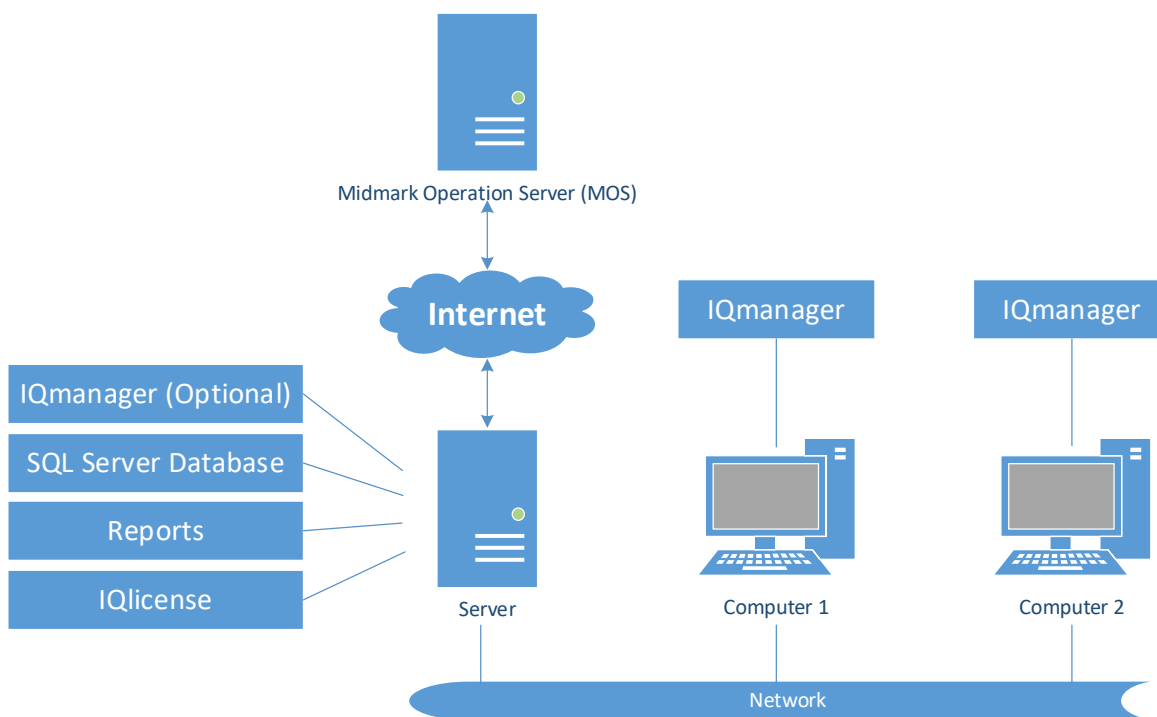
Standalone Setup

If test data will be acquired and edited from multiple computers, you will set IQmanager® up as a Client/Server model. IQmanager® will be required on each computer that will access data, either by acquiring the data or viewing/editing

the data (client). In addition, a database (SQL express is included in this installation) is required to be accessible on the network, along with the licensing management software, and a location to store the reports.

Note

It is recommended to only have one database, one instance of the license management software, and one location to store the reports; these should not be installed on every computer with IQmanager.



Client/Server Setup

Note

When choosing a location to store the reports on the network, ensure every computer points to that location using the same exact path. For example, if the location is \\Computer1\\reports, ensure IQmanager® on Computer2 uses \\Computer1\\reports and if IQmanager® is also installed on Computer1 the path used is still \\Computer1\\reports and not a local path like C:\\reports.

Note

The location to store the reports should have full access for those users who need to acquire and edit data. See [Working with Peer-to-Peer Networks](#), for details.

Typically, in a Client/Server model, the database, report storage location, and license management software will be hosted on one computer in the network. This computer will always need to be on when using IQmanager®. This can be a dedicated Windows Server or one of the acquisition computers that you acquire/access data from. If the database, report storage, and license management software is installed on one of the acquisition stations, then that computer is

both a client and the server. For the remainder of the manual, client will be used to designate any computer with IQmanager® installed on it and server will designate any computer that has the database, report location, and license management software, but in your setup this might mean the same computer.

Thin Client Configuration

If you are operating in a thin client environment, install IQmanager® on the Remote Desktop Session Host and operate the Midmark devices through a thin client terminal.

IQmanager® supports the following thin client configuration: IQpath™ Software Solution. IQpath™ works with the Midmark ECG, Midmark Digital Spirometer, and Vital Signs devices in high-latency, limited bandwidth network configurations with Windows-based PC clients.

Note

Setting up any application in a network environment typically requires special access rights and knowledge of the network. Please have the system administrator install and configure the IQmanager® to the office environment.

Thin Client Using IQpath™ Software Solution

IQpath™ utilizes a dedicated flow control scheme to provide the following advantages over COM port mapping:

- Improved operation over high-latency, low bandwidth, high-loss networks:
 - Microsoft Remote Desktop Services: Improvement is approximately 10 to 1 in latency tolerance.
 - Omnisia (VMware) VDI: Improvement is approximately 10 to 1 in latency tolerance.
 - Citrix® ICA® protocol: Improvement is approximately 40 to 1 in latency tolerance.
- The USB versions of IQecg®, Midmark Digital Spirometer, Midmark Digital Vital Signs Device and IQvitals® Zone™ devices are compatible.
- The BLE versions of IQvitals® Zone™ devices are compatible.
- Improved device auto-configuration and diagnostics.

Note

IQpath™ has specific requirements for computer hardware, software, and network performance. System administrators should read Setup Manual: Thin Client Manual before installing, configuring, and using this software in a thin client environment.

"Figure 1" below illustrates IQpath™. In this thin client environment, the client computers must be running a compatible version of Windows®:

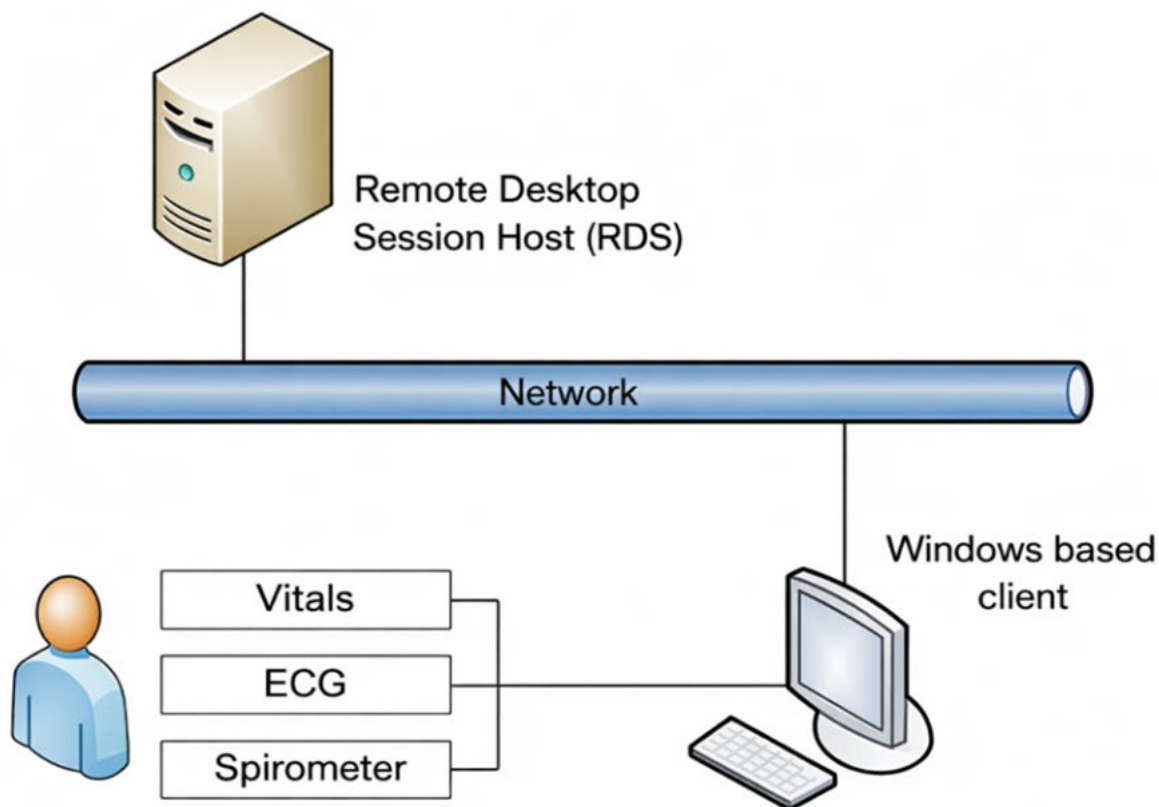


Figure 1

Note

IQpath only supports the USB Midmark ECG device. IQpath does not support the serial port version of the Midmark ECG.

To use IQpath™, load IQmanager® on the RDS and install one of the following software components on each client computer intended to be used for data acquisition:

- **IQpath™ for Microsoft Remote Desktop:** if using Microsoft Remote Desktop Services (Microsoft RDP).
- **IQpath™ for Citrix ICA:** if using Citrix® software on the clients and servers.
- **IQpath™ for VMware:** if using VMware VDI software on the clients and servers.

These software products are provided separately and may be obtained by contacting [Midmark Technical Service](#).

Once the software is installed on the client server network and computers, configure IQmanager® for thin client operation as described in ["Configuring for Client Server Networks"](#).

Installation

Hardware and Software Requirements

Refer to the Minimum Computer Requirements document at midmark.com, or contact [Midmark Technical Service](#).

The Minimum Computer Requirements document describes the minimum computer resources and hardware components needed when using new Midmark devices and software. As it is the nature of technology to change often, these requirements will be evaluated and modified periodically. We suggest always referring to the most recent *Minimum Computer Requirements* document for your version of Midmark software. This information can be found at midmark.com or by contacting [Midmark Technical Service](#).



Equipment Alert

IQmanager® has been tested for proper function with the following Off-the-Shelf (OTS) Operating Systems (OS): Windows 11, Windows Server 2022, Windows Server 2025. Do not operate IQmanager® with an OS other than those listed. Future releases of currently approved OS should not be used until Midmark has conducted necessary performance tests with IQmanager®. Contact [Midmark Technical Service](#) before updating an OS.

Note

If you are updating existing computer systems currently being used with older Midmark devices and software, please contact [Midmark Technical Service](#) before doing so. Midmark will help determine if your update will continue to support the product while meeting our minimum requirements

IQmanager® is a Microsoft® Windows® -based software package requiring approximately 1.5 gigabytes (GB) of disk space when all options are installed. Additional disk space is required if diagnostic tests are stored on the local disk drive.

The computer that IQmanager® will be installed on must meet the minimum system requirements stated in the Minimum Computer Requirements document.

In addition, use of a hospital-grade surge protector for the computer system is recommended.

Note

Some Midmark devices have additional system requirements. Please refer to the Operation Manual for specific Midmark devices (refer to [Related Documents](#)) or contact [Midmark Technical Service](#).

Software Installation

The Installation includes software for the installation and operation of IQmanager®. Before installing IQmanager® on the computer, it is important to understand and carry out the following tasks appropriately.

Screen Saver

The screen saver or any energy-saving feature should be disabled when you are installing software.

Installing IQmanager® and Bundled Software

If you are updating a version of IQmark Diagnostic Workstation earlier than version 4.0 and have ECG records to transfer to IQmanager®, the records must be archived first, to be restored after IQmanager® is installed. Uninstalling Version 4.0 or higher will not delete patient records or reports. When you are upgrading a version earlier than 4.0, upgrade to IQmanager 8.6.1 and restore the records before upgrading to version 10.1.0 or later.

When SQL Server is installed as a prerequisite for IQmanager (a fresh installation), Windows may occasionally display a restart prompt during the installation process. If the user selects **No** and does not restart the PC, the IQmanager installation may not continue, and the product remains not installed. In this case, the user must start the IQmanager installation process again.



WARNING

*Uninstalling versions of the IQmark Diagnostic Workstation older than version 4.0 may automatically **DELETE** all patient records and reports. Contact [Midmark Technical Service](#) before installing IQmanager®.*

Note

When you archive patient records, they should be archived to a temporary location other than the Brentwood folder. For more information, refer to [“Save to File \(Archive\)”](#). To restore patient archives, follow the instructions in [“Read Reports From File \(Restore\)”](#).

Installation Details



WARNING

IQstress® is not supported in IQmanager v.10. Do not upgrade the IQstress® computer past IQmanager v. 8.6.1.

Note

It is recommended that you upgrade from IQmanager v. 8.6.1 If you are upgrading from a previous version, first upgrade to 8.6.1 and then to 10.1.0 or higher if you are migrating data.

Note

Close all programs before running the software installation. Once the installation program is initiated, it should not be interrupted until the installation has completed. The approximate installation time is five minutes. Always create a backup of the database before migrating data.

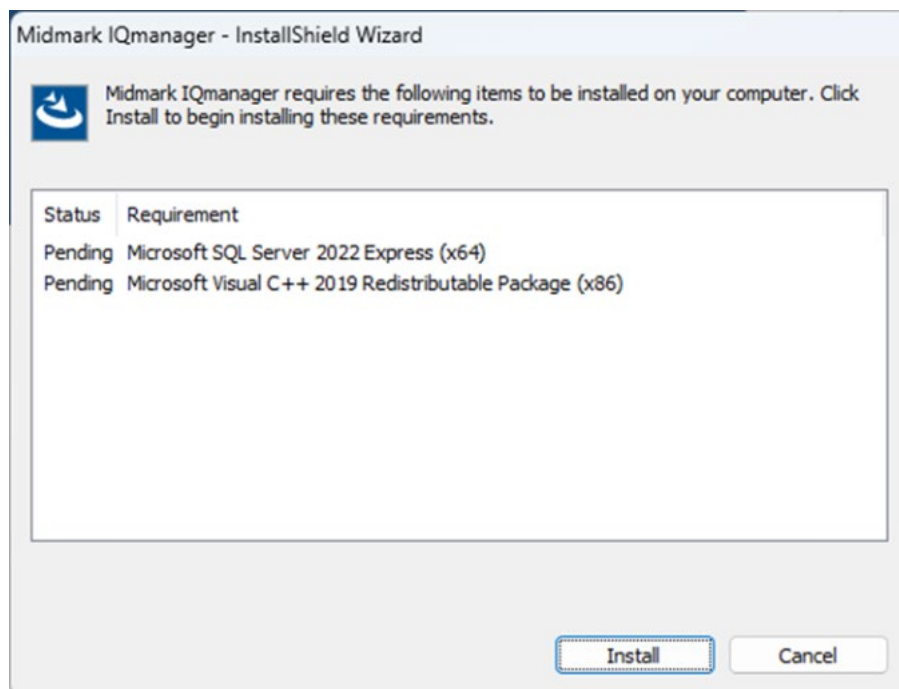
Log in as the administrator before proceeding. Contact the system administrator if you do not have this authority.

1. Launch the **IQmanager®** installer.
 - Double-click the IQmanager® setup file. The installation starts automatically.

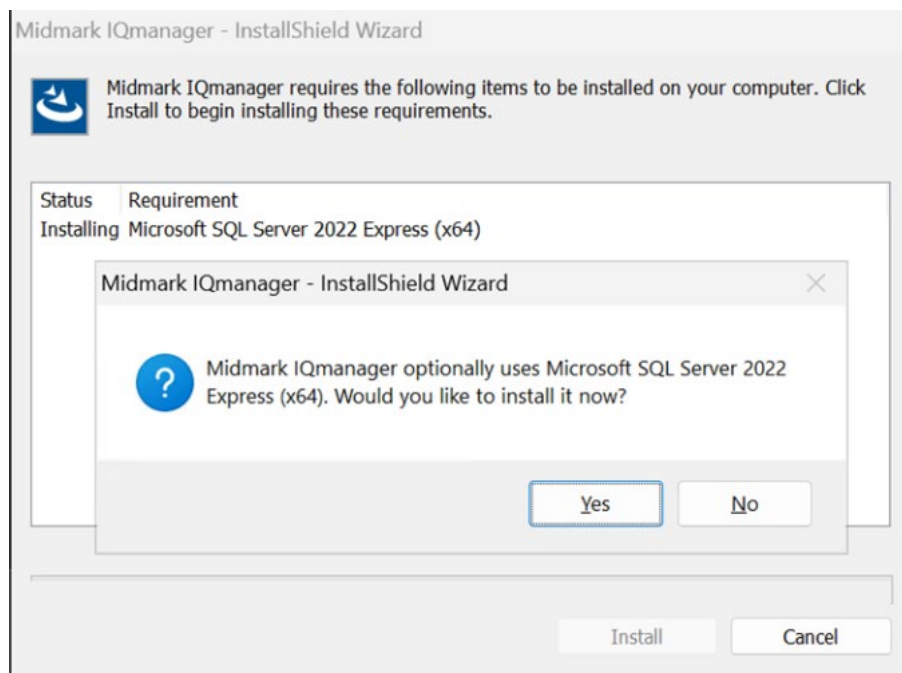
Note

If a previous version of IQmanager® has not been uninstalled, the system will prompt you to uninstall it. Follow the instructions on the screen to remove the previously installed version, and then begin again.

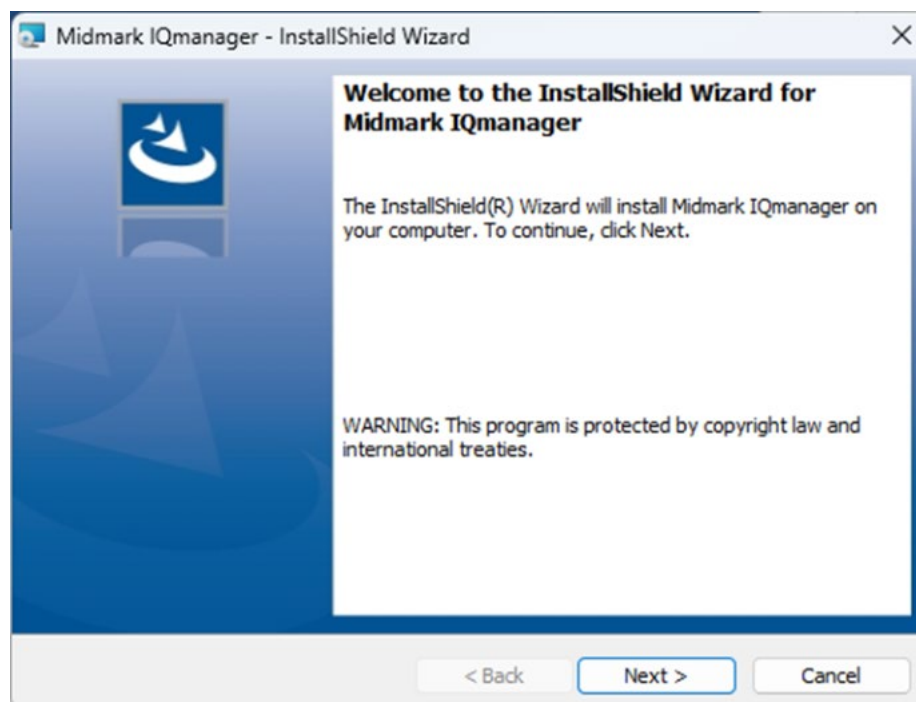
- The program will begin the InstallShield Wizard for IQmanager.
- Click **Install** to install pre-requisite applications.



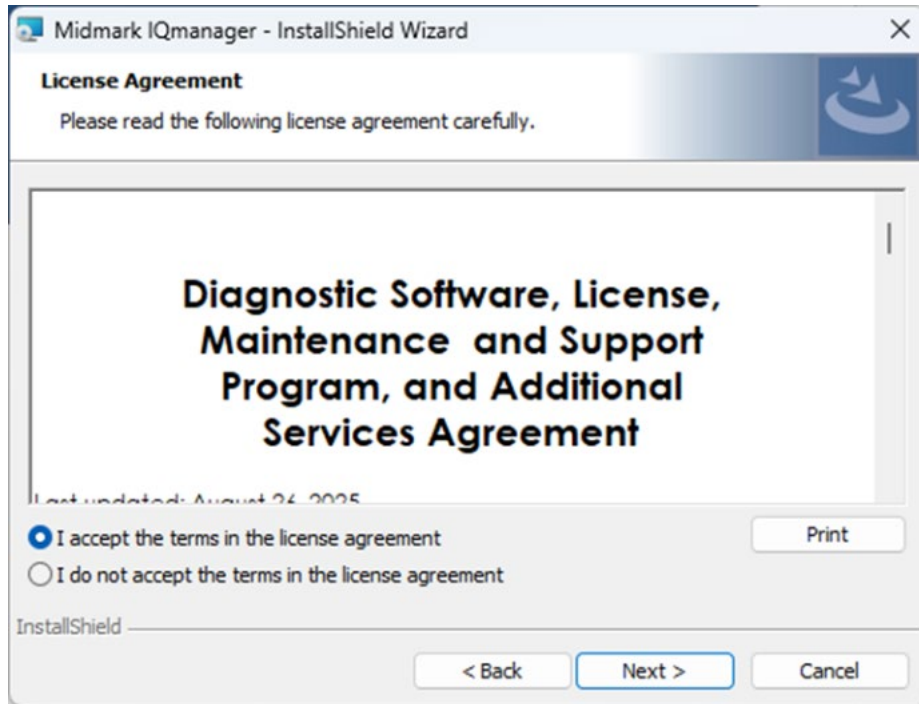
- Click **Yes** to begin the installation process for the SQL Server 2022.



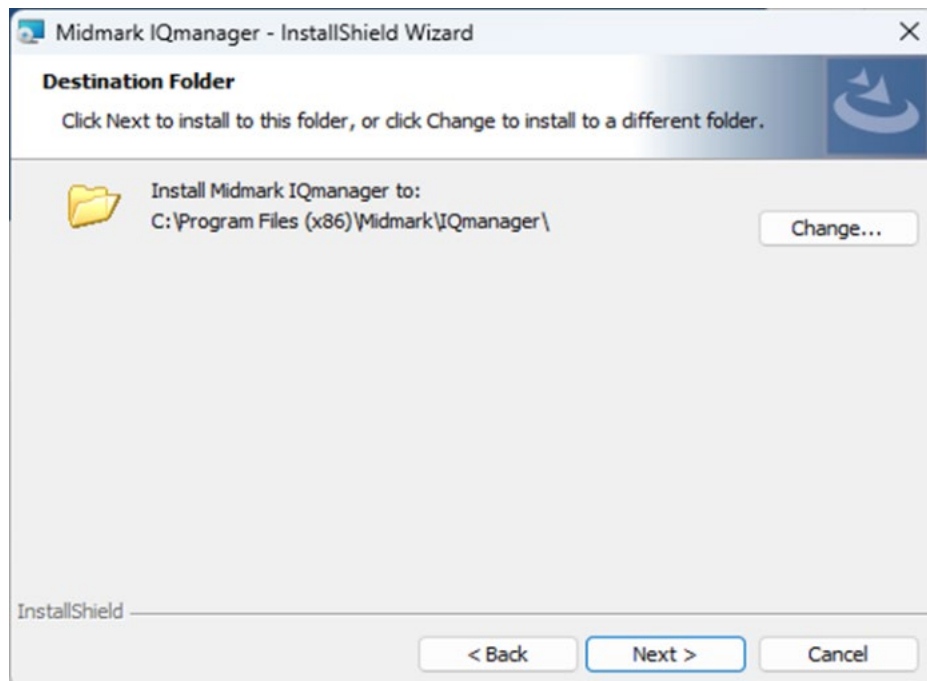
- Click **Next** to begin the installation process for the base IQmanager® component.



- At the license agreement window, select **I accept the terms in the license agreement** and click **Next** to continue with the installation.

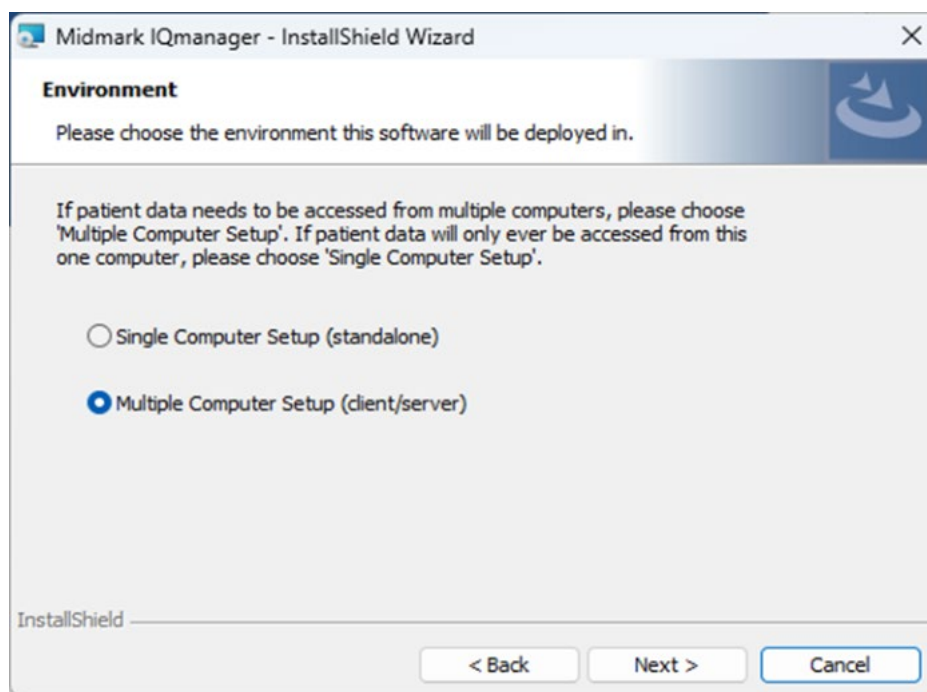


- If desired, click **Change...** to change installation directory and then click **Next** to proceed with installation



- If the IQmanager® software will be run in a standalone model:
 - Select **Single Computer Setup (standalone)** and click **Next** to continue with the installation.
- If the IQmanager® software will be run in a client/server model:

- i. Select **Multiple Computer Setup (client/server)** and click **Next** to continue with the installation.



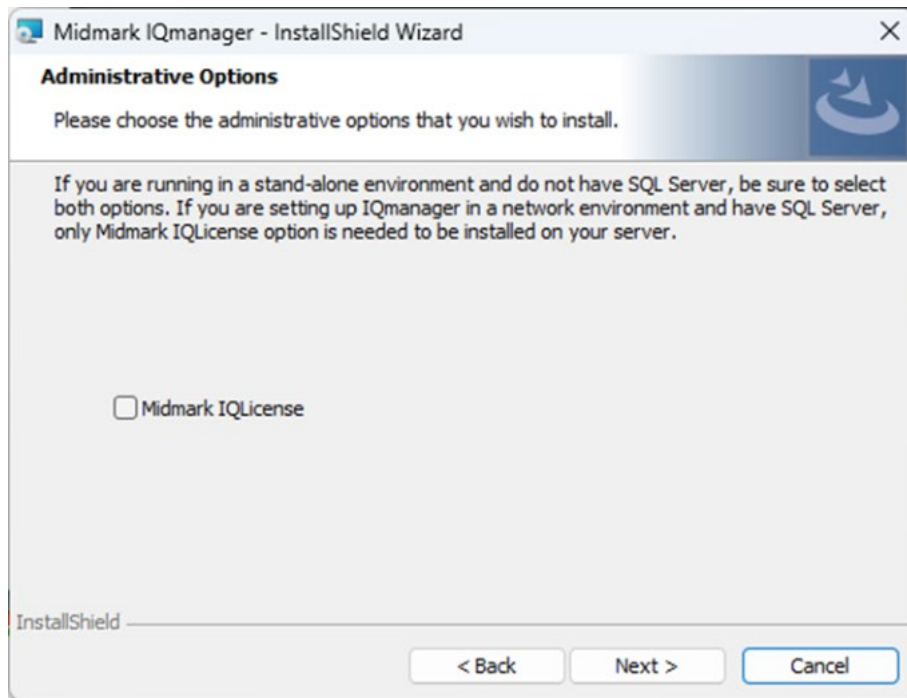
- If the standalone model is selected:
 - i. **Midmark IQlicense®** will be automatically installed; skipping the following Administrative Options window.
- If the IQmanager® software will be run in a client/server model:
 - i. If this is a server machine, place a check mark in the **Midmark IQlicense®** box. If this is a client machine, ensure this box is unchecked. Click **Next** to proceed with installation.

Note

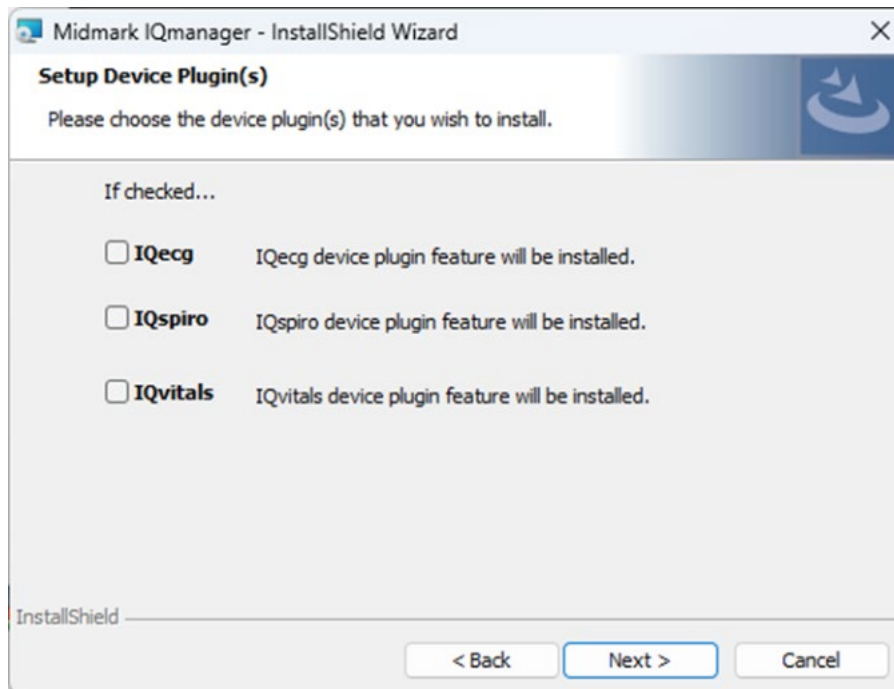
For more information on standalone vs client/server, refer to **Choosing between Standalone and Client/Server Setups** under **Technical Overview**.

Note

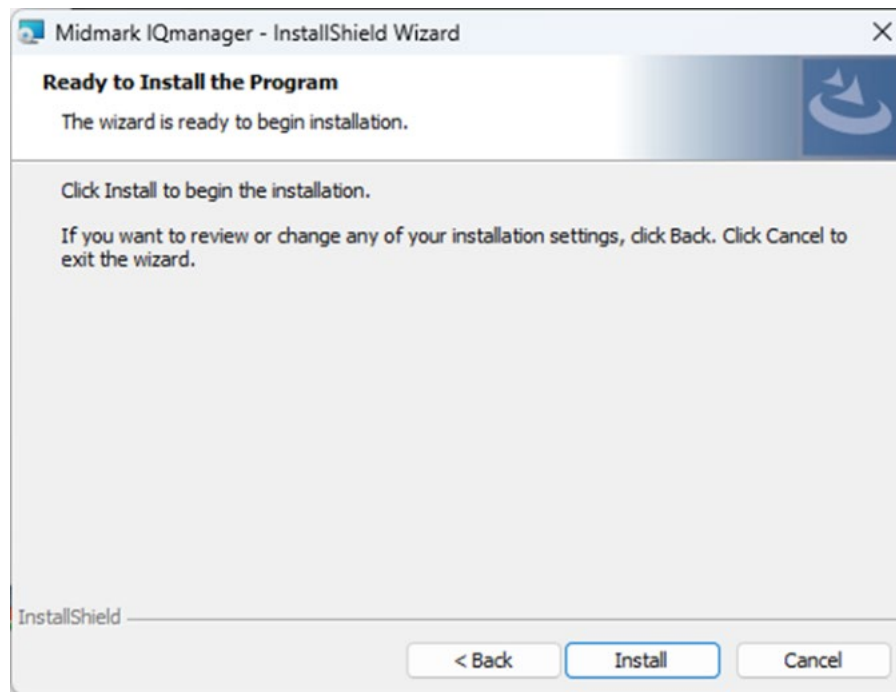
Multiple Computer Configurations – SQL Server® 2022 Express is only required if the existing network environment is without an available SQL server. SQL Server® 2022 Express and Midmark IQlicense are only required to be installed once per network. **It is recommended that both applications are installed on a computer that is always on during operation, typically a computer designated as a server.**



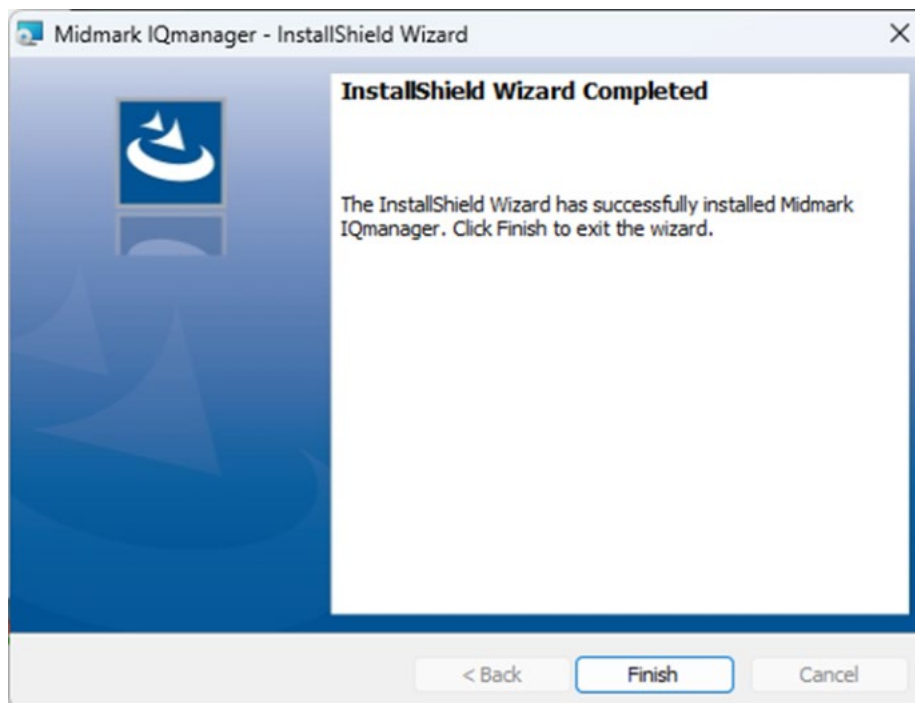
- Place a check mark in desired device plugin box and click **Next** to continue with installation.



- Click **Install** to begin the base IQmanager® component installation.

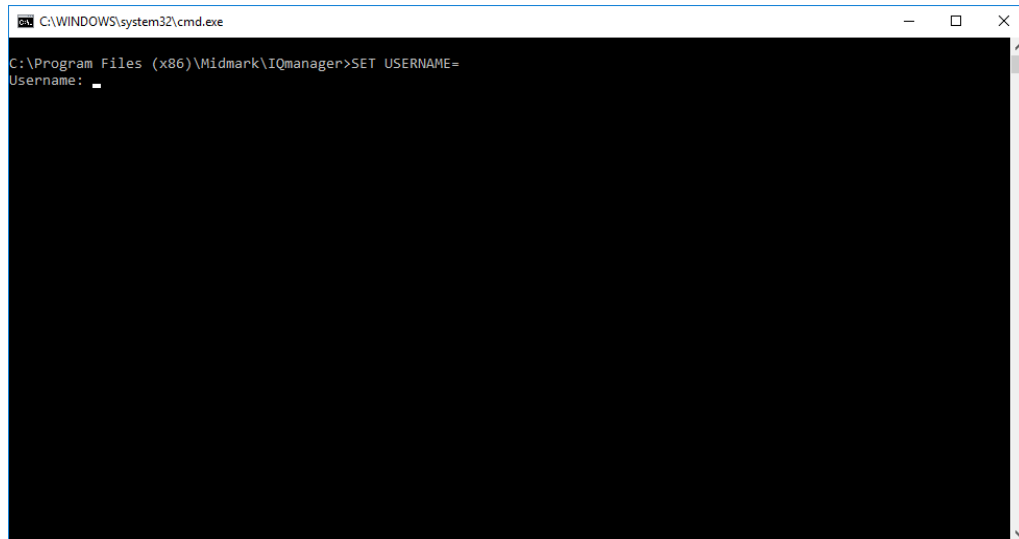


- The following window will appear indicating that the base IQmanager® component has been successfully installed. Click **Finish** to complete installation.

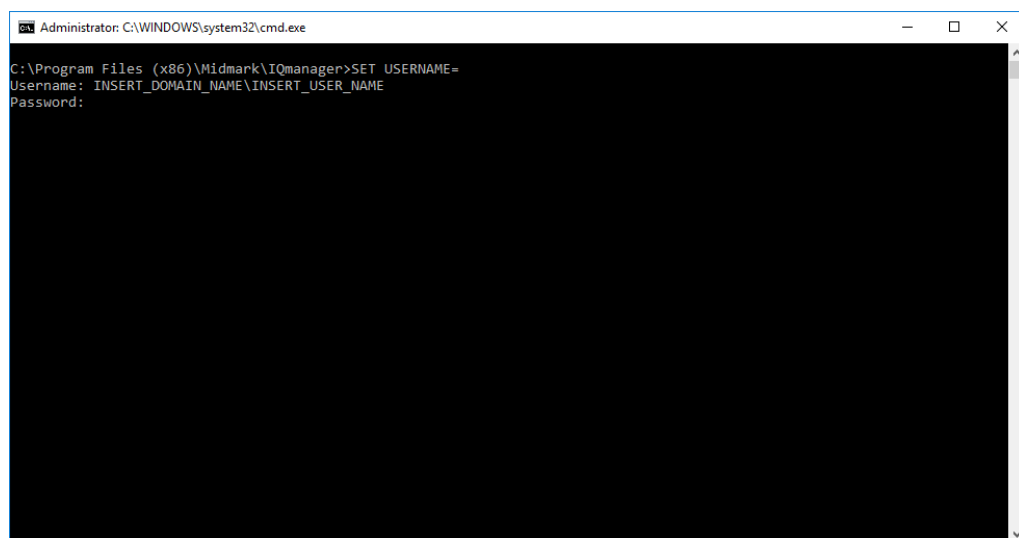


2. If the **Multiple Computer Setup**® component was selected for installation during step 1, follow the corresponding instructions listed below.

- The following window for the MidmarkLicenseRefresher® service will appear after IQmanager® has been successfully installed.



- Provide the Username (Domain Name\Computer Username) and select **Enter**.



- Once the username is provided, the window will prompt for a password. Insert the password and select **Enter**.

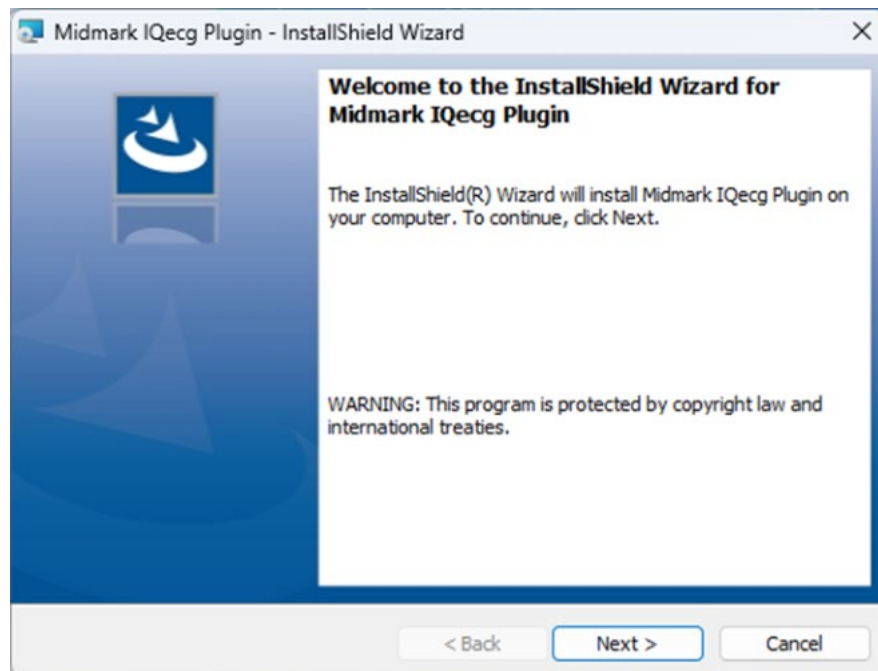
```

Administrator: C:\WINDOWS\system32\cmd.exe

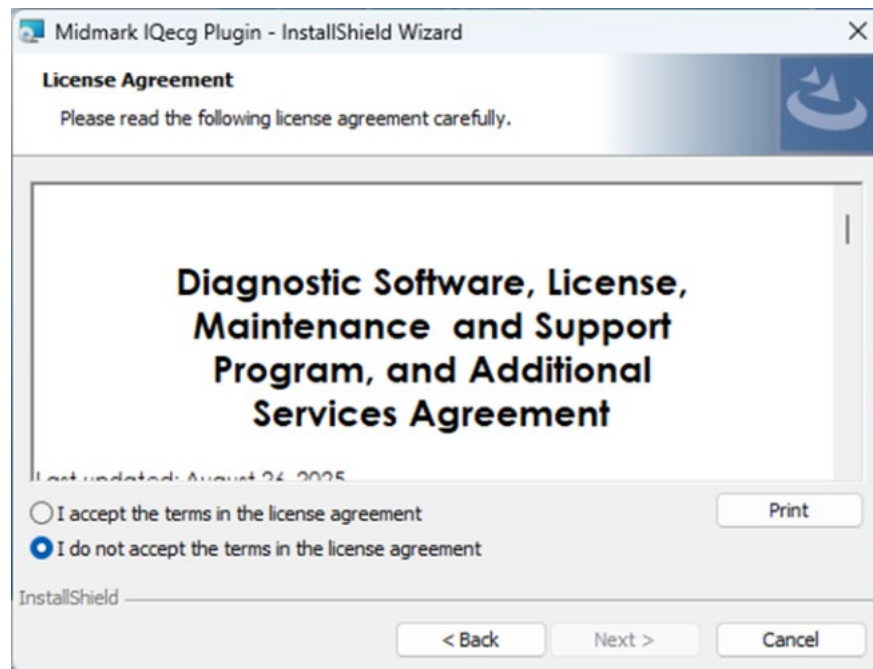
C:\Program Files (x86)\Midmark\IQmanager>SET USERNAME=
Username: INSERT_DOMAIN_NAME\INSERT_USER_NAME
Password: *****
[SC] CreateService SUCCESS
[SC] ChangeServiceConfig SUCCESS

SERVICE_NAME: MidmarkLicenseRefresher
        TYPE               : 10  WIN32_OWN_PROCESS
        STATE                : 2  START_PENDING
                           (NOT_STOPPABLE, NOT_PAUSABLE, IGNORES_SHUTDOWN)
        WIN32_EXIT_CODE       : 0  (0x0)
        SERVICE_EXIT_CODE   : 0  (0x0)
        CHECKPOINT           : 0x0
        WAIT_HINT            : 0x7d0
        PID                 : 6524
        FLAGS                 :
Waiting for 4 seconds, press a key to continue ...
  
```

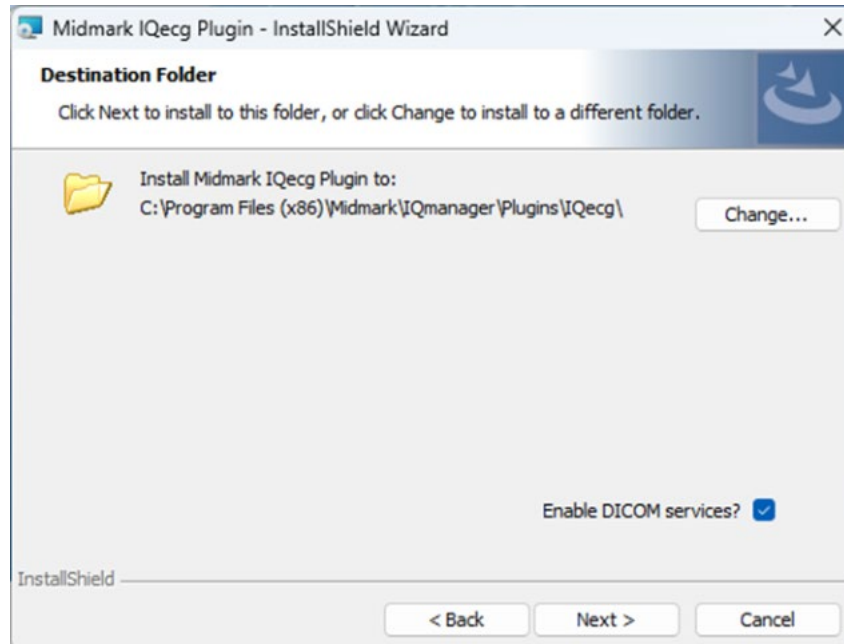
- After the login credentials are provided, the MidmarkLicenseRefresher® service will be installed and started.
- If the **Midmark IQlicense®** component was selected for installation during step 1, reference the corresponding instructions notated in [Appendix C. – Licensing and Configuration](#).
 - If the **IQecg®** plugin was selected for installation during step 1, follow the corresponding instructions listed below.
 - Click **Next** to begin the installation of the IQecg® plugin.



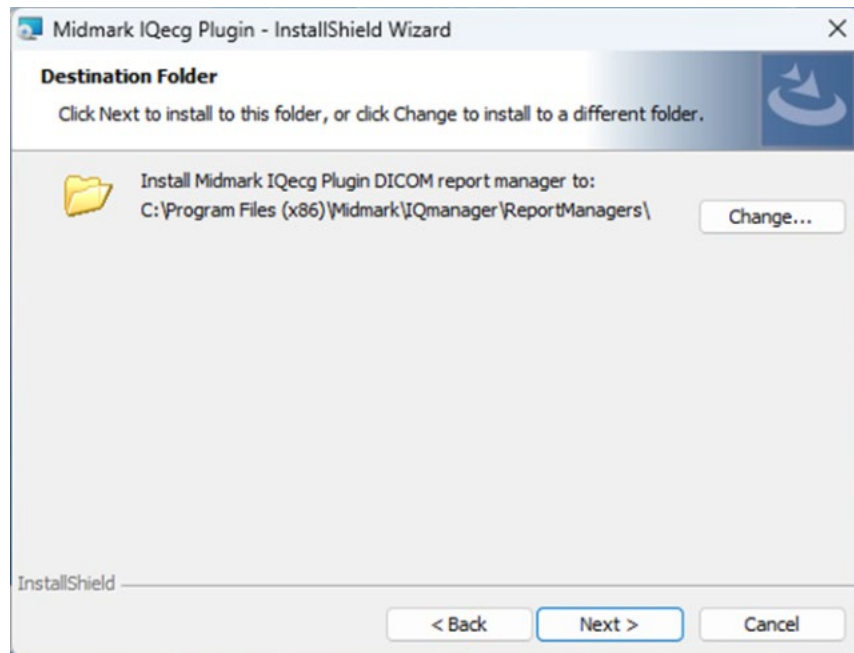
- At the license agreement window, select **I accept the terms in the license agreement** and click **Next** to continue with the installation.



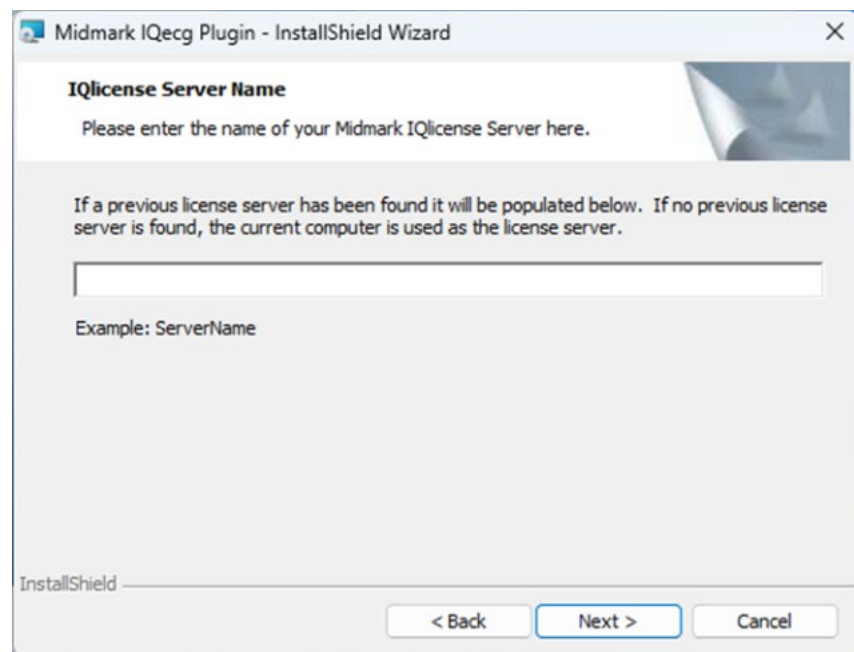
- Select **Enable DICOM services** if it is desired to install DICOM services. If desired, click **Change...** to change installation directory and then click **Next** to continue with installation.



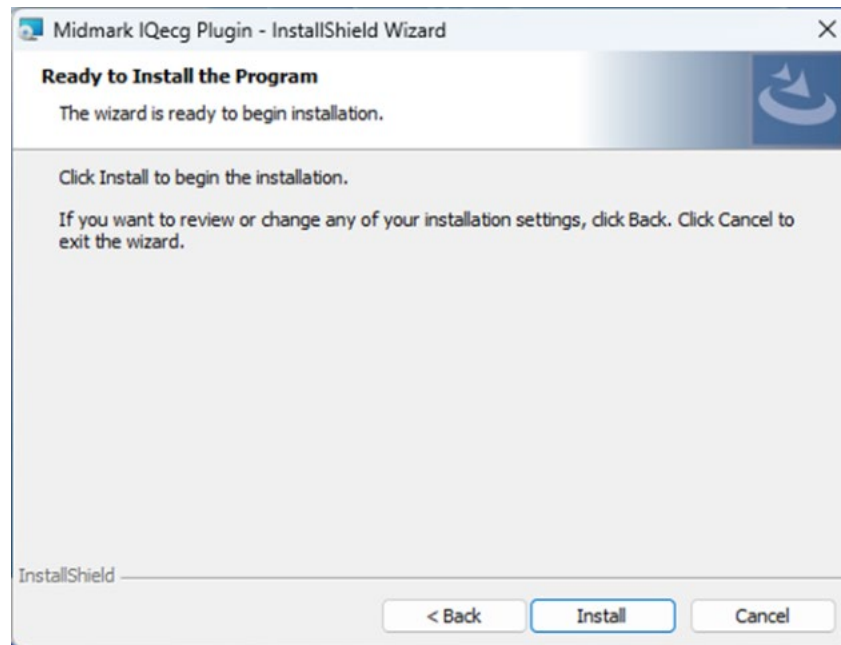
- If DICOM was selected, the following window will appear. If desired, click **Change...** to change DICOM Report Manager directory and then click **Next** to continue with installation.



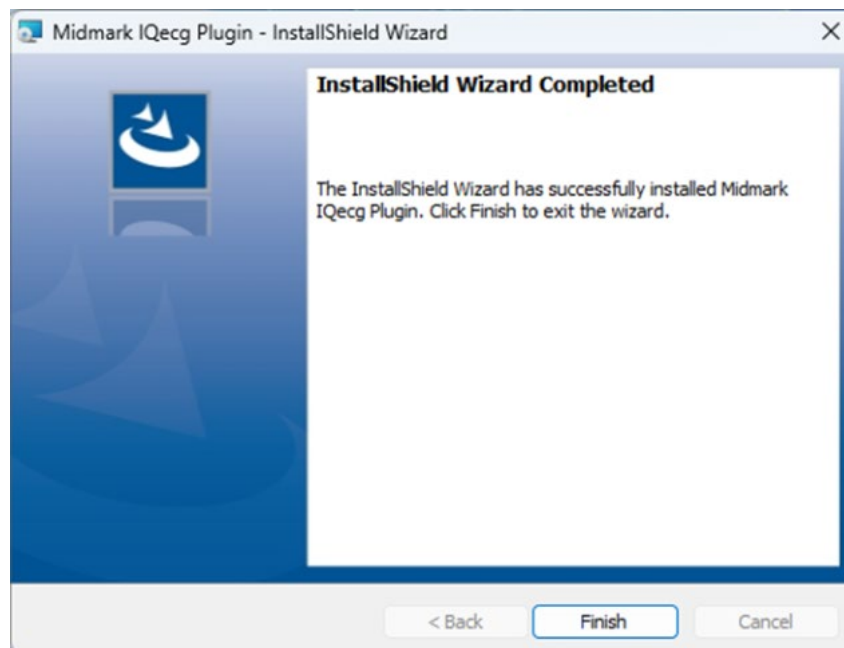
- Enter in the name of the **IQlicense®** server, and then click **Next** to continue with installation.



- Click **Install** to begin the IQecg® plugin installation.

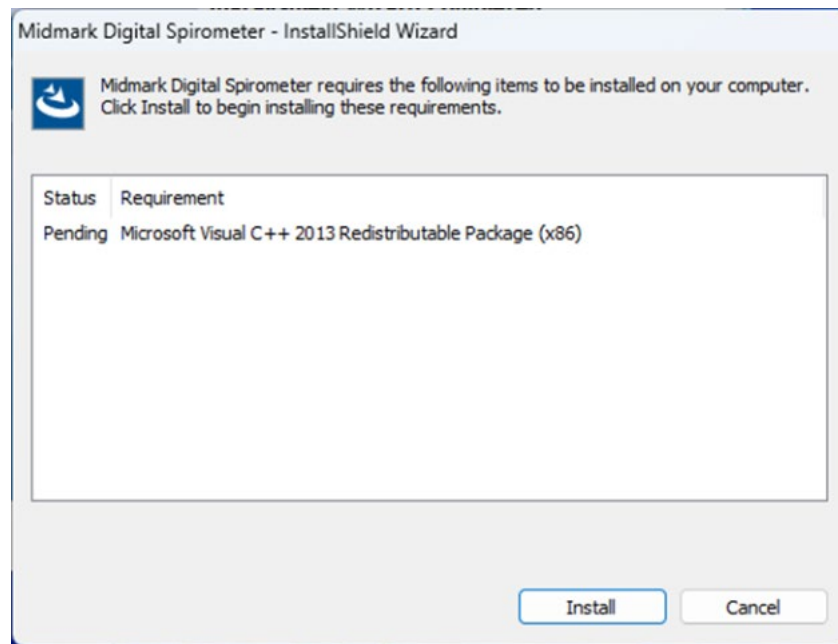


- The following window will appear indicating that the **IQecg®** plugin has been successfully installed. Click **Finish** to complete installation.

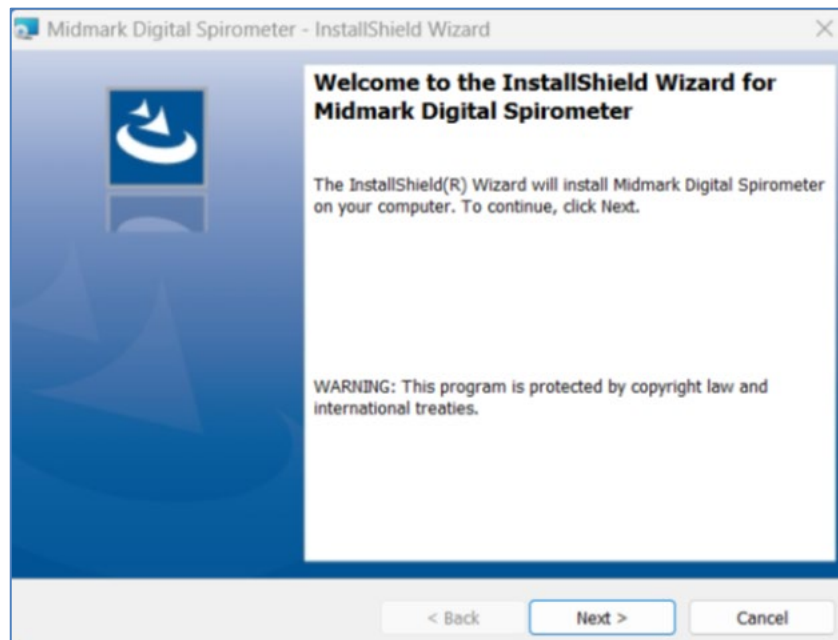


5. If the **Midmark Digital Spirometer** plugin was selected for installation during step 1, follow the corresponding instructions listed below.

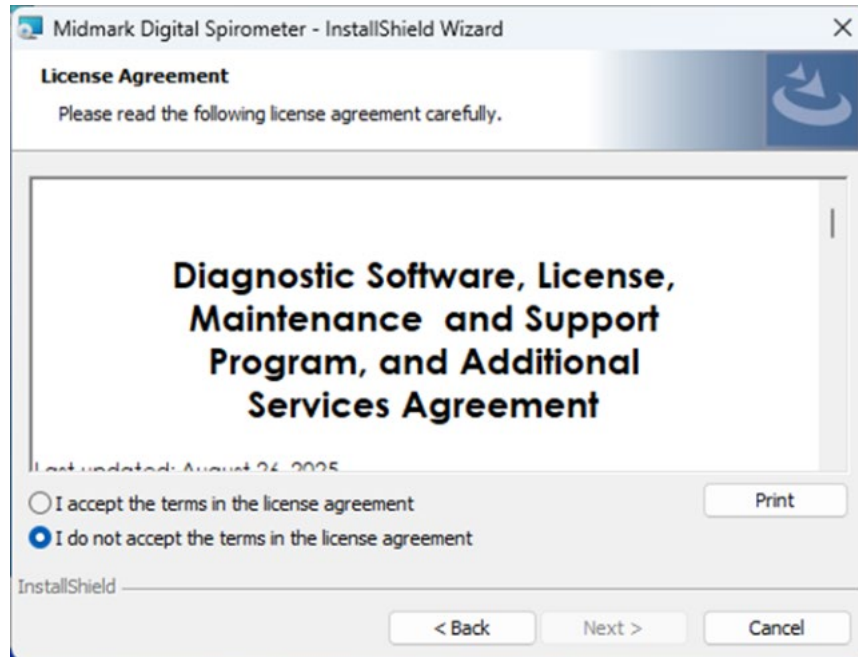
- If the installer detects a missing prerequisite, click **Install** to install Microsoft Visual C++.



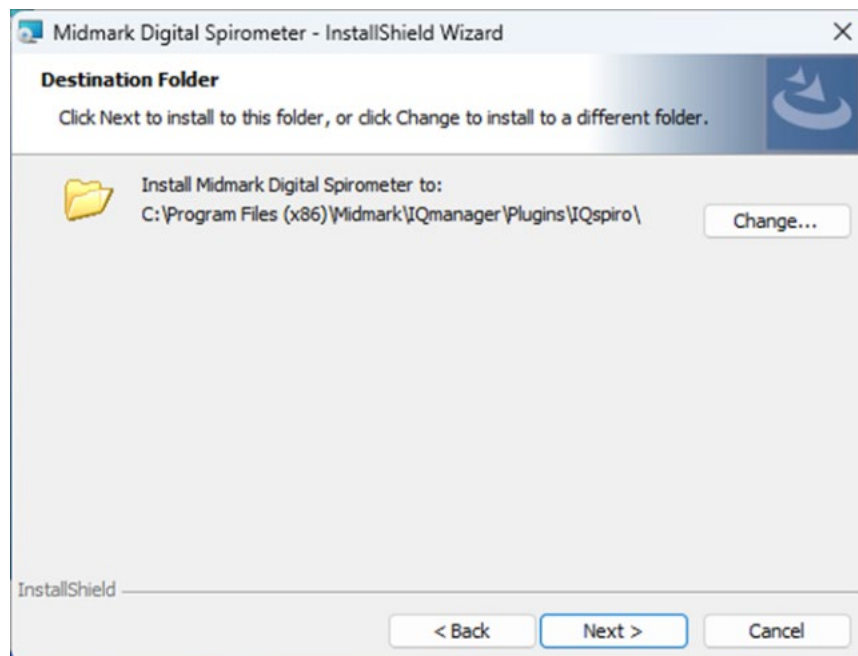
- Click **Next** to begin the installation of the Midmark Digital Spirometer plugin.



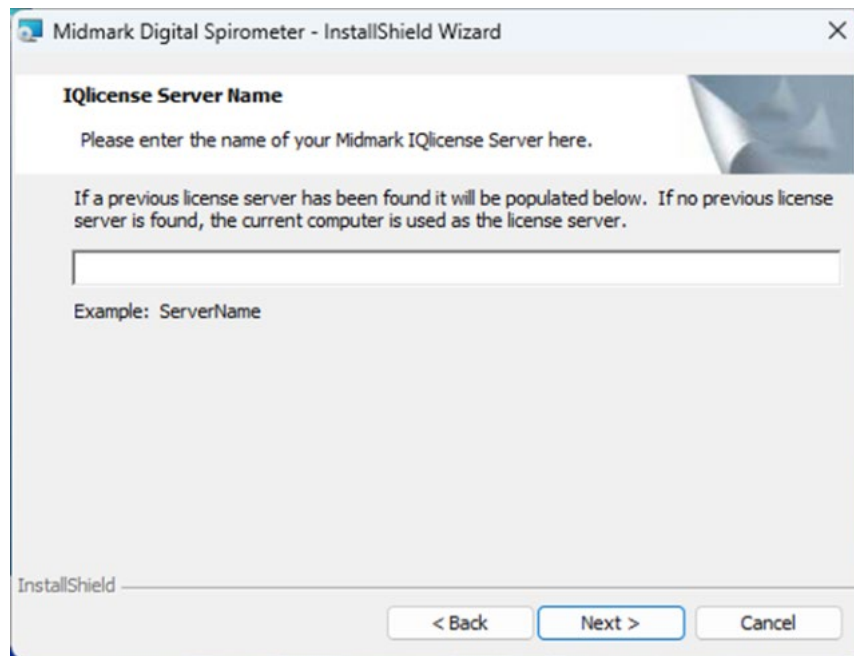
- At the license agreement window, select **I accept the terms in the license agreement** and click **Next** to continue with the installation.



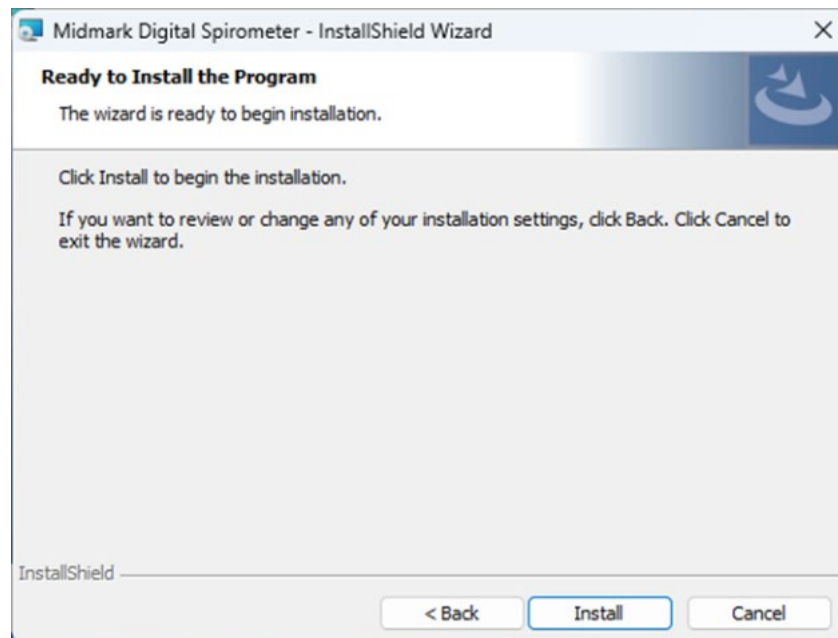
- If desired, click **Change...** to change installation directory and then click **Next** to continue with installation.



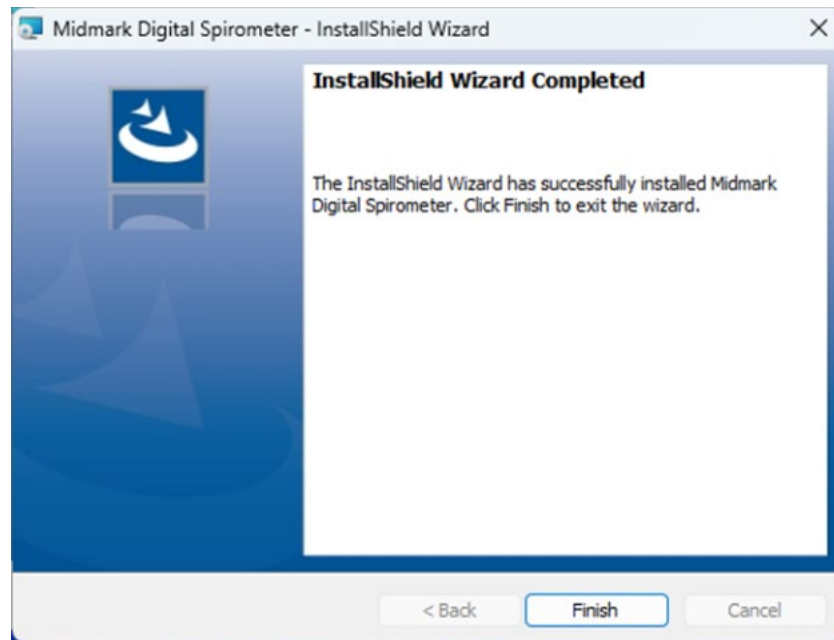
- Enter in the name of the **IQlicense®** server, and then click **Next** to continue with installation.



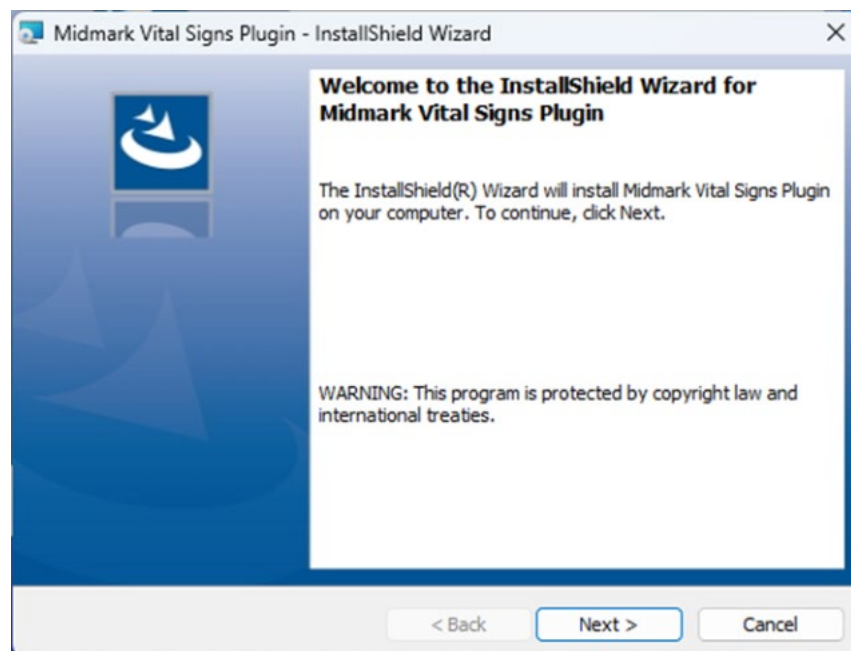
- Click **Install** to begin the Midmark Digital Spirometer plugin installation.



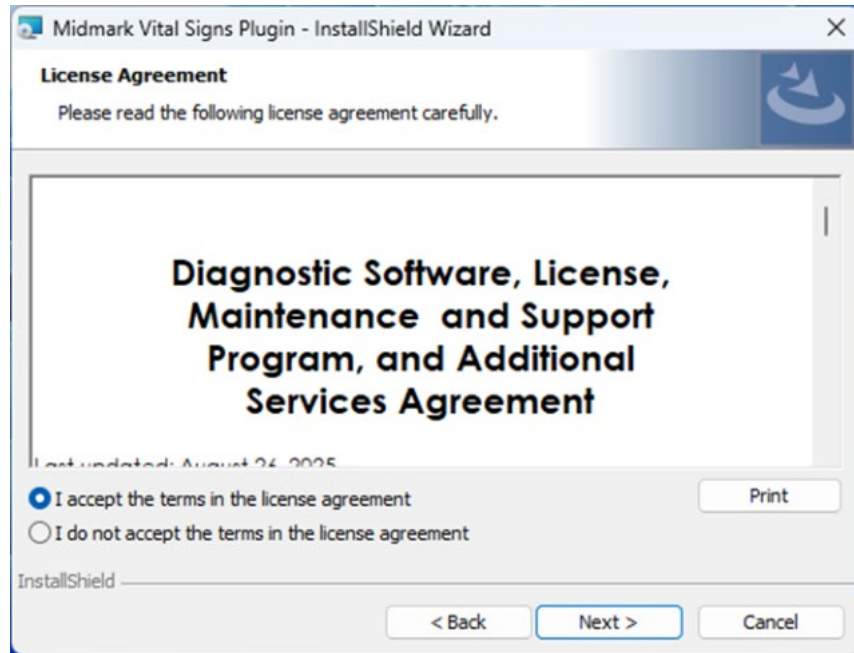
- The following window will appear indicating that the **Midmark Digital Spirometer** plugin has been successfully installed. Click **Finish** to complete installation.



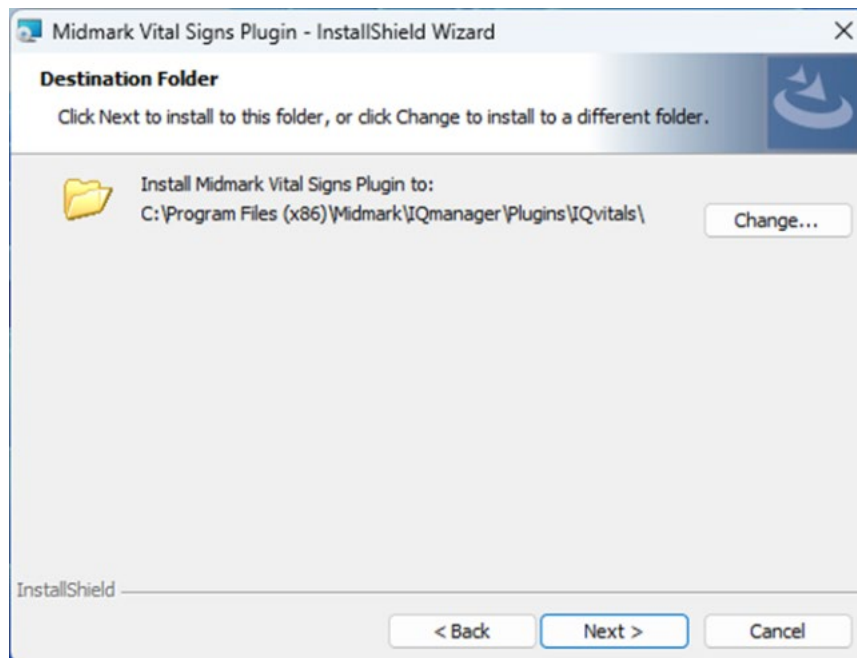
6. If the **IQvitals®** plugin was selected for installation during step 1, follow the corresponding instructions listed below.
 - Click **Next** to begin the installation of the IQvitals® plugin.



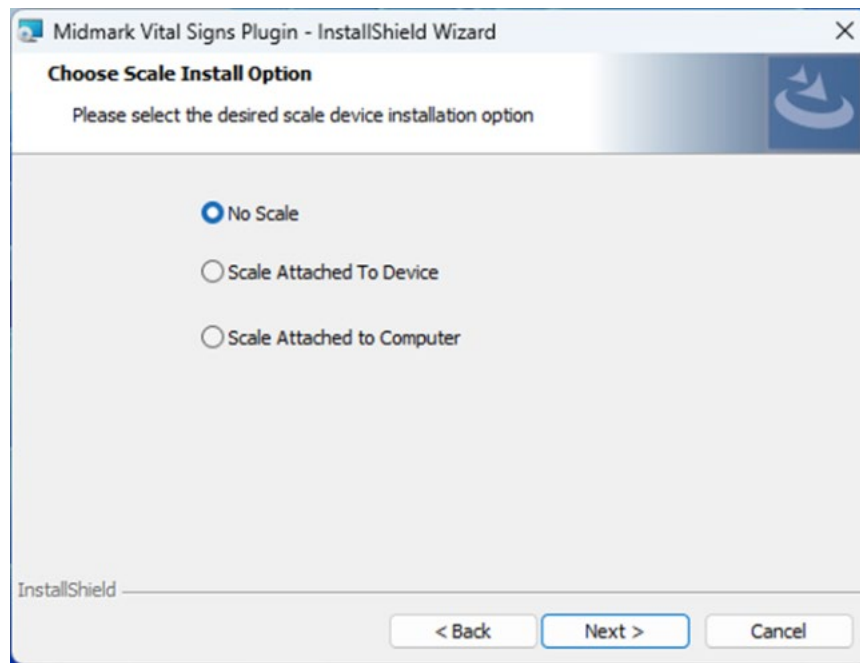
- At the license agreement window, select **I accept the terms in the license agreement** and click **Next** to continue with the installation.



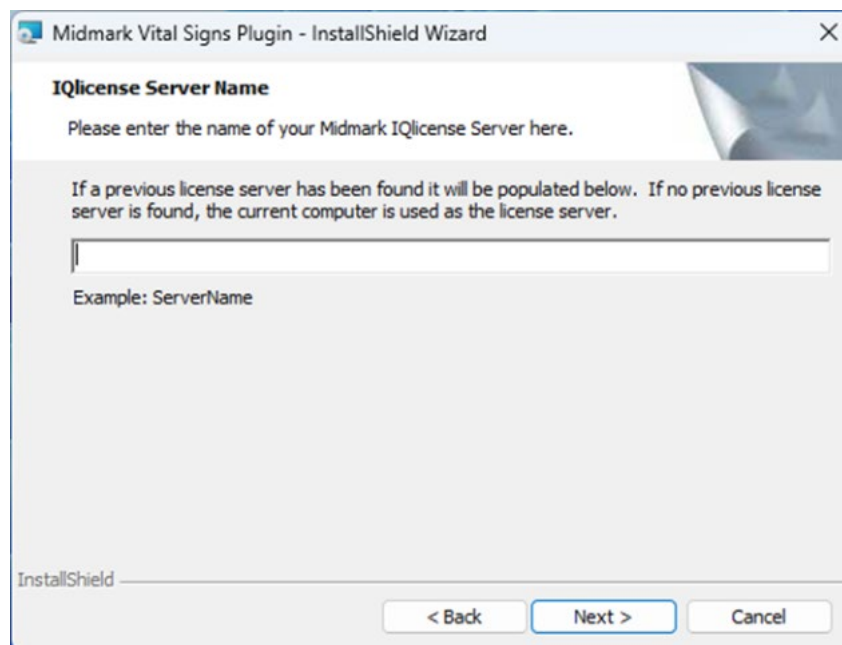
- If desired, click **Change...** to change installation directory and then click **Next** to continue with installation.



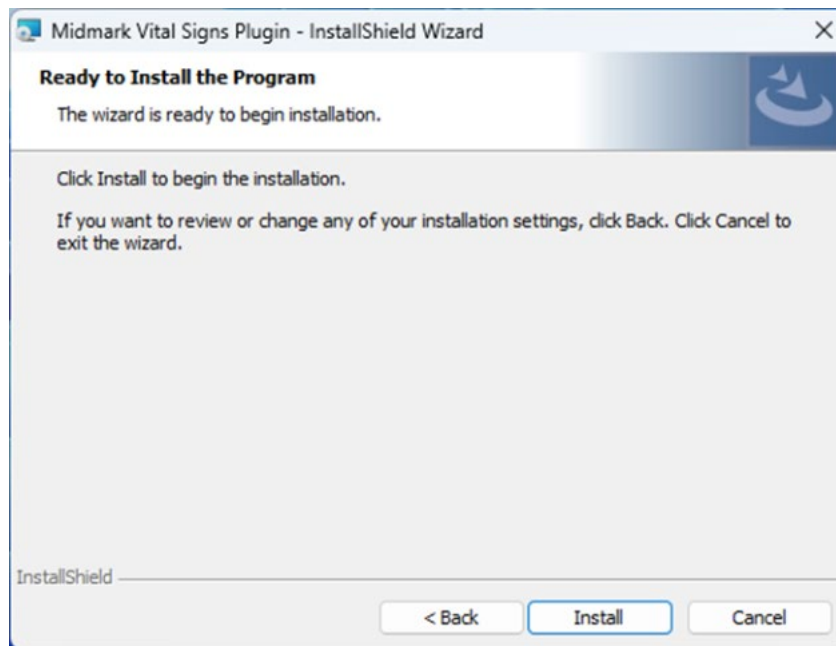
- Select the scale install option and then click **Next** to continue with installation



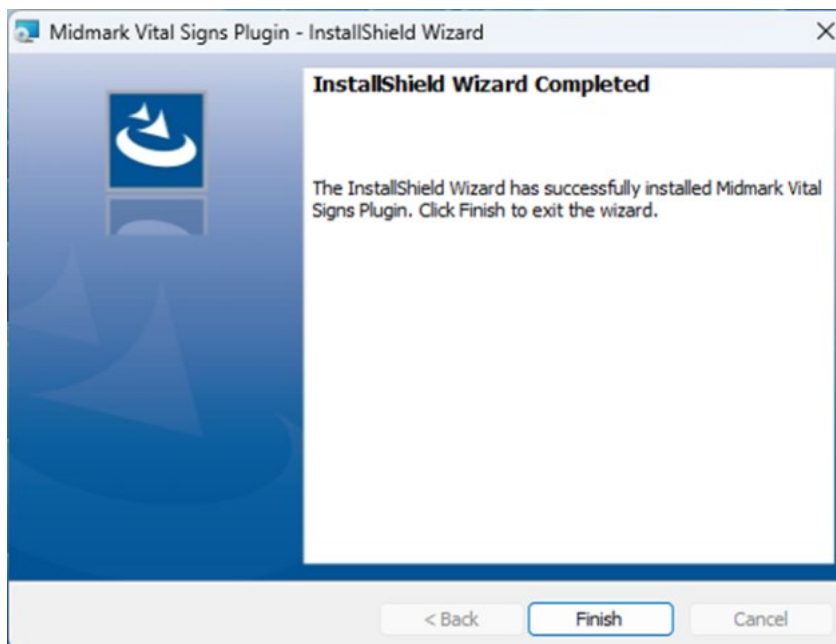
- Enter in the name of the **IQlicense®** server, and then click **Next** to continue with installation.



- Click **Install** to begin the IQvitals® plugin installation.



- The following window will appear indicating that the **IQvitals®** plugin has been successfully installed. Click **Finish** to complete installation.



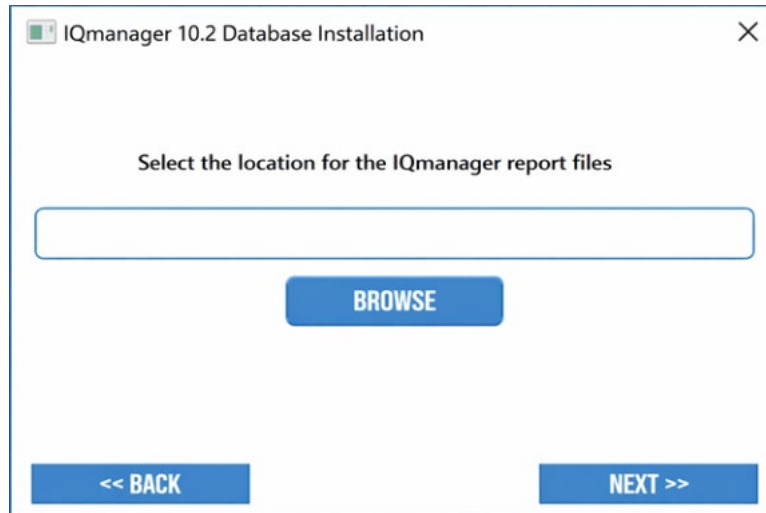
7. **SQL Server® 2022 Express** is an installation prerequisite that is configured automatically. For manual configuration instructions, see [Appendix D – Database Configuration](#).
8. **IQmanager®** Database Configuration
 - Enter in the desired names into the **Server Name** and **Database Name** fields for the **IQmanager® database**.
 - If the IQmanager® software will be run in a standalone model:
 - i. Servername (Computername\SQLserver instancename): the computer name is the Computer name where the SQL server is installed and the Instance name of the SQL server. This value should auto-populate in this field as long as this computer was not pointed to a different Midmark database in the past.

- If the IQmanager® software will be run in a client/server model:
 - i. This will be the name of the server that the database is installed on.
- If using SQL Authentication, uncheck the **Use Windows Authentication** checkbox, enter in the appropriate SQL credentials into the **Database Username** and **Database Password** fields, then click **Next** to continue with configuration.

- If the database specified within the Database Name field does not exist, then click **Yes** to create.

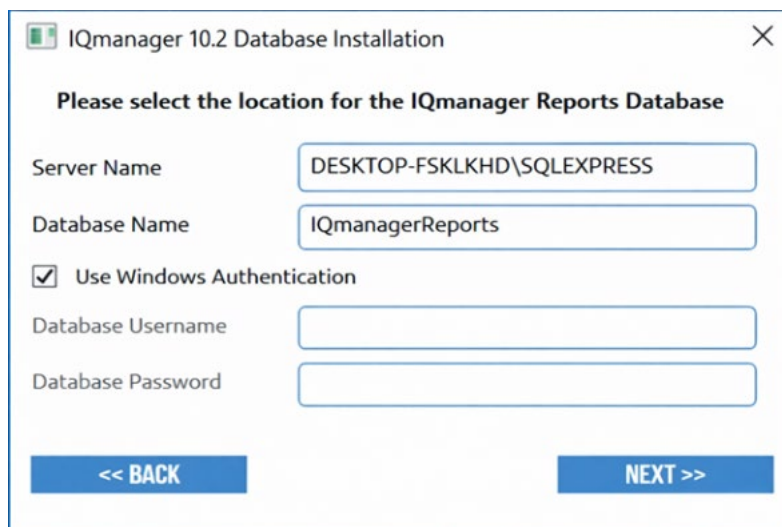
- Enter in the file path or click **Browse** to specify the location for the IQmanager® report files to be saved.
- If the IQmanager® software will be run in a standalone model:
 - i. Use the **Browse** button to select a local folder on this computer.
- If the IQmanager® software will be run in a client/server model:

- i. **Browse** or type in the name of the network folder located on the server (Please use a UNC path to shared network location with modify rights i.e. [\\Server\reports](#))



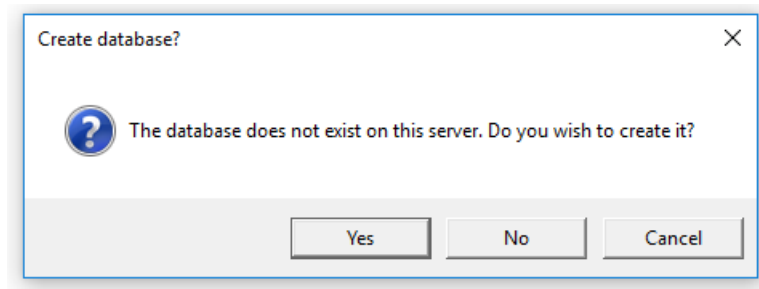
The screenshot shows a window titled "IQmanager 10.2 Database Installation". The main instruction is "Select the location for the IQmanager report files". Below this is a large empty text box for input. A blue "BROWSE" button is centered below the text box. At the bottom, there are two blue buttons: "<< BACK" on the left and "NEXT >>" on the right.

- Enter in the desired names into the **Server Name** and **Database Name** fields for the ***IQmanager® reports database***.
- If the IQmanager® software will run in a standalone model:
 - i. Servername (Computername\SQLserver instancename): the computer name is the Computer name where the SQL server is installed and the Instance name of the SQL server. This value should auto populate in this field as long as this computer was not pointed to a different Midmark database in the past.
- If the IQmanager® software will be run in a client/server model:
 - i. This will be the name of the server that the database is installed on. This is typically the same server that was entered for the *IQmanager® database*.
- If using SQL Authentication, uncheck the **Use Windows Authentication** checkbox, enter in SQL credentials into the **Database Username** and **Database Password** fields, then click **Next** to continue with configuration.

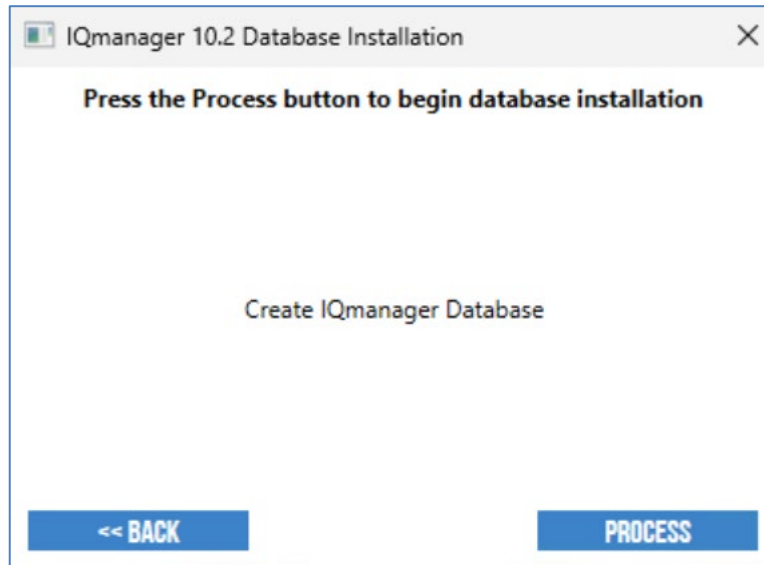


The screenshot shows a window titled "IQmanager 10.2 Database Installation". The main instruction is "Please select the location for the IQmanager Reports Database". Below this are several input fields: "Server Name" with the value "DESKTOP-FSKLKHD\SQLEXPRESS", "Database Name" with the value "IQmanagerReports", a checked checkbox for "Use Windows Authentication", "Database Username" (empty), and "Database Password" (empty). At the bottom, there are two blue buttons: "<< BACK" on the left and "NEXT >>" on the right.

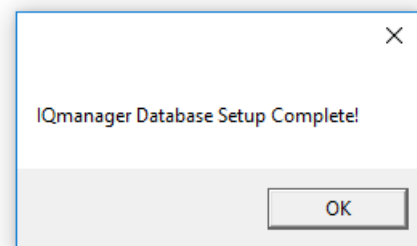
- If the database specified within the **Database Name** field does not exist, then click **Yes** to create.



- And then click **Process** to begin database installation.



- Click **OK** to complete the IQmanager® database installation.



9. Return to the desktop and double-click the **IQmanager®** icon to open the program.



Configuration

Introduction to Configuring IQmanager®

IQmanager® can be customized by using the configuration settings. Access the **Configuration Settings** by clicking the **SETTINGS** button in the upper right side of the IQmanager® opening screen.



Enter the practice's name and details here. This information will also be displayed on printed reports. Enter a name that describes the practice/location to enable other medical personnel to recognize the origin of the reports.

From the *Configuration Settings* dialog box, the following settings can be changed:

- **Full Patient Name Format:**
- **Short Patient Name Format:**
- **Language:**
- **Units:**
- **Date Format:**
- **Time Format:**

The *Thin Client Channel* setting applies only if you are using IQmanager® in a thin client environment. The drop-down list contains the following selections:

- RDP: for using IQpath™ if the clients and servers are using Microsoft Remote Desktop Services
- Citrix: for using IQpath™ if clients and servers are using Citrix® software

VMware VDI is supported in the following versions or above IQecg (v. 10.2.2), IQspiro (v. 11.0.8), and IQvitals (v. 11.0.17). As of these versions, the Thin Client Channel is no longer being used. The device software will auto detect whether Citrix, RDP, or VMware are being used.

Refer to *Setup Manual: Thin Client Manual* (61-78-0001) for more information.

Checking Auto start when one device will cause IQmanager to launch the device acquisition screen when only one device is listed under the device list for specific test. Selecting this setting will streamline the acquisition workflow. If you need to select Technician, Requested by, or Indication do not select, "Checking Auto Start when one device" to prevent bypassing that screen.

Once you have selected the configuration settings, click **Save** to save the settings.

Click **Cancel** to exit without making any changes, or click **Default** to restore all settings to the factory settings, except for **Institution Name and Address**.

Data Management Tab

The *Data Management* tab in the *IQmanager Configuration Settings* dialog box allows you to configure and manage various data storage locations.

From the Data Management tab, the following settings can be changed:

- Database Settings
 - **Midmark SQL Server Name:** The name of the server containing the database storing patient information and other IQmanager specific data, can be local or on the network. Microsoft SQL express is installed by default during the IQmanager® installation. It can be typed as Computername\SQLserver instancename: the Computer name is the Computer name where the SQL server is installed and the Instance name of the SQL server.
 - **Midmark Database Name:** The name of the database on the **Midmark SQL Server**.
 - **Login Credentials:** Select **Use Windows Authentication** or specify the SQL **Database Username** and **Database Password**.
- Report Management Settings
 - **Database Server:** The name of the server containing the database stores only report information; this server can be local or on the network. The reports are not stored here, just their location. See **Save Report Location** below. By default, this server uses the same database as **Midmark SQL Server**.
 - **Database Name:** The name of the database on the **Database Server**.
 - **Login Credentials:** Select **Use Windows Authentication** or specify the SQL **Database Username** and **Database Password**.
 - **Save Report Location:** Specify the location where the Midmark reports will reside.

The screenshot shows the 'IQmanager' application window with the 'Settings' dialog box open to the 'DATA MANAGEMENT' tab. The 'DATABASE SETTINGS' section includes fields for 'Midmark SQL Server Name' (set to 'IQconnectTest'), 'Midmark Database Name' (set to 'IQmanager'), and checkboxes for 'Use Windows Authentication' (checked). Below these are fields for 'Database Username' and 'Database Password', and a 'TEST DB CONNECTION' button. The 'REPORT MANAGEMENT SETTINGS' section includes fields for 'Database Server' (set to 'IQconnectTest'), 'Database Name' (set to 'IQmanagerReports'), and checkboxes for 'Use Window Authentication' (checked). Below these are fields for 'Database Username' and 'Database Password', and a 'BROWSE' button next to the 'Save Report Location' field (set to 'C:\Reports'). At the bottom of the dialog are 'HELP', 'SAVE', and 'CANCEL' buttons.

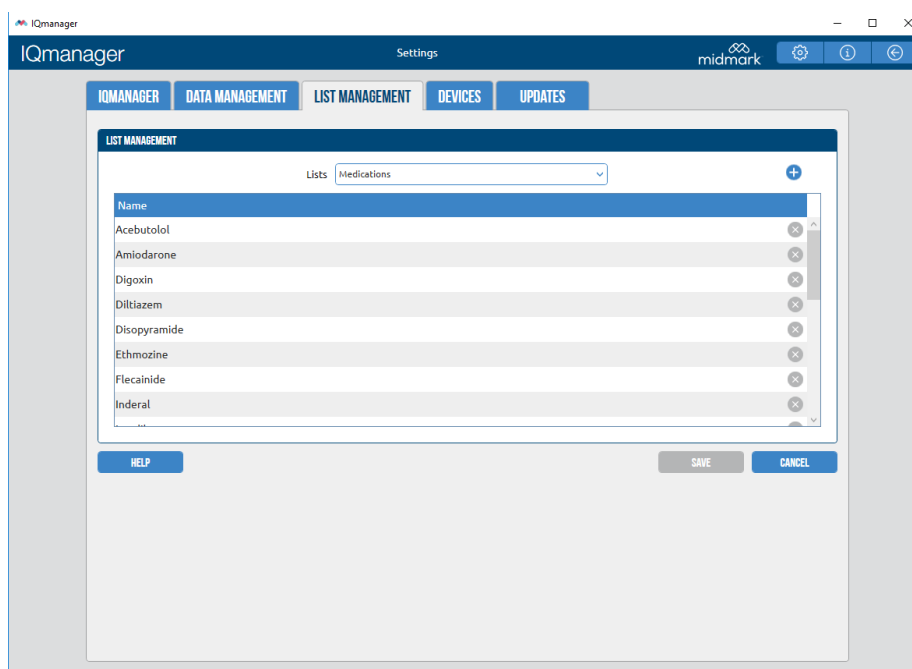
List Management Tab

The *List Management* configuration option customizes the lists used in IQmanager®, including:

- Medications
- Indications
- Race Categories
- Usernames (The names of doctors and technicians performing and reviewing patient tests through IQmanager®.)
- Health networks

Customizing these lists saves time when you are using them in the appropriate testing screens.

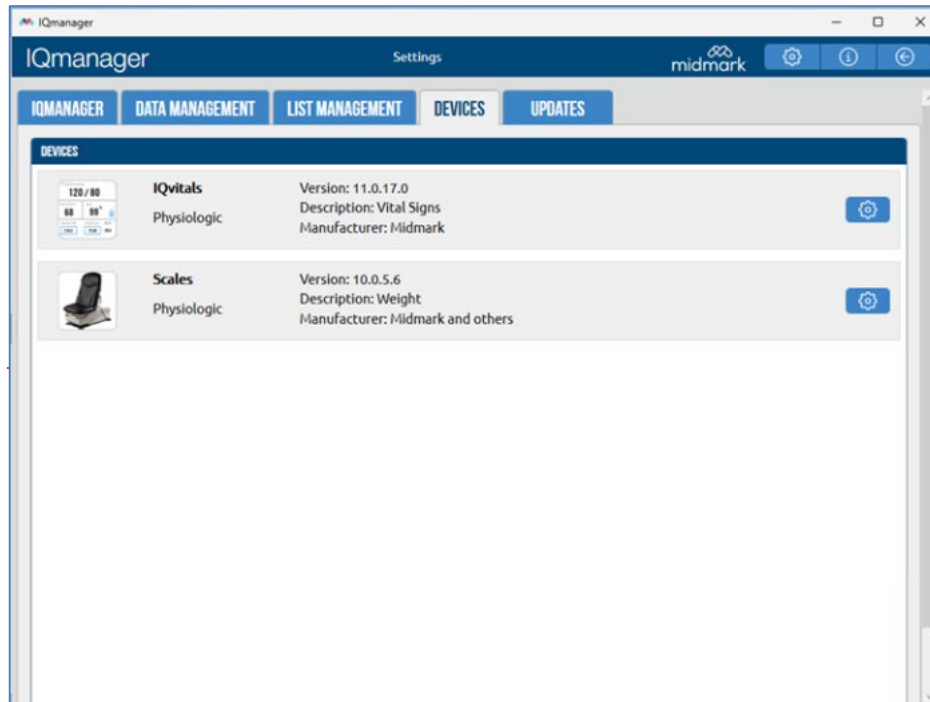
Select the item that you want to modify from the pull-down list.



- **Add:** Scroll to the bottom of the list to type the new value, or select the plus icon next to the drop-down to jump to the bottom of the list. After typing the value, press Enter to save you selections.
- **Edit:** To edit an existing item, select the statement and begin typing to edit the value.
- **Delete:** You can delete an existing item. Highlight the statement with the cursor, and then click the X button.

Devices Tab

The *Devices* tab allows you to view any installed device with customizable settings. You can select the **Setting** button to view the device settings.

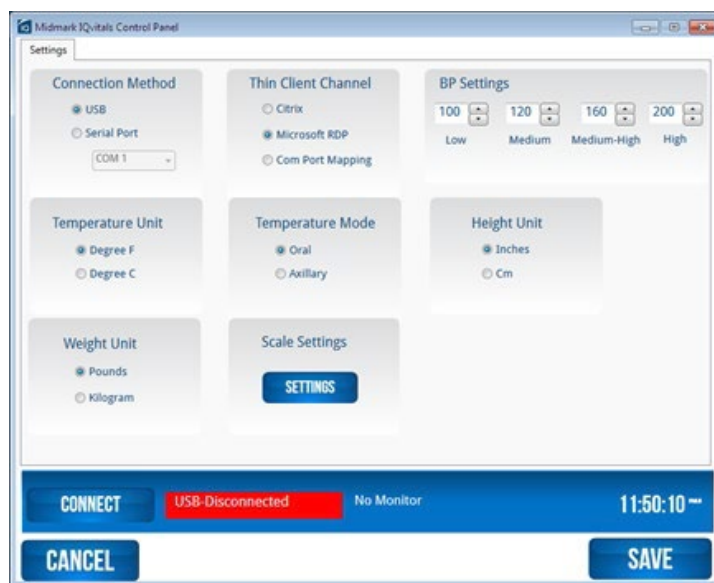


Configuring IQvitals® for IQmanager®

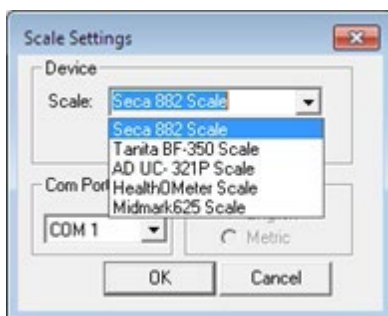
IQmanager® can import blood pressure, pulse rate, temperature, pulse oximetry from IQvitals®, and weight from compatible digital scales.

1. Click the **SETTINGS** button in the upper right side of the IQmanager® opening screen (). The *IQmanager Configuration Settings* dialog box appears.
2. Set the default settings to use for IQvitals® by selecting the *Devices* tab in the IQmanager settings.

- Click the settings icon for IQvitals® to customize settings.



- To modify scale setting, click the **Settings** button under *Scale Settings*.



- Highlight the chosen scale.
- If changes need to be made to the Units of measure, change them from this screen.

Note

If selecting the Health o meter® scale option the following window will appear after clicking the **Configure** button.

- Click the **Auto Detect** button, and then follow the instructions as prompted on the screen.
- Click **OK** to save changes, and then click **Save** to save the IQvitals® settings. The system closes the window and opens the *IQmanager Configurations Settings* window.
- In the *IQmanager Configurations Settings* window, click the back arrow in the top right to return to the IQmanager® Opening Screen.

Configuring Other Midmark Devices

For information on configuring other Midmark devices for IQmanager®, please refer to the devices' individual operation manuals. See ["Related Documents"](#) for a list of possible manuals and associated part numbers.

Updates Tab

The *Updates* tab allows you to view any installed device that has pending updates. When updates are pending, a dot will appear on the IQmanager® *Settings* button and on the Updates tab, indicating that there is an action pending. You can click the **Update** button to begin the update process.

Configuring Licensing

See [Appendix C. – Licensing and Configuration](#)

Working with Peer-to-Peer Networks

A peer-to-peer network usually consists of several PCs that run on Windows® 11 operating systems, and that are connected by hardware in a local area network (LAN) configuration. In such a system, this product may be set up where one of the networked computers contains the central database that can then be accessed from the other PCs connected to the network.

Configuring for Peer-to-Peer Networks

After setting up a working LAN, set up a peer-to-peer network database:

Note

Install IQmanager® on all required computers, including the central database host, under the Administrator privilege. After IQmanager has been successfully installed, the access levels can be reset to the original privileges for normal operation.

Note

All computers must refer to the report location in the same manner. If a UNC path is going to be used, that ensure all computers use the same UNC path, including the central computer if it also has the IQmanager software installed. If a mapped drive letter is being used, ensure that all computers are using the same mapped drive letter and path. Failure to do this will cause the computers to look in the wrong path for the report.

1. Designate one of the computers in the network to host the central database. It is not necessary to install IQmanager® on this machine, but it is necessary to create certain folders and files. See **Creating a Central Peer-to-Peer Database** for additional information. However, if IQmanager® is installed on the computer that is to host the central database, then all of the necessary folders and files are established. It is not necessary to have IQmanager® running on the central database computer in order to provide access to the networked computers that are running IQmanager®; however, ensure that a SQL server is installed (Microsoft SQL Express is distributed with the IQmanager software) and the report folder is shared.
2. Make sure the drive that contains the central database and report folder is set up for shared read and write access to the report folder. To do this, open Windows Explorer on the central computer, right-click the designated report folder, and select **Sharing**. Verify or make appropriate changes. To save the changes, click **Apply**, and then click **OK**. Refer to the appropriate Microsoft operation manual for detailed instructions on using Windows.
3. Install IQmanager® on each computer that will access the central database. See ["Software Installation"](#). During installation, specify the central computer for the database name and the path to the report folder.

Creating a Central Peer-to-Peer Database

Note

The drive that will contain the central report folder must be configured for full sharing on the network.

Note

Installing IQmanager® may require that the computer be restarted.

If IQmanager® has been installed on the computer designated as the central database, the database folders and files are already established. (See ["Software Installation"](#) for complete instructions.)

If IQmanager® will not be installed on the central database computer, it is necessary to set up the required software and folders for the central database.

1. Create a folder on the central database computer for the report location and then share the location with the network while also setting the appropriate security. See *Configuring Peer-to-Peer Networks* for more information
2. Install and configure a SQL server. If IQmanager® is installed on the central database computer, then Microsoft® SQL Express will be installed as part of the default installation and will have the appropriate database tables created. If IQmanager® is not installed on the central database computer, the appropriate tables will be created when any of the computers on the LAN are configured with the central database location.

Setting Up the Peer-to-Peer Data Source

After installing IQmanager® on each network computer and establishing the central database (see steps 1 and 2 above), set up the data source for each computer. If the location was not specified during installation, follow these steps:

1. Open **IQmanager®**, the software should open directly to the **Data Management** tab on the **Settings** screen. If not follow the steps below to access the **Data Management** tab.
 - a. Select the **Settings** icon in the top right.
 - b. Select the **Data Management** tab
2. Set **Midmark SQL Server Name** and **Database Server** to the central database location. The **Midmark Database Name** is 'IQmanager' by default. The **Database Name** under **Report Management Settings** is 'IQmanagerReports' by default.
3. Click **Save**.

Note

When IQmanager® is started again, it will connect to the specific database

Working with Client/Server Networks

Refer to **Working with Peer-to-Peer Networks**, as the steps for setting up and configuring a client/server environment is now the same as deploying a peer to peer network environment.

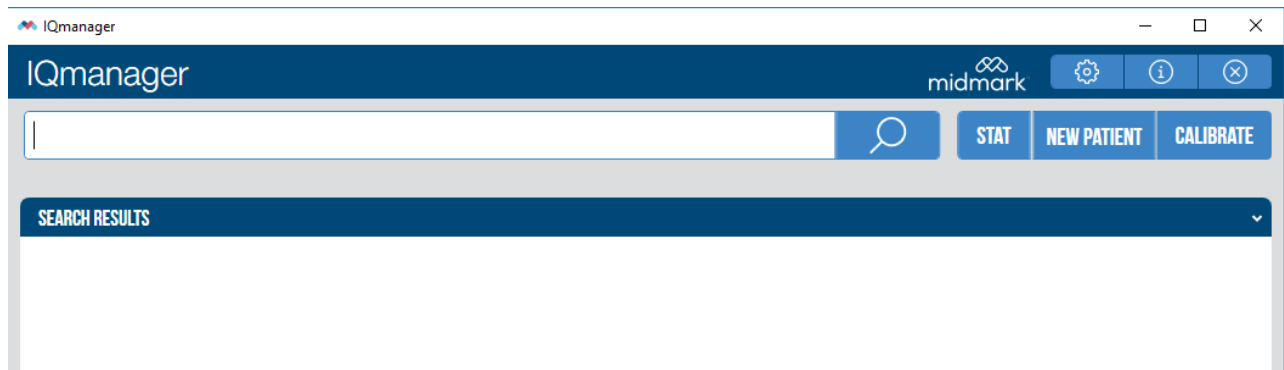
Operation

Introductory Notes

As a Windows-based application, many of the features in IQmanager® are interconnected and can be accessed from more than one screen. The top of each screen has a menu bar that lists other screens that may be accessed. To access any of these screens, click the appropriate button. This program is designed to be both user-friendly and flexible.

Opening Screen

When you start IQmanager®, the opening screen will appear.



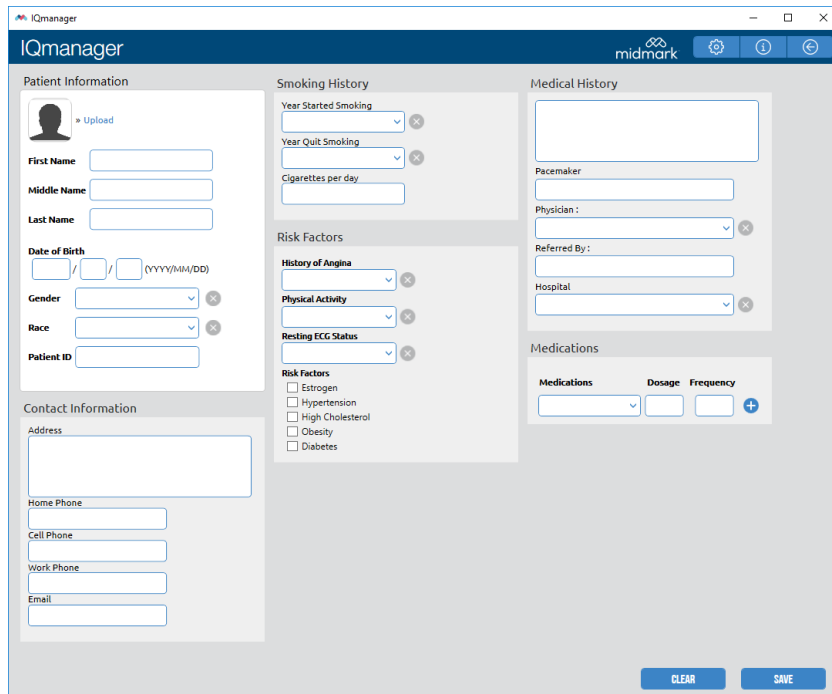
The following table explains each button on the opening screen.

Opening Screen Functions	
Button	Function
	Search for patients previously entered into the database; selecting a patient from the list allows access to edit, add, and delete data from that patient's records; and to view data from previous tests.
	Acquire any STAT test before entering patient demographics or selecting a patient.
	Register a New Patient . Refer to the appropriate device Operation Manual for a description of the patient details required for specific tests.
	Calibrate a Midmark device.

Opening Screen Functions	
Button	Function
	View patient details from a patient selected from the <i>Search Results</i> screen.
	Go directly to the test selection screen for the selected patient, bypassing the Patient Data screen.
	Enable users to configure the program to meet their needs. (See <i>Configuring IQmanager®</i> for more information.)
	Receive assistance regarding the use, operation, and troubleshooting of IQmanager® and other Midmark products.
	Exit the program and return to the Windows desktop.

Testing a New Patient

To create a new patient file, click the **New Patient** button on the *Opening* screen. This opens the *Patient Data Entry* screen, where you can enter the patient's specific data.



Note

A patient name and DOB must be entered. It is highly recommended to enter all information available, including an ID.

Click in any text box or press the Tab key on the computer keyboard to enter information and move from field to field. Some information may not be essential for every test performed; however, it is important to complete each of these fields as accurately as possible. Each diagnostic test has its own patient data requirements, which may affect the computer-generated interpretation of the test; it is important to refer to each device's Operation Manual when you are completing this screen.

The following table describes the Patient Data Fields.

Patient Data Fields		
Field	Diagnostic Role	Description
Patient Information		
First Name Middle Name Last Name	Required (except Middle Name)	Used for identification purposes. Letters and numbers may be used.
Date of Birth Format: MM/DD/YYYY	Required	Used for information and diagnostic purposes in ECG and Spirometry. IQmanager® uses this data to calculate the age of the patient. The format may be changed in the <i>Configuration Settings</i> .
Gender	Required for ECG and Spirometry	Used for identification and diagnostic purposes in ECG and Spirometry.
Race	Required for Spirometry	Used for information and diagnostic purposes in Spirometry. From the pull-down menu, select one of the following: Unspecified, Caucasian, Black, Asian, American Indian, Hispanic, African-American, or African-European. If the patient's race is not listed, not known, or the patient is of multiracial origin, select the race as identified by the patient.
ID #	Recommended	Used for identification purposes. Letters and numbers may be used.
Contact Information		
Address	(Contact Info drop-down)	Used for identification and/or contacting purposes. Letters and numbers may be used.
Home Phone		
Cell Phone		
Work Phone		
Email		

Patient Data Fields		
Field	Diagnostic Role	Description
Smoking History		
Year Start Smoking	Recommended for Spirometry (Smoking History drop-down)	For diagnostic purposes in Spirometry.
Year Quit Smoking		Enables the operator to enter the patient's smoking history.
Cigarette/Day		
Risk Factors		
History of Angina	(Risk Factors drop-down)	Used for informational and diagnostic purposes when interpreting test results. The information entered in this tab appears in the Patient Data Report.
Physical Activity		
Resting ECG Status		
- Hypertension - High Cholesterol - Obesity - Diabetes		
Medical History		
Pacemaker	(History drop-down)	Used for information purposes.
Physician		
Referred By		
Facility		
Medication(s)		
- Medications - Dosage - Frequency	Recommended for Resting ECG and Spirometry (Medications drop-down)	May be used as a diagnostic tool when you are interpreting test results.

Click **Save** to store the data entered or edited in the *New Patient* screen in the database.

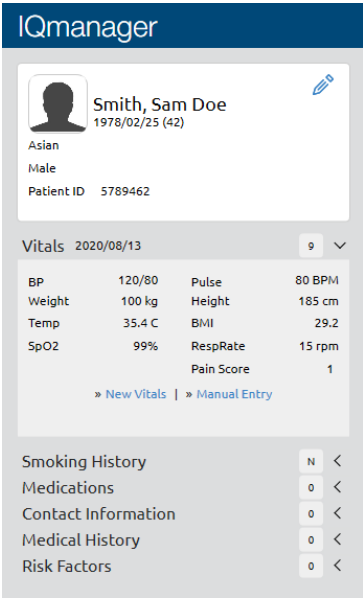
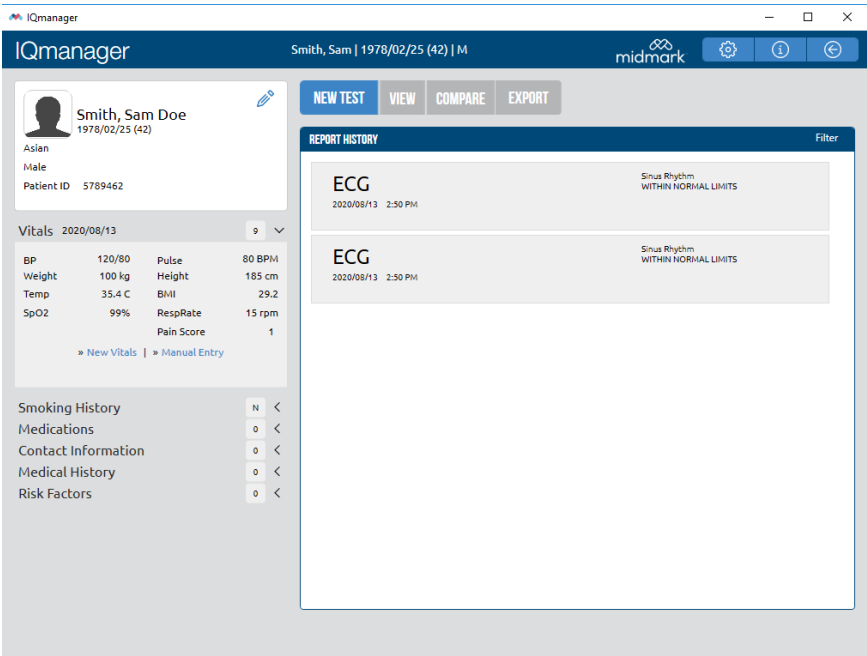
Click **Clear** to refresh the *New Patient* screen and remove all existing information that was entered or edited.

Click **Cancel** to exit the *New Patient* screen without saving any changes.

When you have completed entering information on the *Patient Data* screen, review all of the information to ensure that everything is accurate and up-to-date. Once you have confirmed the accuracy, proceed with a new patient test.

Patient Details Screen

The Patient details screen displays a summary report of the patient's data, showing the most recent information entered for the patient, including patient demographics, vital signs, history, medications, and a summary of the most recently performed diagnostic tests. The section explains each item on the Patient Details screen.



Edit Button

The **Edit** button is a pencil icon located in the upper-right corner of the *Patient details* screen. You can use the **Edit** button when you want to add or update patient data.



- 1. Click the **Edit** button. 
- 2. Click Upload to add or update a profile picture for the patient.
- 3. Click in a Patient Data field to enter or edit data.
- 4. Click **Save** to save the changes made, or click **Cancel** to discard the changes.

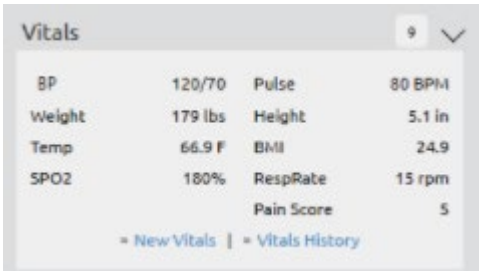
A screenshot of a form for entering or editing patient data. At the top left is a silhouette icon with a blue arrow and the text "Upload" next to it. Below this are input fields for "First Name" (containing "jack"), "Middle Name" (containing "k"), and "Last Name" (containing "shaw"). Below these is a "Date of Birth" section with three input boxes containing "5", "5", and "2001", followed by the text "(MM/DD/YYYY)". Below the date are dropdown menus for "Gender" (set to "Male") and "Race" (set to "American Indian"), each with a close button (X). At the bottom is an "ID #" field containing "2060". At the very bottom are two buttons: "Save" and "Cancel".

Note

Once a patient's data is entered, it cannot be edited without clicking **Edit**.

Vitals Drop-down

The *Vitals* drop-down provides a composite of the patient's most recent day of data. If no vital signs have been entered, the title of the control group title reads *Vitals* and "0" summary number. If vital signs have been previously entered, the control group title will display the date of last vitals update, and the summary number will display the number of vitals data points entered.



Note

BMI (Body Mass Index) cannot be entered manually. This is calculated when the patient's height and weight are entered. BMI = W/H² (Metric). The World Health Organization measures BMI over 25 to be overweight, and over 30 to be obese.

Click **New Vitals** to acquire new Vitals Signs from the IQvitals® device. Click **Manual Entry** to type the patient's vitals

The Vitals tab always displays coalesced vitals from the last day the vitals were acquired. Weight and Height are the only values that will be pulled from previous days if that information is missing in the newest vitals entry. When this occurs, IQmanager® will denote the day that the vitals were last entered by using asterisks (* and **).

Using a Weight Scale and Vital Signs Monitor Interface

If a digital scale is connected to the PC, you can automatically read the patient's weight by clicking **New Vitals** and selecting the correct device from the list.

Follow these steps:

1. Prior to performing the test, make sure that the weight scale is powered on and connected to the appropriate port.
2. a) For Midmark 625 Scale, the Midmark IQscale™ Control Panel will appear:
 - Press the **Zero Scale** button before the patient sits on the exam table.
 - Have the patient sit on the exam table.
 - Press the **Weight** button to acquire weight data.
 - Click the **Save** button to transfer the weight data into IQmanager®.b) For non-Midmark scales, the *Scale Control Panel* will appear.
3. Have the patient stand on the scale.
4. Click **OK** after the weight measurement has stabilized. The weight will be displayed in the weight field of the *Vital Signs* tab.

If you are using a vital signs monitor (IQvitals®), prior to accessing the acquisition screen, make sure that the IQvitals® or IQvitals® PC and the weight scale are operating and connected to the correct communication port. Select **New Vitals** then select the IQvitals® device from the list.

The IQvitals® device will acquire blood pressure, pulse, and temperature. Follow these steps:

- Place the blood pressure cuff on the patient.
- To start a blood pressure measurement, click the appropriate blood pressure inflation rate button on the device.
- Attach the SpO₂ on the patient's finger (**not** the same arm as the blood pressure cuff) and place the temperature probe in the patient's mouth.

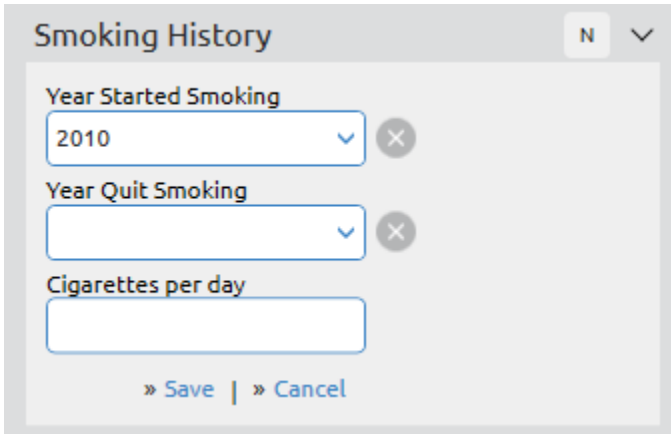
Refer to the *IQvitals®* or *IQvitals® PC Operation Manual* for additional information.

After all the readings are displayed on the screen, click **SAVE** to store this information in the patient's record.

Smoking History Drop-down

The *Smoking History* drop-down displays the patient's current smoking history. The summary window has the following options

- Y – yes, a smoker
- N - not a smoker
- 0 - no history on record



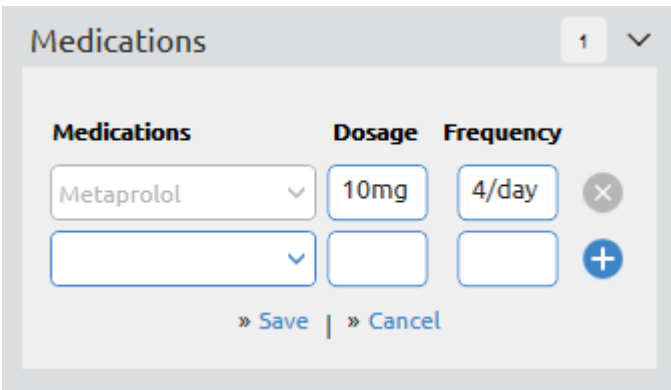
The **Smoking History** summary window features a title bar with a tab labeled 'N' and a dropdown arrow. The main content area contains three input fields: 'Year Started Smoking' (with '2010' selected), 'Year Quit Smoking' (empty), and 'Cigarettes per day' (empty). Each of the first two fields has a small 'X' button to its right. At the bottom, there are '» Save' and '» Cancel' buttons.

- Select the year the patient started smoking from the *Year Start Smoking* drop-down, or select *Not a Smoker*, if the patient is not a smoker.
- If the patient has quit smoking, select the year the patient quit from the *Year Quit Smoking* drop-down. If the patient has not quit smoking, select *Have Not Quit* from the drop-down.
- Enter the number of cigarettes the patient smokes per day in the *Cigarettes/Day* field.

Medications Drop-down

The *Medications* drop-down displays the current medications assigned to the patient. The summary windows include the following options:

- 0 - no history on record
- # - corresponding to the number of medication entries



The **Medications** summary window features a title bar with a tab labeled '1' and a dropdown arrow. The main content area has three columns: 'Medications', 'Dosage', and 'Frequency'. The first row contains 'Metaprolol' in the Medications column, '10mg' in the Dosage column, and '4/day' in the Frequency column. To the right of these fields are 'X' and '+' buttons. A second row contains empty input fields for each column. At the bottom, there are '» Save' and '» Cancel' buttons.

To add a medication, fill out the following three categories:

- **Medication:** Most standard medications can be selected from a drop-down menu. Unlisted medications can be added by entering the information in the *Medication List Management* section in IQmanager® Settings.
- **Dosage:** Enter the prescribed dosage the patient is taking in the *Dosage* text box.
- **Frequency:** Enter the number of times the dosage is taken in the *Frequency* text box.

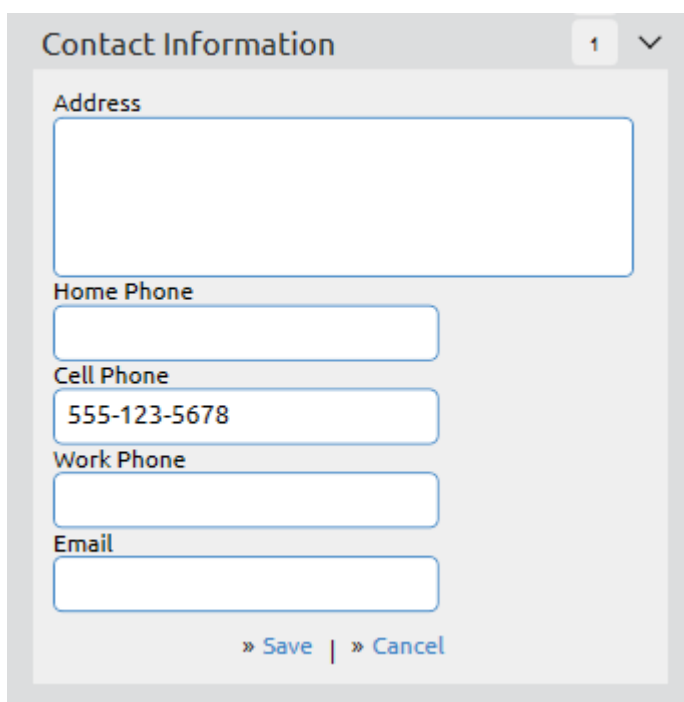
When you have entered the information about the first medication, click  to add the next medication.

To modify or delete the patient's medication data click .

Contact Information Drop-down

The *Contact Information* drop-down provides the patient's address, phone numbers, and email address. The summary window has the following options:

- 0 - no history on record
- # - corresponding to the number of contact entries (max: 5)

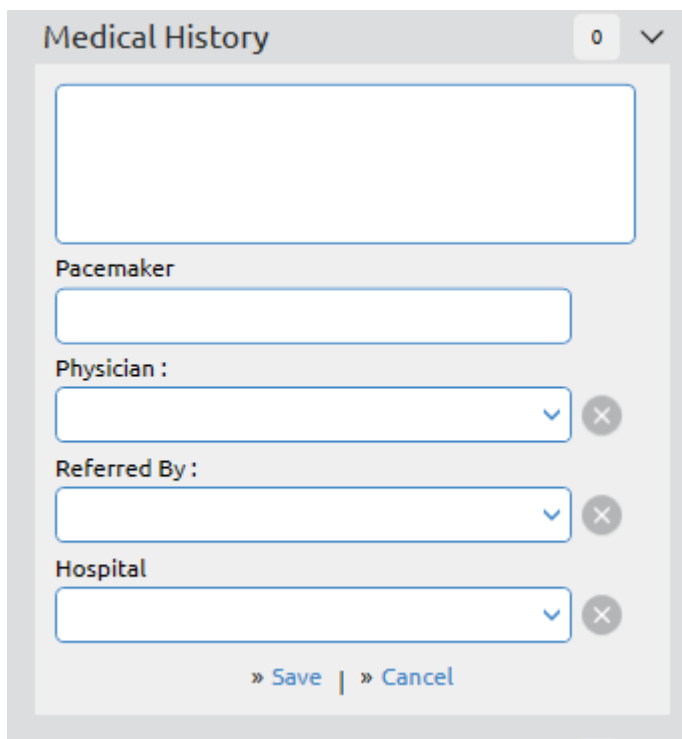


The image shows a screenshot of a 'Contact Information' form. The form has a title bar with the text 'Contact Information' and a small '1' icon with a dropdown arrow. The form contains several input fields: 'Address' (a large text area), 'Home Phone' (a text field), 'Cell Phone' (a text field containing '555-123-5678'), 'Work Phone' (a text field), and 'Email' (a text field). At the bottom of the form, there are two buttons: '» Save' and '» Cancel'.

Medical History Drop-down

Selecting the *Medical History* drop-down on the *Patient Details* screen enables the operator to select from a number of common conditions that may play a role in the physician's diagnosis. The summary window has the following options:

- 0 - no history on record
- # - corresponding to the number of history entries (max: 5)



The screenshot shows a window titled "Medical History" with a dropdown menu in the top right corner displaying "0" and a downward arrow. Below the title bar is a large text input field for medical history. Underneath this field are four labeled input fields: "Pacemaker", "Physician :", "Referred By :", and "Hospital". Each of these four fields is a dropdown menu with a downward arrow and a circular "X" button to its right. At the bottom of the window, there are two buttons: "» Save" and "» Cancel".

- Type any pertinent medical history in the *Medical History* text box.
- The *Medical History* drop-down contains additional fields to add descriptive information regarding the patient, including *Pacemaker*, *Physician*, *Referred By*, and *Hospital*. Each category uses the lists created in **List Management**.

The *Pacemaker* field in the *History* tab are informational only and do not affect the automatic ECG interpretation. If the patient has a pacemaker, enter a description of the pacemaker type in the *Pacemaker* text box.

Risk Factors Drop-down

The *Risk Factors* drop-down lists possible diagnostic factors for the physician's use, including *History of Angina*, *Physical Activity*, *Resting ECG Status*, *Hypertension*, *High Cholesterol*, *Obesity*, and *Diabetes*. Each category uses the lists created in **List Management**. The data is informational only, and will not affect the program's diagnostic results. The summary window has the following options:

- 0 - no history on record
- # - corresponding to the number of risk factors entered (max: 7)

The screenshot shows a window titled "Risk Factors" with a tab indicator showing "3" and a dropdown arrow. The window contains four sections:

- History of Angina**: A dropdown menu showing "None" with a clear button (X).
- Physical Activity**: A dropdown menu showing "Sedentary" with a clear button (X).
- Resting ECG Status**: An empty dropdown menu with a clear button (X).
- Risk Factors**: A list of checkboxes for "Hypertention", "High Cholesterol", "Obesity", and "Diabetes". "Hypertention" is checked.

At the bottom right, there are two buttons: "» Save" and "» Cancel".

Patient Details Screen, Button Bar

The buttons available at the top of the *Patient Details* screen offer a variety of functions.

If a button is grayed out, it is disabled. Active and disabled buttons change from screen to screen.

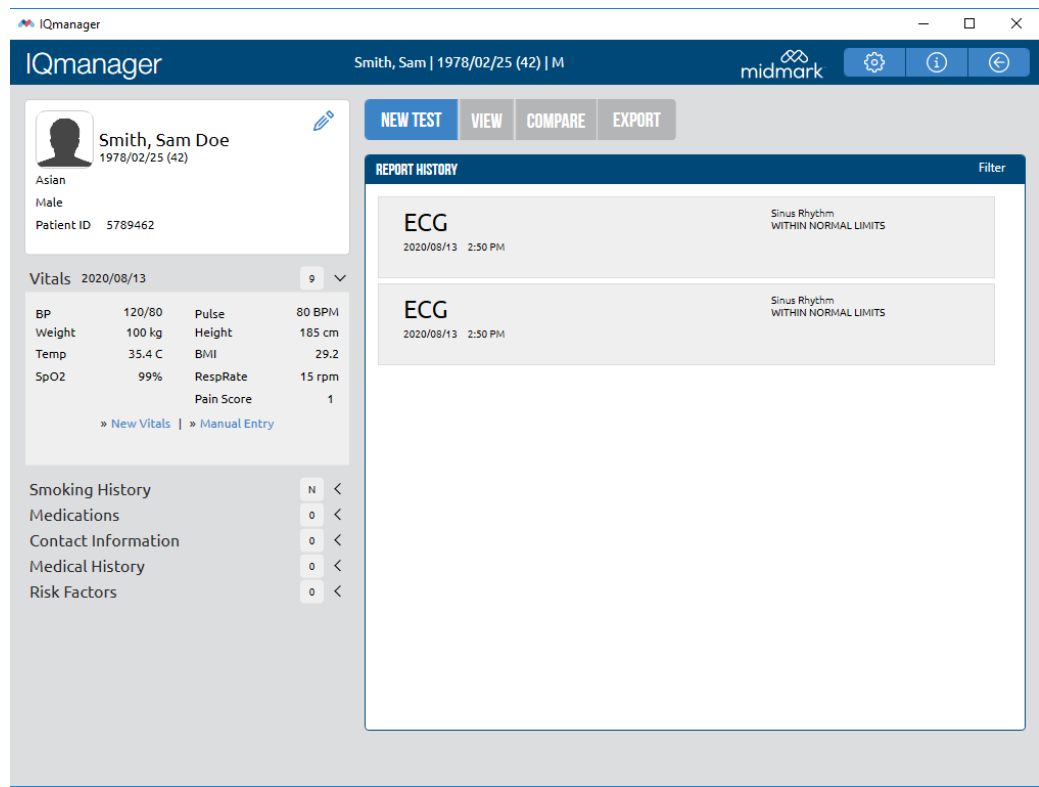
Patient Detail Screen Buttons	
Button Icon	Function(s)
	Opens the test selection screen. Note: Vitals is only available from the <i>Vitals</i> drop-down under New Vitals .
	Opens the selected report.
	Compares or shows trend for the selected reports. Use the Ctrl function on your keyboard to select multiple reports. Not all report types can be compared or trended.
	Exports the selected report as a Car file, PDF, or other file type, depending on what the device supports.

Note

In order to open and view the PDF reports, a PDF reader, like Adobe Acrobat Reader must be installed. If Acrobat Reader is not installed on the computer, visit: <http://www.adobe.com/downloads/>.

Reviewing Patient Reports

Patient reports can be managed effectively with IQmanager®. All reports for a specific patient are listed on the Patient Details screen.



IQmanager® will search for the patients by Last Name, First Name, DOB, type of test, date and time the test was done, the reviewed and signed status, and the interpretation.

Note

You can select multiple reports while displaying the Report List and Patient Data screens, by clicking the desired reports while holding down the **Control (Ctrl)** key.

Send Selected Reports by Email

You can send patient reports to another physician via email if the computer has Internet access and an email account.

Note

The email recipients must have IQmanager® installed on their PCs in order to view patient reports in CAR file formats, or Adobe PDF Reader to view reports in PDF formats.

To send a report by email:

1. Select the **file**.
2. Click **Export** and save the selected reports to a common location, as CAR files, or other supported format.
3. Access the location where the files are saved, and then attach the appropriate file to your email.

Receiving Reports through Email

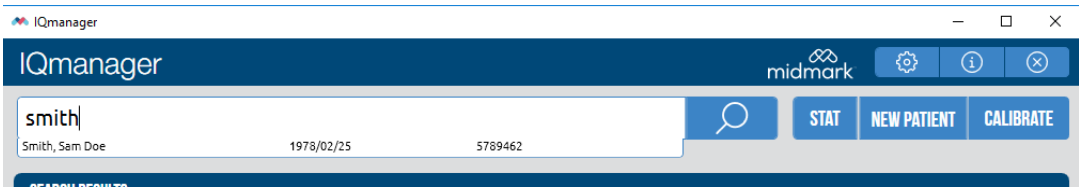
When you receive an email with a patient report attached, double-click the attachment or report icon to retrieve the report. When you are prompted to save or open the file, select **Open**. IQmanager® will start, display the report, and save it in the Report Review screen.

Note

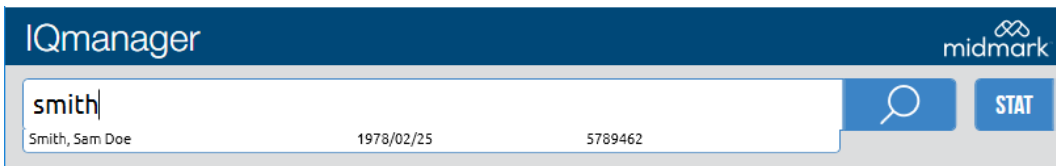
The format and operation of email depends on the Internet Service Provider (ISP) and the email service that are being used. Please refer to ISP's or email provider's Help guide for details.

Acquiring Vital Signs Data

1. To access the Vital Signs Data screen from the IQmanager® Opening Screen, click **New Patient** and fill in the required information. Skip to step 4 when finished.



2. To search for an existing patient. As you type, an auto complete box is displayed.



3. Your search results are displayed in the Search Results section. Click **View** to view the record, or click **Start Test** to begin the test. Click the **View** link.

SEARCH RESULTS			
Name	Date of Birth	Patient ID	
Smith, Sam Doe	1978/02/25	5789462	» View » Start Test

- This screen displays when you click **View** from the previous screen.
Note: Clicking on the window borders and dragging can resize the screens.

IQmanager Smith, Sam | 1978/02/25 (42) | M midmark

Smith, Sam Doe
1978/02/25 (42)
Asian
Male
Patient ID 5789462

Vitals 2020/08/13 9

BP	120/80	Pulse	80 BPM
Weight	100 kg	Height	185 cm
Temp	35.4 C	BMI	29.2
SpO2	99%	RespRate	15 rpm
		Pain Score	1

» New Vitals | » Manual Entry

Smoking History N <
Medications 0 <
Contact Information 0 <
Medical History 0 <
Risk Factors 0 <

REPORT HISTORY Filter

ECG
2020/08/13 2:50 PM
Sinus Rhythm
WITHIN NORMAL LIMITS

ECG
2020/08/13 2:50 PM
Sinus Rhythm
WITHIN NORMAL LIMITS

- From the *Patient Data* screen, below the Vitals section on the left, click **New Vitals** to acquire from the IQvitals or click **Manual Entry** to type in the vitals.

IQmanager

John D Smith
12/14/1982 (33)
Caucasian
Male
Patient ID 1234567890

Vitals 4/6/2016 9

BP	120/80	Pulse	80 BPM
Weight	200 lb	Height	72 in
Temp	95.7 F	BMI	27.1
SpO2	99%	RespRate	15 rpm
		Pain Score	1

» New Vitals | » Manual Entry

Smoking History N <
Medications 0 <
Contact Information 1 <
Medical History 0 <
Risk Factors 3 <

See [“Patient Details Screen, Button Bar”](#) for a complete explanation.

Appendices

Appendix A - Screen Summary

Screen Name	Screen Summary	Main Functions
Opening screen	Access the main functions of IQmanager®.	• Access <i>Search</i> screen • Access <i>Search Results</i> • Access <i>Report History</i> • Configure IQmanager® • Access <i>Help</i> • Exit to Windows desktop • Run a Stat test (if appropriate Midmark device)
Patient Details screen	Enter patient information including name, ID, medications, and smoking and medical history.	• Enter patient data • Edit data for an existing patient • Initiate a test for a patient • Access a previously saved test for review • Initiate a test for the patient • Select a report to view • Filter report list by test type, dates, and/or reports that have not been reviewed

Appendix B - Troubleshooting Guide

This *Troubleshooting Guide* provides a list of solutions or recommendations for situations that may be encountered with IQmanager®. Before calling Midmark Support Services, please refer to the following table for help. Error messages may be displayed at the center or at the bottom-right corner of the screen.

Note

For errors that occur during patient testing with a Midmark device, please refer to the Troubleshooting section in the corresponding device's Operation Manual (IQecg®, IQholter®, Midmark Digital Spirometer, or IQvitals®).

Error Message or Problem	Solution or Recommendation
Email recipient receives patient report as scrambled text.	The file format is associated with the incorrect program. • PDF files must be opened using Adobe Acrobat or Acrobat Reader. • CAR files must be opened with IQmanager®. • JPG files may be opened with any graphics application.
FAILED TO CREATE EMPTY DOCUMENT Message appears immediately after initial software installation and thereafter each attempt to start IQmanager®.	All Windows programs must be closed before installing IQmanager®. • Uninstall IQmanager® (See "Software Installation"). • Restart the computer. • Close and exit all Windows programs. • Reinstall IQmanager® (See "Software Installation").
THE [test] REPORT DATED [test date] FOR [patient name] IS IN USE BY [network computer name] or THIS PATIENT'S RECORD IS IN USE BY [network computer name] Message appears when trying to open a specific test report/patient data screen.	The <i>Report Locking</i> feature prevents more than one operator from accessing the same report at the same time, specifically in a LAN environment where different computers are sharing a central database. Report locking can also be caused by the user improperly exiting the patient report from any computer. • Close the test report or patient data screen by using Review Exit or Exit.
All other operational problems.	• Please refer to the online help by clicking Help • Troubleshooting for a device may be found in that device's Operation Manual • Contact Midmark Technical Service.

Appendix C – Licensing and Configuration

Note

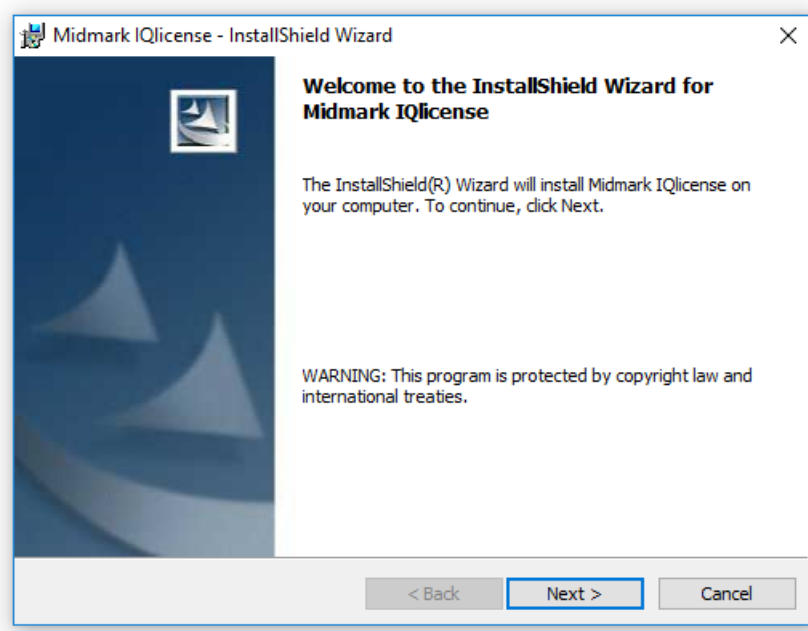
Skip to “Local License Activation and Configuration” if installing IQmanager standalone.

Installing Midmark IQlicense Server Software

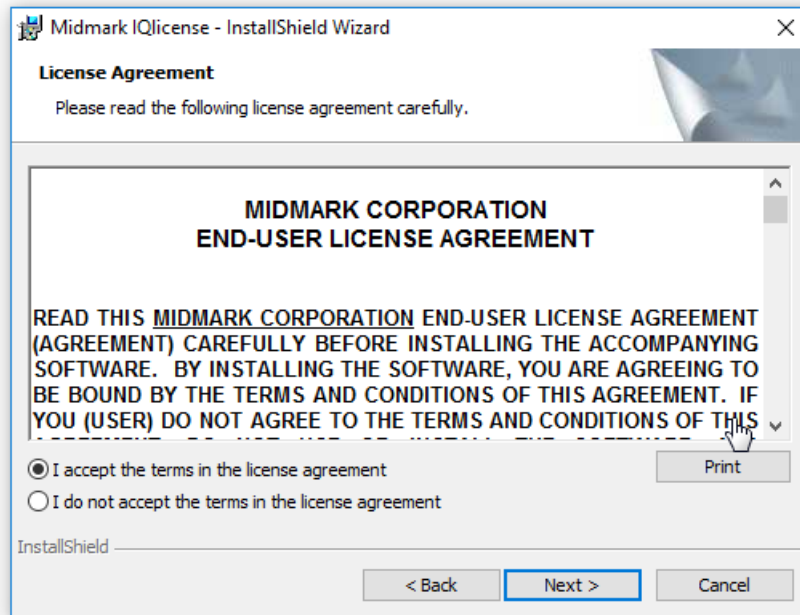
First, decide where to install the Midmark IQlicense server software. The Midmark IQlicense server can be installed on an existing workstation/server. The platform can be Windows® 11; or Windows® Server 2022 or 2025. The Midmark IQlicense server must have access to the Internet in order to activate the license file from MOS (Midmark Operation Server), and the server must be reachable from the workstation/server where you installed the IQmanager® software, it can even be the same computer.

Follow these steps:

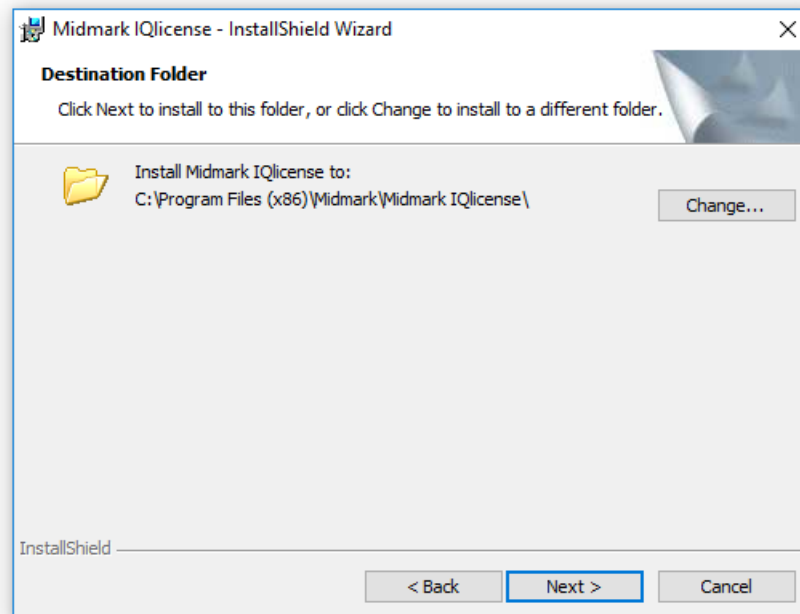
1. In the IQmanager Installation package, open the Server Software folder. Open the IQlicense folder.
2. Launch the setup file, and follow the on-screen prompts.
 - Click **Next** to begin the installation of the IQlicense® software.



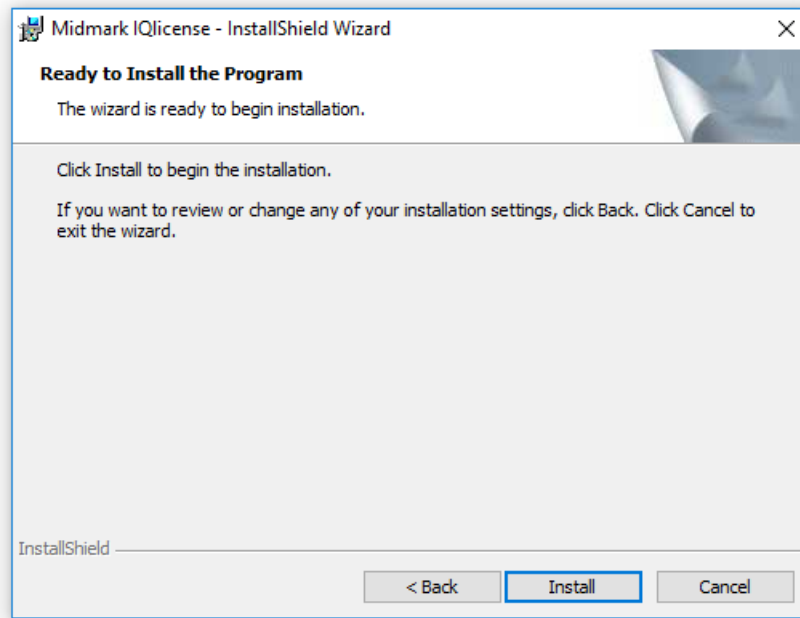
- At the license agreement window, select **I accept the terms in the license agreement** and click **Next** to continue with the installation.



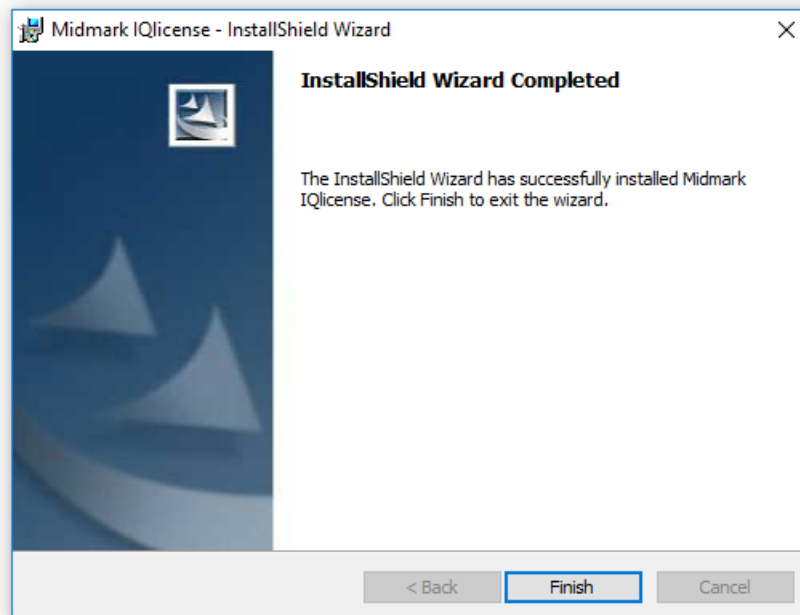
- If desired, click **Change...** to change installation directory and then click **Next** to continue with installation.



- Click **Install** to begin the IQlicense® software installation.

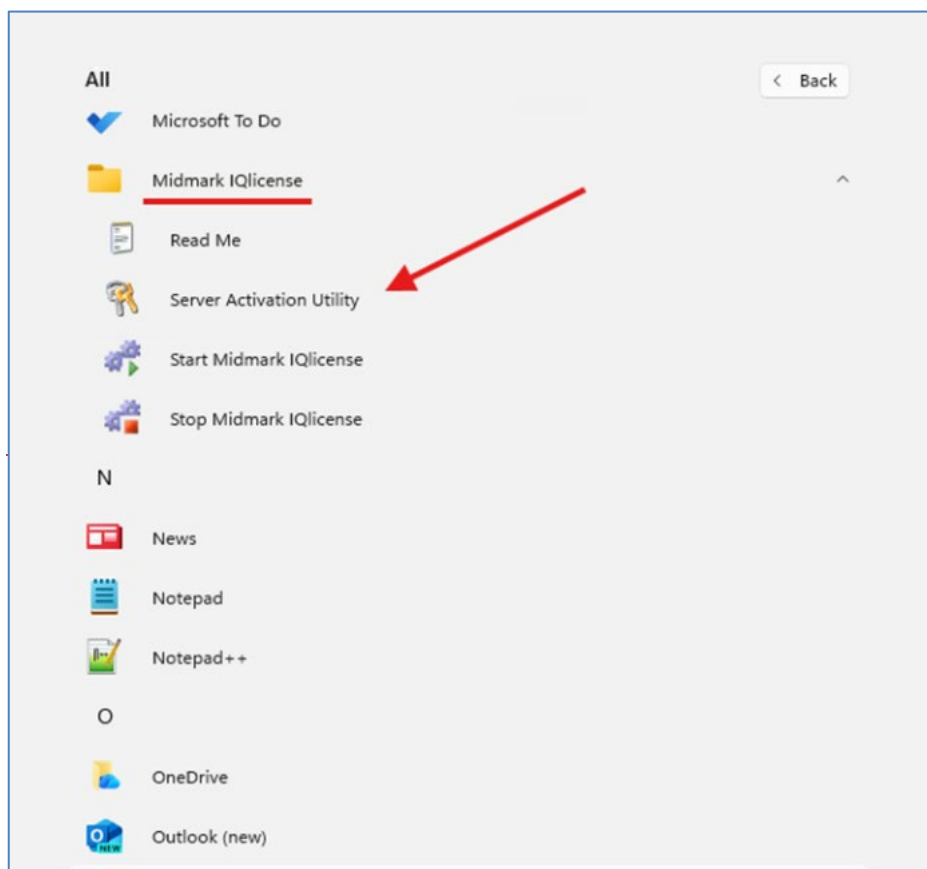


- The following window will appear indicating that the IQlicense® software has been successfully installed. Click **Finish** to complete installation.

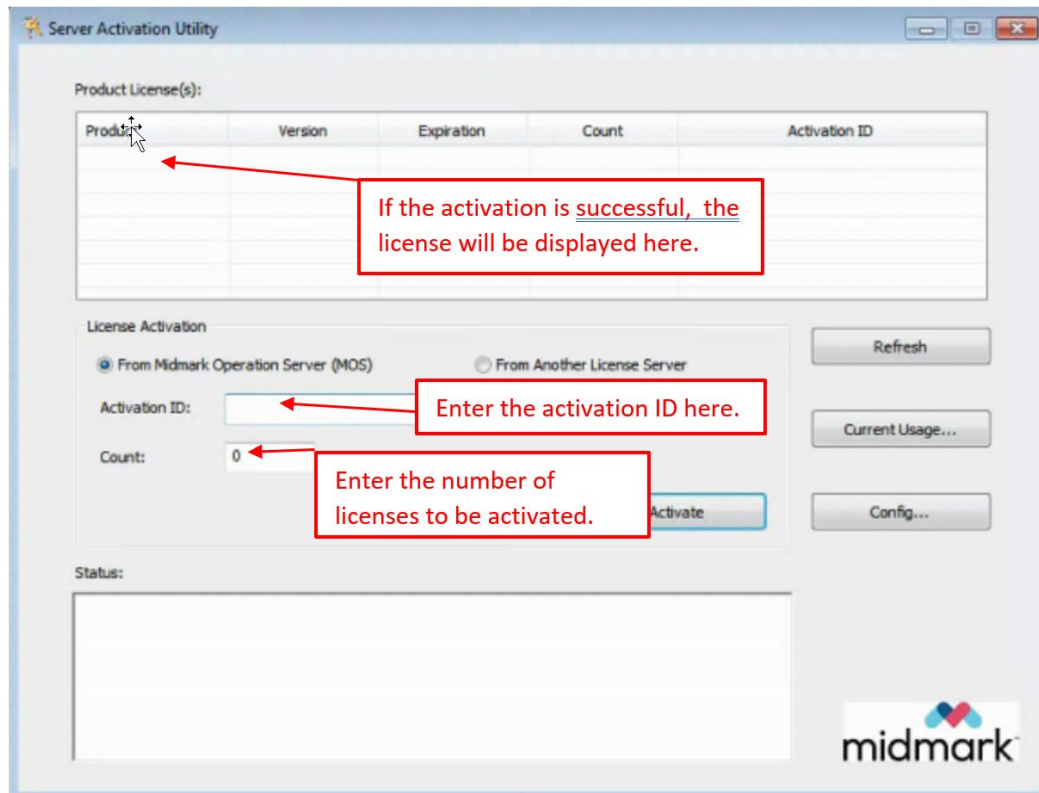


License Activation and configuration

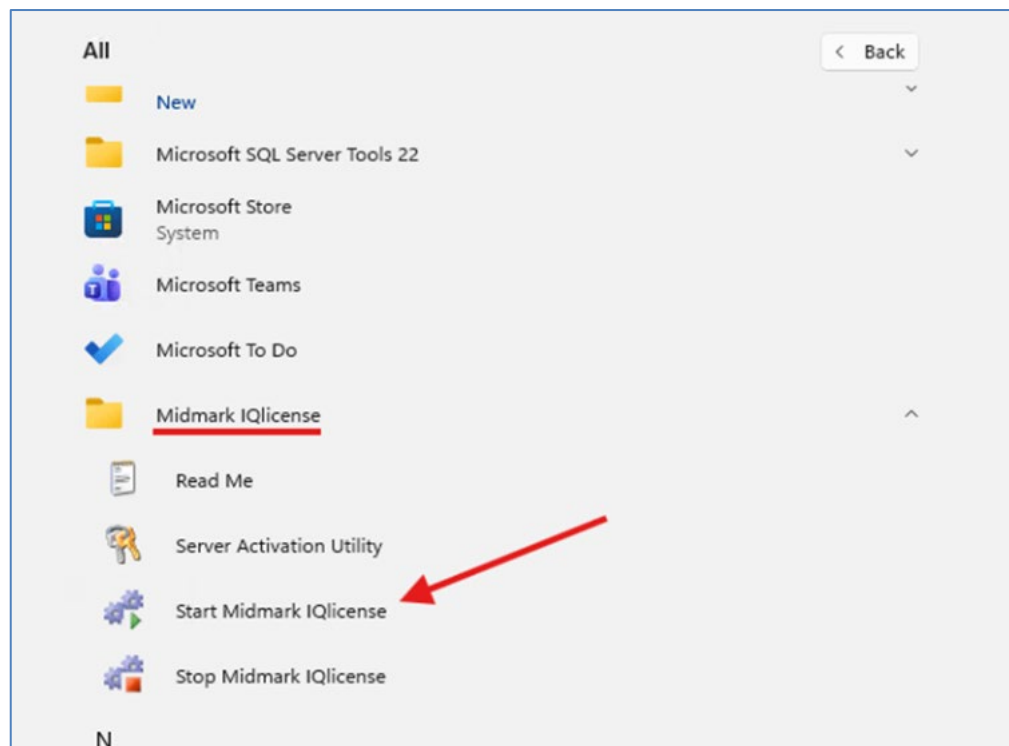
1. To activate the license, launch the **Server Activation Utility** from the Windows® **Start Menu** > **All** > **Midmark IQlicense Server** program group.

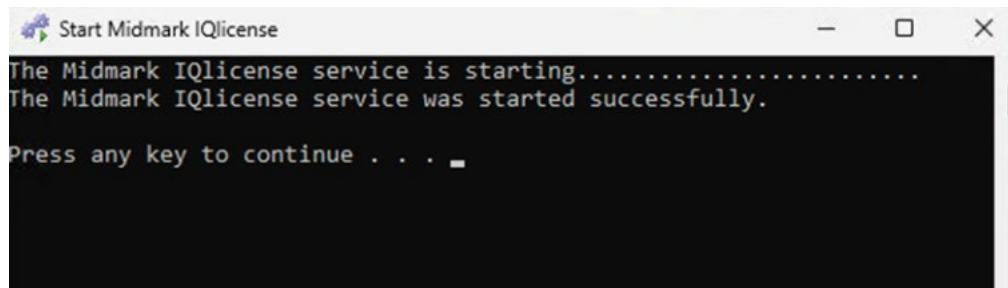


2. Once the **Server Activation Utility** is displayed, enter the **Activation ID**. Under "**Count**," enter the **number of licenses** that have been purchased, and then click the **Activate** button.

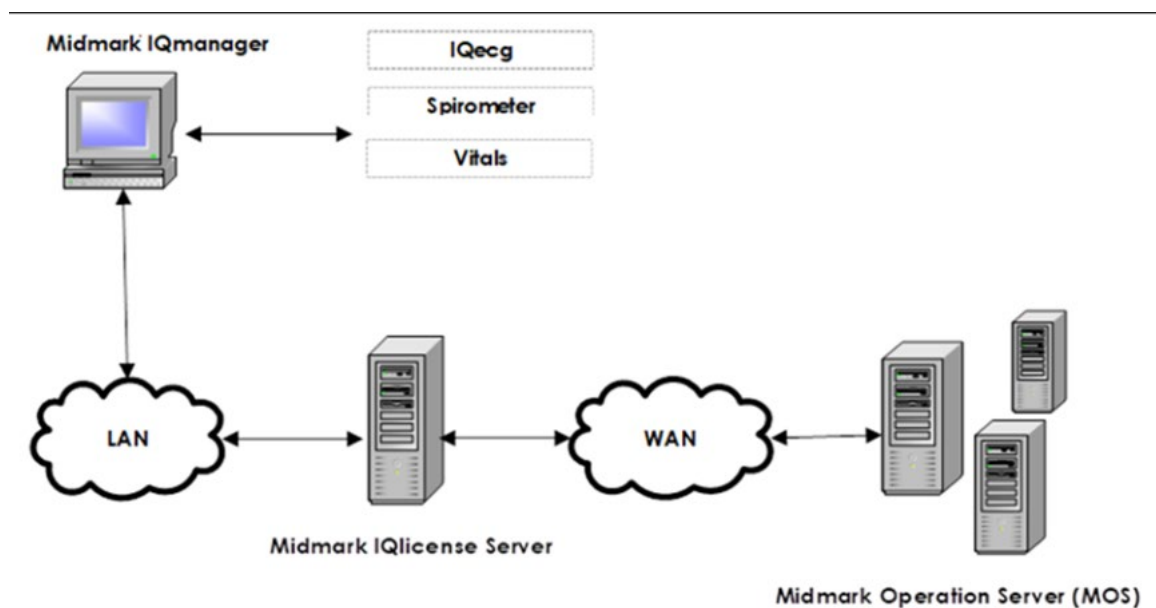


3. Navigate to **Programs** > Click **Midmark IQlicense**, then **right click Start Midmark IQlicense**, then click on **Run as Administrator**. The DOS prompt will state that the service has started successfully. **Press any key** to close the screen.



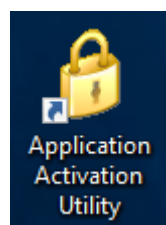


IQlicense® Technical Overview



Local License Activation and Configuration

1. To activate the license, launch the **Local License utility** from the below shortcut on the desktop.



2. Once the **Application Activation Utility** is displayed, enter the **Activation ID** and then click the **Activate** button.

The screenshot shows the 'Application Activation Utility' window. It features a table of product licenses, a license activation section with two radio buttons, and a status section. The 'From Midmark Operation Server (MOS)' option is selected. The 'Activate' button is highlighted with a blue border.

Product	Version	Expiration	Fulfillment ID
IQholter_Emergency	1.0	16-aug-2020	LOCAL_TRIAL_FID_3
IQspiro	1.0	26-Aug-2020	FID-1598378198-000
IQecg	1.0	26-Aug-2020	FID-1598378218-001
IQvitals	1.0	26-Aug-2020	FID-1598378302-002
IQholterEP	1.0	26-Aug-2020	FID-1598378645-003
IQholter_Edit	1.0	26-Aug-2020	FID-1598378670-004

License Activation

☒ From Midmark Operation Server (MOS) ☐ From A License Server

Activation ID:

Activate

Status:

midmark

3. The status of the activation key during activation process is displayed under status section. User shall be notified in case of Successful or unsuccessful activation.

This screenshot is identical to the previous one, but the 'Status' section is highlighted with a red rectangular border, indicating where the activation status will be displayed.

Product	Version	Expiration	Fulfillment ID
IQholter_Emergency	1.0	16-aug-2020	LOCAL_TRIAL_FID_3
IQspiro	1.0	26-Aug-2020	FID-1598378198-000
IQecg	1.0	26-Aug-2020	FID-1598378218-001
IQvitals	1.0	26-Aug-2020	FID-1598378302-002
IQholterEP	1.0	26-Aug-2020	FID-1598378645-003
IQholter_Edit	1.0	26-Aug-2020	FID-1598378670-004

License Activation

☒ From Midmark Operation Server (MOS) ☐ From A License Server

Activation ID:

Activate

Status:

midmark

Appendix D – Database Configuration

Network Database Configuration - IQmanager

1. Enable Shared Settings Mode

- Open the **IQinterface.exe.config** file with a text editor (i.e. notepad)
 - i. C:\Program Files (x86)\Midmark\IQmanager\IQinterface.exe.config
- Set the **SettingsRootFolder** value to the **network folder** where the settings are to be stored.
- Set the **UseSharedSettings** value to **true** within the **appSettings** subsection of the file.
 - i. Example Formatting:

```
<appSettings>
<add key="ConfigurationRootFolder" value=""/>
<add key="SettingsRootFolder" value="\\servername\settings\"/>
<add key="UseSharedSettings" value="true"/>
<add key="CARFileFolderSource"
value="..\MidmarkApps\IQInterface\Images\"/>
<add key="CARFileFolder" value="\\TOBUILDSYSTEM\Reports\"/>
<add key="GECentricityCARFileFolder" value="C:\temp\"/>
<add key="ClientSettingsProvider.ServiceUri" value=""/>
</appSettings>
```

2. Copy the **IQinterface.exe.config** file into all the machines which are going to be sharing the settings. Alternatively, open the **IQinterface.exe.config** file on each computer and manually change the settings values previously explained
3. Once this is done the database and report file location may have changed. On any computer that has the updated **IQinterface.exe.config** file, open **IQmanager**, go to **Settings** and ensure the database and report path are still correct.
- Ensure the correct **Midmark SQL Server Name** under **Database Settings** and **Database Server** under **Report Management Settings**.

Note

Ensure this location is accessible by all client computers.

The screenshot shows the IQmanager Settings window. The top navigation bar includes 'IQmanager', 'Settings', and the 'midmark' logo. Below the navigation bar are tabs for 'IQMANAGER', 'DATA MANAGEMENT', 'LIST MANAGEMENT', 'DEVICES', and 'UPDATES'. The 'DATABASE SETTINGS' section is highlighted with a red box and contains the following fields: 'Midmark SQL Server Name' (DESKTOP\SQLEXPRESS), 'Midmark Database Name' (IQmanager), 'Use Windows Authentication' (checked), 'Database Username' (empty), and 'Database Password' (empty). A 'TEST DB CONNECTION' button is located to the right of these fields. The 'REPORT MANAGEMENT SETTINGS' section is also highlighted with a red box and contains the following fields: 'Database Server' (DESKTOP\SQLEXPRESS), 'Database Name' (IQmanagerReports), 'Use Window Authentication' (checked), 'Database Username' (empty), 'Database Password' (empty), and 'Save Report Location' (C:\Reports\IQmanager\MidmarkReports\MidmarkReports). A 'TEST DB CONNECTION' button is to the right of the first two fields, and a 'BROWSE' button is to the right of the 'Save Report Location' field. At the bottom of the window are 'HELP', 'SAVE', and 'CANCEL' buttons.

- Ensure the **Report Management Settings** has a network share file path for **Save Report Location** (.CAR files).

Note

Ensure this location is accessible by all client computers.

This screenshot is identical to the one above, showing the IQmanager Settings window. The 'DATABASE SETTINGS' and 'REPORT MANAGEMENT SETTINGS' sections are visible. In this view, the 'Save Report Location' field in the 'REPORT MANAGEMENT SETTINGS' section is highlighted with a red box, showing the path 'C:\Reports\IQmanager\MidmarkReports\MidmarkReports'. The 'BROWSE' button is located to the right of this field. The rest of the interface, including the navigation bar and other settings, remains the same.

Warranty Information

For help diagnosing problems with this product by phone or email contact [Midmark Support Services](#).

Self-help knowledge base and live chat can be accessed at: kb.midmark.com.

Warranty

Midmark warrants to the original retail purchaser that it will repair or replace software contained within the Midmark brand products manufactured by Midmark for a period of 12 months. Midmark does not warrant that the software: (1) is error free; (2) can be used without problems or interruptions; or (3) is free from vulnerability to intrusion or attack by viruses or other methods.

Please refer to midmark.com for the full and current Warranty Terms and Conditions.

Return Materials Authorization

To return any product for repair, a Return Materials Authorization (RMA) number must be obtained from Midmark Support Services. This RMA number should be referenced on the package(s) containing the items to be returned and in any correspondence regarding the return.

Shipping

Before shipping any unit to Midmark, be certain that an RMA number has been issued and that all guidelines regarding this authorization are followed. We highly recommend following all guidelines for the shipment of medical products set forth by the shipping company used. If a question should arise regarding the appropriate method of shipment, please feel free to ask when calling for an RMA number. It is ultimately the responsibility of the customer when shipping a product to ensure that all packages and their contents get to Midmark safely. Midmark will not assume responsibility for damage due to improper packaging, shipment or product use. Such actions will void all applicable warranties.

Contact Information

Technical Support is available Monday through Friday (except holidays), 5:00AM to 5:00PM Pacific Standard Time.

Midmark Corporation
60 Vista Drive
Versailles, OH 45380 USA
Email: techsupport@midmark.com
T: 844.856.1230, option 2
midmark.com

Midmark Corporation

60 Vista Drive

Versailles, OH 45380 USA

T: 844.856.1230, option 2

