# **QX Manager Software**

**Installation Guide** 



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## **Revision History**

| Document   | Date              | Description of Change  |  |
|--|-------------------|--|--|
| QX Manager Software Installation Guide<br>Software version 2.2<br>DIR No. 1000158585, Ver C  | May<br>2024       | Add firmware installation requirement for the QX600 Droplet Reader   |  |
| QX Manager Software Installation Guide<br>Software Version 2.1<br>DIR No. 10000158585, Ver B | October<br>2023   | <ul> <li>Update computer requirements</li> <li>Add sections on Windows Update settings and Power settings</li> <li>Rename File Exclusion List to Antivirus Settings</li> <li>Update topics on adding local accounts and adding the first user to add clarity</li> <li>Add Troubleshooting section and two subsections</li> </ul> |  |
| QX Manager Software Installation Guide<br>Software Version 2.0<br>DIR No. 10000158585, Ver A | September<br>2022 | Create new installation guide for QX Manager, v2.0 (standard and premium editions)   |  |

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## Chapter 1 Installation Overview

This installation guide explains how to install QX Manager Software, Standard Edition or Premium Edition, on the computer that will connect to the QX200™ Droplet Reader or QX600™ Droplet Reader. If your organization uses both editions, you can install them on the same computer, but only one edition can be open at a time.

This guide assumes you are installing v2.0 or later.

Important: Before you begin the installation, if the default language on the computer on which QX Manager Software will be installed is not English, you must ensure the Users profile is included in Windows Local Groups or the installation might fail. For information, see Appendix A, Troubleshooting.

If you are installing Standard Edition, then you must choose whether or not to enable the User Management module during the installation, as follows:

- If you do enable User Management, all user functions are included in the installation and you are prompted to add the first user.
- If you do not enable User Management, then the corresponding tab does not appear in the left panel and a generic user, with a small subset of user preferences, is automatically added and logged into the software. The password requirement is also disabled, so all users can access the QX Manager functionality with the same generic user ID.

If you are installing Premium Edition, you are prompted to add the first user automatically. Premium Edition is designed to align with regulatory requirements, so each user must log in with an individual user name and password.

For information on all QX Manager Software functions, see the user guide for the instrument and software edition you are installing.

Chapter 1 Installation Overview

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## Chapter 2 Installation Prerequisites

Before you begin the installation, ensure the following prerequisites are met:

The computer on which the software will be installed must meet the minimum requirements specified in Computer Requirements on page 10.

You can use a company computer or purchase a laptop from Bio-Rad.

- As the installer, you must log into the computer as an administrator.
- You must know the name of the local computer or network domain.
  - If you don't already know the domain name and user name, see Finding Network or Computer Names and User Names on page 16.
- If you are installing Premium Edition, or Standard Edition with the User Management module included, all users must have either a network domain user account or a local user account set up on the computer that will connect to the instrument.
  - To create local user accounts, see Creating Local Windows User Accounts on page 18.
  - Note: If you are installing Standard Edition without enabling User Management, a single generic user is automatically created during the installation.
- If you are installing Standard Edition, you must have a registered Bio-Rad user account to log into the Bio-Rad website and download the software.
  - If you have not created your user account, go to http://www.bio-rad.com and click the Log In/Register link at the top of the page. Follow the prompts to create your Bio-Rad user account.
- If you are installing Premium Edition, you must have the USB drive containing the installation files (Catalog No. 12018108).
- You must exclude certain folder paths in your anti-virus software and external tools, or the applications can block QX Manager Software from running. For information, see Anti-virus Settings on page 15. For assistance, contact your system administrator.

For QX600 instruments, you must install firmware version 1.5 (or later) on the instrument before you can install and connect version 2.2 of QX Manager Software (or later).

#### To check the firmware version for compatibility

- a. Open QX Manager Software.
- b. From the left pane, select the Help (?) tab to display the software information window.
- c. To display a table containing all system specifications, including the firmware version, click the link containing the current name and version of the software (for example, QX Manager Standard Edition Version 2.2.0.67).

## **Computer Requirements**

To accommodate the software and a library of experiments performed in your lab, the computer on which QX Manager Software will be installed must meet the requirements specified in Table 1.

**Table 1. Computer requirements** 

| System<br>Component | Minimum                               | Recommended                            |
|---------------------|---------------------------------------|--|
| Operating system    | Windows 10 64-bit                     | Windows 10 64-bit<br>Windows 11 64-bit |
| CPU                 | 6th generation Intel 2 core processor | 8th generation Intel 4 core processor  |
| Hard disk space     | 500 GB                                | 1 TB                                   |
| System memory       | 8 GB                                  | 32 GB                                  |
| Display resolution  | 1920 x 1080 (scaling at 100%)         | 1920 x 1080 (scaling at 100%)          |
| Ports               | 1 USB                                 | 1 USB                                  |

## **Changing Windows Update Settings**

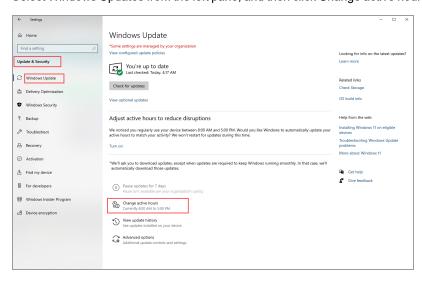
To improve security and the performance of your computer, Windows 10 and Windows 11 automatically download and apply critical system updates. To ensure the updates do not interfere with experiments you are running, you must set active hours to cover the entire period when the ddPCR system is typically in use. During active hours, Windows does not automatically install updates or restart the computer.

#### To verify or change your active hours settings

- 1. Click the Windows icon in the lower-left corner and then click the Settings icon.
- Click Update & Security.



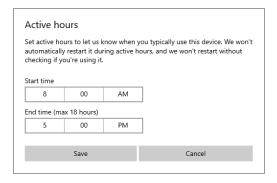
Select Windows Updates from the left pane, and then click Change active hours.



4. If the specified time range is incorrect, click Change.



5. In the Active Hours dialog, enter the start time and end time, up to a maximum of 18 hours.



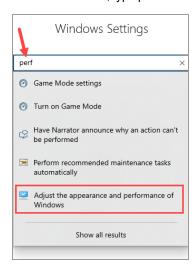
- 6. Click Save.
- 7. Close the Settings windows.

## **Power and Sleep Settings**

To prioritize system performance over energy consumption, Bio-Rad recommends configuring the computer to use the high performance power settings.

#### To change performance settings

- 1. Click the Windows Settings icon.
- In the Search field, type perf.



3. In the Performance Options dialog, select Adjust for best performance and click OK.



To help ensure the computer is operating in an optimal condition during PCR runs, you should also configure Windows to never go to sleep.

#### To change the sleep setting

1. Click the Windows Settings icon and then click System.



2. In the left pane, click Power & Sleep.



3. Under Sleep, click each dropdown arrow and select Never.



## **Anti-virus Settings**

This section contains the directory paths that you must add to the exclusion list for the anti-virus software.

Important: QX Manager has been successfully validated with Windows Defender, an anti-virus application that is a built-in component of Windows 10 and Windows 11. You can install the anti-virus application of your choice, but you must add all QX Manager Software-related folders to the exclusion list or the tools can block QX Manager Software from running. For assistance, contact your system administrator.

#### **Application Installation Path**

C:\Program Files\Bio-Rad\QXMgrStandard C:\Program Files\Bio-Rad\QXMgrPremium

#### Application Public Data Folder Path

C:\Users\Public\PublicDocuments\Bio-Rad\QXMgrStandard C:\Users\Public\PublicDocuments\Bio-Rad\QXMgrPremium

#### **Executable Paths**

#### QX Manager Software, Standard Edition

- C:\ProgramFiles\Bio-Rad\QXMgrStandard\QXMgrStandard.exe (main application executable)
- C:\ProgramFiles\Bio-Rad\QXMgrStandard\WinSCP.exe (new executable required for QX600)
- C:\ProgramFiles\Bio-Rad\QXMgrStandard\7za.exe
- C:\ProgramFiles\Bio-Rad\QXMgrStandard\GeneStudy\7za.exe
- C:\ProgramFiles\Bio-Rad\QXMgrStandard\GeneStudy\Applications.DdpcrExtractor.exe
- C:\ProgramFiles\Bio-Rad\QXMgrStandard\GeneStudy\BioRadGeneStudy.exe

#### QX Manager Software, Premium Edition

- C:\ProgramFiles\Bio-Rad\QXMgrPremium\QXMgrPremium.exe (main application executable)
- C:\ProgramFiles\Bio-Rad\QXMgrPremium\WinSCP.exe (new executable needed for QX600)
- C:\ProgramFiles\Bio-Rad\QXMgrPremium\7za.exe
- C:\ProgramFiles\Bio-Rad\ QXMgrPremium\GeneStudy\7za.exe
- C:\ProgramFiles\Bio-Rad\QXMgrPremium\GeneStudy\Applications.DdpcrExtractor.exe
- C:\ProgramFiles\Bio-Rad\QXMgrPremium\GeneStudy\BioRadGeneStudy.exe

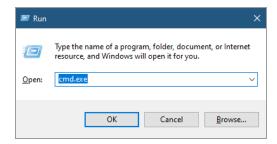
## **Finding Network or Computer Names and User Names**

Before beginning the installation and adding the first user (if User Management will be enabled), you must know either the network domain name and your network user name or the local computer name.

Important: You must log in as an administrator on the local computer.

#### To find the network domain name and network user name

- 1. Press and hold the Windows key, and then press the R key.
- 2. After the Run prompt appears in the lower-left corner, type cmd.exe in the Open field.



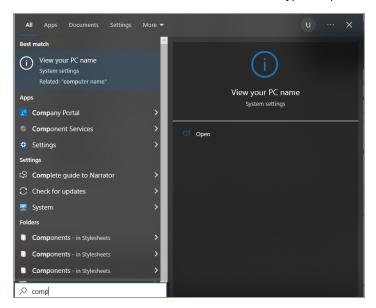
3. When the command prompt appears, type whoami at the command prompt.

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.19044.3448]
(c) Microsoft Corporation. All rights reserved.
C:\whoami
<network name>\<network user name>
C:\\
```

Windows returns the network domain name, followed by your network user name.

#### To determine the local computer name

1. In the Windows search field in the lower-left corner, type comp, and then click View your PC Name.



The About window appears and the computer name is displayed as the Device name.



## **Creating Local Windows User Accounts**

You can set up QX Manager Software users with local Windows user accounts or your organization's network user accounts.

If you will use local Windows accounts to set up users in QX Manager Software, you must create them on the computer that will connect to your QX200 Droplet Reader or QX600 Droplet Reader. Before you begin the installation, complete the instructions in this section.

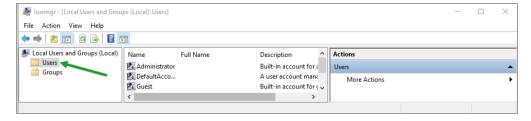
**Note:** Local accounts must comply with the conventions and policies established by your company.

If you will use network user accounts, no preliminary setup is necessary. You can add users, including the first user, immediately in QX Manager Software. If necessary, contact your system administrator for the domain information and user names or see Adding the First User on page 24 for information on locating domain, computer, and user names.

#### To create a local Windows user account

- 1. Log into the local computer with an administrative account.
- 2. On the Windows desktop, type Local User in the Search field, and then press Enter.

The Local Users and Groups window appears.





3. Right-click on the Users folder and select New User to display the New User dialog.

- 4. Complete the following substeps:
  - a. In the User Name field, enter a user name.
  - b. (Optional) Enter the full name and user description in the corresponding fields.

For example, you can use the description field to further identify specific user access or to explain different permission levels that will be assigned in the application.

- Enter a password in the Password and Confirm Password fields.
- If the password is intended to be temporary, ensure the User must change password at next logon checkbox is enabled and click Create.
- Repeat to create each user account.

Chapter 2 Installation Prerequisites

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## Chapter 3 Installation and Verification

This section explains how to install the software, add the first user, and then verify the software installation.

## **Installing the Software**

This guide assumes you are installing QX Manager Software, version 2.0 or later. Continue to the applicable section to install Standard Edition or Premium Edition.

Note: If your organization uses both editions, you can install them on the same computer, but only one edition can be open at a time.

### Installing Standard Edition

#### To download and install Standard Edition

- Enter http://www.bio-rad.com into your browser.
- Enter QX Software into the Search field and click the search icon.
- 3. When the search results appear, click QX Software to open the corresponding page.
- Scroll to the Download section and under QX Manager Software Standard Edition, locate the current version and click Log in to download software.
- 5. Log into the website with your Bio-Rad username and password.
- 6. In the Software Download window, select the I agree with the compliance requirements checkbox, and then click Download.
  - A zip file is downloaded and appears in the Downloads folder. The download process can take a few minutes.
- 7. Open the Downloads folder on the computer and select the QXManagerStandard\_v<x.x> zip file.
- 8. Right-click the file and choose Extract All. Optionally, you can navigate to a destination folder; otherwise, the files are automatically extracted to a folder in Downloads.
- 9. Select the Show extracted files when complete checkbox and click Extract.
- 10. Locate the QXMgrStandard\_<x.x>\_Setup.exe file.

- 11. Double-click the file and follow the prompts in the Installation Wizard.
- 12. As the sequential windows appear, install the default settings.
- 13. When the User Management dialog appears, do one of the following:
  - To bypass the User Management module, ensure the Enable User Management checkbox is cleared and click Continue.



A prompt appears, asking you to confirm. Click Yes to proceed.



QX Manager Software automatically sets up a generic user. When the installation concludes, click Finish.

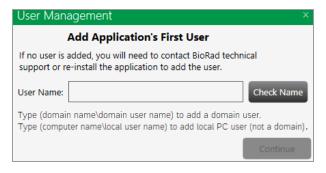
■ To install the User Management module, ensure the Enable User Management checkbox is selected and then follow the process in Adding the First User on page 24. You cannot click Continue until the user is validated.



### **Installing Premium Edition**

#### To install Premium Edition

- Copy the zip file from the product USB drive (PN# 12018108) to your Downloads folder.
- Open the Downloads folder on the computer and select the QXManagerPremium v<x.x> zip file.
- 3. Right-click the file and choose Extract All. Optionally, you can navigate to a destination folder; otherwise, the files are automatically extracted to a folder in Downloads.
- Select the Show extracted files when complete checkbox and click Extract.
- Locate the QXMgrPremium\_<x.x>\_Setup.exe file.
- Double-click the file and follow the prompts in the Installation Wizard. As the sequential windows appear, install the default settings.
- 7. When the User Management dialog appears, follow the process in Adding the First User on page 24. You cannot click Continue until the user is validated.



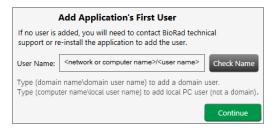
## **Adding the First User**

If you enabled User Management as part of the Standard Edition installation, or if you are installing Premium Edition, you must add the first user as part of the installation.

**Important:** QX Manager users must already be set up as either local users on the computer or as network users, and you must know the network name or local computer name.

#### To add the first user

- 1. In the User Name field on the right, do one of the following:
  - If the computer is connected to a network and you are using network accounts, enter the user in the following format:
    - <network domain name>/<network user name>.
  - If you set up users with local Windows user accounts, enter the user in the following format:
    - local computer name>/<local user name>.



**Important:** The names must match exactly or an error appears.

2. Click Check Name.

When the software recognizes the network domain or computer name and the user name, a validation message appears and the Continue button is enabled.

3. Click Continue to finish the installation, and then click Finish.

For information on user privileges and preferences, see the most recent version of the applicable user guide, as follows:

- QX200 Droplet Reader and QX Manager Software, Standard Edition
- QX200 Droplet Reader and QX Manager Software, Premium Edition
- QX600 Droplet Reader and QX Manager Software, Standard Edition
- QX600 Droplet Reader and QX Manager Software, Premium Edition

## **Verifying the Software Installation**

To verify that QX Manager Software installed properly and is ready to run experiments, complete the steps in the following sections.

### **Connecting the Instrument**

#### To connect and start the instrument

- 1. Connect the USB cable provided by Bio-Rad to the USB port on the back of the QX200 or QX600 Droplet Reader, and then to the computer.
- 2. Press the Power button on the instrument.
  - The Power indicator light turns solid green to indicate that power is on.
- 3. Turn on the connected computer and log in with the account set up for the first user.

### **Logging Into the Software**

4. Enter the user name in the following format:

#### <computer or domain name\user name>



- 5. Enter the password and click Sign in.
- Ensure the Do not show EULA on sign-in checkbox is selected and tap I Agree.



When you agree to the EULA, the dialog closes and the application opens to the Instrument window in System Settings.

### **Selecting the Instrument**

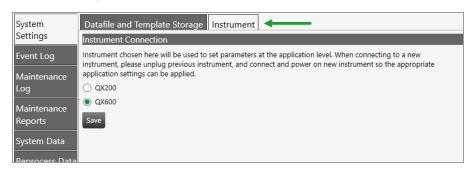
The first time you log into the software, the Instrument window appears automatically and you must select the instrument you are using. For complete information on your instrument and software edition, see the most recent version of the applicable user guide, as follows:

- QX200 Droplet Reader and QX Manager Software, Standard Edition
- QX200 Droplet Reader and QX Manager Software, Premium Edition
- QX600 Droplet Reader and QX Manager Software, Standard Edition
- QX600 Droplet Reader and QX Manager Software, Premium Edition

#### To select the instrument

► Select QX200 or QX600.

**Note:** If you are using the QX200 Droplet Reader, you can also select a droplet volume. See the applicable user guide for information.



When the software recognizes the connected instrument, the status bar includes the instrument information.

## Appendix A Troubleshooting

## **Creating the Windows Users Profile**

If you plan to install QX Manager Software on a computer on which the default language is not English, the installation might fail due to a missing Users profile in local Groups. Complete the following steps to create the Users profile.

#### To create the Users profile

- In the Windows Search field, enter Computer Management.
- 2. Select Local Users and Groups, then double-click Groups.
- Determine whether the Users profile is missing from the list; if so, continue to step 4.
- In the left panel, right-click Groups and select New Group.
- For Group Name, enter Users, and then click Create.
- Restart the computer and then install QX Manager Software.

## **Reinstalling the Software**

#### To perform a clean reinstallation of the software

- 1. Back up all data you want to preserve.
- Click the Windows icon in the lower-left corner and select Apps in the Windows Settings window.
- Scroll to and select QX Manager Software, and then click Uninstall.
- 4. After the software is uninstalled, navigate to
  - C:\Program Files\Bio-Rad and delete the folder for your QX Manager edition
  - C:\Program Data\Bio-Rad and delete the .folder for your QX Manager edition
- Run the QX Manager installation executable file to reinstall the software.

Appendix A Troubleshooting



Bio-Rad Laboratories, Inc.

Life Science Group Website bio-rad.com USA 1 800 424 6723 Australia 61 2 9914 2800 Austria 00 800 00 24 67 23 Belgium 00 800 00 24 67 23 Brazil 4003 0399
Canada 1 905 364 3435 China 86 21 6169 8500 Czech Republic 00 800 00 24 67 23 Denmark 00 800 00 24 67 23 Finland 00 800 00 24 67 23
France 00 800 00 24 67 23 Germany 00 800 00 24 67 23 Hong Kong 852 2789 3300 Hungary 00 800 00 24 67 23 India 91 124 4029300 Israel 0 3 9636050
Italy 00 800 00 24 67 23 Japan 81 3 6381 7000 Korea 82 808 0007 7373 Luxembourg 00 800 00 24 67 23 Mexico 52 555 488 7670
The Netherlands 00 800 00 24 67 23 New Zealand 64 9 415 2280 Norway 00 800 00 24 67 23 Poland 00 800 00 24 67 23 Portugal 00 800 00 24 67 23
Russian Federation 00 800 00 24 67 23 Singapore 65 6415 3188 South Africa 00 800 00 24 67 23 Spain 00 800 00 24 67 23 Sweden 00 800 00 24 67 23
Switzerland 00 800 00 24 67 23 Taiwan 886 2 2578 7189 Thailand 66 2 651 8311 United Arab Emirates 36 1 459 6150 United Kingdom 00 800 00 24 67 23

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