

May 2018

Rotor-Gene[®] Q Installation Guide

For use with Rotor-Gene Q Software
version 2.3.4 or above

Revision 2



QIAGEN Sample and Assay Technologies

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Contents

Product Warranty and Satisfaction Guarantee	4
Technical Assistance	4
Introduction	5
About this installation guide	5
Configuration for Windows 7 security	5
Unpacking the Rotor-Gene Q	7
Hardware Installation	9
Installing Rotor-Gene Q Software	9
Connecting the Laptop/Computer to the Rotor-Gene Q	11
USB connection for Microsoft® Windows 7 and Windows 10	11
RS-232 connection for Microsoft Windows 7 and Windows 10	13
Launching Rotor-Gene Q Software	13
Additional Software on Computers Connected to Rotor-Gene Q Instruments	15
Anti-Virus scanners	15
System tools	19
Operating system updates	20

Product Warranty and Satisfaction Guarantee

QIAGEN guarantees the performance of all products in the manner described in our product literature. The purchaser must determine the suitability of the product for its particular use. Should any product fail to perform satisfactorily due to any reason other than misuse, QIAGEN will replace it free of charge or refund the purchase price. We reserve the right to change, alter, or modify any product to enhance its performance and design. If a QIAGEN® product does not meet your expectations, simply call your local Technical Service Department or distributor. We will credit your account or exchange the product — as you wish. Separate conditions apply to QIAGEN scientific instruments, service products, and to products shipped on dry ice. Please inquire for more information.

A copy of QIAGEN terms and conditions can be obtained on request, and is also provided on the back of our invoices. If you have questions about product specifications or performance, please call QIAGEN Technical Services or your local distributor (see back cover or visit www.qiagen.com).

Technical Assistance

At QIAGEN, we pride ourselves on the quality and availability of our technical support. Our Technical Service Departments are staffed by experienced scientists with extensive practical and theoretical expertise in sample and assay technologies and the use of QIAGEN products. If you have any questions or experience any difficulties regarding Rotor-Gene Q instruments or QIAGEN products in general, please do not hesitate to contact us.

QIAGEN customers are a major source of information regarding advanced or specialized uses of our products. This information is helpful to other scientists as well as to the researchers at QIAGEN. We therefore encourage you to contact us if you have any suggestions about product performance or new applications and techniques.

For technical assistance and more information, please see our Technical Support Center at www.qiagen.com/Support or call one of the QIAGEN Technical Service Departments or local distributors (see back cover or visit www.qiagen.com).

Introduction

About this installation guide

This installation guide describes how to set up Rotor-Gene Q instruments before first use.

Note: The term Rotor-Gene Q used in this installation guide applies to all Rotor-Gene Q and Rotor-Gene Q MDx instruments (not available in all countries) unless otherwise described.

Note: Before using Rotor-Gene Q instruments, make sure to read the user manual provided with your instrument and pay particular attention to the safety information.

Information about Rotor-Gene Q instruments is provided in the following sections:

- Unpacking the Rotor-Gene Q
- Hardware Installation
- Installing Rotor-Gene Q Software
- Connecting the Laptop/Computer to the Rotor-Gene Q
- Launching Rotor-Gene Q Software

Configuration for Windows 7 security

The laptop computers that are provided by QIAGEN for use with your Rotor-Gene Q MDx instrument have Microsoft Windows 7 pre-installed and are configured with a standard (non-administrative) Windows user account and with an administrator account. In routine usage of the system, the standard account shall be used, since Rotor-Gene Q software and the Rotor-Gene AssayManager version 1.0 or 2.1 are designed to run without administrator rights. The administrator account shall only be used to install the Rotor-Gene Q or the Rotor-Gene AssayManager version 1.0 or 2.1 software and a virus scanner (please see chapter for anti-virus software). Using the administrator account is indicated by a red desktop background. Please make sure that you always log-in as standard-user for routine use.

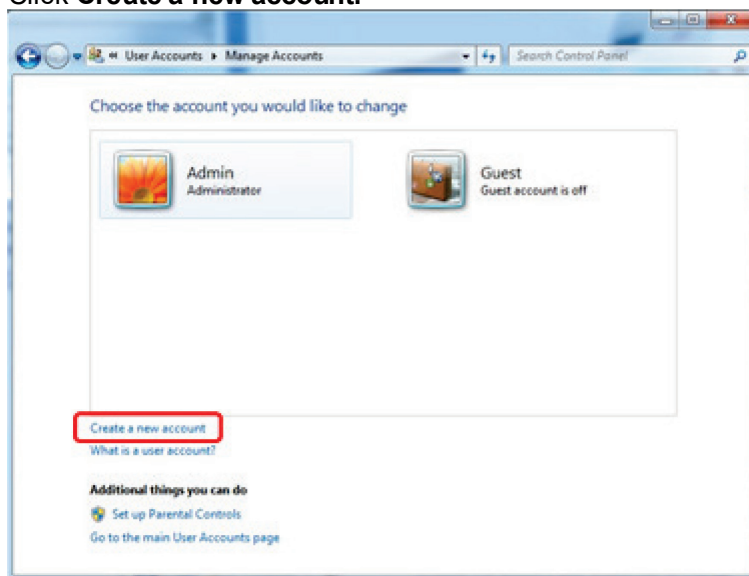
The default password of the administrator account is as follows: **Q1a#g3n!A6**. Please change the administrator password after first login. Please make sure that the password is secure and does not get lost. There is no password for the operator account.

If the laptop Administrator password is lost then we would advise you to contact Microsoft® for support.

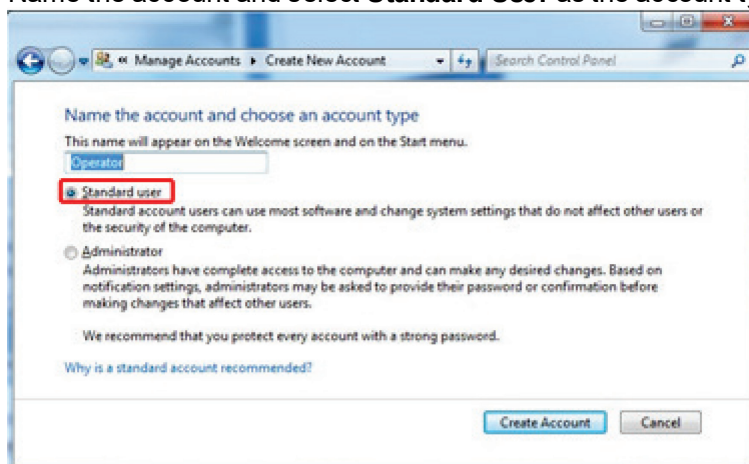
If your configuration is different and no non-administrative account is contained, system administrators shall setup an additional standard Windows user account to prevent access to critical system areas, such as "Program Files", "Windows" directory (e.g. access to installation or uninstallation functionality, including applications, operating system components, date/time settings, Windows updates, firewall, user rights & roles, anti-virus activation), or performance relevant settings like power saving.

To create a standard user account in Windows 7, please follow these steps described in section "Creating a new user account".

1. Open the Windows control panel via the **Start** menu and select **User Accounts/Manage Accounts**.
2. Click **Create a new account**.



3. Name the account and select **Standard User** as the account type.



4. Click **Create Account**

Unpacking the Rotor-Gene Q

The Rotor-Gene Q is delivered with all necessary accessories for instrument setup and for performing a run. A list of accessories is provided in the Rotor-Gene Q box.

Note: Check the items on this list to ensure that all accessories are present.

Note: Check that the instrument and delivered accessories are free from transport damage before installation.

The accessories box is on top of the foam packing. The accessories box contains:

- *Rotor-Gene Q Installation Guide*
- CD (software)
- CD (user manuals)
- Loading Block 96 x 0.2 ml Tubes
- Loading Block 72 x 0.1 ml Tubes
- Rotor Holder (dismantled for safe transport)
- 36-Well Rotor (this rotor is red in color)
- 36-Well Rotor Locking Ring

The following items are packed on each side of the foam packing:

- USB and RS-232 serial cable
- International power cable set
- PCR Tubes, 0.2 ml (1000)
- Strip Tubes and Caps, 0.1 ml (1000)

When you have removed these accessories from the box, remove the foam packing on top of the Rotor-Gene Q. Carefully remove the Rotor-Gene Q from the box and unwrap the plastic cover. Open the lid by sliding it toward the back to access the reaction chamber.

The following items are already installed inside the Rotor-Gene Q:

- 72-Well Rotor (this rotor is blue in color)
- 72-Well Rotor Locking Ring

A laptop computer may be included in the packaging, depending on your order details.

Once you have unpacked the Rotor-Gene Q, proceed with instrument hardware installation, as described on the next page.

Hardware Installation

Note: When the Rotor-Gene Q is started immediately after delivery in cold climates, mechanical parts can block. Allow the instrument to acclimatize to room temperature for at least one hour before turning the instrument on.

1. **Place the Rotor-Gene Q on a level surface that is vibration free.**

Note: Ensure that there is sufficient space behind the instrument for the lid to open fully.

Note: Ensure that the power switch at the back of the instrument can be easily reached.

Note: Do not obstruct the back of the instrument. Ensure that the power cord can be easily detached if required, to disconnect power to the instrument.

2. **Install Rotor-Gene Q software.**

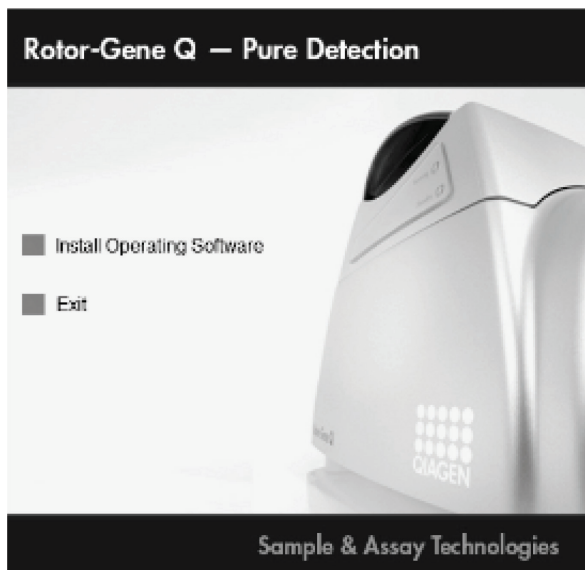
Connect the computer/laptop and instrument as described below.

Installing Rotor-Gene Q Software

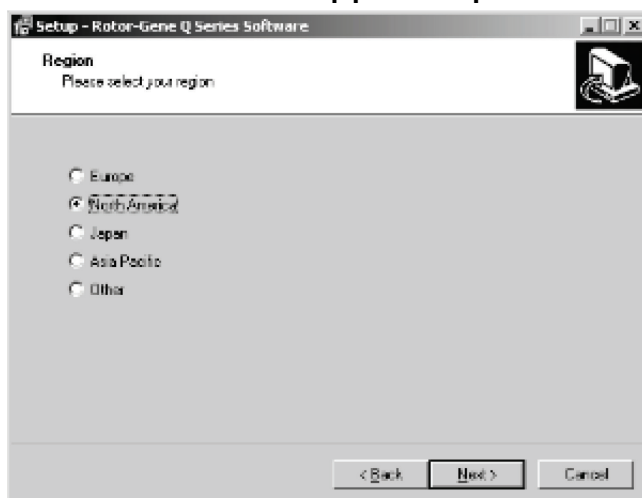
The Rotor-Gene Q can be connected to a computer either via a USB interface (recommended) or via an RS-232 serial interface depending on the specifications of your computer. Rotor-Gene Q software should be installed as described below before connecting the computer/laptop to the Rotor-Gene Q.

The Rotor-Gene Q software can be downloaded from the QIAGEN website and transferred to Virus free removable storage (USB storage) and then transferred to the computer connected to the Rotor-Gene Q.

1. **Insert the Installation CD or removable storage into the computer. The software should launch automatically if using the CD-ROM. If it does not, browse to the CD-ROM in Windows Explorer and double-click "autorun.hta". If using another form of removable storage, navigate to the device using Windows explorer and double-click the Rotor-Gene Q '.exe' file.**
2. **Install the Rotor-Gene Q software by clicking "Install Operating Software" in the window that appears.**



3. Click "Next", then select "I accept the agreement" in the license agreement step, and click "Next" again.
4. In the "Region" window, select the region that will be used by the software to direct support requests to the right location.



5. Select the destination location where the Rotor-Gene Q software should be installed. For convenience, simply accept the suggested destination folder by clicking "Next".
6. In the "Select components" window you can select "Standard Installation" or "Force authentication through Windows domain" (advanced users only) via a drop-down list. Select "Force authentication through Windows domain" (advanced users only) if you want to use the advanced security features (see the "Security Menu" section of the user manual for more details). With this selection, the checkbox "Security & User Management" is automatically activated. Then click "Next".
7. The setup wizard will now install the Rotor-Gene Q software. If the following message appears, click "Continue Anyway".



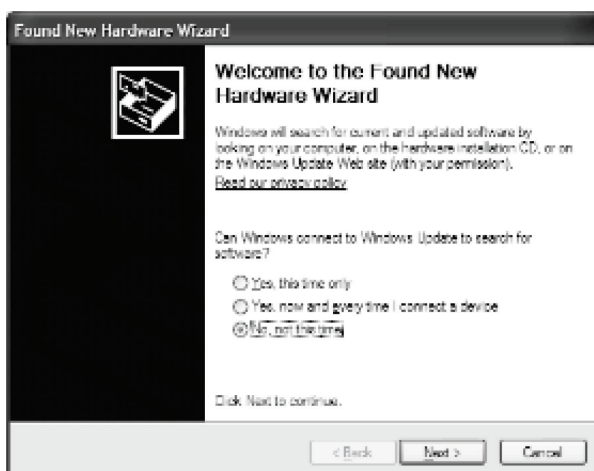
8. After installation is completed, close the setup wizard by clicking "Finish".

Connecting the Laptop/Computer to the Rotor-Gene Q

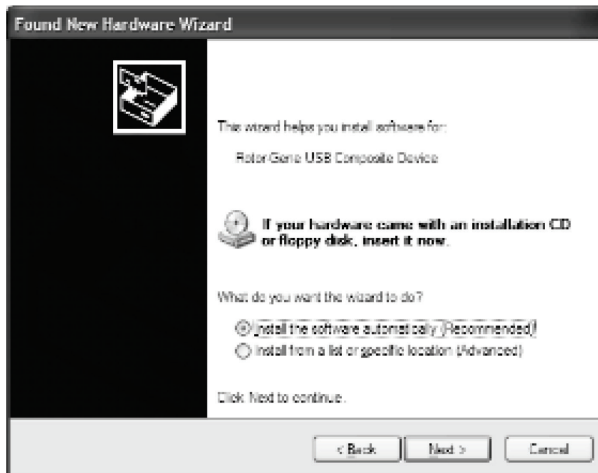
USB connection for Microsoft® Windows 7 and Windows 10

We recommend connecting your computer via the USB port. Make sure that the connected computer fulfills the technical requirements that are provided in the user manual supplied with your Rotor-Gene Q instrument.

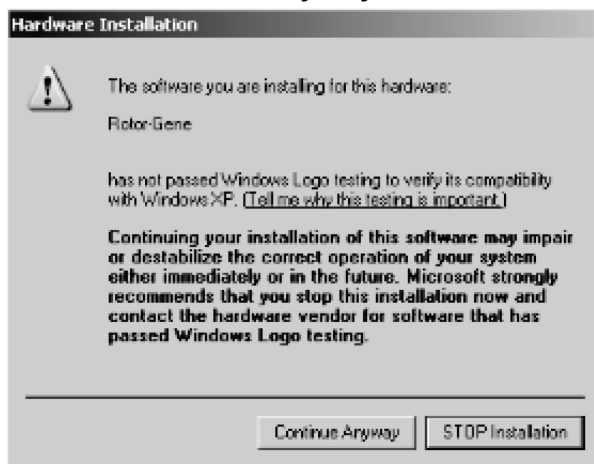
1. Connect the USB cable provided to a USB port at the back of the computer. Connect the USB cable to the back of the Rotor-Gene Q. Then connect the Rotor-Gene Q to the power supply.
2. Switch on the Rotor-Gene Q.
3. The following window appears. Select "No, not this time" and then click "Next".



4. Select "Install the software automatically (Recommended)" and then click "Next".



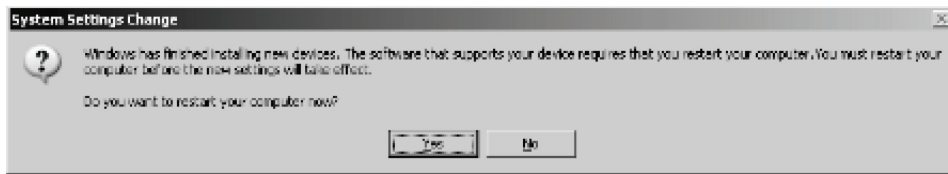
5. Click "Continue Anyway".



6. Click "Finish".



7. Click “Yes” to restart the computer.



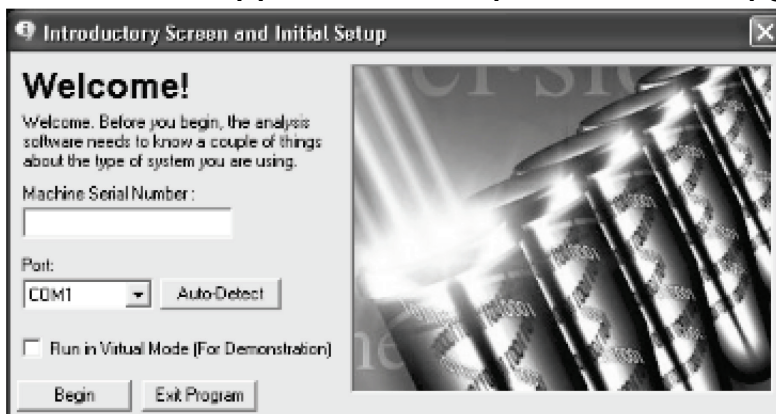
8. After the computer has restarted, log in again and launch the Rotor-Gene Q software as described below.

RS-232 connection for Microsoft Windows 7 and Windows 10

1. Connect the RS-232 serial cable provided to the serial port of your computer. Connect the RS-232 serial cable to the back of the Rotor-Gene Q. Then connect the Rotor-Gene Q to the power supply.
2. Switch on the Rotor-Gene Q.
3. Start the Rotor-Gene Q software as described in “Launching Rotor-Gene Q Software”, page 13.

Launching Rotor-Gene Q Software

1. Double-click the “Rotor-Gene Q Series software” desktop icon to launch the software. A message may appear with information. Click “Yes” to view a list of the latest changes or “No” to continue with the Rotor-Gene Q installation.
2. A “Welcome” window appears the first time the software is launched, but does not appear for subsequent software upgrades.



3. Enter the serial number using numerical digits only (e.g., 0110123). You can find the serial number on the type plate located at the back of the instrument.
4. Click “Auto-Detect”. The corresponding USB or serial port will be detected and shown in the “Port” drop-down list.

5. Click “Begin” to work with the software.

Additional Software on Computers Connected to Rotor-Gene Q Instruments

Rotor-Gene Q software manages time-critical processes during the PCR run and the data acquisition process. For this reason, it is important to ensure that no other processes use significant system resources and thus slow down the Rotor-Gene Q software. It is particularly important to pay attention to the points listed below.

System administrators are advised to consider any impact that a modification to the system may have on the resources before implementing it.

Anti-Virus scanners

QIAGEN is aware of the threat that computer viruses cause to any computer that exchanges data with other computers. Rotor-Gene AssayManager version 1.0 and 2.1 software is expected to be primarily installed in environments where local policies are in place to minimize this threat. However, QIAGEN recommends the use of a virus scanner in any case. The selection and installation of an appropriate virus scanning tool is in the customer's responsibility. However, QIAGEN has validated the Rotor-Gene Q software and Rotor-Gene AssayManager version 1.0 and 2.1 with the QIAGEN laptop in combination with the following two virus scanners to show compatibility:

- Symantec Endpoint Protection V12.1.6
- Microsoft Security Essentials V4.10.209 ¹

Please refer to the product page on QIAGEN.com for the latest versions of anti-virus software that have been validated in combination with Rotor-Gene Q software and Rotor-Gene AssayManager version 1.0 and 2.1.

If a virus scanner is selected, make sure that it can be configured in a way that the database folder path can be excluded from the scan. Otherwise, there is the risk of database connection errors. Since Rotor-Gene AssayManager version 1.0 and 2.1 creates new database archives dynamically, it is required to exclude the folder path to the files and not single files. We do not recommend the use of virus scanners where only single files can be excluded, e.g. McAfee Antivirus Plus V16.0.5. If the computer is used in an environment without

¹ **Note:** After installation of "Microsoft Security Essentials", you shall check that Windows updates are deactivated since the installation might activate this setting (please read chapter "Operating system updates").

network access, please also make sure that the virus scanner supports offline updates.

To get consistent results after installation of a virus scanner, a system administrator should ensure the following:

- As explained above, the database folder path of the Rotor-Gene AssayManager 1.0 and 2.1 needs to be excluded from file scans which is as follows: C:\Program Files\Microsoft SQL Server\MSSQL10_50.RGAMINSTANCE\MSSQL\DATA
- Updates to the virus database are not performed when the Rotor-Gene AssayManager 1.0 and 2.1 is in use.
- Please make sure that full or partial scans of the hard drive are disabled during real-time PCR data acquisition. Otherwise there is a risk of adverse impact on the performance of the instrument.

Please read the manual of your selected virus scanner for configuration details.

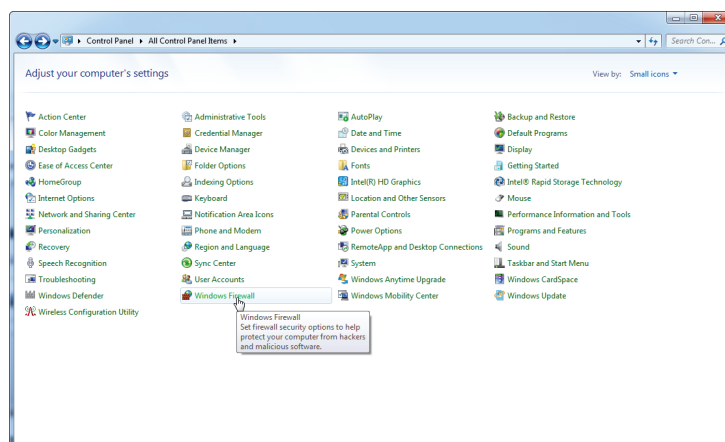
Firewall and networks

The Rotor-Gene Q software can run either on computers without network access, or can run in a network environment, if a remote database server is used. For networked operation, the firewall on the laptop computer provided by QIAGEN is configured in a way that inbound traffic is blocked for all ports, except those ones required to establish a network connection.

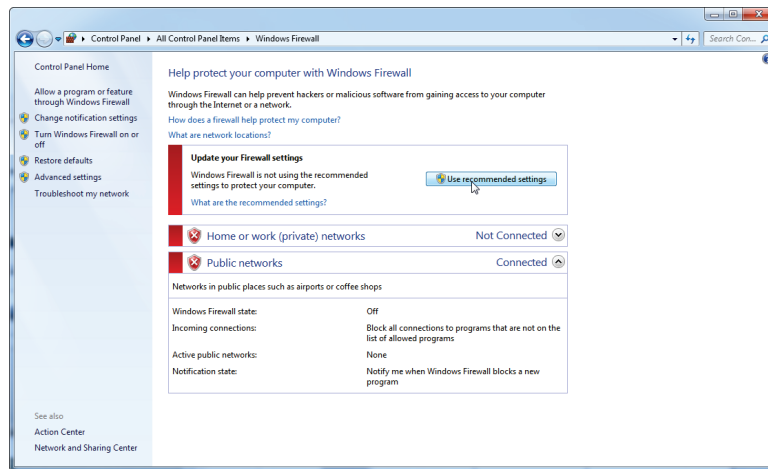
Please note that blocking incoming connections does not affect responses to requests triggered by the user. Outgoing connections are allowed as this may be required for retrieving updates.

If your configuration is different, QIAGEN recommends to configure the firewall in the same way as described above. To this end, a system administrator has to login and has to perform the following steps:

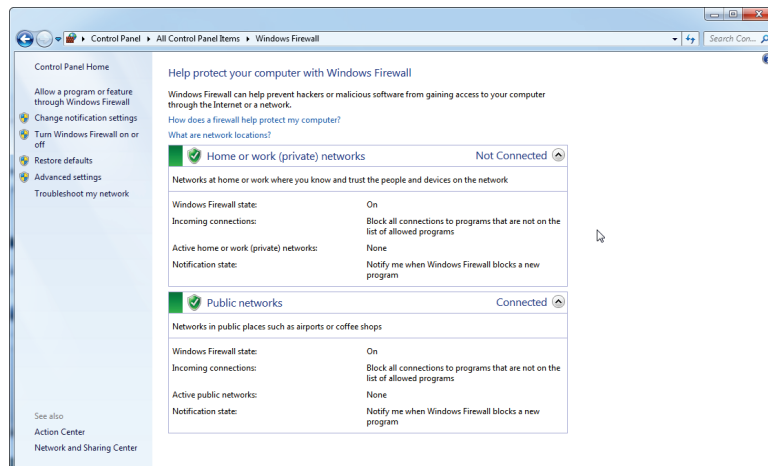
1. Open the "Control Panel" and select "Windows Firewall".



2. Select "Use recommended settings".



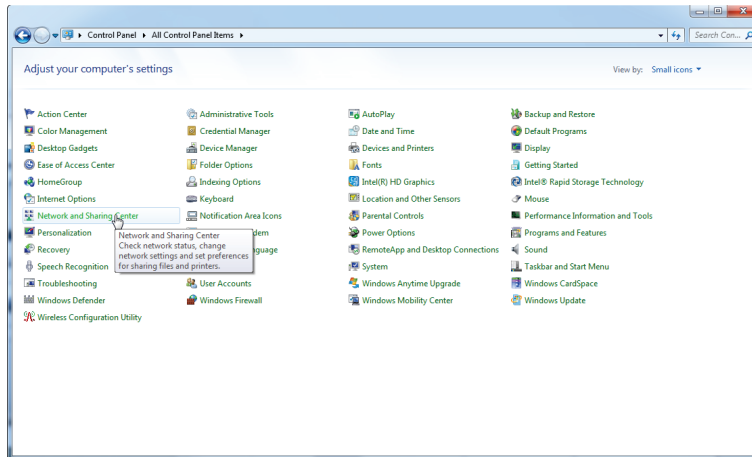
3. Check that the following settings are active:



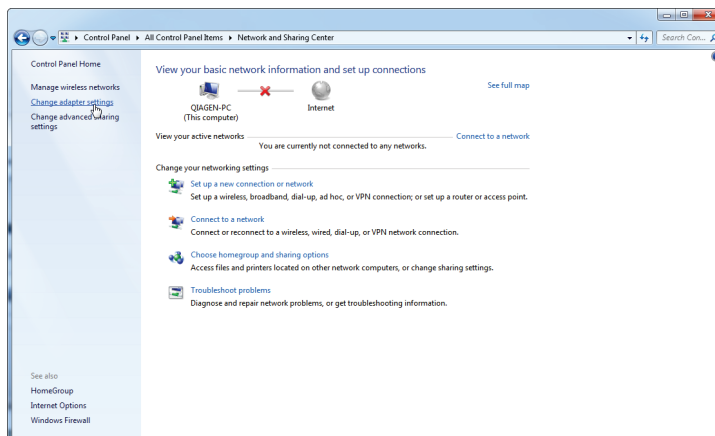
For security and reliability reasons, cable-based network access instead of Wi-Fi shall be used. The laptop computers that are provided by QIAGEN have a disabled Wi-Fi adapter. If your configuration is different, a system

administrator must disable the Wi-Fi adapter manually which can be done by the following steps:

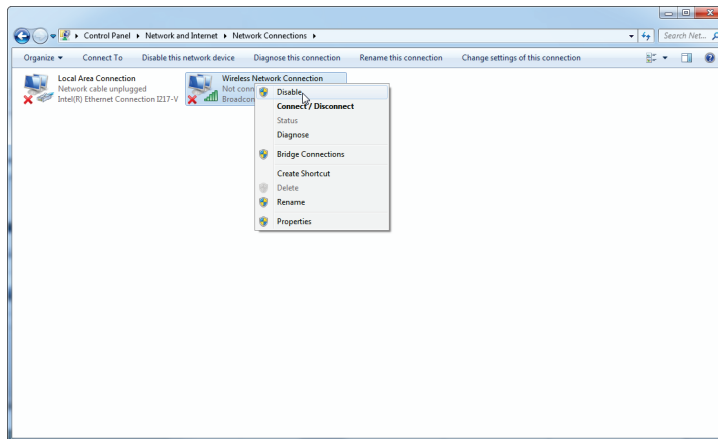
1. Open the "Control Panel" and select "Network and Sharing Center"



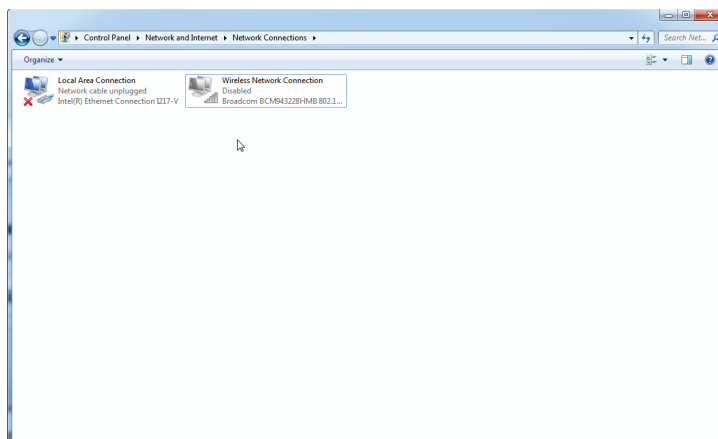
2. Select "Change adapter settings".



3. Hover over "Wireless Network Connection", press the right mouse button, and select "Disable" from the context menu.



4. Check that the Wireless Network Connection is disabled.



System tools

Many system tools may use significant system resources even without any user interaction. Typical examples of such tools are:

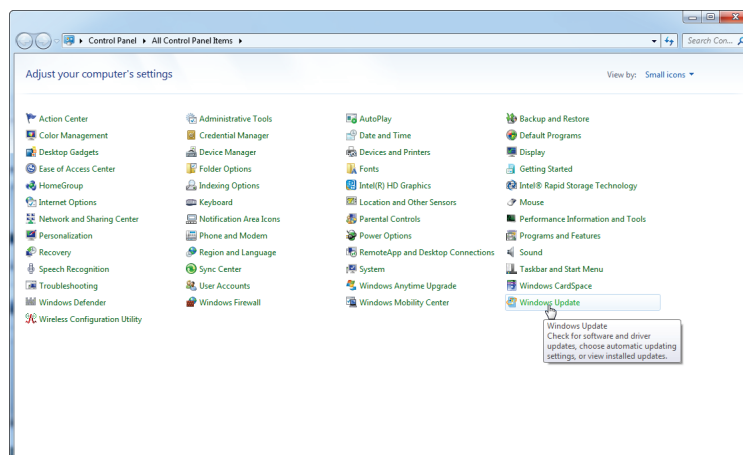
- File indexing, which is performed as a background task by many contemporary office applications
- Disk defragmentation, which often also employs a background task
- Any software that checks for updates on the internet
- Remote monitoring and management tools

Please be aware that due to the dynamic nature of the IT world, this list may not be complete and tools may be released that are not known at the time of writing. It is important that system administrators take care that such a tool is not active during a PCR run.

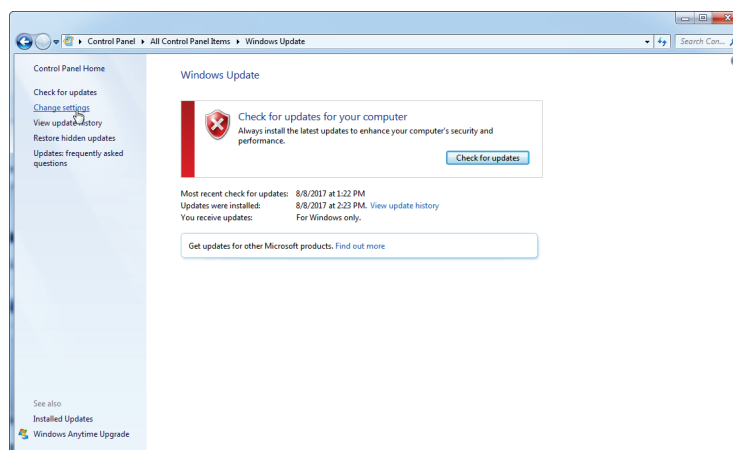
Operating system updates

The laptop computers provided by QIAGEN is configured in a way that automatic updates of the operating system are disabled. If your configuration is different, a system administrator must disable any automatic update process of the operating system which can be done by the following steps:

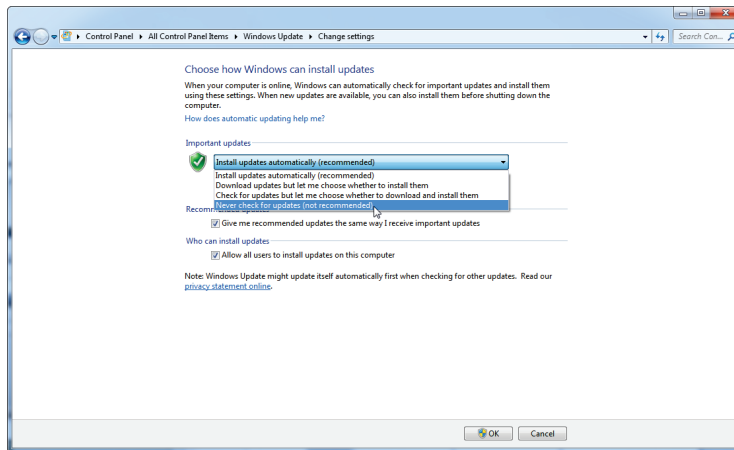
1. Open the "Control Panel" and select "Windows Update".



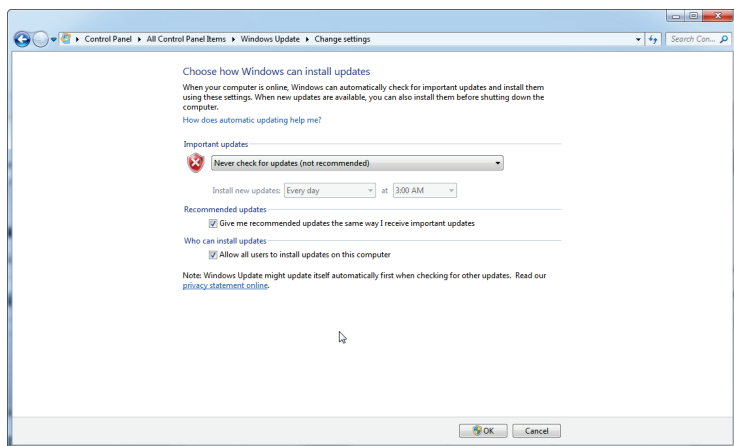
2. Select "Change settings".



3. Select "Never check for updates".



4. Check that option “Never check for updates” is active.



In the event that updates are required due to uncovered security vulnerabilities, QIAGEN provides mechanisms to install a defined set of validated Windows security patches either online (if internet connection is available on QIAGEN laptop), or as offline package, prepared on a separate computer with internet connection.

Please visit the product page on QIAGEN.com for more information.

For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit handbook or user manual. QIAGEN kit handbooks and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services or your local distributor.

Document Revision History

R2, May 2018

- Updates to the security configuration of QIAGEN-provided laptops
- Details of the password for the new admin account that is now pre-installed on all new QIAGEN laptops
- Information on how to create user accounts in Windows 7
- Updates to anti-virus software recommendations
- Updates to firewall and network settings

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Belgium ■ Orders 0800-79612 ■ Fax 0800-79611 ■ Technical 0800-79556

Brazil ■ Orders 0800-557779 ■ Fax 55-11-5079-4001 ■ Technical 0800-557779

Canada ■ Orders 800-572-9613 ■ Fax 800-713-5951 ■ Technical 800-DNA-PREP (800-362-7737)

China ■ Orders 86-21-3865-3865 ■ Fax 86-21-3865-3965 ■ Technical 800-988-0325

Denmark ■ Orders 80-885945 ■ Fax 80-885944 ■ Technical 80-885942

Finland ■ Orders 0800-914416 ■ Fax 0800-914415 ■ Technical 0800-914413

France ■ Orders 01-60-920-926 ■ Fax 01-60-920-925 ■ Technical 01-60-920-930 ■ Offers 01-60-920-928

Germany ■ Orders 02103-29-12000 ■ Fax 02103-29-22000 ■ Technical 02103-29-12400

Hong Kong ■ Orders 800 933 965 ■ Fax 800 930 439 ■ Technical 800 930 425

Ireland ■ Orders 1800 555 049 ■ Fax 1800 555 048 ■ Technical 1800 555 061

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Switzerland ■ Orders 055-254-22-11 ■ Fax 055-254-22-13 ■ Technical 055-254-22-12

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