



Agilent GeneSpring Software

Installation Guide

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Agilent Technologies

Agilent GeneSpring provides powerful, accessible tools for statistical analysis and visualization of genomics, transcriptomics, proteomics, and metabolomics data.

Quick Start Installation of Agilent GeneSpring

Agilent GeneSpring software can be installed on any desktop computer with Windows, Mac, or Linux operating systems. The following flowchart describes the general steps for installing Agilent GeneSpring. Make sure to follow the steps in the order they are shown. Detailed instructions for each step and the differences, if any, for the varying operating systems are provided later in this guide. Click the “See” links to jump to the detailed topics.

If you want to upgrade to a new version, read [“Upgrading Agilent GeneSpring to a New Version”](#) on page 26.

If you have been working with version 7.3 and you want to move to the latest version of GeneSpring, please refer to Chapter 4 in the GeneSpring [User Manual](#) for information on how to migrate your data.

NOTE

In Windows, you cannot run two different versions of GeneSpring on the same computer at the same time. The only exception is a combination of version 7.3 and any of the later versions of GeneSpring, due to the fact that version 7.3 is based on a different software platform.

Flowchart for installation

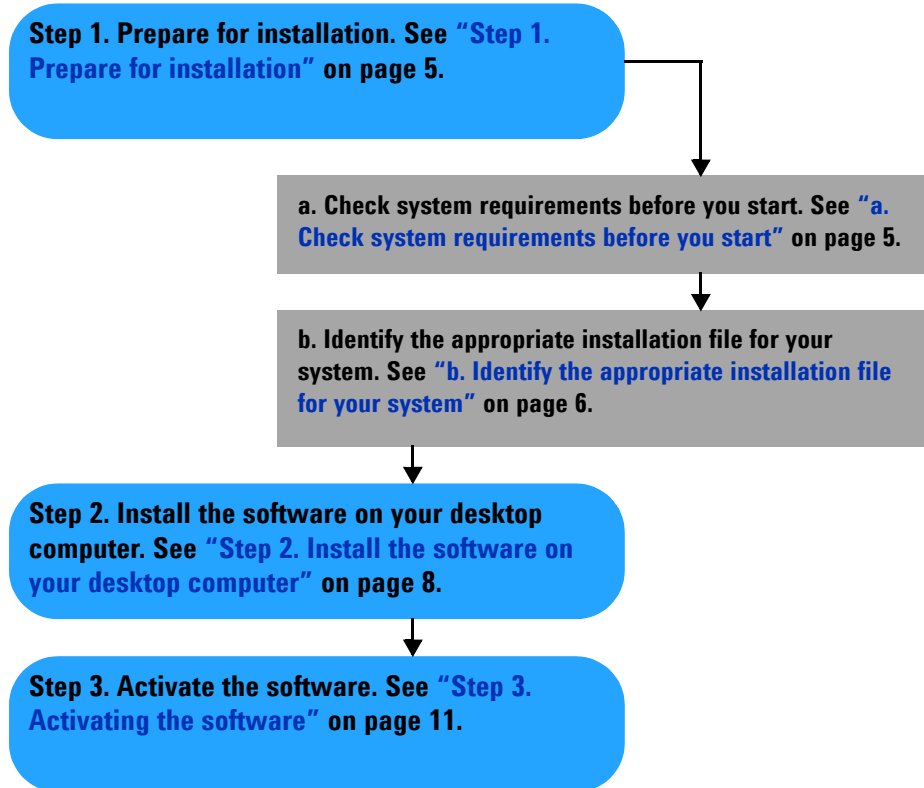


Figure 1 Flowchart for installing Agilent GeneSpring

Detailed Instructions for Installing Agilent GeneSpring

This section contains more detailed instructions and important notes about each step of the installation process outlined in the installation flow chart shown in [Figure 1](#) on page 4. You can click on the link at the end of each topic to return to the flow chart.

Step 1. Prepare for installation

a. Check system requirements before you start

Before installing GeneSpring, make sure that your computer system meets the minimum requirements specified in [Table 1](#).

Table 1 System Requirements by Different Platforms

	Microsoft Windows	Apple Mac OS X	Linux
Operating system	<ul style="list-style-type: none"> 7 Professional XP Service Pack 3 Vista 	<ul style="list-style-type: none"> Snow Leopard (v10.6) Lion (v10.7) Mountain Lion (v10.8) 	<ul style="list-style-type: none"> Red Hat Enterprise Linux 5 Debian GNU/Linux 4.0r1
Processor	Pentium 4 with 1.5 GHz	1.5 GHz	Pentium 4 with 1.5 GHz
Available memory (RAM)	1 GB	1 GB	1 GB
Hard disk space	1.5 GB	1.5 GB	1.5 GB
Video Memory	at least 16 MB	at least 16 MB	at least 16 MB
Administrator privileges	required Following installations, all other users of this machine will also be able to use GeneSpring.	not required Following installation, GeneSpring will only be available from the user account in which it was installed.	not required Following installation, GeneSpring will only be available from the user account in which it was installed.

Detailed Instructions for Installing Agilent GeneSpring

Actual system requirements vary depending on the experiment type, number of samples, and sample size of your data, especially for NGS experiments, as well as Copy Number and Association experiments (see [Table 2](#)).

Table 2 Recommended system specifications for NGS, Copy Number, and Association experiment types

	NGS experiments	Copy Number and Association experiments*
Hardware architecture and processor	64-bit, quad core,	at least 32-bit, ideally 64-bit
Available memory	at least 4 GB*, ideally 8 GB	at least 2 GB, ideally 4 GB
Hard disk space	30 GB (or more depending on sample size and number)	at least 25 GB, ideally 5x the total file size of all the samples to be loaded into GeneSpring
	* in Methyl-Seq experiments, these specifications are sufficient to work with up to 6 samples with 50 million reads each.	* minimum requirements stated here are based on 75 samples from an Affymetrix Genome-Wide Human SNP Array 6.0.

b. Identify the appropriate installation file for your system

Agilent provides different installation files optimized for the different platforms and relevant system types. Before downloading the installation file from the [GeneSpring support portal](#), or requesting the installation files from your Agilent account manager, follow these steps to identify your operating system's system type.

In Windows operating systems:

- 1 Click the **Start** button.
- 2 In Windows 7 and Vista, select **Control Panel**.
In Windows XP, select **Settings > Control Panel**.
- 3 Click **Systems**.

Your version of the operating system and system type (32-bit or 64-bit) are specified in the **Systems** page of the Control Panel browser window (see [Figure 2](#) on page 7).

NOTE

In the Windows XP system, the system type is only explicitly mentioned for the 64-bit type.

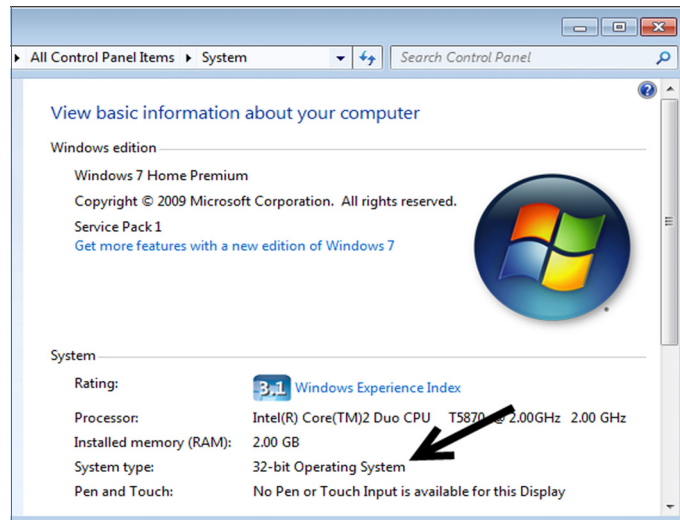


Figure 2 Systems information for Windows 7 installation

In Linux operating systems:

- 1 Launch a Terminal via **Applications > Accessories < Terminal** from the main menu.
- 2 Type "uname -a" and press **Enter**.

Your version of the operating system and system type can be found at the end of the Terminal response, for example:

- for a 32-bit system type and Debian GNU/Linux 4.0 system the response ends like this: "i686 GNU/Linux",
- for a 64-bit system type and Debian GNU/Linux 4.0 system, the response ends like this: "x86_64 GNU/Linux".

In Mac OS X operating systems:

The installation file provided by Agilent for Mac is compatible with all supported operating system versions and all system types. You do not have to identify the system type first.

Return to the "[Flowchart for installation](#)".

Step 2. Install the software on your desktop computer

The installation process for GeneSpring described in this section is applicable for all three supported platforms (see [Table 1](#) on page 5). Where the instructions differ for a particular platform, this is indicated in the details of each step where applicable.

- 1 Before beginning to install Agilent GeneSpring, make sure you have completed all the pre-installation steps outlined in [“Step 1. Prepare for installation”](#) on page 5.
- 2 Login to the system where you want to install Agilent GeneSpring.
 - In Windows systems, use an account that has administrator privileges.
 - In Linux and Mac systems, administrator privileges are not required.
- 3 Close any other programs that are running on your computer.
- 4 Browse your hard drive for the installation file, which you downloaded from the [GeneSpring support portal](#).
- 5 Double-click the <installation file name> icon.
 - In Mac systems (if downloading the file in any other browser than Safari): The first double-click uncompresses the installation file and creates a *.app file in the same location. Make sure this file has executable permission. Double-click this file to start the installation.

The **InstallAnywhere** dialog box (see [Figure 3](#)) indicates the progress of preparing the installation wizard.

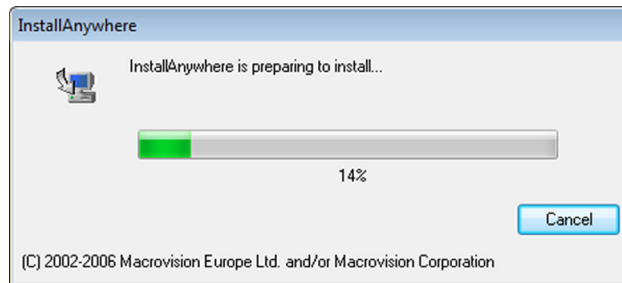


Figure 3 Install Anywhere dialog box - preparing to install

Detailed Instructions for Installing Agilent GeneSpring

The installation wizard starts. Click **Next** to move on to a next step. Click **Previous** to review information in a previous step. If you no longer want to install GeneSpring you can click **Cancel** at any time.

- 6 Review the information provided in the **Introduction** and **System Requirements** steps of the installation wizard.
- 7 In the **License Agreement** step, review the license agreement. If you agree to the terms of the agreement, select **I accept the terms of the License Agreement** from the options at the bottom of the page. The installation only continues if you accept these terms.
- 8 In the **Choose Install Folder** step of the installation wizard, click **Choose...** to specify an installation folder other than the folder chosen by the installation wizard.

By default, Agilent GeneSpring is installed in these directories:

- in Windows systems: C:\Program Files\Agilent\GeneSpring\
- in Linux systems: \$HOME/Agilent/GeneSpring\$
- in Mac systems: \$HOME/Applications/Agilent/GeneSpring\$

NOTE

When specifying the installation folder, consider the hard disk space requirements for your experiments (see [Table 1](#) on page 5 and [Table 2](#) on page 6).

- 9 Review the installation details, including the installation folder and where the shortcut to start GeneSpring is created in the **Pre-Installation Summary** step. This step also indicates the exact hard disk space required for installing GeneSpring and the available space in the selected installation folder. If the available space is less than the required space, click **Previous** to return to the **Choose Install Folder** step (see [step 8](#)) and specify another location that has sufficient space.

When you are ready to continue with the installation, click **Install**.

- 10 The installation process begins. You can find out more about any new and existing features of this version of GeneSpring from the peeling pages displayed in the installation window.
- 11 The **Install Complete** step confirms when the installation process has finished. Click **Done** to complete the installation and close the wizard.

Detailed Instructions for Installing Agilent GeneSpring

The documentation index opens in your default browser. You can access the available GeneSpring user manuals and quick start guides from this page. A shortcut to start GeneSpring is now available on your desktop.

NOTE

Following installation, you will only be able to start using GeneSpring once you have activated it with your license key (see [“Step 3. Activating the software”](#) on page 11).

Return to the [“Flowchart for installation”](#).

Step 3. Activating the software

When starting GeneSpring for the first time, you have to provide a license key (OrderID) for each of the modules for which you have a license. This will activate your software installation and enables all the available features associated with the activated module.

NOTE


Agilent GeneSpring software imposes a node-locked desktop license. This means the software can only be used on the machine that it was installed on. See [“Managing Licenses”](#) on page 16 for more information on how you can transfer your license to an installation of GeneSpring on another computer.

Follow the steps below to activate your installation of GeneSpring.

- 1 Have your valid OrderID ready and make sure you are connected to the internet.

NOTE

You should have received your OrderID when you purchased the license. For a free trial of the software, register at www.genespring-support.com and apply for a free trial. You will receive a valid OrderID by email.

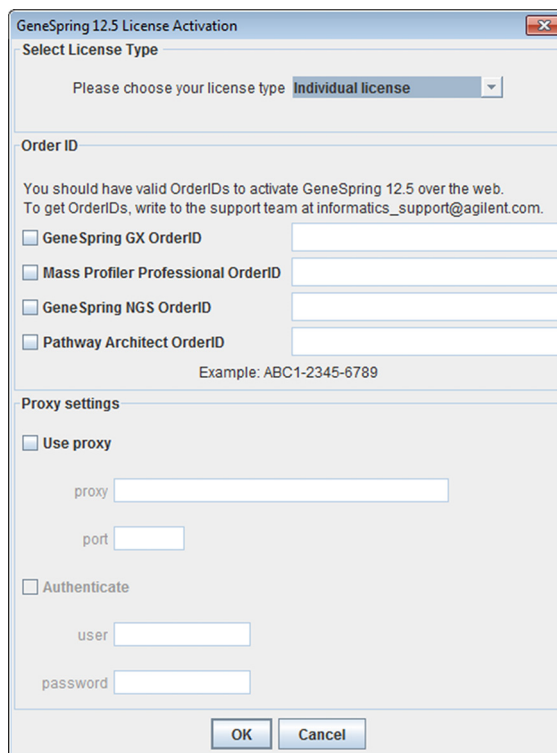
- 2 Double-click the GeneSpring shortcut icon  that was added to your desktop during installation to start GeneSpring.

The **GeneSpring License Activation** dialog box (see [Figure 4](#) on page 12) opens.

- 3 Select the modules (GeneSpring GX, Mass Profiler Professional, GeneSpring NGS, and Pathway Architect) that you would like to activate and enter the corresponding OrderIDs.

Optional: If your system is behind a proxy server, provide the proxy host and proxy port in the **Proxy settings** area of the License Activation dialog box. If your proxy server supports authentication, you also have to provide your proxy user name and password.

Detailed Instructions for Installing Agilent GeneSpring



The image shows a Windows-style dialog box titled "GeneSpring 12.5 License Activation". The dialog has a standard title bar with a close button. The main content is organized into several sections:

- Select License Type:** A dropdown menu with "individual license" selected. Above it is the text "Please choose your license type".
- Order ID:** A section with the text "You should have valid OrderIDs to activate GeneSpring 12.5 over the web. To get OrderIDs, write to the support team at informatics_support@agilent.com." Below this are four checkboxes, each followed by a text input field:
 - GeneSpring GX OrderID
 - Mass Profiler Professional OrderID
 - GeneSpring NGS OrderID
 - Pathway Architect OrderIDAn example "Example: ABC1-2345-6789" is provided below the checkboxes.
- Proxy settings:** A section with a checkbox "Use proxy". If checked, there are input fields for "proxy" and "port". Below this is a checkbox "Authenticate". If checked, there are input fields for "user" and "password".

At the bottom of the dialog are "OK" and "Cancel" buttons.

Figure 4 GeneSpring License Activation dialog box

4 Click the **OK** button.

GeneSpring obtains the information associated with your OrderID (validity and license duration) by connecting to the Agilent license server over the internet. Successful completion of this process activates your installation and GeneSpring is launched.

If the automatic activation process failed, you can activate your license manually, as described under [“Manual License Activation”](#) on page 13.

Manual License Activation

If automatic license activation fails, you can manually activate your license through the Agilent Manual License Activation website. You will need an active internet connection, your OrderIDs and the activation file that is provided in the installation directory of GeneSpring.

To complete manual activation, follow the steps below.

- 1 Go to the [GeneSpring License Request](http://lcosgens.cos.agilent.com/gsLicense/MultipleActivate.html) website (<http://lcosgens.cos.agilent.com/gsLicense/MultipleActivate.html>) by clicking on this link or on the link provided in the License Error dialog box.
- 2 Enter the OrderIDs for the modules that you want to activate in the field provided on the website.
- 3 Browse for the activation file “manualActivation.txt” in the <installation directory>\bin\license folder.
- 4 Click **Submit**.

You will receive an activation license file for each module (gs.lic, mpp.lic, ss.lic, or pw.lic) at your email address that you provided when you purchased GeneSpring or registered for a free trial.

- 5 Save the *.lic files to the \bin\license folder in your GeneSpring installation directory.
- 6 Restart GeneSpring.

Your licenses are now activated and GeneSpring is launched.

If you have followed the steps above and launching GeneSpring still produces an error, please send an email to GeneSpring technical support (informatics_support@agilent.com) with the subject “Activation Failure” and provide the Error code displayed in the License Error dialog box. The support team will respond to your email within four hours.

If you cannot access the Agilent Manual License Activation website, or did not receive the strand.lic file, please send an email to GeneSpring technical support (informatics_support@agilent.com) with the subject “Registration Request” and attach the activation file “manualActivation.txt”. The support team will generate the activation license file and reply your email with the file as an attachment within four hours.

Uninstalling GeneSpring

Your installation of GeneSpring includes an uninstall facility. Before uninstalling, please contact [GeneSpring technical support](#) to get more information on how to backup your data and experiments. If you are planning to use your licenses on another computer, surrender the licenses before uninstalling (see “[To surrender a license](#)” on page 18).

Follow these steps to uninstall GeneSpring from your computer:

- 1 In a Windows system, log in to an account with administrator privileges on the computer where you installed GeneSpring.

In Mac and Linux systems, log in to the account where you installed GeneSpring. Administrator privileges are not required.

- 2 Go to the GeneSpring installation folder.
- 3 Double-click the **Uninstall** shortcut icon .

The Uninstall wizard opens.



Figure 5 Uninstall GeneSpring dialog box

- 4 Click **Uninstall** in the **Uninstall GeneSpring** dialog box.

Detailed Instructions for Installing Agilent GeneSpring

You can follow the progress of the uninstalling process in the same dialog box.

- 5 Click **Done** in the **Uninstall GeneSpring** dialog box when the uninstall process is completed.

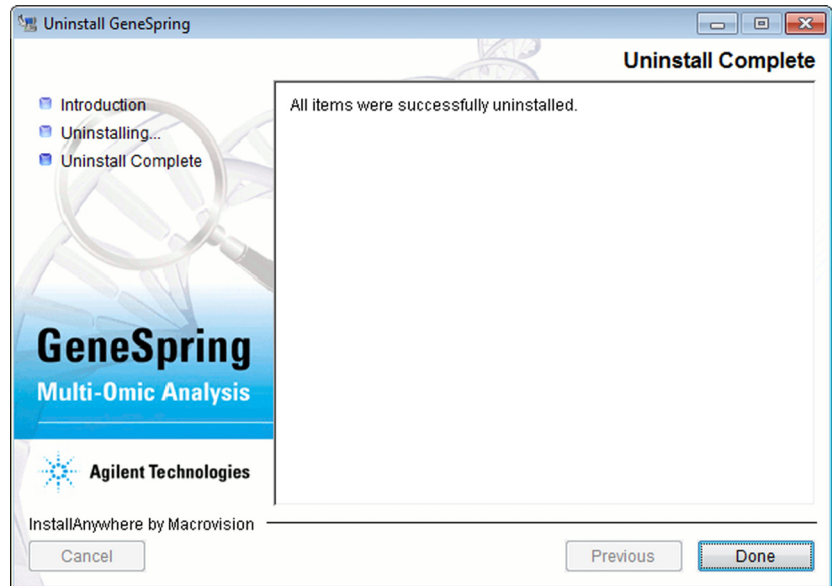


Figure 6 Uninstall GeneSpring dialog box - Uninstall Complete

GeneSpring is uninstalled from your computer. The following folders remain in your installation folder:

- app
- logs
- marray logs
- samples

If you want to remove everything related to GeneSpring from your computer, delete these folders as you delete any other folders containing information you no longer require.

Managing Licenses

The GeneSpring License Manager provides an easy way for you to manage your licenses for all the available modules (see [“Step 3. Activating the software”](#) on page 11). Select **Help > License Manager** from the main menu bar to access the License Manager.

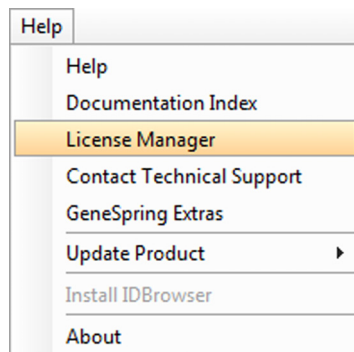


Figure 7 License Manager is available within the Help menu from the menu bar

The GeneSpring License Manager (see [Figure 8](#) on page 17), allows you to:

- **Surrender** a license, when you want to move your license to another computer (see [“To surrender a license”](#) on page 18).
- **Add/Change** a license, for example, when you purchased GeneSpring and want to replace your trial license (see [“To add or change a license”](#) on page 21).
- **Re-activate** a license, for example, if the duration of your license has changed (see [“To reactivate a license”](#) on page 24).

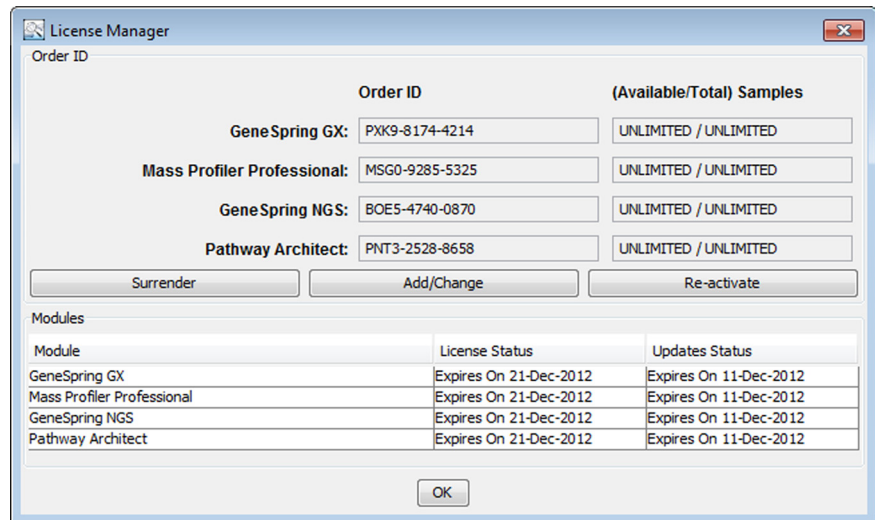


Figure 8 License Manager dialog box

The following sections describe how to perform each of these license management tasks.

To surrender a license

You can move a license to an installation of GeneSpring on another computer by surrendering the license on the current computer and activating it on the other computer. Use this procedure if you want to activate an installation of GeneSpring on a different computer with the same license.

NOTE

Make a note of your OrderIDs before surrendering them. If you want to activate the associated licenses again at a later date (see [“Step 3. Activating the software”](#) on page 11), you have to enter these OrderIDs in the GeneSpring License Activation dialog box.

- 1 Select **Help > License Manager** from the main menu (see [Figure 7](#) on page 16).
- 2 Click **Surrender** in the **License Manager** dialog box (see [Figure 8](#) on page 17).
- 3 Select **GeneSpring GX**, and any other products(orderIDs) for which you want to surrender the license.

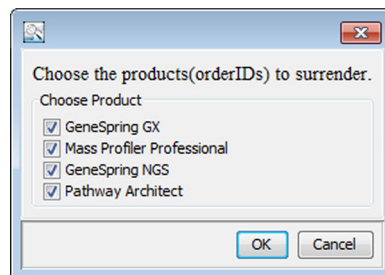


Figure 9 Product selection dialog box

- 4 Click **OK**. You can confirm or decline surrendering your licenses in the next dialog box.
- 5 Click **Yes** in the **Confirm Surrender** dialog box.

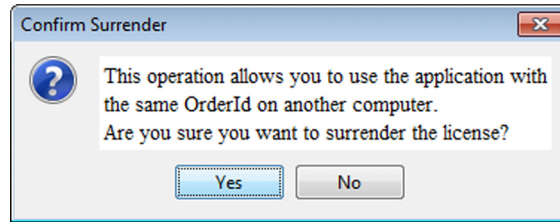


Figure 10 Confirm Surrender dialog box

- 6 Click **OK** in the **Automatic Surrender Operation Successful** dialog box.

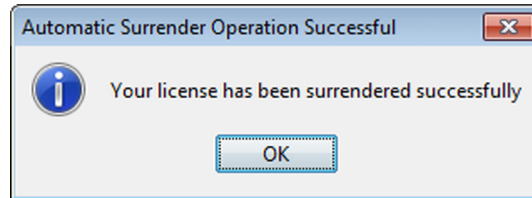


Figure 11 Automatic Surrender Operation Successful dialog box

The license is surrendered and GeneSpring shuts down. You can now proceed with activating the license in another installation on a different computer (“[Step 3. Activating the software](#)” on page 11).

Surrender a license manually

If the automatic surrender process described in “[To surrender a license](#)” on page 18 fails, you can surrender a license or licenses manually, as described in this section.

- 1 Click **Yes** in the **Automatic Surrender Operation Failed** dialog box.

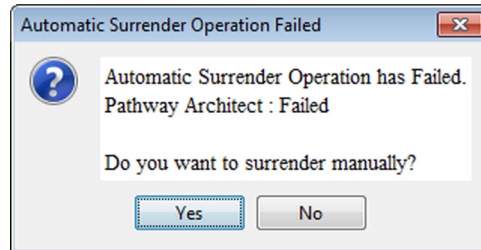


Figure 12 Automatic Surrender Operation Failed dialog box

- 2 Click the web link for the [Agilent manual surrender](http://lcosgens.cos.agilent.com/gsLicense/MultipleSurrender.html) web page (<http://lcosgens.cos.agilent.com/gsLicense/MultipleSurrender.html>) in the **Manual Surrender Operation** dialog box. Make a note of the location of the `surrender.bin` directory displayed in the same dialog box. You have to know the location of this directory in Step 4 of this procedure. Click **OK**.

GeneSpring shuts down.

- 3 On the GeneSpring License Request website, provide the OrderID for each of the modules for which you want to surrender your license in the corresponding fields of the website form.
- 4 Specify the `surrender.bin` directory in the Surrender file field. This directory is located in the `bin` folder of the GeneSpring installation directory, You made a note of the exact location in **Step 2** of this procedure.
- 5 Click **Submit**.

The licenses are surrendered. You can now proceed with activating the license in another installation on a different computer (“[Step 3. Activating the software](#)” on page 11).

To add or change a license

There are a number of different license types available for GeneSpring, for example, a trial license or purchased licenses for any of the four available GeneSpring modules. Use this procedure if you want to add a license for a new module, or if you want to change a trial license to a purchased license.

- 1 Select **Help > License Manager** from the main menu (see [Figure 7](#) on page 16).
- 2 Click **Add/Change** in the **License Manager** dialog box (see [Figure 8](#) on page 17).

The **Change License** dialog box opens and displays all the existing licenses currently associated with the available modules.

- 3 Provide the new OrderIDs for the corresponding modules. Click **OK**.

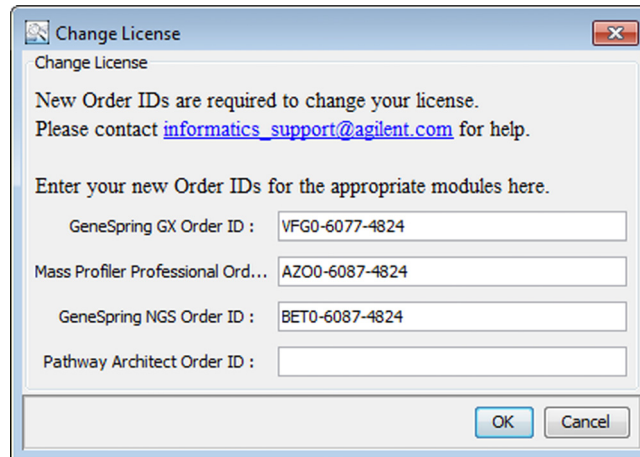


Figure 13 Change License dialog box

GeneSpring confirms the activation of the licenses associated with the new or changed OrderIDs with a confirmation message.

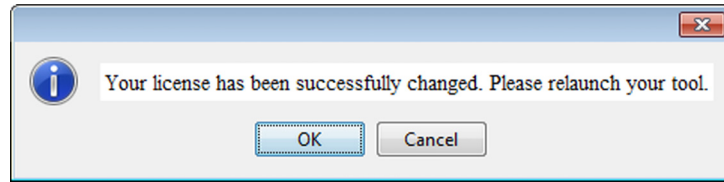


Figure 14 Successful license change confirmation

- 4 Click **OK** to acknowledge the successful license change.

GeneSpring shuts down. Restart GeneSpring to start using the features of the new module for which you added a new OrderID. If you changed your license type from a trial license to a purchased license, this change is now reflected in the new expiry date displayed in the **License Manager** dialog box (see [Figure 8](#) on page 17).

Add or change a license manually

If the automatic procedure to add or change a license fails, you can add or change your license manually using the following procedure.

- 1 Click **Yes** in the dialog box indicating that the automatic change license operation failed.

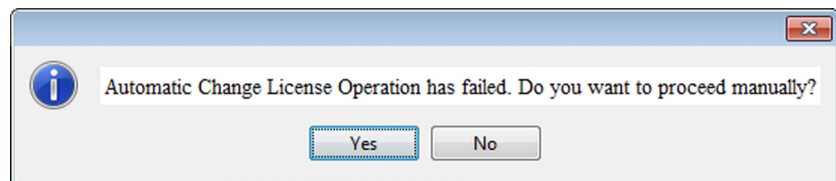


Figure 15 Automatic change license operation failed message.

- 2 Click the web link for the [Agilent manual activation](http://lcosgens.cos.agilent.com/gsLicense/MultipleActivate.html) web page (<http://lcosgens.cos.agilent.com/gsLicense/MultipleActivate.html>) in the dialog box that opens. Make a note of the location of the manualActivation.txt file, which is displayed in the same dialog box. You have to know the location of this file in **Step 4** of this procedure. Click **OK**.

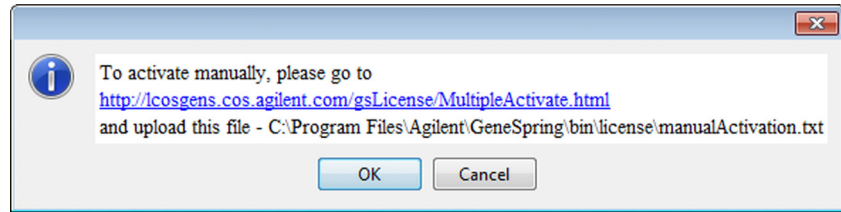


Figure 16 Manual change license operation details message

- 3 On the GeneSpring License Request website, provide the OrderID for each of the modules for which you want to add or change your license in the corresponding fields of the website form.
- 4 Specify the “manualActivation.txt” file in the Activation file field. This file is located in the bin folder of the GeneSpring installation directory. You made a note of the exact location in **Step 2** of this procedure.
- 5 Click **Submit**.

You will receive an activation license file (*.lic) corresponding to each module you wanted to change by email from GeneSpring technical support. The support team uses the email address that you provided when you purchased GeneSpring or registered for a free trial.

- 6 Save the *.lic files in the \bin\license folder of your GeneSpring installation directory.
- 7 Restart GeneSpring.

Your license is now activated.

If you have followed the steps above and launching GeneSpring produces an error, please send an email to GeneSpring technical support (informatics_support@agilent.com) with the subject “Activation Failure” and provide the Error code displayed in the License Error dialog box. The support team will respond to your email within four hours.

If you cannot access the Agilent Manual License Activation website, or did not receive the *.lic file, please send an email to GeneSpring technical support (informatics_support@agilent.com) with the subject “Registration Request” and attach the activation file

“manualActivation.text”. The support team will generate the activation license file and reply to your email with the new activation license file as an attachment within four hours.

To reactivate a license

If your license period was extended by GeneSpring technical support, reactivate your license for the extension to take effect. Follow the steps described in this section to reactivate your license.

- 1 Select **Help > License Manager** from the main menu (see [Figure 7](#) on page 16).
- 2 Click **Re-activate** in the **License Manager** dialog box (see [Figure 8](#) on page 17).
- 3 Click **Yes** in the **License Re-activation** dialog box.

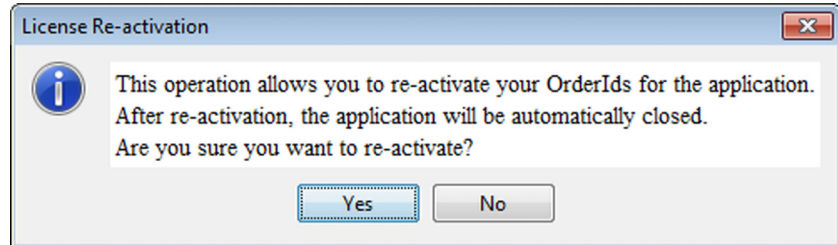


Figure 17 License Re-activation dialog box

- 4 Click **OK** to acknowledge the successful license re-activation.

GeneSpring shuts down. The next time you start GeneSpring the extension of your license duration is reflected in the new expiry date displayed in the **License Manager** dialog box (see [Figure 8](#) on page 17).

Reactivate a license manually

If the automatic process to reactivate a license fails, you can reactivate that license manually using the following procedure.

- 1 Click **Yes** in the **Automatic License Reactivation Failed** dialog box.

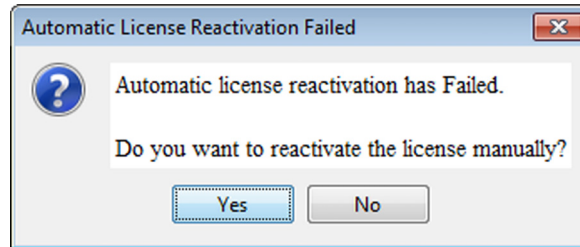


Figure 18 Automatic License Reactivation Failed dialog box

- 2 The remaining steps are the same as Steps 1 to 6 of the manual license activation procedure (see [“Manual License Activation”](#) on page 13).

The next time you start GeneSpring the new license expiry date is reflected in the License Manager dialog box.

Upgrading Agilent GeneSpring to a New Version

Agilent continues to improve the GeneSpring suite of products to enable you to analyze and visualize the latest data types generated in the laboratory environment. In addition to such new features, upgrades also contain enhancements to existing features as well as bug fixes. We therefore recommend that you upgrade your GeneSpring installation whenever a new product update becomes available.

CAUTION

Always use the procedure described here to upgrade to a new version. Do not uninstall the current version and install the new one, as you risk losing access to parts or all of your analyses performed in the current version.

Every time you start GeneSpring while you are connected to the internet, GeneSpring connects to the Agilent Server to retrieve information about available updates to technologies, annotations, and product updates. An **Update** dialog box opens immediately after GeneSpring has launched to inform you of the availability of a product update.

To upgrade to the new version, follow these steps:

- 1 In GeneSpring, select **Help > Update Product > Update from Agilent Server** from the main menu.
- 2 Click **Yes** in the **Updates** dialog box to confirm that you want to go ahead with the update.

Your current session closes and GeneSpring retrieves the update from the Agilent server.

- 3 Select the product update in the **Automatic Software Update** dialog box. Details about the selected update, including a list of new features, enhancements, and bug fixes are available in the lower panel of this dialog box. Click **Update**.

An information dialog box informs you about the space requirements to perform the update.

Upgrading Agilent GeneSpring to a New Version

- 4 Before continuing, make sure there is sufficient space for the upgrade in the folder where you installed GeneSpring. Click **OK**.

GeneSpring performs the upgrade. The progress bar at the bottom of the **Automatic Software Update** dialog box indicates the progress of the upgrade process.

- 5 Click **OK** in the **Update** dialog box to acknowledge completion of the upgrade.

You have successfully upgraded to the new version of GeneSpring.

NOTE

The GeneSpring **Update Product** feature upgrades your installation one update at a time. If you have skipped previous version updates and would now like to upgrade to the latest version, repeat the steps described here until you have upgraded to the latest version.

Migrating data from previous versions

Due to the completely new data organization in **GeneSpring GX 9** and later versions when compared to previous versions, data that was saved in **GeneSpring GX 7** is not automatically available in version 9 or later. To allow you to move genomes from version 7 to later versions, a migration tool is available in all versions of GeneSpring from GX 9 onwards. Please refer to **Chapter 4** of the GeneSpring [User Manual](#) for the detailed procedure to migrate your data.

Getting help

Online help

Press F1 To get more information about a menu, toolbar, window, or dialog box, place the cursor on the part of the menu, toolbar, window, or dialog box of interest and press the **F1** key.

Help menu Click **Help > Documentation Index** to access the release notes, quick start guides, and HTML and PDF versions of the GeneSpring manual.

Online support portal Visit www.genespring-support.com to contact the GeneSpring support team and access additional demo data sets, user guides, and video tutorials.

E-seminars Visit our [e-seminar calendar](#) to register for live seminars on available features in GeneSpring.

Documents

GeneSpring manual Agilent GeneSpring [User Manual](#) (Agilent publication n/a, August 2012).

www.agilent.com

In this Book

This book tells you how to install Agilent GeneSpring on your computer.

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