Agilent CytoGenomics 3.0

Product Overview and Installation & Administration Guide

For Research Use Only. Not for use in diagnostic procedures.
Notices

© Agilent Technologies, Inc. 2015

No part of this manual may be reproduced in any form or by any means (including electronic storage and retrieval or translation into a foreign language) without prior agreement and written consent from Agilent Technologies, Inc. as governed by United States and international copyright laws.

Manual Part Number
G1662-90047

Edition
Revision A1, August 2015
Agilent Technologies, Inc.
5301 Stevens Creek Blvd.
Santa Clara, CA 95051

Technical Support
For technical support, contact Agilent at techservices@agilent.com or visit www.agilent.com/genomics/contactus.

Warranty

The material contained in this document is provided “as is,” and is subject to being changed, without notice, in future editions. Further, to the maximum extent permitted by applicable law, Agilent disclaims all warranties, either express or implied, with regard to this manual and any information contained herein, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. Agilent shall not be liable for errors or for incidental or consequential damages in connection with the furnishing, use, or performance of this document or of any information contained herein. Should Agilent and the user have a separate written agreement with warranty terms covering the material in this document that conflict with these terms, the warranty terms in the separate agreement shall control.

Safety Notices

CAUTION

A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.

WARNING

A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.

Technology Licenses

The hardware and/or software described in this document are furnished under a license and may be used or copied only in accordance with the terms of such license.

Restricted Rights Legend

U.S. Government Restricted Rights. Software and technical data rights granted to the federal government include only those rights customarily provided to end user customers. Agilent provides this customary commercial license in Software and technical data pursuant to FAR 12.211 (Technical Data) and 12.212 (Computer Software) and, for the Department of Defense, DFARS 252.227-7015 (Technical Data - Commercial Items) and DFARS 227.7202-3 (Rights in Commercial Computer Software or Computer Software Documentation).
In This Guide...

This *Product Overview and Installation & Administration Guide* provides an overview of Agilent CytoGenomics 3.0 and instructions for installing and administering the software.

1 **Product Overview**

   This chapter provides an overview of Agilent CytoGenomics. It explains the overall design of the program and how different users can work with it to fulfill their roles in the laboratory.

2 **Installation Instructions for Windows**

   This chapter shows you how to install Agilent CytoGenomics 3.0 on computers running the Windows 7 operating system.

3 **Installation Instructions for Macintosh**

   This chapter shows you how to install Agilent CytoGenomics 3.0 on systems running a Macintosh OS.

4 **Administering the System**

   This chapter shows you how to add users, assign roles and manage the database.
## Contents

### 1 Product Overview

What is Agilent CytoGenomics? 8

Getting Help 10

- To get help within Agilent CytoGenomics 3.0 10
- To contact Agilent Technical Support 10
- To learn about Agilent products and services 10

Key Features 11

- The Home tab - getting started with CytoGenomics 11
- The Analysis Workflow tab – selecting samples and running analyses 11
- The Sample Review tab – reviewing analyses 12
- The Configure Settings tab – setting up system defaults and analysis methods 12
- The Supporting Files tab – managing samples, designs, gene lists, tracks, and other supporting files 13
- The Admin tab – managing users and database 13

User Roles and Capabilities 14

### 2 Installation Instructions for Windows

Installing Agilent CytoGenomics 3.0 – Windows 16

- Step 1. Prepare for installation 16
- Step 2. Install the database server and client on a single Windows computer 18
- Step 3. Install the client software on additional Windows computers 32
- Step 4. Start the Agilent CytoGenomics 3.0 client software 36
- Step 5. Log in to Agilent CytoGenomics 36
- Step 6. Add your software license 37
- Step 7. Add users and assign roles 40

Upgrading from the Previous Version of CytoGenomics – Windows 41

- To upgrade from a previous version and keep the database 41
# Contents

To remove the database and upgrade from a previous version 48  
To remove the client software for Agilent CytoGenomics 2.9 49  
To remove the client and server software for Agilent CytoGenomics 2.9 51  

Troubleshooting 53  
If the Agilent CytoGenomics program does not open 53  

3 **Installation Instructions for Macintosh** 55  

Installing Agilent CytoGenomics 3.0 – Macintosh 56  
Step 1. Prepare for installation 56  
Step 2. Install the database server and client on a single Macintosh computer 58  
Step 3. Install the client software on additional Macintosh computers 74  
Step 4. Start the Agilent CytoGenomics 3.0 client software 77  
Step 5. Log in to Agilent CytoGenomics 77  
Step 6. Add your software license 78  
Step 7. Add users and assign roles 80  

Upgrading from the Previous Version of CytoGenomics – Macintosh 81  
To upgrade from a previous version and keep the database 81  
To remove the database and upgrade from a previous version 84  
To remove the client software for Agilent CytoGenomics 2.9 85  
To remove the client and server software for Agilent CytoGenomics 2.9 89  

4 **Administering the System** 93  

Administering the System 94  
To manage users and roles 94  
To manage the database 95
This chapter provides an overview of Agilent CytoGenomics. It explains the overall design of the program and how different users can work with it to fulfill their roles in the laboratory.
What is Agilent CytoGenomics?

Cytogenetic research labs are increasingly turning to array CGH to improve detection of copy number changes and increase sample throughput. Alongside Agilent’s gold standard CGH+SNP and CGH microarrays, Agilent CytoGenomics software completes Agilent’s array-based cytogenetic research solution. Agilent CytoGenomics provides a statistically and visually powerful tool to streamline the day-to-day cytogenetic sample analysis research workflow. It offers full support for efficient analysis of cytogenetic samples and easy report generation, based on information from both external databases and an internal database. Key automation features enable a seamless flow through the experimental process, starting with full automation of data upload and analysis, and ending with customized report generation.

With Agilent CytoGenomics, cytogenetic research labs can analyze a normal, constitutional sample in less than five minutes. This increases efficiency and throughput, while enabling cytogenetic researchers to better detect copy number and copy-neutral aberrations across the genome.

Agilent CytoGenomics supports CGH analysis for both constitutional and tumor samples from either fresh or FFPE sample sources. The SNP-based LOH (Loss or Lack of Heterozygosity) and UPD (Uniparental Disomy) analysis is supported for both constitutional and liquid tumor samples from fresh sample sources only.

Agilent CytoGenomics provides cytogenetic laboratories security data access through three types of user roles: Technician, Scientist, and Administrator. Each of the three user roles has unique permissions to access a selected set of features and data in the software. (See Table 1.)

An Agilent CytoGenomics workflow (Figure 1) automatically feature extracts images generated by a microarray scanner. The extracted data is then filtered and analyzed, and aberrant intervals are identified. You can edit, suppress, add, or classify identified aberration calls during sample triage. A set of reports is generated at the end of the workflow, including a customizable Cyto report. Audit trails of changes are available to display or export.
Figure 1  Agilent CytoGenomics Workflow — from image to result
Getting Help

To get help within Agilent CytoGenomics 3.0

Agilent CytoGenomics 3.0 has an online help system that provides detailed instructions on using the software and descriptions of the user interface. To open the help, click Help near the top right corner of the program window.

Help videos are also available from within the Agilent CytoGenomics program. These short videos give you instructions for doing basic tasks within the program. You can access the videos from the CytoGenomics Home screen.

To contact Agilent Technical Support

Technical support is available by phone and/or e-mail.

<table>
<thead>
<tr>
<th>Resource</th>
<th>To find technical support contact information</th>
</tr>
</thead>
</table>
| Contact Agilent Technical Support by telephone or e-mail message (United States and Canada) | Telephone: (800-227-9770)  
E-mail message: informatics_support@agilent.com |
| Contact Agilent Technical Support by telephone or e-mail message (for your country) | 1 Go to http://www.agilent.com/genomics/contactus.  
2 Under Worldwide Sales, Support and Distributors click to select a country. Complete e-mail message and telephone contact information for your country is displayed. |

To learn about Agilent products and services

To view information about the Genomics products and services that are available from Agilent, go to www.agilent.com/genomics. To view information about the Life Sciences and Chemical Analysis products and services that are available from Agilent, go to www.chem.agilent.com.
Key Features

This section provides an overview of the features and capabilities available in Agilent CytoGenomics 3.0. The “tabs” at the top of the program window provide access to related tasks and commands. Users see only the tabs for which they have access, according to their assigned user role. (See “User Roles and Capabilities” on page 14.)

The Home tab – getting started with CytoGenomics

Capabilities within the Home tab include:
• Entering your user license for the software
• Watching help videos for CytoGenomics
• Accessing the full set of Auto-Processing functions
• Opening links to other Agilent Genomics software programs

The Analysis Workflow tab – selecting samples and running analyses

Capabilities within the Analysis Workflow tab include:
• Running manual workflows
• Adding sample information
• Importing design files
• Viewing array images by launching the Feature Extraction program
The Sample Review tab – reviewing analyses

Capabilities within the Sample Review tab include:

- Monitoring workflow jobs
- Displaying Cyto reports and aberration results
- Triaging samples:
  - Check in/out samples
  - Add sample and interval notes
  - Modify, add, or suppress calls
  - Add/change intervals classifications
  - Review SNP fit and change copy number peak assignments
  - Search database for similar classified intervals
  - Sign off samples and generate sign off reports
- Reanalyzing samples
- Viewing results from multiple samples side-by-side in Multisample View
- Viewing results for single cell analyses using Single Cell Triage
- Transferring results to Cartagenia BENCH

The Configure Settings tab – setting up system defaults and analysis methods

Capabilities within the Configure Settings tab include:

- Setting up analysis method parameters
- Creating customized QC metric sets
- Creating customized Cyto report templates
- Configuring system preferences, including
  - Dynamic and static tracks
  - Default view preferences
  - Default input/output folders
  - Default genome build
  - Auto-Processing workflow settings
  - Standard notes and classifications
  - Cartagenia BENCH data transfer settings
- Entering account information for Cartagenia BENCH and Agilent eArray
The Supporting Files tab – managing samples, designs, gene lists, tracks, and other supporting files

Capabilities within the Supporting Files tab include:

- Viewing sample attributes and data
- Downloading new builds of a design from eArray
- Exporting sample attribute files
- Importing design files
- Importing genotype reference files
- Importing and exporting probe ID lists
- Importing and exporting tracks
- Opening the workflow log
- Displaying list of samples in the database, organized by design/build

The Admin tab – managing users and database

Capabilities within the Admin tab include:

- Adding new users and assign roles
- Changing roles for existing users
- Enabling/disabling user access to the program
- Displaying or changing database connection parameters for the client computer
- Backing up the CytoGenomics database
- Clearing cached data
User Roles and Capabilities

The following table lists the capabilities allowed for the three different user roles within Agilent CytoGenomics 3.0.

Table 1  User roles and capabilities

<table>
<thead>
<tr>
<th>Role</th>
<th>Tasks and capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technician</td>
<td>• Run manual or auto-processing workflows  &lt;br&gt;• Add sample information  &lt;br&gt;• Monitor workflow jobs  &lt;br&gt;• Display reports and aberration results  &lt;br&gt;• Triage samples  &lt;br&gt;• Check in/out samples  &lt;br&gt;• Add notes  &lt;br&gt;• Add or suppress calls  &lt;br&gt;• Add/change interval classifications  &lt;br&gt;• Review and change SNP peak assignment  &lt;br&gt;• Transfer results to Cartagenia BENCH  &lt;br&gt;• Display auto-processing logs  &lt;br&gt;(Technicians cannot sign off samples.)</td>
</tr>
<tr>
<td>Scientist</td>
<td>Technician tasks, plus:  &lt;br&gt;• Configure system preferences, including  &lt;br&gt;• Default input/output folders  &lt;br&gt;• Auto-processing workflow settings  &lt;br&gt;• Default view preferences  &lt;br&gt;• Default genome build  &lt;br&gt;• Standard notes, classifications, and queries  &lt;br&gt;• Dynamic and static tracks  &lt;br&gt;• Cartagenia BENCH data transfer settings  &lt;br&gt;• Set analysis and workflow settings  &lt;br&gt;• Create standard notes, classifications, and queries  &lt;br&gt;• Create customized Cyto report templates  &lt;br&gt;• Manage samples  &lt;br&gt;• Evaluate and chart QC trends  &lt;br&gt;• Sign off results</td>
</tr>
<tr>
<td>Administrator</td>
<td>Complete system access, including all Technician and Scientist tasks, plus  &lt;br&gt;• Add users and roles  &lt;br&gt;• Change database connection settings for client systems</td>
</tr>
</tbody>
</table>
This chapter shows you how to install Agilent CytoGenomics 3.0 on computers running the Windows 7 operating system.
Installing Agilent CytoGenomics 3.0 – Windows

This section includes detailed instructions and important notes for installing Agilent CytoGenomics 3.0 on a Windows system that does not have a previous version of CytoGenomics installed.

Agilent CytoGenomics consists of two parts: a PostgreSQL database server and the client software. Once you have installed the database server and client software on one computer, you can install additional copies of the client software on client computers that have network access to the database computer.

For instructions on how to upgrade an existing Agilent CytoGenomics installation, see “Upgrading from the Previous Version of CytoGenomics – Windows” on page 41.

Step 1. Prepare for installation

a. Download the Windows version of the software and release notes

1. Go to the eArray website https://earray.chem.agilent.com/earray.
2. Click Download Agilent CytoGenomics.
3. Click Download next to the version of software required for your computer (Windows 64-bit or Windows 32-bit).
4. Click Save As to save the Installer on your computer. (This file is a large file. Depending on your internet connection speed, the download can take a long time.)
5. Browse to a location where you want to save the Installer program, and then click Save. (Do not start the installation at this time.)
7. Click Save As.
8. Browse to a location where you want to save the release notes.
9. Click Save.
b. Check system requirements before you start

Check to make sure that your computer systems meet the following requirements. All client installations point to the computer on which the server software is installed. See Table 2 for minimum requirements. See Table 3 for recommended requirements.

NOTE

If an operating system is not listed in Table 2 or Table 3, it is not supported.

<table>
<thead>
<tr>
<th>Table 2</th>
<th>Minimum Requirements for Agilent CytoGenomics computers – Windows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>32-bit Windows 7</td>
</tr>
<tr>
<td>Programs</td>
<td>Any program that enables you to open PDF files (for example, Adobe Reader)</td>
</tr>
<tr>
<td>Processor</td>
<td>&gt; 2 GHz</td>
</tr>
<tr>
<td>Working memory (RAM)</td>
<td>4 GB</td>
</tr>
<tr>
<td>Hard disk space</td>
<td>500 GB</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>1280 x 768 or higher</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3</th>
<th>Recommended Requirements for Agilent CytoGenomics computers – Windows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating system</td>
<td>64-bit Windows 7 Enterprise</td>
</tr>
<tr>
<td>Programs</td>
<td>Any program that enables you to open PDF files (for example, Adobe Reader)</td>
</tr>
<tr>
<td>Processor</td>
<td>&gt; 3 GHz</td>
</tr>
<tr>
<td>Working memory (RAM)</td>
<td>8 GB</td>
</tr>
<tr>
<td>Hard disk space</td>
<td>500 GB</td>
</tr>
<tr>
<td>Display Resolution</td>
<td>1280 x 768 or higher</td>
</tr>
</tbody>
</table>
c. Set up permissions for Installer and users

- Make sure that the user account used to install the Agilent CytoGenomics 3.0 software has administrator permissions on the installation computer.
- Make sure that every user account running the Agilent CytoGenomics 3.0 software has read/write permissions in the computer where the client software is installed. In addition, users must have read/write permissions in the installation folder of the computer where the database server is installed.

The way you set permissions varies between operating systems. Contact your network administrator for help in checking or changing user account permissions. If the user account permissions are not set correctly, the software will fail to install or run properly.

d. Adjust user account settings for Windows 7 computers

For Windows 7 computers

Change the User Account Control settings from the default setting to “Never Notify.”

1. Go to Control Panel.
2. Click User Accounts.
3. Click Change User Account Control setting.
4. Change the setting to “Never Notify” and click OK.
5. Restart the machine.

Step 2. Install the database server and client on a single Windows computer

Only one copy of the server software is installed. To run the client software, the database server must be installed. The client is the program you run when you want to use Agilent CytoGenomics. You can run the client program on the same computer as the server, or from any other computer with the client program installed. After installation, the database server software runs silently in the background and manages the shared database for all Agilent CytoGenomics 3.0 users. All client computers must have network access to the server computer and users must have read/write permissions.
1 Log on to the Windows system where you want to install Agilent CytoGenomics 3.0 server. Use an account that has administrator permissions.

2 Locate the installation program that you downloaded in Step 1, “a. Download the Windows version of the software and release notes” on page 16. Double-click the Agilent CytoGenomics 3.0.X.X application file to start the installation wizard.

The following message is displayed.

![InstallAnywhere dialog box - preparing to install](image)

**Figure 2** InstallAnywhere dialog box - preparing to install

The installation wizard starts.
3 Read the introductory information.

4 Click Next.

   The License Agreement screen opens.
5 Read the license agreement. Click I accept the terms of the License Agreement and then click Next. (Click Previous to review information in a previous section.)

The Choose Install Set screen opens.
6 Click the icon next to **Both Client and Server** to install both the database server and client software on this computer.

7 Click **Next**.

An Information message opens. Click **OK** to continue. The Choose Install Folder screen opens.
8 By default, the program is installed in:
C:\Agilent\AgilentCytoGenomics3.0.X.X (where X.X is the revision number). Leave this folder as-is, or type the location and name of the folder where you want to install Agilent CytoGenomics 3.0. Within this folder, one folder is created for the server software and one folder is created for the client software.

OR

Click Choose, browse to a location where you want to install the program, and then click Save.

NOTE For installations on Windows 7, the installation program folder must not be in the C:\Program Files folder.

9 Click Next.

The Enter Administrator details screen opens.
The domain and user name of the person currently logged on to the computer appear in Username. If this Username is not the administrator for the Agilent CytoGenomics 3.0 software, type the correct user, using the format example shown.

For domain user: DOMAIN\username
For local machine: MACHINENAME\username

To set up additional CytoGenomics users, mark the check box labeled **Add additional CytoGenomics users?**. In the Password field that appears, type the password for the administrator account.

If you do not want to set up new users at this time, proceed directly to step 16 on page 26. Note that the administrator can set up new users from within CytoGenomics once installation is complete (see “To manage users and roles” on page 94).

Click **Next**.

The Add additional CytoGenomics users screen opens.
The Add additional CytoGenomics users screen lists all of the users in the domain or on the local machine. Mark the check box next to the users that you want to add to the CytoGenomics database.

To search for a user, type the user name into the search box at the top of the screen.

Click **Next**.

The Add additional CytoGenomics users screen advances to the step for configuring user roles.
For each user listed on the screen, select a role in the Roles drop-down list. The default selection is Technician.

See “User Roles and Capabilities” on page 14 for a description of each role.

Click Next.

The Choose common storage folder screen opens.
By default, the common storage folder is created inside the folder C:\Agilent\AgilentCytoGenomics3.0.X.X\Server (where X.X is the revision number). Leave this folder as-is, or Click **Choose**, browse to the desired folder, and then click **Save**.

The common storage folder is where the program saves files that are used at the server level.

Click **Next**.

The Choose client data folder screen opens.
Figure 11  Choose client data folder screen – Windows

19 By default, the client data folder is created inside the folder 
C:\Agilent\AgilentCytoGenomics3.0.X.X\Client (where X.X is the revision number). Leave this folder as-is, or Click Choose, browse to the desired folder, and then click Save.

The client data folder is where the program installs the files for the genome builds and reference genomes.

20 Click Next.

The Choose Shortcut Folder screen opens.
By default, program icons are installed in the Agilent CytoGenomics 3.0.X.X program group on your computer (where X.X is the revision number). To select another location for the program icons, select the desired location (on the desktop, for example) and then click Next.

**NOTE**

If more than one user plans to use Agilent CytoGenomics 3.0 on this computer, select **Create Icons for All Users**. Otherwise, other users do not see the program icons.

The Warning screen opens.
Read the message that cautions you not to stop the installation once it has started, and then click **Next**.

The Pre-Installation Summary screen opens.
23 Review the installation setup information. If you want to change any of the settings, click Previous and go back and change the settings. To start the installation, click Install.

The Installing Agilent CytoGenomics screen opens and is displayed until the installation is complete.
Figure 15 Installing Agilent CytoGenomics screen – Windows

When the installation is complete, the Installation Complete screen opens.

24 Click Done.

25 Make sure the folder where you installed the software is shared with read/write permission for all client computers and for all users who run Agilent CytoGenomics.

**Step 3. Install the client software on additional Windows computers**

To use other computers to run Agilent CytoGenomics 3.0 client software (with a shared database), install the client software on each of the computers.

1 On each computer you want to run the Agilent CytoGenomics 3.0 program, run the installation wizard, as described in “Step 2. Install the database server and client on a single Windows computer” on page 18.

2 When the Choose Install Set screen opens, select Only Client.
Installation Instructions for Windows
Installing Agilent CytoGenomics 3.0 – Windows

Figure 16  Choose Install Set screen – Windows – select **Only Client**

3  Click **Next**.

The Choose Install Folder screen opens.
4 By default, the program is installed in C:\Agilent\AgilentCytoGenomics3.0.X.X (where X.X is the revision number). Leave this folder as-is, or type the location and name of the folder where you want to install Agilent CytoGenomics 3.0.

OR

Click **Choose** and browse to a location where you want to install the program, and then click **Save**.

5 Click **Next**.

The **Provide Info. of CytoGenomics server** screen opens.
6 Under **Host**, type the assigned computer name or IP address of the computer (from step 2) where you installed the Agilent CytoGenomics 3.0 database server. (To find the computer name of your current computer, click **Start** > **Control Panel** > **System**.)

7 Accept the default **Port**, unless your system administrator tells you otherwise.

8 Click **Next**.

Installer immediately tests the connection to the specified database. If incorrect database parameters are provided, or the PostgreSQL database service is not running, a message is displayed.

You can choose to complete the installation and change database connection parameters when launching the client software. However, Agilent recommends that you provide the correct database information during installation.
Continue the installation wizard. The next screen is the Choose client data folder screen. Follow the instructions for the installation wizard to enter the client data folder location, choose a shortcut location, and start the installation. For information, see step 19 through step 25 in the section “Step 2. Install the database server and client on a single Windows computer” on page 18.

**Step 4. Start the Agilent CytoGenomics 3.0 client software**

After you install the Agilent CytoGenomics database server and client programs as described in this manual, start the program.

- Double-click the Agilent CytoGenomics 3.0 icon, or select Agilent CytoGenomics 3.0 from the Windows Start menu.

**NOTE** How you start the program depends on the choice you made for Shortcut Folder during installation of the Agilent CytoGenomics client.

**Step 5. Log in to Agilent CytoGenomics**

After you start the program, the Login screen appears. The name and domain for the administrator set during installation appears in the dialog box.
1 Log in with your username and password. After the software is started, administrators can add additional users and assign their roles.

2 Next to **Password** type your password.

3 To change the domain, click the arrow next to **Domain** and select the correct domain. Otherwise, leave it as-is.

4 Click **Ok**.

**NOTE**

If you are using a local machine that is not part of a domain, you see a message that the software cannot find the domain. Click **OK** to ignore this message.

---

**Step 6. Add your software license**

When you log in for the first time, the Enter License dialog box opens (Figure 20).

1 If you do not already have the license file saved to your computer, click **Request for license** to open the Agilent website to the CytoGenomics license request page. Complete the fields in the request form to obtain a CytoGenomics software license. The license is contained in a text file.

2 At the bottom of the Enter License dialog box, click **Browse**.

The Open dialog box opens.
2 Installation Instructions for Windows

Installing Agilent CytoGenomics 3.0 – Windows

Figure 20  Enter License dialog box

3 Browse to the saved license text file. Select the file and click Open. The program loads the contents of the file into the text box on the Enter License dialog box.

4 Click OK. The Agilent CytoGenomics program opens to the Home screen (Figure 22).

Upon opening the program, you may see a message, like the one in Figure 21, notifying you that updates are available for the software and/or the preloaded tracks.

Figure 21  Updates Available message box
• If you want to download the available updates at this time, mark the check boxes next to **Software update** and/or **Track Updates**, then click **Download**. During the download process, you are blocked from using CytoGenomics. Download time is dependent on internet speed.

• If you do not want to download the available updates at this time, click **Cancel**.

• To stop being automatically notified of available updates, clear the check box labeled **Check for updates at application start up**. This check box is also accessible from Local Settings tab of the Configure Settings > Settings screen of CytoGenomics.

---

**Figure 22** Agilent CytoGenomics program Home screen
Step 7. Add users and assign roles

Before other users can log in to Agilent CytoGenomics, the administrator must add the users and assign user roles (if the users were not added during installation of the server). The user role determines what capabilities the user has within Agilent CytoGenomics. For information on what capabilities each user role has, see “User Roles and Capabilities” on page 14. For information on how to add users and assign roles, see “To manage users and roles” on page 94.
Upgrading from the Previous Version of CytoGenomics – Windows

There are two ways to upgrade from Agilent CytoGenomics 2.9 to Agilent CytoGenomics 3.0:

1. Upgrade the program without removing the database.
   This approach is intended for users who want to upgrade and keep all records currently in the database. See “To upgrade from a previous version and keep the database” on page 41.

2. Completely remove the program and database and then reinstall.
   This approach is intended for users who want to discard all data in their current Agilent CytoGenomics database. See “To remove the database and upgrade from a previous version” on page 48.

To upgrade from a previous version and keep the database

Follow these steps to upgrade from Agilent CytoGenomics 2.9 to Agilent CytoGenomics 3.0 and retain the data in the database.

1. Make sure that all users are logged off all Agilent CytoGenomics clients before proceeding, and that no automatic workflows are in process.

2. Back up the data folder in the Agilent CytoGenomics 2.9 server program folder.

3. Download Agilent CytoGenomics 3.0 from Agilent Technologies and check the system requirements.
   See “Step 1. Prepare for installation” on page 16 for detailed instructions on this step.

4. On the server computer, uninstall the Agilent CytoGenomics 2.9 client software and install the Agilent CytoGenomics 3.0 server and client software using the instructions below (step a through step k).
   a. Double-click the Agilent CytoGenomics 3.0.X.X application file that you downloaded from Agilent.
   b. On the Introduction screen, read the introductory information and then click Next.
The following dialog box opens notifying you that Agilent CytoGenomics 2.9 is already installed on this computer and the client software must be uninstalled before continuing to upgrade to Agilent CytoGenomics 3.0.

![Dialog box - Agilent CytoGenomics 2.9 already exists](image)

**Figure 23**  Dialog box - Agilent CytoGenomics 2.9 already exists

- **c** Click **OK** in the dialog box to continue.
  
  The CytoGenomics 2.9 Uninstaller opens.

- **d** In the Uninstaller, uninstall only the client software for Agilent CytoGenomics 2.9.
  
  See step 2 through step 6 in “To remove the client software for Agilent CytoGenomics 2.9” on page 49.

  Once the uninstallation of the Agilent CytoGenomics 2.9 client software has completed, the Installer for Agilent CytoGenomics 3.0 re-opens to the License Agreement screen.

- **e** Read the license agreement. Click **I accept the terms of the License Agreement** and then click **Next**.
  
  The Choose Install Set screen opens.
On the Choose Install Set screen, select **Both Client and Server**. Click **Next**.

The following dialog box opens to inform you that you have selected to install the CytoGenomics server and client.

Click **OK** in the dialog box to continue.
The following dialog box opens to inform you that the existing version of the server will be overwritten with the new version.

![Dialog box – Agilent CytoGenomics server already exists](image)

**Figure 26** Dialog box – Agilent CytoGenomics server already exists

**h** Click **OK** in the dialog box to continue.

The Choose Install Folder screen open.

**i** At the Choose Install Folder screen, the default folder for installation of the program is `C:\Agilent\AgilentCytoGenomics3.0.X.X` (where X.X is the revision number). Leave this folder as-is, or click **Choose** and browse to a location where you want to install the program, and then click **Save**.

**NOTE**
The client software is installed to the folder indicated in the Choose Install Folder screen. The server software remains in the program folder for the previous version of Agilent CytoGenomics.

**j** Click **Next**.

**k** Continue the installation wizard. The next screen is the Choose client data folder screen. Follow the instructions for the installation wizard to enter the client data folder location, choose a shortcut location, and start the installation. For information, see step 19 through step 25 in the section “Step 2. Install the database server and client on a single Windows computer” on page 18.
5 On each client computer, uninstall the Agilent CytoGenomics 2.9 client software and install the Agilent CytoGenomics 3.0 client software using the instructions below (step a through step j).

a Double-click the Agilent CytoGenomics 3.0.X.X application file that you downloaded from Agilent.

b On the Introduction screen, read the introductory information then click Next.

The following dialog box opens notifying you that Agilent CytoGenomics 2.9 is already installed on this computer and the client software must be uninstalled before continuing to upgrade to Agilent CytoGenomics 3.0.

![Figure 27 Dialog box - Agilent CytoGenomics 2.9 already exists]

- Click OK in the dialog box to continue.

  The CytoGenomics 2.9 Uninstaller opens.

- In the Uninstaller, uninstall only the client software for Agilent CytoGenomics 2.9.

  See step 2 through step 6 in “To remove the client software for Agilent CytoGenomics 2.9” on page 49.
Once the uninstallation of the Agilent CytoGenomics 2.9 client software has completed, the Installer for Agilent CytoGenomics 3.0 re-opens to the License Agreement screen.

Read the license agreement. Click **I accept the terms of the License Agreement** and then click **Next**.

The Choose Install Set screen opens.

![Choose Install Set screen – Windows – select Only Client](image)

**Figure 28** Choose Install Set screen – Windows – select **Only Client**

On the Choose Install Set screen, select **Only Client**. Click **Next**.

The following dialog box opens to inform you that you have selected to install only the Agilent CytoGenomics 3.0 client.
**Figure 29** Dialog box – Only CytoGenomics client software will be installed

**g** Click **OK** in the dialog box to continue.

The Choose Install Folder screen opens.

**h** At the Choose Install Folder screen, the default folder for installation of the program is C:\Agilent\AgilentCytoGenomics3.0.X.X (where X.X is the revision number). Leave this folder as-is, or click **Choose** and browse to a location where you want to install the program, and then click **Save**.

**i** Click **Next**.

**j** Continue the installation wizard. Follow the instructions to provide server information, choose a shortcut location, and start the installation. See step 6 through step 8 in the section “Step 3. Install the client software on additional Windows computers” on page 32.

**6** On the server and client computers, start the Agilent CytoGenomics program.

See “Step 4. Start the Agilent CytoGenomics 3.0 client software” on page 36.

**7** Log in.

See “Step 5. Log in to Agilent CytoGenomics” on page 36.

**8** Enter your updated license information.

See “Step 6. Add your software license” on page 37.
To remove the database and upgrade from a previous version

To completely uninstall Agilent CytoGenomics 2.9 (including the database) and then install Agilent CytoGenomics 3.0, follow these steps.

1. Make sure that all users are logged off all Agilent CytoGenomics clients before proceeding, and that no automatic workflows are in process.

2. (Optional) Back-up the data folder in the Agilent CytoGenomics server program folder.

3. Remove the previous version of the Agilent CytoGenomics client program from all client computers.
   See “To remove the client software for Agilent CytoGenomics 2.9” on page 49.

4. Remove the Agilent CytoGenomics client and server software from the server computer.
   See “To remove the client and server software for Agilent CytoGenomics 2.9” on page 51.

5. Download the new software revision from Agilent Technologies and check the system requirements.
   See “Step 1. Prepare for installation” on page 16 for detailed instructions on this step.

6. Install Agilent CytoGenomics 3.0 client and server software on the server computer.
   See “Step 2. Install the database server and client on a single Windows computer” on page 18.

7. Install Agilent CytoGenomics 3.0 client software on all computers where you want to run the client software. (Make sure that the previous version of the client software was removed.)
   See “Step 3. Install the client software on additional Windows computers” on page 32.

8. Start the Agilent CytoGenomics 3.0 program.
   See “Step 4. Start the Agilent CytoGenomics 3.0 client software” on page 36.

9. Log in.
   See “Step 5. Log in to Agilent CytoGenomics” on page 36.

10. Enter your updated license information.
To remove the client software for Agilent CytoGenomics 2.9

Before you update the Agilent CytoGenomics software to revision 3.0, (whether you are updating the server software or not) first remove the client software on all computers where it is installed. Use the Uninstall Agilent CytoGenomics.exe file, located in the \Uninstall_Agilent CytoGenomics folder of your program folder. Or, you can use the Windows Control Panel to remove the program.

1. Start the Uninstall Agilent CytoGenomics.exe file, located in the \Uninstall_Agilent CytoGenomics folder of your program folder.

   The Uninstaller program starts.

2. Read the introductory information, and then click Next.

3. Read the warning information. You are cautioned not to stop the Uninstaller once it has started to remove the programs. Click Next.

   The Uninstall Options screen opens.

   Figure 30 Uninstall Options screen – Windows – select Uninstall Specific Features
4. Select Uninstall Specific Features.

5. Click Next.

The Choose Product Feature screen opens.

![Figure 31](image)

Choose Product Features screen – Windows – mark Client

6. In the Choose Product Features screen, mark Client. When the Client check box is marked, only the client software is removed from the computer. The client software folder and any data folders created after installation are not removed.

   The Uninstall button becomes active.

**CAUTION**

Do not mark Server unless you want to remove client and server software completely, including the database, from your computer.

7. Click Uninstall.

The following dialog box opens asking you to confirm that you want to uninstall the CytoGenomics client.
Figure 32  Dialog box – Uninstall CytoGenomics Client

8 Click Yes in the dialog box to continue.
9 When the uninstallation has completed, click Done to close the Uninstaller program.

To remove the client and server software for Agilent CytoGenomics 2.9

The Uninstall program for Agilent CytoGenomics 2.9 provides an easy way to remove the Agilent CytoGenomics 2.9 client, server, and PostgreSQL programs from your computer.

CAUTION When you completely uninstall Agilent CytoGenomics 2.9, the database and the data contained in it are completely removed. Do not uninstall the entire program unless you have backed up your database or no longer wish to use it.

1 Start the Uninstall Agilent CytoGenomics.exe file, located in the \Uninstall_Agilent CytoGenomics folder of your program folder.

   The Uninstaller program starts.

2 Read the introductory information, and then click Next.

3 Read the warning information. You are cautioned not to stop the Uninstaller once it has started to remove the programs. Click Next.

   The Uninstall Options screen opens.
Figure 33  Uninstall Options screen – Windows – select Complete Uninstall

4 Select Complete Uninstall.

5 Click Next.

6 When the uninstallation is complete, a message appears. Click Done.

The Agilent CytoGenomics 2.9 client program, server program and database, and PostgreSQL program were removed from your computer. Program folders and data folders (such as data output folders) created after installation were not removed.
Troubleshooting

If the Agilent CytoGenomics program does not open

✔ Try opening the program by running the run_CytoGenomics.bat file.
  a  Open the installation folder AgilentCytoGenomics3.0.X.X.
  b  Double-click run_CytoGenomics.bat.

Agilent CytoGenomics opens and you can operate the program normally.

If the program still does not open, try adjusting the amount of RAM allocated to the program using the approach provided below.

✔ Adjust the amount of RAM that is allocated to the program.
  a  Open the Client folder inside the AgilentCytoGenomics3.0.X.X installation folder.
  b  Open the file Agilent CytoGenomics.lax in Notepad.
  c  In this file, locate the following text.
      lax.nl.java.option.additional=Xms1000m
  d  Change Xms1000m to Xms900m.
  e  Save and close the file.
  f  Open the Agilent CytoGenomics client program.
     • Double-click the Agilent CytoGenomics 3.0 icon, or select Agilent CytoGenomics 3.0 from the Windows Start menu.

If Agilent CytoGenomics opens, you can operate the program normally.

If Agilent CytoGenomics still does not open, repeat step a through step f, and reduce the Xms value by 100 again. Continue to reduce this value in increments of 100 until the program opens successfully.
This chapter shows you how to install Agilent CytoGenomics 3.0 on systems running a Macintosh OS.

**NOTE**

The Macintosh version of CytoGenomics does not permit analysis of scanner image files. To run an analysis workflow, you must first extract the image file using the Agilent Feature Extraction program, then use the extracted FE file in the workflow.
This section includes detailed instructions and important notes for installing Agilent CytoGenomics 3.0 on a Macintosh system that does not have a previous version of CytoGenomics installed.

Agilent CytoGenomics consists of two parts: a PostgreSQL database server and the client software. Once you have installed the database server and client software on one computer, you can install additional copies of the client software on client computers that have network access to the database computer.

For instructions on how to upgrade an existing Agilent CytoGenomics installation, see “Upgrading from the Previous Version of CytoGenomics – Macintosh” on page 81.

Step 1. Prepare for installation

a. Download the Macintosh version of the software and release notes

1  Go to the eArray website https://earray.chem.agilent.com/earray.
2  Click Download Agilent CytoGenomics.
3  Click Download for the Mac version of the software.
4  Click Save As to save the installer on your computer. (This file is a large file. Depending on your internet connection speed, the download can take a long time.)
5  Browse to a location where you want to save the installer program, and then click Save.

The Mac installer is downloaded as a compressed folder (Agilent_CytoGenomics_3_0_X_X_MAC.zip).
6  Next to Release Notes, click Download.
7  Click Save As.
8  Browse to a location where you want to save the release notes.
9  Click Save.
b. Check Macintosh system requirements before you start

Check to make sure that your computer systems meet the following requirements. All client installations point to the computer on which the server software is installed. See Table 4 for minimum requirements. See Table 5 for recommended requirements.

**NOTE**

If an operating system is not listed in Table 4 or Table 5, it is not supported.

<table>
<thead>
<tr>
<th>Table 4 Minimum Requirements for Agilent CytoGenomics on Macintosh computers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computer Requirements for Macintosh</strong></td>
</tr>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Programs</td>
</tr>
<tr>
<td>Processor</td>
</tr>
<tr>
<td>Working memory (RAM)</td>
</tr>
<tr>
<td>Hard disk space</td>
</tr>
<tr>
<td>Display resolution</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 5 Recommended Requirements for Agilent CytoGenomics on Macintosh computers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Computer Requirements for Macintosh</strong></td>
</tr>
<tr>
<td>Operating System</td>
</tr>
<tr>
<td>Programs</td>
</tr>
<tr>
<td>Processor</td>
</tr>
<tr>
<td>Working memory (RAM)</td>
</tr>
<tr>
<td>Hard disk space</td>
</tr>
<tr>
<td>Display resolution</td>
</tr>
</tbody>
</table>
c. Set up permissions for installer and users

- Make sure that the user account used to install the Agilent CytoGenomics 3.0 software has administrator permissions on the installation computer.
- Make sure that every user account running the Agilent CytoGenomics 3.0 software has read/write permissions in the computer where the client software is installed. In addition, users must have read/write permissions in the installation folder of the computer where the database server is installed.

The way you set permissions varies between operating systems. Contact your network administrator for help in checking or changing user account permissions. If the user account permissions are not set correctly, the software will fail to install or run properly.

Step 2. Install the database server and client on a single Macintosh computer

Only one copy of the server software is installed. To run the client software, the database server must be installed. The client is the program you run when you want to use Agilent CytoGenomics. You can run the client program on the same computer as the server, or from any other computer with the client program installed. After installation, the database server software runs silently in the background and manages the shared database for all Agilent CytoGenomics 3.0 users. All client computers must have network access to the server computer and users must have read/write permissions.

7 Log on to the Macintosh system where you want to install Agilent CytoGenomics 3.0 server. Use an account that has administrator permissions.

8 Locate the compressed folder (Agilent_CytoGenomics_3_0_X_X_MAC.zip) that you downloaded in Step 1, “a. Download the Macintosh version of the software and release notes” on page 56. Double-click the folder to expand the contents of the folder and save the installer on your computer.

9 Double-click the Mac installer.
   The following window opens.
10 Click directly on the lock icon near bottom of the dialog box. The following dialog box opens.

11 In this dialog box, enter the Name and Password for a user with administrator rights to the computer, then click **OK**. The installation wizard starts.
Installation Instructions for Macintosh
Installing Agilent CytoGenomics 3.0 – Macintosh

Figure 36  Introduction screen for the installation wizard – Macintosh

12 Read the introductory information.
13 Click Next to display the next section.
   The License Agreement screen opens.
14 Read the license agreement. Click I accept the terms of the License Agreement and then click Next. (Click Previous to review information in a previous section.)

The Choose Install Set screen opens.
15 Click the icon next to **Both Client and Server** to install both the database server and client software on this computer.

16 Click **Next**.

17 An Information message opens. Click **OK**. The Choose Install Folder screen opens.
By default, the program is installed in the AgilentCytoGenomics3.0.X.X folder (where X.X is the revision number) in the Agilent folder on the Macintosh HD disk. Leave this folder as-is, or click Choose to select a new location where you want to install Agilent CytoGenomics 3.0 folder. Within this folder, one folder is created for the server software and one folder is created for the client software.

Click Next.

The Provide Domain Properties screen opens.
If only the administrator will be accessing Agilent CytoGenomics 3.0 from this computer, click Next. The Enter Administrator details screen opens, and you can proceed to step 32.

If more than one user plans to use Agilent CytoGenomics 3.0 on this computer, configure the domain properties using the instructions in the following substeps.

a Mark Configure Domain Properties.

b Using the domain properties for your system, complete the fields for User Domain, User DNS Domain, LDAP Server, Global Catalog Server Port, and LDAP Port.

c Click Next.

The Enter Administrator details screen opens.
**NOTE**

If you see a warning message titled **Domain validation failed**, click **OK** in the message box, and then click **Previous** in the install window to return to the Provide Domain Properties screen. Repeat step b above with the correct domain properties. Do not proceed with the installation until you enter the domain properties and do not receive the **Domain validation failed** warning message.

![Figure 41 Enter Administrator details screen – Macintosh](image)

21 In the Username field, type the user name of the person who will be the administrator for the Agilent CytoGenomics 3.0 software, using the format example shown.

For domain user: DOMAIN\username

For local machine: \username
To set up additional CytoGenomics users, mark the check box labeled **Add CytoGenomics users?**. In the Password field that appears, type the password for the administrator account.

If you do not want to set up new users at this time, proceed directly to step 27 on page 67. Note that the administrator can set up new users from within CytoGenomics once installation is complete (see “To manage users and roles” on page 94).

23 Click **Next**.

The Add CytoGenomics Users screen opens.

The Add CytoGenomics Users screen lists all of the users in the domain or on the local machine. Mark the check box next to the users that you want to add to the CytoGenomics database.
To search for a user, type the user name into the search box at the top of the screen.

25 Click Next.

The Add CytoGenomics Users screen advances to the step for configuring user roles.

![Add CytoGenomics Users screen – Configure roles step – Macintosh](image)

**Figure 43**  Add CytoGenomics Users screen – Configure roles step – Macintosh

26 For each user listed on the screen, select a role in the Roles drop-down list. The default selection is Technician.

See “User Roles and Capabilities” on page 14 for a description of each role.

27 Click Next.

The Choose common storage folder screen opens.
By default, the common storage folder is created inside the Server folder in the AgilentCytoGenomics3.0.X.X folder (where X.X is the revision number) on the Macintosh HD disk. Leave this folder as-is, or Click Choose, browse to the desired folder, and then click Save.

The common storage folder is where the program saves files that are used at the server level.

29 Click Next.

The Choose client data folder screen opens.
30 By default, the client data folder is created inside the Client folder in the AgilentCytoGenomics3.0.X.X folder (where X.X is the revision number) on the Macintosh HD disk. Leave this folder as-is, or Click **Choose**, browse to the desired folder, and then click **Save**. The client data folder is where the program installs the files for the genome build and reference genomes.

31 Click **Next**.

The Choose Alias Folder screen opens.
32 By default, program icons are installed on the Desktop of your computer. To select another location for the program icons, select the desired location (In the Dock, for example) and then click **Next**.

The Warning screen opens.
Read the message that cautions you not to stop the installation once it has started, and then click **Next**.

The Pre-Installation Summary screen opens.
Review the installation setup information. If you want to change any of the settings, click **Previous** and go back and change the settings. To start the installation, click **Install**.

The Installing Agilent CytoGenomics 3.0.X.X screen opens and is displayed until the installation is complete.
When the installation is complete, the Installation Complete screen is displayed.

35 **Click Done.**

36 **Make sure the folder where you installed the software is shared with read/write permission for all client computers and for all users who run Agilent CytoGenomics.**
**Step 3. Install the client software on additional Macintosh computers**

To use other computers to run Agilent CytoGenomics 3.0 client software (with a shared database), install the client software on each of the computers.

1. On each computer you want to run the Agilent CytoGenomics 3.0 program, run the installation wizard, as described in “Step 2. Install the database server and client on a single Macintosh computer” on page 58.

2. When the Choose Install Set screen appears, select **Only Client**.

![Choose Install Set screen – Macintosh](image)

**Figure 50** Choose Install Set screen – Macintosh

3. Click **Next**.

The Choose Installation Folder opens.
4 By default, the program is installed in the AgilentCytoGenomics3.0.X.X folder (where X.X is the revision number) in the Agilent folder on the Macintosh HD disk. Leave this folder as-is, or type the location and name of the folder where you want to install Agilent CytoGenomics 3.0. OR

Click **Choose** and browse to a location where you want to install the program, and then click **Save**.

5 Click **Next**.

The Provide Information of CytoGenomics server screen opens.
### 3 Installation Instructions for Macintosh

#### Installing Agilent CytoGenomics 3.0 – Macintosh

**Figure 52**  Provide information of CytoGenomics server screen – Macintosh

6  Under Database Host, type the assigned computer name or IP address of the computer (from step 2) where you installed the Agilent CytoGenomics 3.0 database server.

7  Accept the default **Database Port**, unless your system administrator tells you otherwise.

8  Click **Next**.

   Installer immediately tests the connection to the specified database. If incorrect database parameters are provided, or the PostgreSQL database service is not running, a message is displayed.

   You can choose to complete the installation and change database connection parameters when launching the client software. However, Agilent recommends that you provide the correct database information during installation.
Continue the installation wizard. Follow the instructions for the installation wizard to provide domain properties, enter administrator information, choose an alias location, and start the installation. For information, see step 21 through step 36 in the section “Step 2. Install the database server and client on a single Macintosh computer” on page 58.

**Step 4. Start the Agilent CytoGenomics 3.0 client software**

After you install the Agilent CytoGenomics database server and client programs as described in this manual, start the program.

- Double-click the Agilent CytoGenomics 3.0 icon to open the program.

**NOTE**

How you start the program depends on the choice you made for the Alias or Install Folder during installation of the Agilent CytoGenomics client.

---

**Step 5. Log in to Agilent CytoGenomics**

After you start the program, the Login screen appears. The name and domain for the administrator set during installation appears in the dialog box.
3 Installation Instructions for Macintosh
Installing Agilent CytoGenomics 3.0 – Macintosh

Figure 53    Login screen

1   Log in with your username and password. After the software is started, administrators can add additional users and assign their roles.

2   Next to Password type your password.

3   To change the domain, click the arrow next to Domain and select the correct domain. Otherwise, leave it as-is.

4   Click Ok.

NOTE
If you are using a local machine that is not part of a domain, you see a message that the software cannot find the domain. Click OK to ignore this message.

---

**Step 6. Add your software license**

After you log in for the first time, the following dialog box opens.
1 If you do not already have the license file saved to your computer, click Request for license to open the Agilent website to the CytoGenomics license request page. Complete the fields in the request form to obtain a CytoGenomics software license. The license is contained in a text file.

2 At the bottom of the Enter License dialog box, click Browse.

   The Open dialog box opens.

3 Browse to the saved license text file. Select the file and click Open.

   The program loads the contents of the file into the text box on the Enter License dialog box.

4 Click OK.

   The Agilent CytoGenomics program opens.
Step 7. Add users and assign roles

Before other users can log in to Agilent CytoGenomics, the administrator must add the users and assign user roles. The user role determines what capabilities the user has within Agilent CytoGenomics. For information on what capabilities each user role has, see the Agilent CytoGenomics Product Overview Guide or the CytoGenomics help system. For information on how to add users and assign roles, see “To manage users and roles” on page 94.
Upgrading from the Previous Version of CytoGenomics – Macintosh

There are two ways to upgrade Agilent CytoGenomics from a previous version:

1. Upgrade the program without removing the database.
   This approach is intended for users who want to upgrade and keep all records currently in the database. See “To upgrade from a previous version and keep the database” on page 81.

2. Completely remove the program and database. Then, restart the system and reinstall.
   This approach is intended for users who want to discard all data in their current Agilent CytoGenomics database. See “To remove the database and upgrade from a previous version” on page 84.

To upgrade from a previous version and keep the database

Follow these steps to upgrade Agilent CytoGenomics to a new version and retain the data in the database.

1. Make sure that all users are logged off all Agilent CytoGenomics clients before proceeding, and that no workflows are in process.

2. Back up the data folder in the Agilent CytoGenomics 2.9 server program folder.

3. Download the new software revision from Agilent Technologies and check the system requirements.
   See “Step 1. Prepare for installation” on page 56 for detailed instructions on this step.

4. On the server and each client computer, remove the previous version of the client software.
   See “To remove the client software for Agilent CytoGenomics 2.9” on page 85.
5 On the server computer, install the new revision of the server and client software.
   a  Start the installation program you downloaded from Agilent.
   b  Read the Introduction and then click Next.
   c  Click Accept and then click Next to accept the license agreement.
   d  On the Choose Install Set screen, select Both Client and Server.

   e  Click Next.

   f  In the Information dialog box that opens, click OK to continue. The message in this dialog box informs you that the installer will overwrite the existing version of Agilent CytoGenomics server with the new version.

Figure 56  Choose Install Set screen – Macintosh - select Both Client and Server
g At the Choose Install Folder screen, the default folder for installation of the program is the AgilentCytoGenomics3.0.X.X folder (where X.X is the revision number) in the Agilent folder on the Macintosh HD disk. Leave this folder as-is, or click Choose and browse to a location where you want to install the program, and then click Save.

The client software is installed to the folder indicated in the Choose Install Folder screen. The server software remains in the program folder for the previous revision of Agilent CytoGenomics.

h Click Next.

i Continue the installation wizard. Follow the instructions to enter administrator information, choose a shortcut location, and start the installation. For more information, see step 21 through step 35 in the section “Step 2. Install the database server and client on a single Macintosh computer” on page 58.

6 Install the CytoGenomics 3.0 client software on all computers where you want to run the client software. This procedure is the same as installing on client computers for a new installation.

For more information, see “Step 3. Install the client software on additional Macintosh computers” on page 74.

7 Start the Agilent CytoGenomics program.

See “Step 4. Start the Agilent CytoGenomics 3.0 client software” on page 77.

8 Log in.

See “Step 5. Log in to Agilent CytoGenomics” on page 77.

9 Enter your updated license information.

See “Step 6. Add your software license” on page 78.
To remove the database and upgrade from a previous version

To completely uninstall a previous version (including the database) and then install a new version of Agilent CytoGenomics, follow these steps.

1. Make sure that all users are logged off all Agilent CytoGenomics clients before proceeding, and that no workflows are in process.

2. (Optional) Back-up the data folder in the Agilent CytoGenomics server program folder.

3. Remove the previous version of the Agilent CytoGenomics client program from all client computers.
   See “To remove the client software for Agilent CytoGenomics 2.9” on page 85.

4. Remove the Agilent CytoGenomics client and server software from the server computer. Restart the system when the uninstallation is complete.
   See “To remove the client and server software for Agilent CytoGenomics 2.9” on page 89.

5. Download the new software revision from Agilent Technologies and check the system requirements.
   See “Step 1. Prepare for installation” on page 56 for detailed instructions on this step.

6. Install Agilent CytoGenomics 3.0 client and server software on the server computer.
   See “Step 2. Install the database server and client on a single Macintosh computer” on page 58.

7. Install Agilent CytoGenomics 3.0 client software on all computers where you want to run the client software. (Make sure that the previous version of the client software was removed.)
   See “Step 3. Install the client software on additional Macintosh computers” on page 74.

8. Start the Agilent CytoGenomics 3.0 program.
   See “Step 4. Start the Agilent CytoGenomics 3.0 client software” on page 77.

9. Log in.
   See “Step 5. Log in to Agilent CytoGenomics” on page 77.
10 Enter your updated license information.
See “Step 6. Add your software license” on page 78.

To remove the client software for Agilent CytoGenomics 2.9

Before you update the Agilent CytoGenomics software to a new revision, (whether you are updating the server software or not) first remove the client software on all computers where it is installed.

1 Double-click the Uninstaller file, located in the \Uninstall_Agilent_CytoGenomics 2.9.X.X folder of your program folder.
   The following window opens.

![Figure 57 Authentication dialog box - preparing to uninstall]

2 Click directly on the lock icon near bottom of the dialog box.
   The following dialog box opens.
3 In this dialog box, enter the Name and Password for a user with administrator rights to the computer, then click **OK**.

The uninstaller starts.

4 Read the introductory information, and then click **Next**.

5 Read the warning information. You are cautioned not to stop the uninstaller once it has started to remove the programs. Click **Next**.

The Uninstall Options screen opens.
6. Select **Uninstall Specific Features**.
7. Click **Next**.

The Choose Product Features screen opens.
3 Installation Instructions for Macintosh
Upgrading from the Previous Version of CytoGenomics – Macintosh

8 In the Choose Product Features screen, mark Client. When the Client check box is marked, only the client software is removed from the computer. The client software folder and any data folders created after installation are not removed.

   The Uninstall button becomes active.

   **CAUTION**
   Do not select Server unless you want to remove client and server software completely, including the database, from your computer.

9 Click Uninstall.

   The following dialog box opens asking you to confirm that you want to uninstall the CytoGenomics client.
Figure 61 Dialog box – Uninstall CytoGenomics Client

10 Click Yes in the dialog box to continue.

11 When the uninstallation has completed, click Done.

To remove the client and server software for Agilent CytoGenomics 2.9

The Uninstall program for Agilent CytoGenomics 2.9 provides an easy way to remove the Agilent CytoGenomics 2.9 client, server, and PostgreSQL programs from your computer.

CAUTION

When you completely uninstall Agilent CytoGenomics 2.9, the database and the data contained in it are completely removed. Do not uninstall the entire program unless you have backed up your database or no longer wish to use it.

1 Double-click the Uninstaller file, located in the \Uninstall_Agilent CytoGenomics 2.9.X.X folder of your program folder.

The following window opens.
2 Click directly on the lock icon near bottom of the dialog box. The following dialog box opens.

3 In this dialog box, enter the Name and Password for a user with administrator rights to the computer, then click **OK**.

   The uninstaller starts.

4 Read the introductory information, and then click **Next**.
5 Read the warning information. You are cautioned not to stop the uninstaller once it has started to remove the programs. Click Next. The Uninstall Options screen opens.

![Uninstall Options screen - Macintosh - select Complete Uninstall](image)

**Figure 64**  Uninstall Options screen – Macintosh – select **Complete Uninstall**

6 Select **Complete Uninstall**.

7 Click **Next**.

8 When the uninstallation is complete, a message appears. Click **Done** and then restart the system.

   The Agilent CytoGenomics 2.9 client program, server program and database, and PostgreSQL program were removed from your computer. Program folders and data folders (such as data output folders) created after installation were not removed.
3 Installation Instructions for Macintosh
Upgrading from the Previous Version of CytoGenomics – Macintosh
This chapter shows you how to add users, assign roles and manage the database.

See the Product Overview Guide for an overview of the program and organization of the tasks within it.
Administering the System

As an Administrator for Agilent CytoGenomics, you have access to everything. That is, you can perform any task available in the program. Your primary responsibility is to add users and their roles to the system, and you also manage the database.

See the Product Overview Guide for an explanation of the tasks that each role can perform with the program. Users who are assigned the role of Technician can only run workflows and view the results. They cannot set up workflows, nor can they sign off on results. Those are tasks for users assigned the role of Scientist.

To manage users and roles

Only the Administrator role can perform these tasks.

Table 6  Tasks for managing users and roles

<table>
<thead>
<tr>
<th>To do this task</th>
<th>Follow these instructions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Click Admin.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Click Add New User.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Next to Add New User, type the user name, and then click Find. (See comments for information about adding users for local machines.)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>At the bottom of the Add User Dialog dialog box, click Add User.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>When the Add User dialog box appears that asks you to confirm, click Yes.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>When the notice of success appears, click OK.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>When you are finished adding users, click Close.</td>
<td></td>
</tr>
</tbody>
</table>

The user now appears in the list of users with the role of Technician, with a status of Enabled.

• A user cannot be deleted but can be disabled.
  a Click Edit for the user you intend to disable.
  b Clear the Enabled check box, and click Save.
• For local machines with no Domain, 
  a Next to User, type the computer name and user in the format machinename\username, or \username for Macintosh systems. (Do NOT click Find.)
  b Click Add User.
  A warning dialog box opens stating that there was a problem fetching user details from the LDAP server. You can ignore this warning. Click OK to close the dialog box.
Table 6  Tasks for managing users and roles  (continued)

<table>
<thead>
<tr>
<th>To do this task</th>
<th>Follow these instructions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• See “User Roles and Capabilities” on page 14 for descriptions of each user role.</td>
</tr>
</tbody>
</table>

To manage the database

Although only the Administrator role can change the location of the database or the common storage folder, any user can restart the PostgreSQL service.

Table 7  Tasks for managing the database

<table>
<thead>
<tr>
<th>To do this task</th>
<th>Follow these instructions</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• If the PostgreSQL service stops, to restart it, click <strong>Restart PostgreSQL Service</strong> on the desktop.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• If you change the location of your common storage, copy the contents of the previous location to the new location manually. <strong>Failure to do so can cause unexpected behavior in the program.</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Enter the location of the common storage using UNC standard notation. (<strong>\machine2\CommonStorage</strong>)</td>
</tr>
</tbody>
</table>

Change database locations and information

1. Click **Admin**.
2. Under **Database Settings**, click **Change**.
3. Type:
   - Common Storage Location
   - Database Host
   - Database Port
   - Click **Apply** to save your changes.
In this book

This book provides an overview of Agilent CytoGenomics 3.0 and gives you instructions for installing and administering the software.