Agilent Feature Extraction 12.0

Installation Guide

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

This guide explains how to install Agilent Feature Extraction 12.0 software for stand-alone use. This software is compatible with Agilent Genomic Workbench Lite Edition. Agilent Feature Extraction 12.0 can be installed on a computer with Agilent CytoGenomics 2.9 or GeneSpring 12.5 installed. Do not install Feature Extraction 12.0 on a computer with Feature Extraction 11.0 or 11.5.

Agilent Technologies

Quick Start Installation of Agilent Feature Extraction 12.0

Feature Extraction 12.0 is installed by running the installation program and following the installation wizard steps, described in this guide. When you run the installation program, both Feature Extraction and QC Chart Tool are installed.

NOTE If Feature Extraction 11.0 or 11.5 is installed on the computer, do not install Feature Extraction 12.0 until you uninstall the previous version.

Before uninstalling the previous version of Feature Extraction, run the Migration Utility program to export grid templates, protocols, and QC metric sets. You can then use the Migration Utility program to import these files into Feature Extraction 12.0.
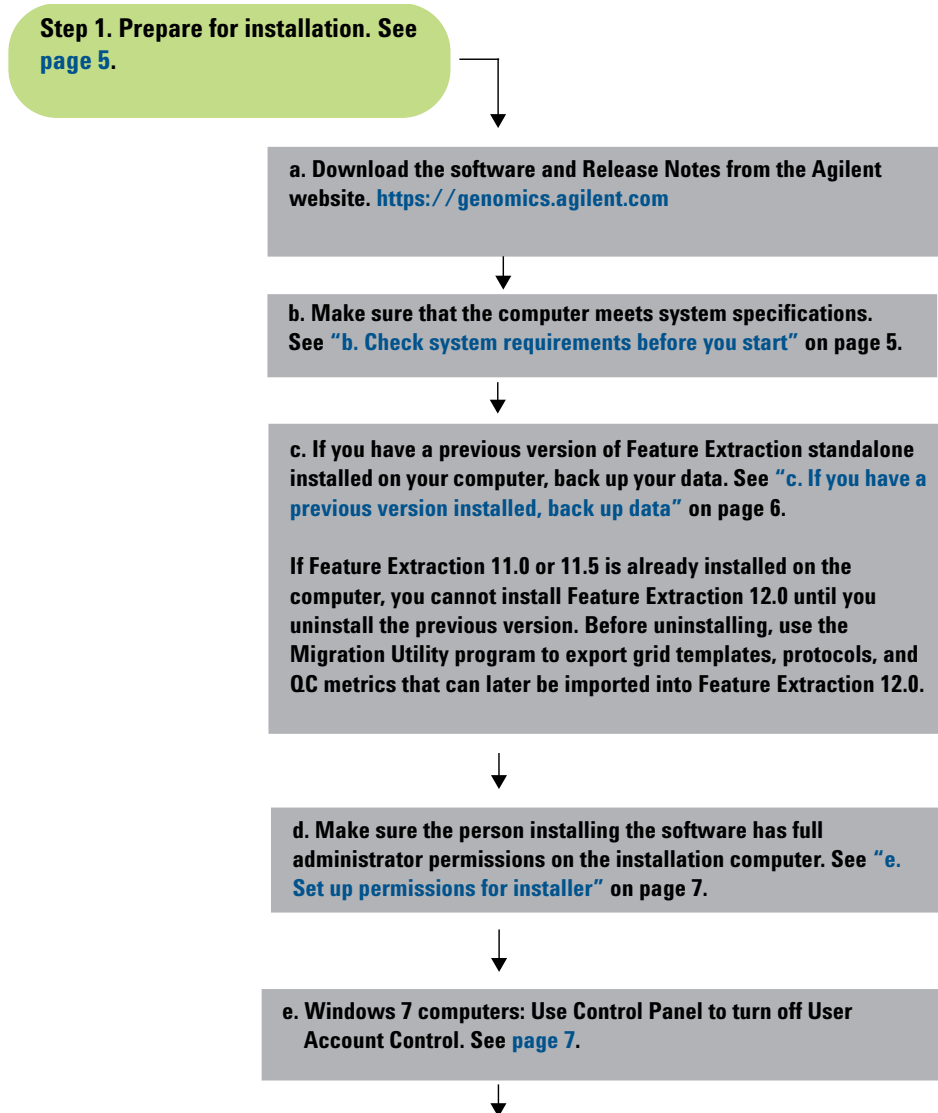
If you have the following software installed on your computer, you *can* install Feature Extraction 12.0:
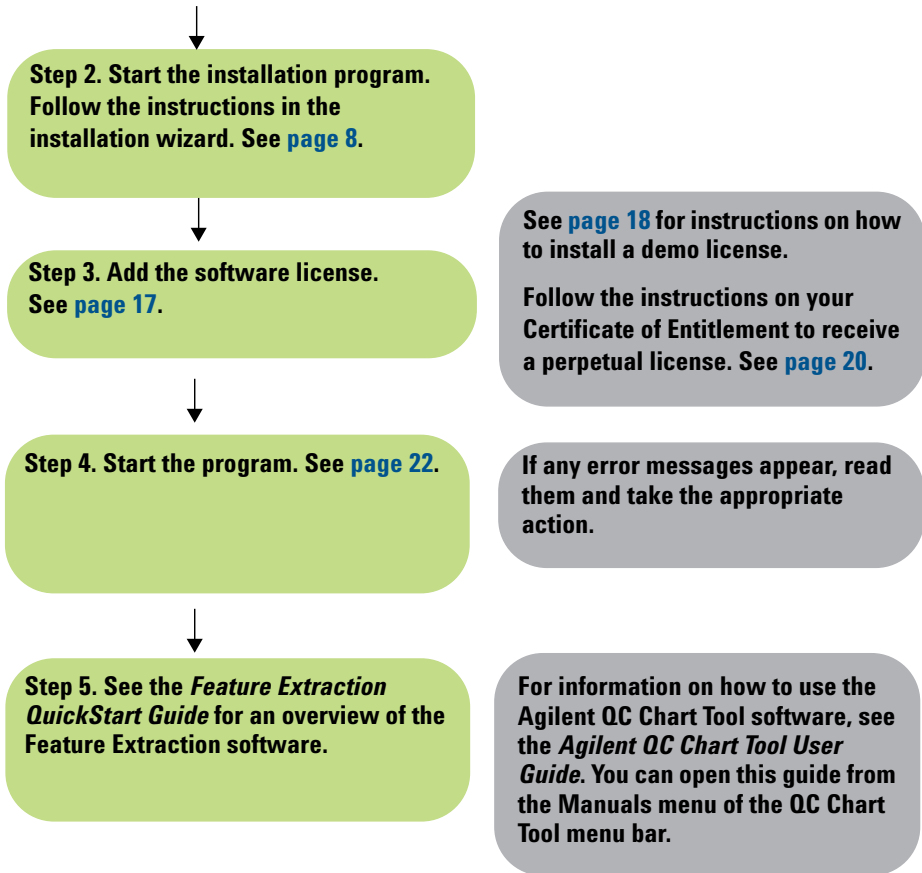
* Feature Extraction 10.7 or earlier standalone version
* Agilent CytoGenomics 2.5 or later
* Agilent Genomic Workbench Lite edition
* GeneSpring 12.0 or 12.5

NOTE Feature Extraction version 12.0 does not support the import of grid template data from Feature Extraction version 11.0 or 11.5. Use the Migration Utility to transfer grid templates from Feature Extraction 11.0 or 11.5 to Feature Extraction 12.0. See the *Migration Utility Guide* for detailed instructions.

Flow chart for installation

Step 1. Prepare for installation. See page 5.

a. Download the software and Release Notes from the Agilent website. https://genomics.agilent.com

b. Make sure that the computer meets system specifications. See "b. Check system requirements before you start" on page 5.

c. If you have a previous version of Feature Extraction standalone installed on your computer, back up your data. See "c. If you have a previous version installed, back up data" on page 6.

If Feature Extraction 11.0 or 11.5 is already installed on the computer, you cannot install Feature Extraction 12.0 until you uninstall the previous version. Before uninstalling, use the Migration Utility program to export grid templates, protocols, and QC metrics that can later be imported into Feature Extraction 12.0.

d. Make sure the person installing the software has full administrator permissions on the installation computer. See "e. Set up permissions for installer" on page 7.

e. Windows 7 computers: Use Control Panel to turn off User Account Control. See page 7.

Step 2. Start the installation program. Follow the instructions in the installation wizard. See page 8.

Step 3. Add the software license. See page 17.

See page 18 for instructions on how to install a demo license.

Follow the instructions on your Certificate of Entitlement to receive a perpetual license. See page 20.

Step 4. Start the program. See page 22.

If any error messages appear, read them and take the appropriate action.

Step 5. See the *Feature Extraction QuickStart Guide* for an overview of the Feature Extraction software.

For information on how to use the Agilent QC Chart Tool software, see the *Agilent QC Chart Tool User Guide*. You can open this guide from the Manuals menu of the QC Chart Tool menu bar.

Instructions for Installing Agilent Feature Extraction 12.0

This section includes more detailed instructions and important notes about each step of the installation process. These steps are outlined in the installation flow chart shown in "Flow chart for installation" on page 3.

NOTE	Upgrade from previous versions is not supported. Use the steps in this section to install Feature Extraction 12.0.

Step 1. Prepare for installation

a. Download the software and release notes

1 Go to the Agilent Genomics website www.agilent.com/chem/fe.

2 Click **Download Software**.

3 Under Download Software, click **Version 12.0**.

4 Next to the operating system for your computer, click **Download**.

5 Click **Save File** 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.)

6 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 Next to Release Notes, click **Download**.

8 Click **Save As**.

9 Browse to a location where you want to save the release notes.

10 Click **Save.**

b. Check system requirements before you start

Check to make sure that your computer system meets the following requirements.

NOTE	If an operating system is not listed, it is not supported.

Table 1 Minimum Requirements for Agilent Feature Extraction computers

Computer requirements for Windows	
Operating system	32-bit Windows: • Windows 7 Professional SP1 • Windows 7 Enterprise 64-bit Windows: • Windows 7 Professional SP1 • Windows 7 Enterprise
Software	Any software that enables you to open PDF files (for example, Adobe Reader) Internet Explorer version 6.0 or later (version 7 or later recommended)
Processor	2GHz or higher
Working memory (RAM)	2 GB RAM or higher (4 GB or higher with 64- bit OS recommended, or for extracting 2- and 3-micron scans)
Hard disk space	40 GB available
Display Resolution	1280 x768 or higher

c. If you have a previous version installed, back up data

If you have a *standalone* version of Feature Extraction 11.0 or 11.5, back up your data and uninstall the previous version before installing Feature Extraction 12.0.

If you plan to remove the older version and/or transfer the data to the new version, do the following:

• Export any user-created FE protocols and QC metric sets from the old version of Feature Extraction.

You can import or add the exported protocols and QC metric sets to the new database after you install Feature Extraction 12.0.

Feature Extraction version 12.0 does not support the manual import of grid template data from Feature Extraction version 11.0 or 11.5. Use the Migration Utility program to transfer grid templates from the previous version of Feature Extraction into Feature Extraction 12.0.

- If you have Feature Extraction 11.0 or 11.5 installed, export all the data (grid templates, protocols, and metric sets) from version 11.0 and then uninstall version 11.0 before continuing. Once version 11.0 is uninstalled, you can install Feature Extraction 12.0 and import the data that you exported from version 11.0.

Visit http://www.genomics.agilent.com/article.jsp?pageId=4500002 to download the Migration Utility program.

- Export QC Chart Tool data.

  To export data in your old QC Chart Tool database, use a QC Chart Tool query and then export the query results. You can then import this data to the newly installed QC Chart Tool database. Queries cannot be exported; recreate them in the new version of the software.

CAUTION
Do not use the Database Backup-Restore utility to back up the QC Chart Tool database. The backup of the QC Chart Tool database using these methods cannot be loaded into the new version.

e. Set up permissions for installer

- Make sure that the user account used to install the Agilent Feature Extraction 12.0 software has administrator permissions on the installation computer.

  The way you set permissions varies between operating systems. Contact your network administrator for help in checking or changing user account permissions. Administrator permissions are not required to run the Feature Extraction software.

f. Adjust user account settings for Windows 7 and Windows Vista computers

Turn off the User Account Control before you install Feature Extraction 12.0. After you install the software, you can turn it on again.

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 Feature Extraction software

The Agilent Feature Extraction 12.0 installation program installs the Agilent Feature Extraction, Agilent QC Chart Tool, and PostGreSQL software. After installation, the database server (PostGreSQL) runs silently in the background and manages the shared database for Agilent Feature Extraction 12.0 and QC Chart Tool.

1 Before installing Agilent Feature Extraction 12.0, complete all the preinstallation steps outlined in Step 1 of the "Flow chart for installation" on page 3.

2 Log on to the Windows system where you want to install Agilent Feature Extraction 12.0. Use an account that has administrator permissions.

3 Locate the installation program you downloaded in Step 1, "a. Download the software and release notes" on page 5. Double-click the Agilent_Feature_Extraction_12_0_X_X_32Bit.exe or Agilent_Feature_Extraction_12_0_X_X_64Bit.exe file (depending on your operating system) to start the installation wizard.

The following message is displayed.
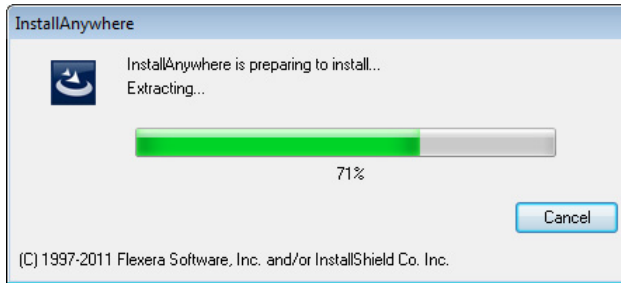
Figure 1   InstallAnywhere dialog box - preparing to install

The installation wizard starts.
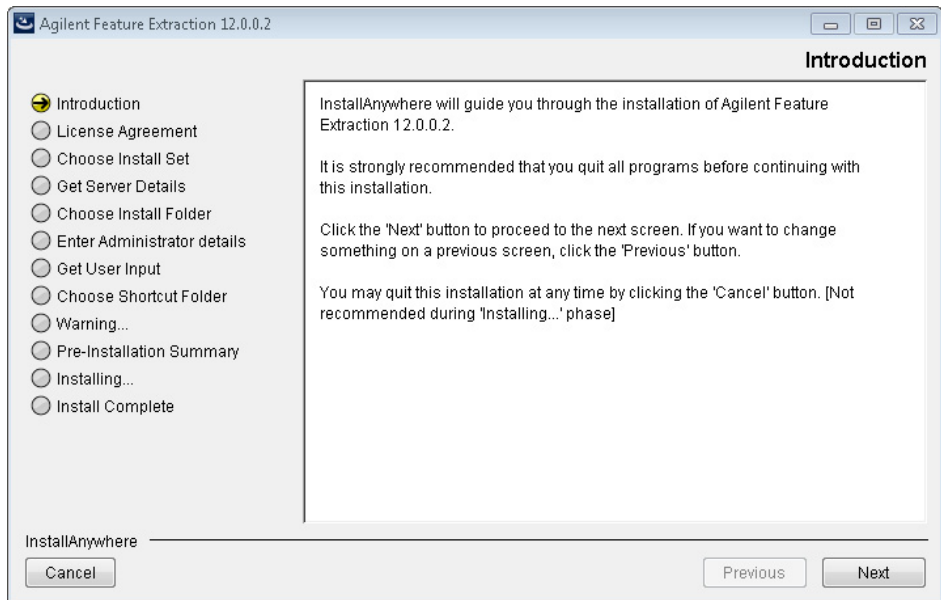
Figure 2   Introduction screen for the installation wizard

4 Read the introductory information.

5 Click **Next** to display the next section.
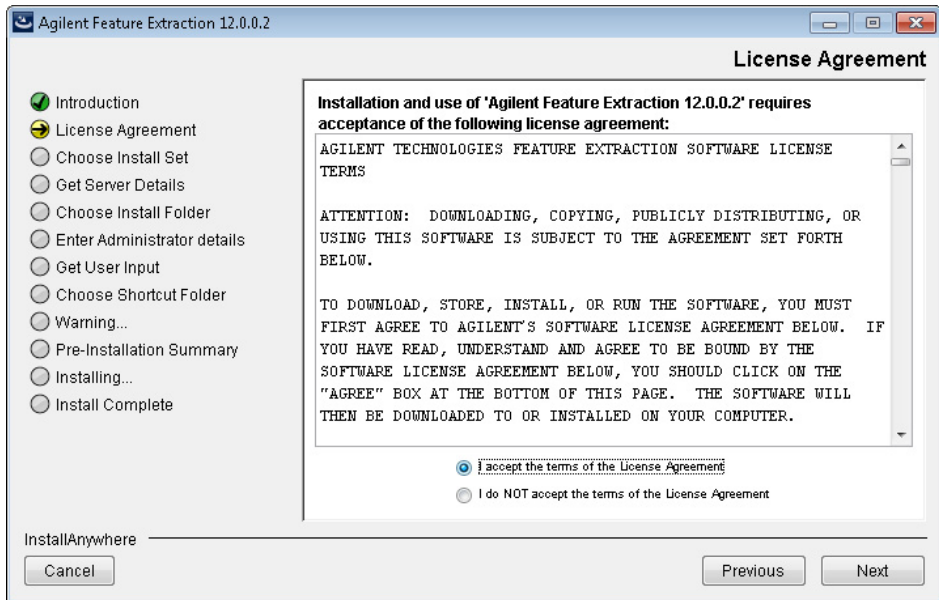
The License screen appears.

Figure 3   License screen

6 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 Folder screen appears.
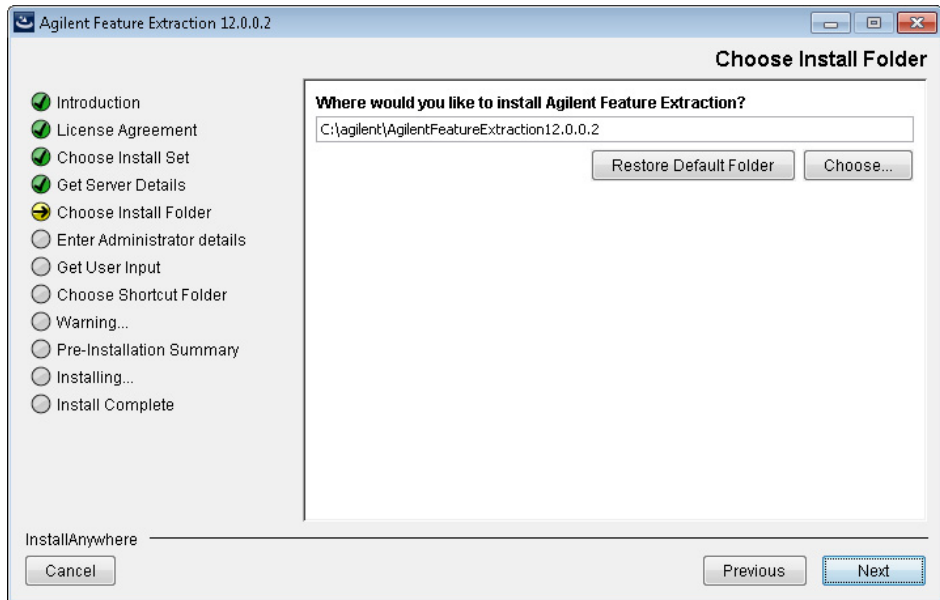
Figure 4   Choose Install Folder screen

7 By default, the software is installed in **C:\Agilent\AgilentFeatureExtraction 12.0.X.X** (where X.X is the revision number). Leave this folder, or type the path for the name of the folder where you want to install Agilent Feature Extraction 12.0.

OR

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

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

8 Click **Next**.

If there is a conflict in the port used to install PostGreSQL, the Get User Input screen appears. Otherwise, the Choose Shortcut Folder screen appears. See Figure 6 on page 13.

If you go to the 'Choose Shortcut Folder' screen, and then go back to the 'Get User Input' screen and enter a different port, the new port number is not updated in the DBInfo file. To change the port, open the DBInfo.ini file in a text editor, and change the port value. The DBInfo.ini file is located in the FeatureExtraction folder of your installation folder. By default, this folder is C:\Agilent\AgilentFeatureExtraction <version>\FeatureExtraction.
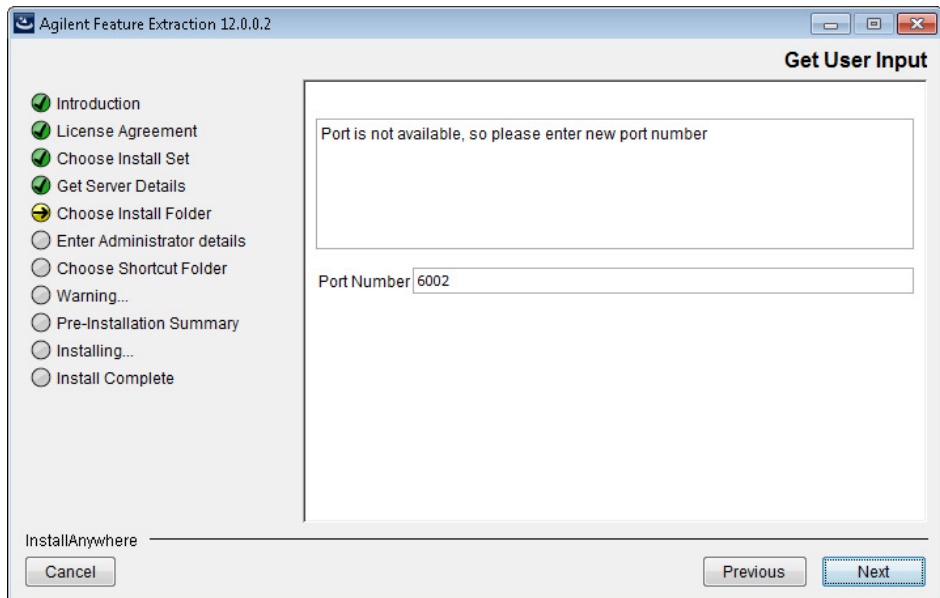

Figure 5   Get User Input screen

9 Click **Next**.

The Choose Shortcut Folder screen appears.
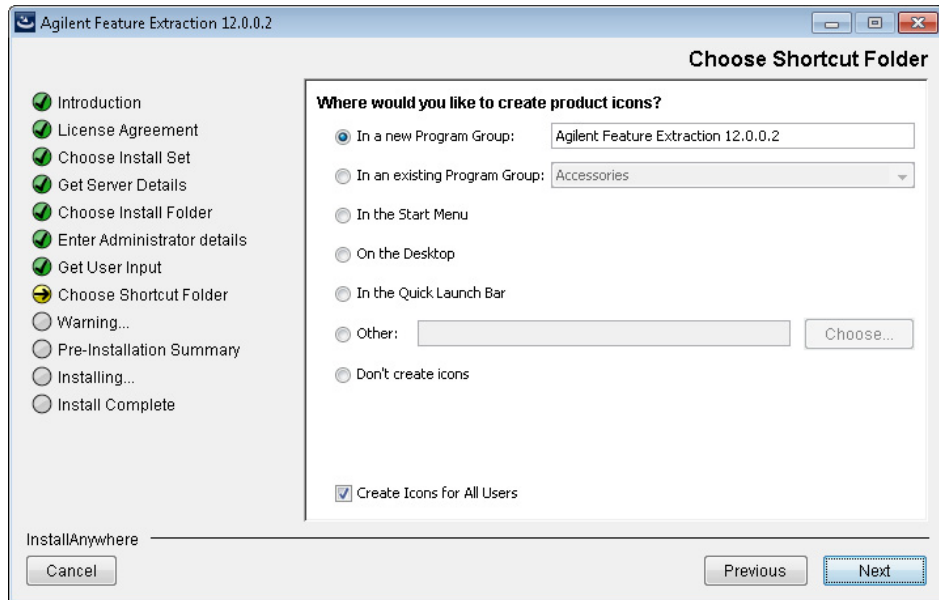
Figure 6   Choose Shortcut Folder screen

10 By default, program icons are installed in the AgilentFeatureExtraction 12.0.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 person plans to use Agilent Feature Extraction 12.0 on this computer, select **Create Icons for All Users**. Otherwise, other users do not see the program icons.

The Warning screen appears.
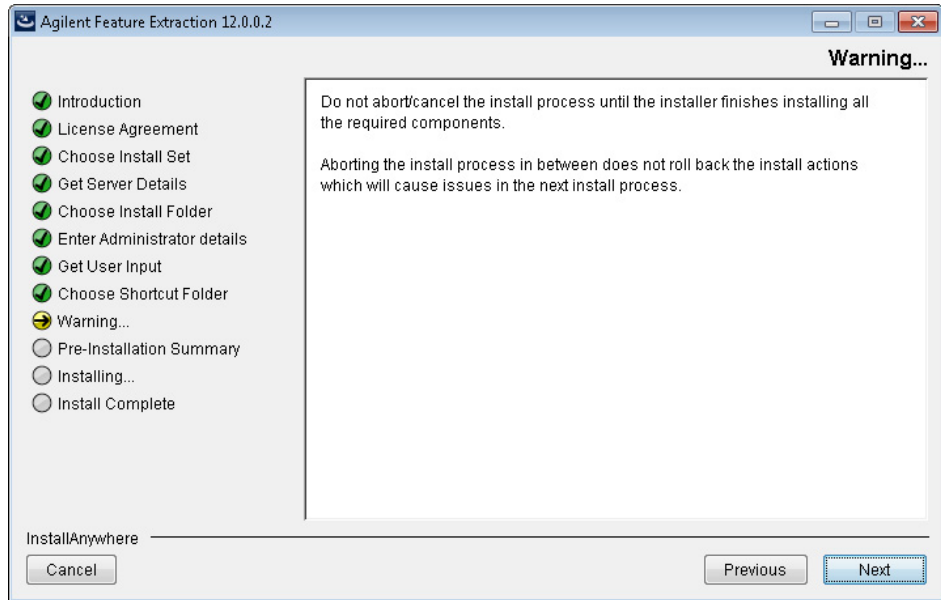
Figure 7   Warning screen

11 Read the message that cautions you not to stop the installation once it has started, and then click **Next**.
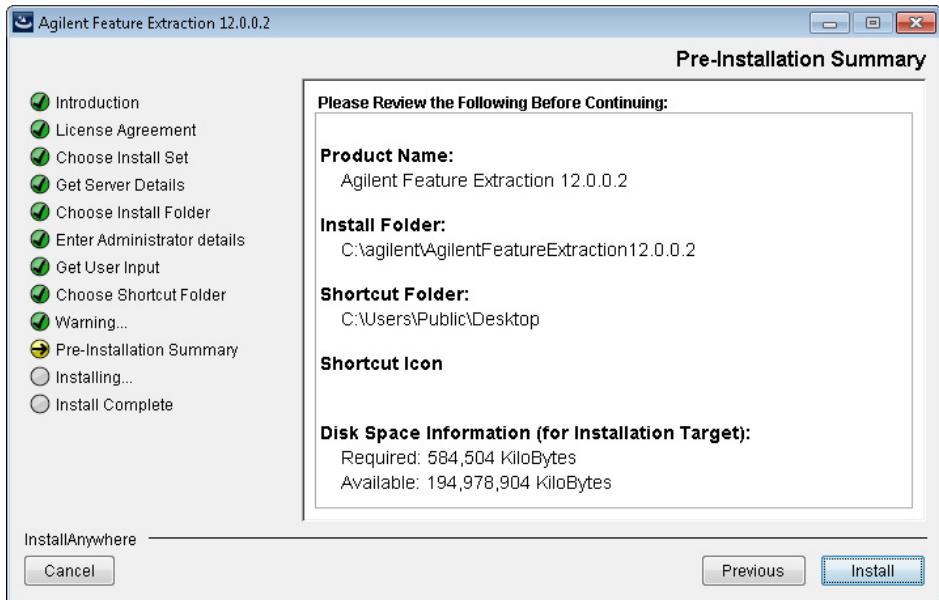
The Pre-Installation Summary screen appears.

Figure 8   Pre-Installation Summary screen

12 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 Feature Extraction 12.0.X.X screen appears and is displayed until the installation is complete.
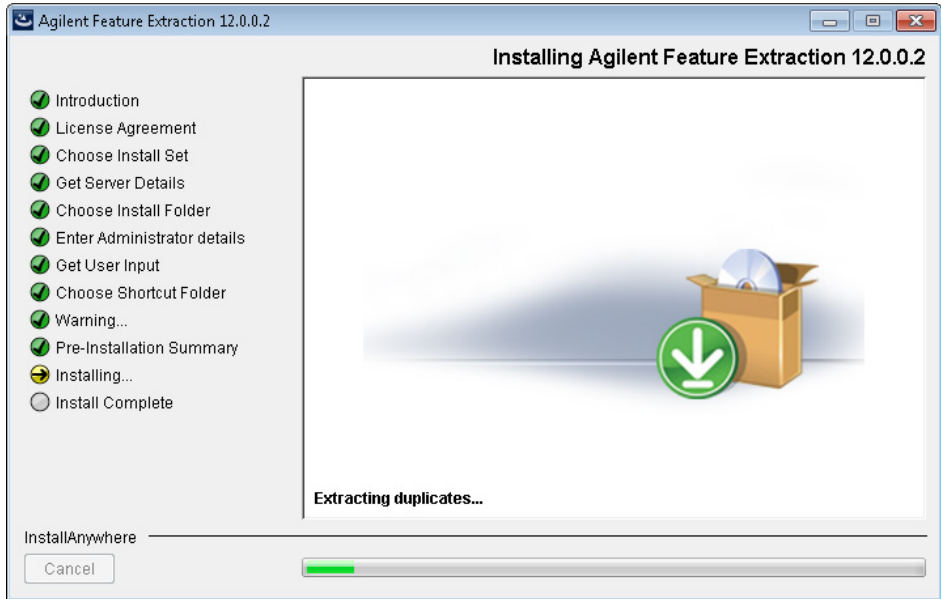
Figure 9   Installing Agilent Feature Extraction 12.0.X.X screen

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

13 Click **Done**.

Step 3. Add your software license

Types of licenses

Agilent supplies two kinds of licenses for Feature Extraction: demo and perpetual.

Demo

If you want to try Feature Extraction before purchasing, you can download a 30-day demo license from the Agilent website at www.agilent.com/chem/fe. Click **Download Free Trial > Download Trial License**.

<table>
<tr><td>NOTE</td><td>The PDF QC reports are not available with the demo license. To get PDF QC reports, buy and install a perpetual license.</td></tr>
</table>

The demo license expires 30 days from the date you download it. If you install the demo license on the same day that you downloaded it, Feature Extraction works for the next 30 days. However, if you waited until day 20 to install the downloaded demo license, the software only works for the remaining 10 days.

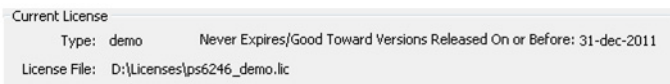• To view when your demo license expires, from the Feature Extraction menu bar, select **Help > About**.

Figure 10   Current License Information - Demo

Perpetual

When you purchase Feature Extraction software, Agilent provides you with a perpetual license.

 • Perpetual license never expires.

 • Perpetual license is good for the current software version released at time of purchase.

- Perpetual license is good toward new software versions released within the license term (1-year, 2-year, and 3-year licenses are available).

- To view the date that your perpetual license is still good toward new software versions, select **Help > About**.
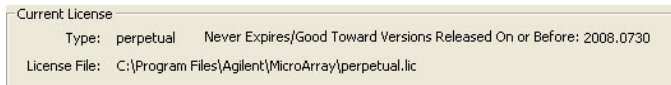
Current License
Type: perpetual   Never Expires/Good Toward Versions Released On or Before: 2008.0730
License File: C:\Program Files\Agilent\MicroArray\perpetual.lic

Figure 11   Current License Information - Perpetual

The date code displayed tells you what updates your license allows. For example, a date code of "2012.0730" indicates that the license is good towards new software versions released on or before July 30, 2012.

Instructions to set up a valid license depend on several situations:

- If you want to try the software first before you purchase
- If you have purchased a new version or an upgrade
- If your license is about to expire or has expired, or is invalid

CAUTION   Because the Feature Extraction license uses the Ethernet MAC address as host ID, the license becomes invalid if you remove or change Ethernet cards.

To install a demo license

Follow the instructions to demo the software before purchase.

1 Go to www.agilent.com/chem/fe and click **Download Free Trial > Download Trial License**.

2 Download the 30-day trial license.

To download the license, register at the Agilent site.

3 Unzip the 30-day trial license file into the Feature Extraction installation folder.

Or, you can place the license anywhere you want. However, if the license file is not located in the installation folder, the following message appears when you start Feature Extraction.
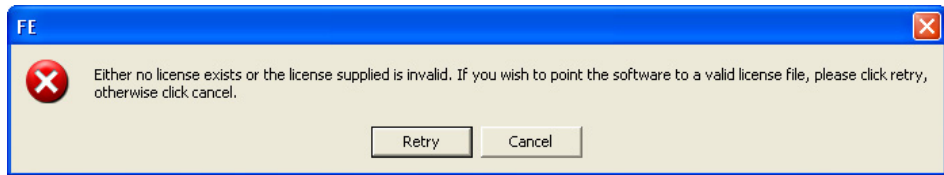
Figure 12 License message

> **a** Click **Retry**.
>
> The following dialog appears.
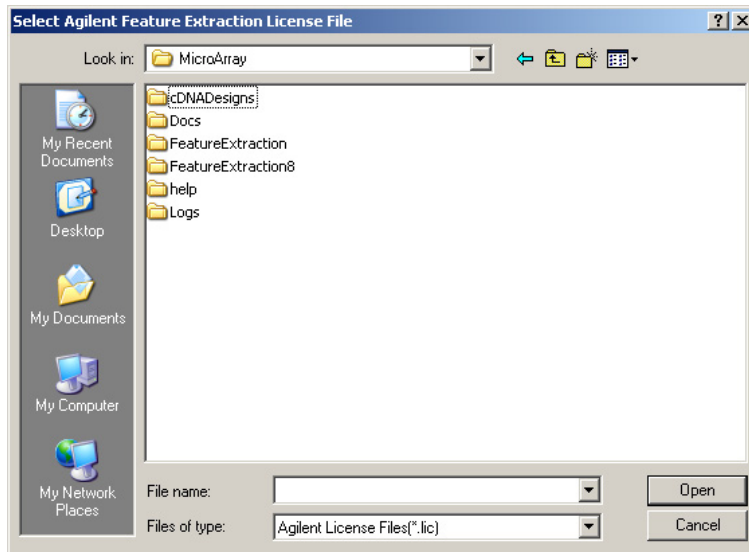

Figure 13 Select Agilent Feature Extraction License File dialog box

> **b** Find the folder that contains the unzipped license file.
>
> **c** Select the license file (.lic), and click **Open**.

To install a perpetual license (with or without an Agilent scanner)

When you purchase Agilent Feature Extraction software, you receive a Software Entitlement Certificate (SEC). To redeem your purchased license, go to the Agilent Software License Redemption website and use the information on the certificate.

These instructions assume that you have already installed the software.

1 Start Feature Extraction. If Figure 12 appears, click **Cancel**.

2 Select **Help > Agilent License**. The internet browser opens to the Agilent Software License Redemption website at https://software.business.agilent.com/.

Have the following items available:

• **Software Entitlement Certificate (SEC)** - This PDF contains the Order Number and Certificate Number that you provide to redeem your purchased license.

• **Host ID** - The Host ID can be found under the menu **Help > About**. You provide the host ID to redeem your purchased license.

3 Follow the instructions on the Agilent Software License Redemption website to redeem your license.

After redeeming the license on line, you will receive an email with the license attached.

4 Save the license file to your installation folder:

C:\Agilent\AgilentFeatureExtraction 12.0.X.X (where X is the revision number)

Or, you can place the license file anywhere you want. If the license file is not found in the installation folder when the program starts, it asks you to identify the location of the license file.

a If the Feature Extraction program is already running, open a project. Otherwise, double-click the Feature Extraction icon to open a project.

Figure 12, "License message," on page 19 appears:

b Click **Retry**.

Figure 13, "Select Agilent Feature Extraction License File dialog box," on page 19 appears.

c Find the directory that contains the license file.

d Select the license file (.lic), and click **Open**.

Feature Extraction opens automatically with FE_Project1.

If your license expired, or is invalid for the software version

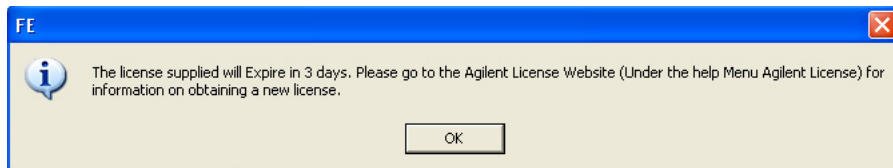The software warns you 20 days before your license file expires. The following message appears.

Figure 14   License expiration message

Without a valid license you can still open an image, import templates and protocols, set up preferences and change protocols. You cannot open a project or open Grid Mode for manual gridding.

If you try to open a project in Feature Extraction and your license has expired or is not valid for the software version, an error message appears saying that your license expired or is invalid.

To acquire a valid Feature Extraction 12.0 license, contact Agilent Technologies.

1 Call your local sales representative or go online to www.agilent.com/chem/fe to purchase a new license.

After your purchase, you receive a Software Entitlement Certificate.

2 Start the Feature Extraction program and select **Help > Agilent License**.

Have the following items available:

   • **Software Entitlement Certificate (SEC)** - This PDF contains the Order Number and Certificate Number that you provide to redeem your purchased license.

   • **Host ID** - The Host ID can be found under the menu **Help > About**. You provide the Host ID to redeem your purchased license.

3 Follow the instructions on the Agilent Software License Redemption website to redeem your purchased license.

After redeeming the license on line, you will receive an email with the license attached.

4 Save the license file to the same path as your previous license.

You are now ready to work with Feature Extraction.

Step 4. Start the Feature Extraction program

After you install the Agilent Feature Extraction software and license, start the program.

- Double-click the Agilent Feature Extraction 12.0.X.X icon from your desktop or select Agilent Feature Extraction 12.0.X.X from the Windows Start menu.

NOTE How you start the program depends on the choice you made for Shortcut Folder during installation of the Feature Extraction software.

To start the Agilent QC Chart Tool program

QC Chart Tool is a separate program that shares the database with Feature Extraction. To start the program,

- Double-click the Agilent QC Chart Tool icon from your desktop or select Agilent QC Chart Tool from the Windows Start menu.

NOTE How you start the program depends on the choice you made for Shortcut Folder during installation of the Feature Extraction software.

Removing the Feature Extraction and QC Chart Tool Software

The Feature Extraction and QC Chart Tool software is removed by running the Uninstall Agilent Feature Extraction 12.0.X.X.exe program (X.X is the revision number). Alternatively, you can use the Windows Control Panel to remove the Agilent Feature Extraction 12.0.X.X software. The uninstaller program removes the Feature Extraction, QC Chart Tool, and MySQL software from your computer.

1 Run the Uninstall Agilent Feature Extraction 12.0.X.X.exe program in the <Installation Drive>\Agilent\AgilentFeatureExtraction12.0.X.X\Uninstall_Agilent Feature Extraction 12.0.X.X folder.
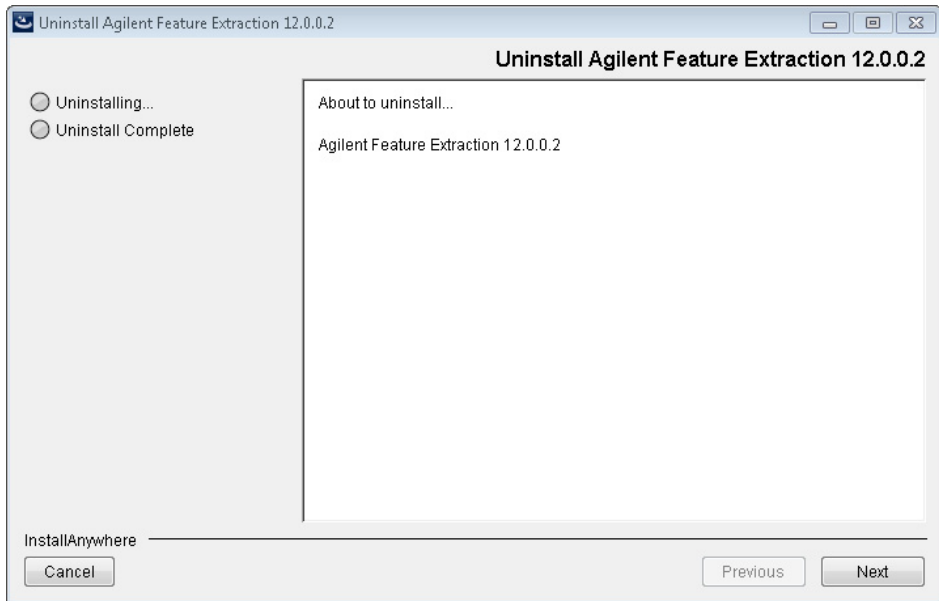
The uninstaller wizard starts.

Figure 15   Uninstaller Introduction
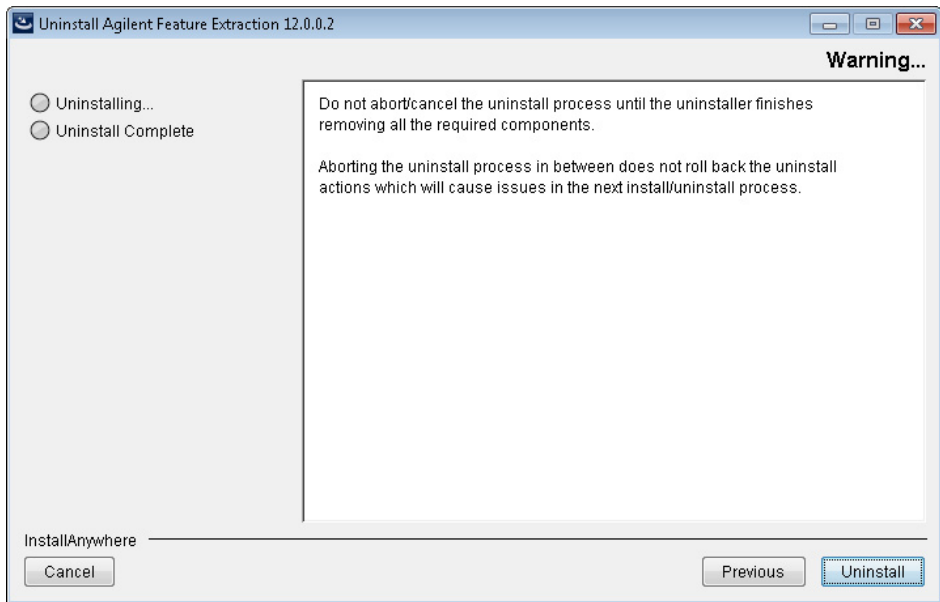
2 Click **Next**.

A warning screen appears.

Figure 16   Warning screen

CAUTION   Once you start the software removal process, do not cancel or abort the uninstaller.
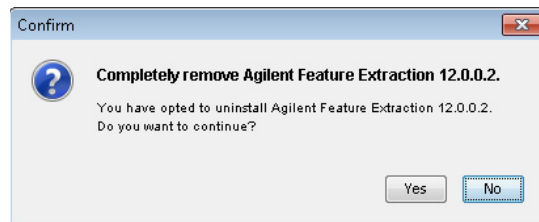
3 Click **Next**.

A confirmation screen appears.

Figure 17   Confirm and continue screen

4 Click **Yes**.

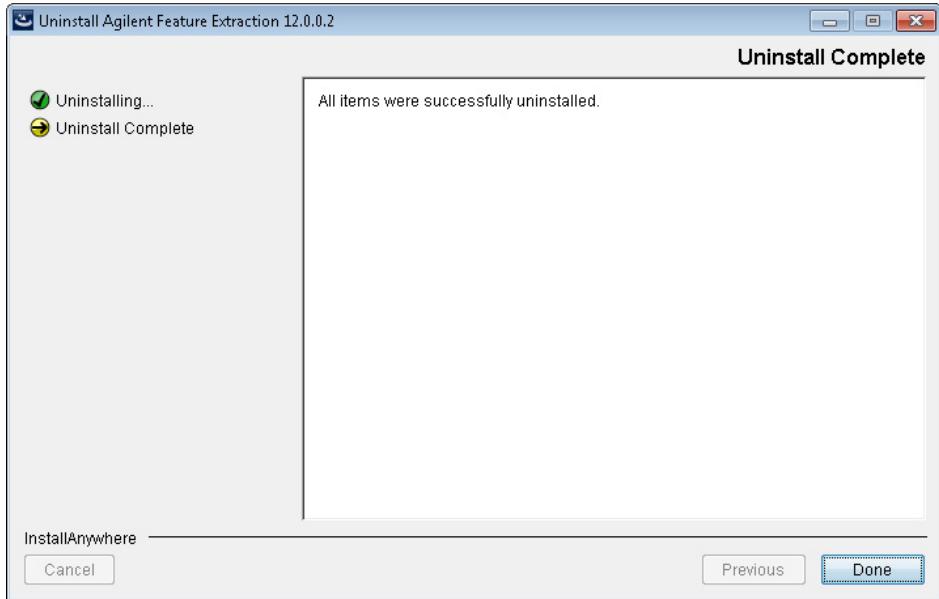The software removal begins. When completed, the following message appears.

Figure 18 Uninstall complete

When the software removal is complete, the Uninstall Complete screen notifies you if any errors occurred.

In some cases, the uninstaller cannot remove folders. This occurs when:

• You saved FE projects, output files, or images in the installation folder.
• You downloaded updated FE protocols from eArray. In this case, the software saves the old protocols in the Old_Protocols folder.

You can remove the folders manually at a later time.

5 Click **Done** to close the wizard.

Getting Help

To get help within Agilent Feature Extraction 12.0

Agilent Feature Extraction 12.0 has several help resources. To open a help guide, from the Agilent Feature Extraction 12.0 menu bar, click the **Help**. Then select the help you want to display. Help guides are in PDF format, and are opened by default in the Adobe Reader program (if installed).

The following help links are found in the Help menu.

Help command	Opens
User Guide	Opens the *Feature Extraction User Guide*, where you can learn about real time feature extraction, grid templates, protocols, and how to change image display.
Quick Start Guide	Opens the *Feature Extraction Quick Start Guide*, for an overview of how Feature Extraction works.
Reference Guide	Opens the *Feature Extraction Reference Guide*, where you learn how Feature Extraction generates results. It also contains details about default protocol settings, QC reports, data output, algorithms, and Command-Line Feature Extraction.
Technical Support	Opens the Agilent Genomics Contact Us website, where you can find contact information for assistance with various issues.
Feature Extraction Training	Opens the Feature Extraction Tutorials website, where you can open and view tutorials on how to use the Feature Extraction program.
Feature Extraction on the Web	Opens a menu with the following links: • Array Annotation — Opens the list of Agilent catalog gene list web page, where you can download gene lists for Agilent catalog microarrays. • Feature Extraction Software — Opens the Agilent Feature Extraction webpage, where you can find related resources and literature or find other services and products. • Feature Extraction Protocols — Opens the Feature Extraction protocols web page, where you can download protocols for current and previous versions of Feature Extraction.

Help command	Opens
Agilent License	Opens the Agilent Software License Redemption website, where you can use your Software Entitlement Certificate to obtain your software license.
Memory Status	Opens the Memory Status display that shows the total and available memory for your computer.
About	Opens the About FE dialog box, where you can find the status of your Feature Extraction license, computer Host ID, and program version numbers. (You need the Host ID to redeem your license.)

To contact Agilent Technical Support

Technical support is available by phone and/or e-mail message. Various useful information is also available on the Agilent Technical Support website.

In the United States and Canada)	Telephone: 800-227-9770
	E-mail message: informatics_support@agilent.com
Worldwide	1 Go to www.agilent.com/genomics/contactus.
	2 Under Worldwide Sales and Support, 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 display information about the Genomics products and services that are available from Agilent, go to www.agilent.com/genomics.

www.agilent.com

In this book

This book gives you
instructions for installing
Agilent Feature Extraction
12.0.

Agilent Technologies