32-bit and 64-bit BarTender
How to Select the Right Version for Your Needs
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Overview

Before BarTender 2016, BarTender software was only available in a 32-bit version. In BarTender 2016, all editions of BarTender are available in a 64-bit version as well. The purpose of this white paper is to help you decide whether you should install the 32-bit version or the new 64-bit version when you are ready to install BarTender.

For instructions on the installation process, see the Installing BarTender and Choosing What to Install topics in the BarTender Help system.

The Difference Between 32-bit and 64-bit

The terms 32-bit and 64-bit refer to how a computer's central processing unit (CPU) handles information. A 64-bit processor can handle much more random access memory (RAM) than a 32-bit processor. If your computer has more than 4 gigabytes (GB) of RAM, you almost certainly have a 64-bit processor.

32-bit and 64-bit also refer to operating systems and software. A 32-bit processor can run only 32-bit software, including the operating system (OS). A 64-bit processor can run both compatible 32-bit and 64-bit software, including the operating system.

To run 64-bit software, you must have a 64-bit operating system.

NOTE: Windows Server has been 64-bit only since 2008 R2. After 2008 R2, there is no 32-bit option for a server OS available.

Difference in Performance

With BarTender, the difference in performance between the 32-bit and 64-bit versions is minimal, but a 64-bit installation can be slightly faster and more stable. Seagull Scientific recommends that you install the 64-bit version of BarTender whenever possible.
Find Out if Your Computer is Capable of Running 64-bit Software

Your computer's ability to run 64-bit software depends on two things: the operating system and the processor.

- If you have a 64-bit operating system and a 64-bit processor, you can run 64-bit software.
- If you have a 32-bit operating system and a 64-bit processor, you cannot run 64-bit software.
- If you have a 32-bit operating system and a 32-bit processor, you cannot run 64-bit software.

You can view your operating system and processor information using the Windows Start menu.

In Windows 10

You can find out whether you have a 32-bit or 64-bit processor and/or operating system from the System dialog.

1. Open the Start menu.
2. Select Settings.
3. On the Settings page, click System.
5. The System type option describes your operating system and processor information.
In older versions of Windows

You can find out whether you have a 32-bit or 64-bit processor and/or operating system from the Performance Information and Tools dialog, accessed from the Windows Start menu.

**NOTE:** The process to access processor performance information and tools may vary depending on the version of Windows you are running. If you are in doubt, check your computer’s documentation to see the processor type.

1. Open the Start menu.
2. In the search field, type Performance Information and Tools.
3. Click the View and print detailed performance and system information or View and print details link.
4. In the System section, the System Type option describes the type of operating system you are using. If it is a 64-bit system, you have a 64-bit processor, and you can run 64-bit software. If it is a 32-bit system, you might still have a 64-bit processor. See step 5.
5. Under 64-bit capable, see whether or not your system can run 64-bit software.
   (If your computer is currently running a 64-bit version of Windows, you won’t see the 64-bit capable listing.)
Database and Operating System Considerations

Databases

Although Seagull Scientific recommends that you install the 64-bit version of BarTender whenever possible, there are exceptions.

If you need to use 32-bit external database drivers, you will need to install the 32-bit version of BarTender. Types of external database drivers include:

- OLE DB
- ODBC
- Excel
- Access

Natively supported databases, such as Microsoft SQL Server, will work with either 32-bit or 64-bit BarTender.

Operating Systems

When you are making the decision whether to install the 32-bit version or 64-bit version of BarTender, keep in mind that the BarTender drivers and your operating system (OS) drivers must match, or be compatible.

If you have a 32-bit OS, you must install the 32-bit version of BarTender. Your OS will not support the 64-bit version, even if you're running it on a 64-bit processor.

If you have a 64-bit version of Windows, you may install either the 64-bit or the 32-bit version of BarTender. The 64-bit version is recommended, but you may need to install the 32-bit edition if you are using certain OLE DB or ODBC drivers (as described above), or if you need to develop a 32-bit application using the BarTender .NET SDK.

See the quick reference table below:

<table>
<thead>
<tr>
<th>Processor</th>
<th>Operating System</th>
<th>Can install 32-bit client</th>
<th>Can install 64-bit client</th>
</tr>
</thead>
<tbody>
<tr>
<td>32-bit</td>
<td>32-bit</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>64-bit</td>
<td>64-bit</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>64-bit</td>
<td>32-bit</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
**SDK Considerations**

If you have a custom 32-bit print client application that previously used BarTender's 32-bit Print SDK (Seagull.BarTender.dll), you must install the 32-bit version of BarTender. The 64-bit version will not work with your application. However, you can install the 32-bit version of BarTender even if you have a 64-bit processor and a 64-bit OS. Refer to [Database and Operating System Considerations](#).

If you will be using the BarTender SDKs to write a 64-bit program with ActiveX, you must install the 64-bit version of BarTender.

**NOTE:** In addition to introducing 64-bit BarTender, Seagull Scientific has also moved to .NET 4.0. Because of this, a client application compiled to run against BarTender 10.1 will not work out of the box with BarTender 2016; it will need to be rebuilt. Since you need to rebuild the application targeting .NET 4.0 anyway, you may wish to also change the architecture of the application to 64-bit (assuming your application has no other 32-bit dependencies).
Integration Platform Considerations

Running a 32-bit version of BarTender on a 64-bit OS is not supported when using the BarTender Integration Platform. If you plan to use Integration Builder, ensure that you are running 32-bit BarTender on a 32-bit operating system, or 64-bit BarTender on a 64-bit operating system.

For more information on the BarTender Integration Platform, refer to the following white papers:

- BarTender Integration Methods
- Integrating with BarTender Integration Builder
FAQ

Is the 64-bit version of BarTender "better" than the 32-bit version?

No. Both versions have full functionality, and contain all of the new features implemented into BarTender 2016. A 64-bit version may be slightly faster and more stable than a 32-bit version.

Do I have to use the new 64-bit version of BarTender?

No. However, if you have a 64-bit processor and a 64-bit OS, the 64-bit version is optimal.

Is there any reason to install the 32-bit version of BarTender on my 64-bit OS?

You will need to install 32-bit BarTender if:

- You have a custom 32-bit print client application that uses a previous version of the BarTender .NET SDK (Seagull.BarTender.dll).
- You are using a 32-bit external database driver, such as older versions of Excel or Access, because you are unable to install the 64-bit version(s).

I got a "Database Software Conflict" error while trying to install BarTender. What does that mean?

It means that you are trying to install 64-bit BarTender on a 32-bit system. You need to install 32-bit BarTender.

If I write a 32-bit application, will it run on the 64-bit version of BarTender?

No.

If you write a 32-bit application using CPP or .NET, you must use the 32-bit Seagull.BarTender.dll with a 32-bit BarTender installation.

If you write a 64-bit application using CPP or .NET, you must use the 64-bit Seagull.BarTender.dll with a 64-bit BarTender installation.
Related Documentation

White Papers and Manuals
- BarTender Version Upgrades
- BarTender Integration Methods
- Integration with BarTender Integration Builder

For downloadable versions, visit:

http://www.seagullscientific.com/support/white-papers

BarTender Help System
- Installing BarTender
- Reading Data from Databases