

XF Extracellular Flux Analyzer

Installation and Troubleshooting Guide

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TABLE OF CONTENTS

XF Client System and File Requirements	4
Frequently Asked Questions	4
Installation	5
Installing XF Software	5
Resolving XF Software Issues	6
Configuring Excel	7
Disabling Protected Mode	8
Saving XF Data Files in (.xls) Format	8
Excel 2007/2010 Crashes When Export File Opens	8
Excel Exits After Open	9
Other Troubleshooting Tips	10

XF Client System and File Requirements

These system and file requirements are for the XF24, XF96 and XF Prep Station software.

Operating System	Microsoft® Windows® XP with Service Pack 3 for 32 bit or 64 bit, Windows Vista (32 bit or 64 bit), or Windows 7 (32 bit or 64 bit)
Microsoft Excel® Editions	Excel 2003, 2007, or 2010 (32-bit) (Excel 2013 is pending validation.)
Minimum Display Resolution	1024x768 screen resolution
Excel File types	XF Excel data files saved in .xls format.

WARNING! XF24, XF96, and XF Prep Station software are not compatible with the following:

Operating Systems	Microsoft Windows 8, Mac OS, or any form of Unix or Linux
Microsoft Excel® Editions	Microsoft Excel 64-bit Edition, Microsoft Excel for Mac OS
Excel File types	XF Excel data files saved in .xlsx or .xlsm format.

Frequently Asked Questions

1. How do I know if the version of Excel on my PC is 32-bit or 64-bit?

Open Microsoft Excel>>File>>Help. Look at the pane on the right-hand side under About Microsoft Excel. The (32-bit) or (64-bit) designation will be listed after the version information.

2. The version of Windows 7 installed on my PC is the 64-bit version. Will I be able to use XF software with this operating system?

Yes, as long as the version of Excel 2010 installed on your PC is the 32-bit version. The default version of Excel installed with MS Office 2010 is the 32-bit version, even when Windows 7 OS is 64-bit. Unless you have specifically upgraded to the 64-bit version of MS Excel 2010, your system will have 32-bit installed.

3. **What should I do if I have the 64-bit version of Excel installed on my computer, and want to run XF software?**

Uninstall the 64-bit version and reinstall Excel 2010 on your computer. The default installation for MS Office 2010 programs is the 32-bit version, so the new installation will replace the 64-bit version with the 32-bit version.

4. **How can I tell if I am an administrator on my PC?**

From the Start menu, open the Control Panel, then User Accounts. Click Manager User Accounts. Your User Name will be assigned to a Group – if your User Name is assigned to the Administrator Group, you are an administrator on your PC. If your User Name is assigned to any other group type (Standard, Guest, or Child), ask your IT system manager to change your account type.

Installation

Installing XF Software

NOTE:

You must have Administrator privileges on your computer in order to install and run XF Software. Ask your system manager to change your user account type to Administrator if you are a standard Windows user.

You or your administrator must turn off “user account control”.

To turn off “user account control”, go to the **Start Menu > Control Panel** and type “uac” into the search bar. Select **Change User Account Control Settings**, and use the slider to select the **Never notify** level.

1. Log on to your computer with administrator privileges.
2. Make sure you have closed XF software and MS Excel.
3. If you are using Windows Vista or Windows 7, right-click the XF installer setup file and select Run As Administrator, rather than double-clicking the icon.
4. Select the correct mode, ‘My Personal Laptop or Desktop Computer’.
Note: If you are installing both XF 24 software and XF 96 software, both applications must be from the same release of XF software and must be updated at the same time.

Resolving XF Software Issues

This section explains how to resolve some XF software issues:

- XF software exits after you have opened it and selected 'Standard' or 'Start App'.
- XF software displays an 'MFC' error dialog and exits immediately or soon after the application is started.

XF Software Exits After 'Standard' or 'Start App' Selected

If the XF software stops running it may be due to restrictions imposed by your company's IT policies. Your user account must have write access to C:\Program Files and C:\Windows\system32. If you do not have write access to these directories, your operating system will cause XF software to exit suddenly.

Resolution:

1. Log on with administrator privileges to your computer.
2. In Windows File Explorer, open one of the following folders: C:\Program Files\SeahorseBioscience\XFReader24 or .\XFReader96.
3. If you are running on 64-bit Windows, the path is C:\Program Files (x86)\SeahorseBioscience\XFReader24 or .\XFReader96.
4. Locate the Seahorse XF.exe file and right-click on it.
5. Select Properties.
6. In the Properties dialog, select the Compatibility tab.
7. Click the Change settings for all users button at the bottom. You might have to answer some Windows security questions, which are to ensure the security of your computer.
8. Check Run this program in compatibility mode and select Windows XP (Service Pack 3). Also, check Run this program as an administrator to avoid the Windows security questions.

XF Software Displays an 'MFC' Error Dialog and Exits After the Application Starts

The XF software displays an 'MFC' error dialog and exits immediately or soon after the application starts because User Account Control (UAC) blocks XF from performing administrative actions even though you have administrator privileges.

Resolution:

1. Right-click the installer setup file and select **Run as administrator**, then install XF software.
2. If the problem is not resolved, follow the instructions in **XF software exits after you have selected 'Standard' or 'Start App'**.

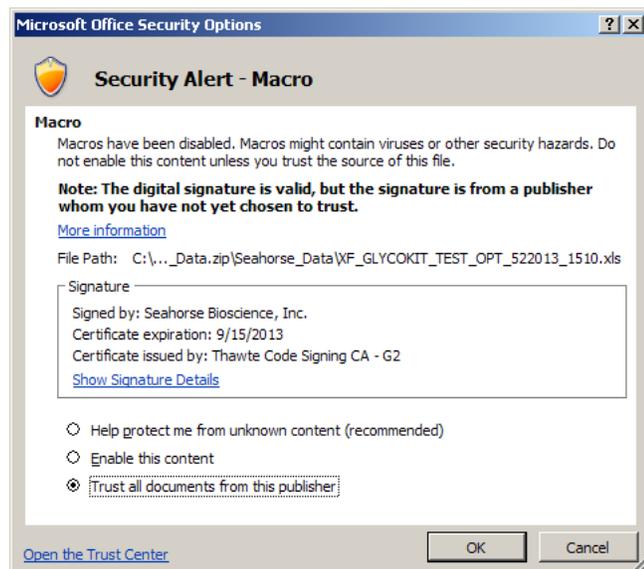
Configuring Excel

To ensure compatibility with Excel, follow these steps:

1. Open the Trust Center in one of two ways depending on the version of Office.
 - Office 2007: Office button . . . Excel Options . . . Trust Center
 - Office 2010: File . . . Options . . . Trust Center
2. Click the **Trust Center Settings** button.
3. Select **ActiveX Settings** and, in the right pane, select **Prompt me before enabling all controls with minimal restrictions**.
4. Select **Macro Settings** and, in the right pane, select **Disable all macros except digitally signed macros**.
5. Select **Message Bar** and, in the right pane, select **Show the Message Bar . . .**
6. Locate an XF Assay Excel export (.xls) file and double-click to open it.
7. The Message Bar will appear with a warning.



8. Click **Options. . .** to display the **Security Options** dialog.
9. Select **Trust all documents from this publisher** and click OK.
10. To ensure that your installation runs smoothly, you must be an administrator on your computer.



Disabling Protected Mode

NOTE: For security purposes, Excel 2010 and 2013 have a Protected Mode feature that restricts access to files in certain locations, such as Outlook attachments, network drives, and the Internet zone. In some instances, even when you have enabled editing, XF macros will not run correctly. Either disable Protected Mode through the Trust Center, or save your files in a different location. Note that Excel 2007 does not restrict access in this way.

Saving XF Data Files in (.xls) Format

If you have Excel 2007 or later, save XF data files using the Excel 97/2003 Workbook (.xls) format.

NOTE: Do not save files in the Excel 2007/2010 (.xlsx) format because this format does not permit executable code. The Excel 2007/2010 macro-enabled format (.xlsm) does permit executable code, but it is incompatible with XF macros.

Excel 2007/2010 Crashes When Export File Opens

Excel may crash due to a bug in Excel 2007 and Excel 2010 that affects Compatibility Mode. It may occur if Excel 2007 or Excel 2010 is not configured to execute code embedded in a workbook, and then you try to open files that were formatted in Excel 2003 (.xls) format.

Resolution:

1. Follow Steps 1 – 5 of Configuring Excel in order to verify that the Trust Center options are correct.
2. Locate an XF Assay Excel export (.xls) file, hold down the Shift key, and double-click to open it. Holding down the Shift key while opening prevents startup code in the workbook from running, averting an Excel crash.
3. Excel produces a dialog box similar to the dialog box that appears when you click Options ...in the Message Bar shown in Configuring Excel.
4. Click Trust all from publisher.
5. Exit Excel, and try opening the exported .xls file again.



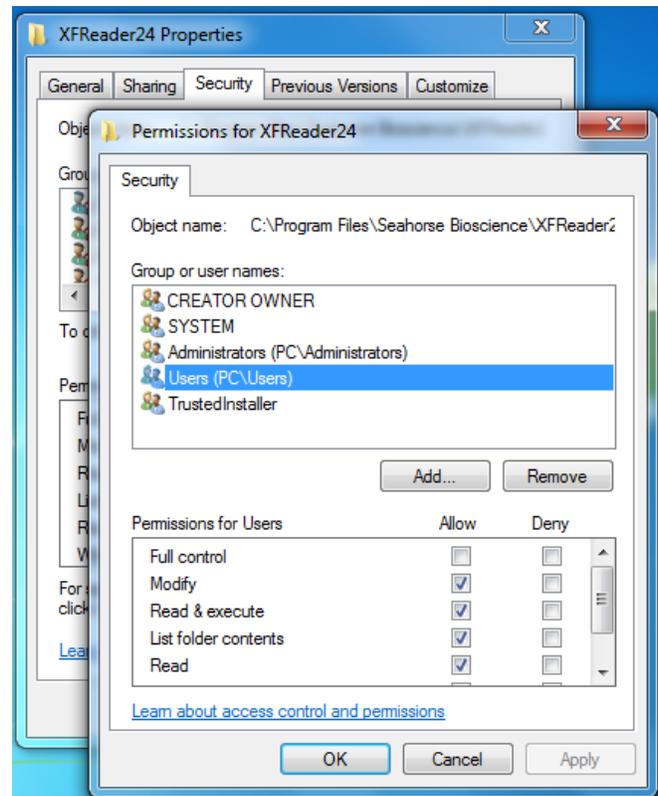
Excel Exits After Open

Excel stops running because of the restrictions imposed by your company's IT policies. Your user account must have write access to C:\Program Files and C:\Windows\system32. If you do not have write access to these directories, Windows will cause Excel to exit suddenly.

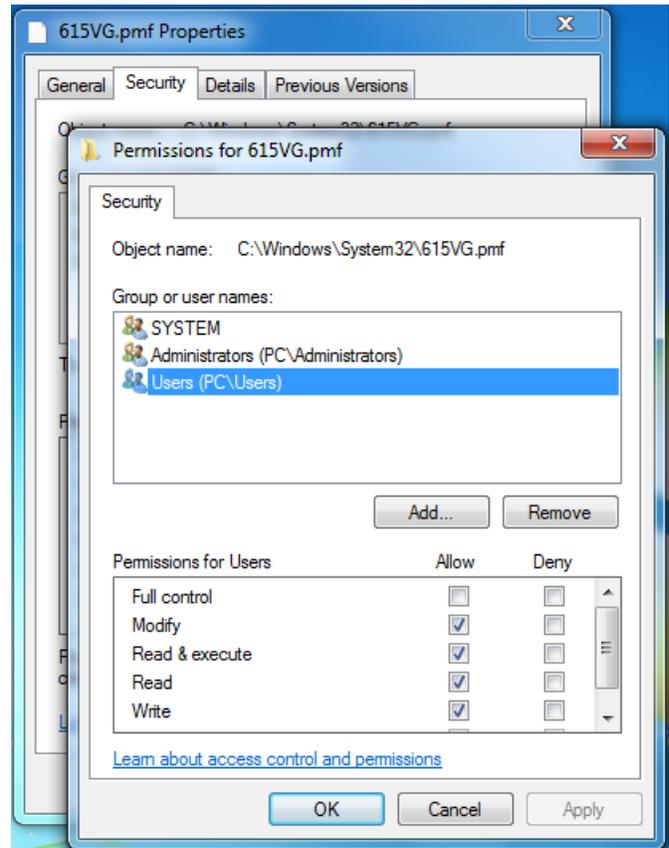
Resolution: (must be logged on as an Administrator)

Log on to the computer using an account with Administrator privileges

1. Right-click on the **Seahorse XF24** desktop shortcut and select **Properties**
2. In the Properties dialog, select the **Compatibility** tab and click the **Change settings for all users** button.
3. Check the **Run this program in compatibility mode for:** and select **Windows XP (Service Pack 3)**. It is *not* necessary to select the administrator mode.
4. Open a Windows File Explorer and navigate to the folder **C:\Program Files\Seahorse Bioscience**. On 64-bit systems, navigate to **C:\Program Files (x86)\Seahorse Bioscience**.
5. Right click on the **XFReader24** folder and select **Properties**
6. Select the **Security** tab and click the **Edit** button
7. In the **Permissions for XFReader24** dialog, select the **Users** group (or whatever Group to which the Standard User is assigned) from the **Group or user names** field and check the box next to the **Modify** entry in the **Permissions for Users** field, as shown:
8. Click **OK** in both dialogs to dismiss.
9. Repeat steps 1 through 8 for Seahorse XF24, if applicable.
10. Navigate to **C:\Windows\system32** (on 64-bit systems, **C:\Windows\SysWOW64**) and locate a file named **615VG.pmf**. Right-click on the file and select **Properties**.



11. Select the **Security** tab and click the **Edit** button
12. In the **Permissions for 614VG.pmf** dialog, select the **Users** group (or whatever Group to which the Standard User is assigned) from the **Group or user names** field and check the box next to the **Modify** entry in the **Permissions for Users** field, as shown:
13. Click **OK** in both dialogs to dismiss
14. Switch to your standard user account. Locate the **Seahorse XF24** (and/or Seahorse XF96) shortcut on the Start Menu, right click and select **Properties**
15. Select the **Compatibility** tab and confirm that the application is configured to start in compatibility mode for Windows XP Service Pack 3.



16. Start Excel under your standard user account and ensure that an XF Excel export can be opened.

Other Troubleshooting Tips

The Windows Event Log is a source of useful information when you experience technical difficulties while running XF software on the client or on the controller. You can export a log file, compressed for emailing to Seahorse support staff.

1. Open the Windows Control Panel by clicking Start and then selecting Control Panel.
2. Select Administrative Tools.

On Windows Vista and Windows 7, you might need to select the Small Icons view or the Large Icons view in the upper-right corner of the Control Panel because Administrative Tools is difficult to find on the Control Panel in Category view.

3. Double-click Event Viewer from the list of Control Panel facilities.
4. From the Event Viewer, do one of the following depending on your version of Windows:
 - Windows XP: Right click the Application Log and select **Save Log File As . . .** and then provide a file name for the export.
 - Windows Vista or Windows 7: Expand the **Windows Log** note, right-click the Application Log, and select **Save All Events As . . .** and then provide a file name for the export.