

Seahorse XFe Controller Network Setup Guidelines



General software information and policies

This document provides guidelines and recommendations regarding network setup and security on Agilent Seahorse XFe Controllers (computers) running the Microsoft Windows 10 Operating System (OS) only. Store this guide near your XFe Controller for reference. All IT system administrators of Seahorse XFe Controllers should read this guide.

Agilent Technologies provides XFe Controllers and software that are intended for running the XFe Analyzers supplied by Agilent Technologies.

The **XFe Controller** is the PC (computer) connected to the XFe Analyzer. This document applies to XFe Controllers with Windows 10 Enterprise (64-bit) only. For complete detail of system compatibility and specs, see **XF Software & Computer Specifications**. If you have any questions about your XFe Controller model, please contact **Technical Support**.

Wave Controller is the software application installed on the XFe Controller that enables instrument control & data acquisition. See the **Wave User Guide** for more information.

The **network connection hardware** in the XFe controller provides two options to connect to your LAN – (1) 1 Gbps Ethernet network adapter located at the base of the XFe Controller, or (2) built-in wireless LAN (802.11 b/g/n)

Related documents

- Wave User Guide https://www.agilent.com/cs/library/usermanuals/public/Wave_2_6_User_Guide.pdf
- XF Software & Computer Specifications https://www.agilent.com/cs/pubimages/misc/Seahorse_XF_Software_Computer_Specifications.pdf
- Agilent Software End User License Agreement (EULA) https://www.agilent.com/cs/library/quickreference/public/Agilent_Software_EULA.pdf

Best practices for the XFe Controller

Reboot the XFe Controller at least once per week. Why?

You may notice at times the Windows OS or Wave Controller software responding slowly. This can be due to an application over-using the computer's resources (CPU, physical memory), memory leaks, or other low-level errors that have accumulated over time. Rebooting the XFe Controller resets the current state of Windows and software applications that may be causing any of the issues mentioned above.

Save & close open assay template files and assay result files prior to starting an XF assay. Why?

Like any software program, more computer resources (CPU & memory) are consumed when multiple files are open in Wave Controller software, even if the files are not actively being used. This could lead to instability of Wave Controller software, or even the Windows OS itself.

Do not insert or eject USB flash drives (or insert/remove network cable) during an XF assay. Why?

If the target file save location for the assay result file is the USB flash drive or virus protection software starts scanning the USB. This could lead to instability of Wave Controller software and in some instances may result in data loss.

Limit 'data analysis' performed on the XFe Controller, especially during an assay. Why?

XFe Analyzers acquire a significant amount of data for each assay, as mentioned above leaving files open in Wave Controller consumes computer resources, even if the files are not actively being used. Additionally, modifying the data display during an assay (i.e. changing from "Group" to "Well" mode, or "Rate" to "Level" mode) can redirect a significant amount of computer resources away from data acquisition, and in some instances may result in data loss.

Please be aware! Agilent Technologies...

- Does **not** provide any warranty with respect to Windows security updates and hotfixes or their compatibility with Agilent products.
- Is **not** liable for any claims related to or resulting from failure to install and maintain Windows security.
- Does **not** provide any warranty with respect to virus protection software or its compatibility with Agilent products.
- Does **not** make any representation with respect to the XFe Controller remaining virus-free after installation.
- Is **not** liable for any claims related to or resulting from failure to install and maintain virus protection.

It is your responsibility to...

- Ensure that XFe Controllers are updated with approved Windows security updates and hotfixes.
- Install and maintain Windows security updates and hotfixes.
- Ensure that all electronic files (including software and other transport media) are virus-free. It is your responsibility to maintain up-to-date virus protection software.

The guidelines in this document are based on tests performed using Windows Defender virus protection software, Kaspersky, AVG AntiVirus Free, and Norton AntiVirus Basic. Agilent cannot claim that future versions of the above-mentioned virus protection software, or virus protection software from other vendors will be compatible with these guidelines. See the [Agilent Software End User License Agreement \(EULA\)](#) for additional information.

Virus protection software

Windows Defender is pre-installed and pre-configured on Seahorse XFe Controllers running Microsoft Windows 10 Enterprise (64-bit) OS. If an alternate antivirus software is required, please review the details in this section to reduce the risk of impacting performance and functionality of the XFe Controller & Wave Controller software.

Virus protection software full system and on-access scans are resource intensive and could adversely affect the performance of Wave Controller software if run during assay execution.

Exclude the following folders from on-access scanning:

- C:\Program Files (x86)\Seahorse Bioscience
- C:\ProgramData\Seahorse Bioscience, Inc

The **ProgramData** folder is hidden by default in Windows File Explorer. To unhide this folder, open **File Explorer** and select the **C:\ drive** using the left navigation pane. Then click **View** in the upper ribbon menu to display **Show/hide** controls. Check the box next to **Hidden items** to display the **ProgramData** folder (see Figure 1).

Agilent Technologies is not responsible for data loss if full-system scanning occurs while running an XF assay. Do not insert removable storage media (i.e. USB flash drive) while running an XF assay. SCHEDULE SCANNING WHILE THE SYSTEM IS **NOT** IN USE!

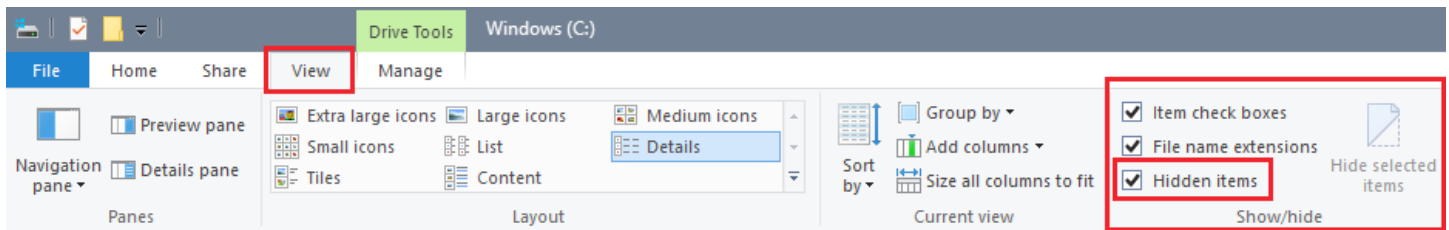


Figure 1. Excluding folders from on-access scanning.

Before installing or upgrading Wave Controller software

on your XFe Analyzer, temporarily disable antivirus software. Once the installation (or update) is complete, enable antivirus software.

Upgrading antivirus software might cause several changes in the configuration of the software and the exclusion list for the on-access scanner. We suggest that you verify that the recommended configuration settings and exclusion list have not been altered by the software upgrade.

If you follow these guidelines, but the performance and functionality of Wave Controller software is still affected, contact your virus protection software vendor for additional software-specific guidelines.

Microsoft Windows updates

Microsoft Windows updates are disabled by default on all XFe Controllers (Windows 10 64-bit). This means when Microsoft releases new Windows updates, they will not be automatically installed on the XFe Controller (with an active internet connection). Microsoft typically releases **quality updates** the second Tuesday of every month, and **feature updates** twice a year. For more information about Windows 10 updates, see: <https://docs.microsoft.com/en-us/windows/deployment/update/waas-quick-start>

Every new XFe Analyzer Controller is updated with the latest Microsoft **quality updates** – security updates, virus definitions, critical updates, driver updates – that are available at the time of instrument production.

Please contact **Agilent Cell Analysis Technical Support** if you have any questions related to Windows updates.

Depending on your network policy, automatic Windows updates may be required for network access. It is strongly encouraged to contact your IT system administrator before enabling automatic Windows updates, and for installation of Windows updates on the XFe Controller. Your IT system administrator should test and approve the Windows updates.

If you enable automatic Windows updates, please be aware of the following:

- Agilent Technologies does **not** provide any warranty with respect to Windows updates or their compatibility with Agilent products and is **not** liable for any claims related to or resulting from failure to install and maintain Windows security.
- Windows 10 initiates mandatory auto-updates (new features and security patches) when connected to the internet.
- Any major Windows updates may be incompatible with your current version of Wave Controller software.
- The XFe Controller may require a restart during or immediately after Windows updates are installed. To prevent data loss, do NOT run/install Windows updates while performing an experiment on the XFe Analyzer.

Microsoft Windows user accounts

The default Administrator user account on the XFe Controller is called *seahorse*. The seahorse account is configured for automatic logon, therefore you will not be prompted for a password when logging into the XFe Controller (for example, after restarting the XFe Controller).

The default password for the *seahorse* Windows user account is: seahorse

You may need to provide the password when performing an update of Wave Controller software. It is recommended to change the default 'seahorse' account password to a stronger password aligned with your company network policy.

You may add additional Windows user accounts on the XFe Controller if needed. You, or your company's IT system administrator is responsible for managing (add/remove) Windows user accounts, assigning and maintaining passwords, and appropriate privileges (user, administrator; read/write access) for each Windows user account.

All Windows user accounts must have read/write permission to the folder:

- C:\ProgramData\Seahorse Bioscience, Inc

Windows user accounts that do not have full access permissions to the folder mentioned above will be unable to run assays on the XFe Analyzer/Controller. Ensure that your network policies do not override the permissions set on the above folder or impose a Windows Update schedule that coincides with expected assay execution times.

Removable media guidelines

To prevent adverse performance of Wave Controller software, install removable media only when you are not running an XF assay.

The XFe Controller requires the use of one or more USB ports to connect to the XFe Analyzer. Do not disable the USB ports on your XFe Controller.

Firewall and encryption

Windows Firewall is ON by default on every XFe Controller (Windows 10 64-bit). Microsoft BitLocker has been tested for compatibility with Agilent Seahorse XFe Controllers with a Windows 10 64-bit OS only. Other disk encryption software has not been validated.

www.agilent.com/chem/discoverxf

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