

ZS XPLOER SOFTWARE: v4.2.0 (PSS0048-24) SOFTWARE UPDATE NOTIFICATION

Introduction

This document details the release of ZS XPLOER software version 4.2.0 (PSS0048-24) for the Zetasizer Advance range of instruments. Here forward referred to as ZS Xplorer.

This release supports the Zetasizer Advance range of instruments only (including Pro (ZSU5800) and Ultra (ZSU5700) models).

ZS Xplorer is not compatible with the Zetasizer Nano series of instruments (Nano S90, Nano ZS90, Nano S, Nano ZS, Nano ZSE, Nano ZSP, Zetasizer μ V and Zetasizer APS) nor can it read the *.dts file format from the Classic Zetasizer series software 8.02 or earlier.

For the latest version of this document please check our website at -<https://www.malvernpanalytical.com/en/support/product-support/zetasizer-range/zetasizer-advance-range>

Installation

It is assumed that you have authority to install or update software within your company's SOPs. If you do not have this authority, please consult with your I.T. support department before proceeding.

It is assumed that you have Administrator rights for the computer. This is required by the installation process. For ZS Xplorer software, Windows 10 and later will not allow an installation if the user does not have administrator access. This is in line with Microsoft's Logo policy and is standard practice.



IMPORTANT:

Only Windows 10 & Windows 11 64-bit Operating Systems are supported

Microsoft user accounts are not supported.

Before installation of the software, the instrument should be switched off and disconnected.

Regulated Environment customers upgrading to ZS Xplorer V2.3.1 or later, will need to also upgrade to OmniTrail and OmniAccess V1.4 or later.

In some cases, the installer will require the user to restart the PC, in this case it is required that the Administrator logs in to the PC for the first time, following the restart. Failure to do so may cause the software to crash. In this case reinstalling the software on the Administrator account will fix the issue.

Recommended System Requirements

The recommended computer system requirements for running this software are highlighted in table 1 below.

Table 1 Recommended system requirements for ZS Xplorer software.

Feature	Specification
Processor Type	8th Gen+ Intel Core i7 Processor (or better)
Memory	16 GB RAM
Solid State Drive	512GB or greater
Display Resolution	1920 x 1080 full HD screen resolution minimum
Connectivity	2 free USB2.0 or higher ports
Operating System *	Windows 10 or 11, 64 bit. * The ZS Xplorer software is not compatible with 32-bit Operating Systems

Supported operating systems

ZS Xplorer is compatible with Windows 10 & 11 (tested on Windows 10 Pro 22H2 Win11 Pro 24H2 26100.3775). Only 64-bit versions are supported.

ZS Xplorer has also been tested on Windows 11 with both core isolation mode enabled and disabled.

Supported Languages

- English (US)
- Chinese (simplified)
- Japanese

Note: New features may initially lack additional language support other than English.

Installation Instructions

Installation process

The software suite is available as a web download. The downloaded extractor contains the ZS Xplorer Setup, License Manager Setup and .NET Framework 4.8 Setup files. License Manager and .NET Framework 4.8 are prerequisites of ZS Xplorer, even if you are not using OMNITRUST regulated environment software suite.

When the extractor is run (see figure 1) it will extract the required installers to a folder named 'MPInstallers' in the location the extractor is run. The folder and a readme, with important information, will be opened (see figure 2).

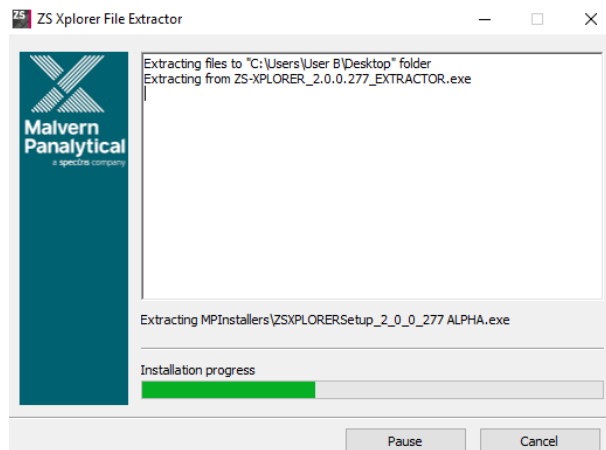


figure 1 ZS Xplorer Self-Extracting Installation files

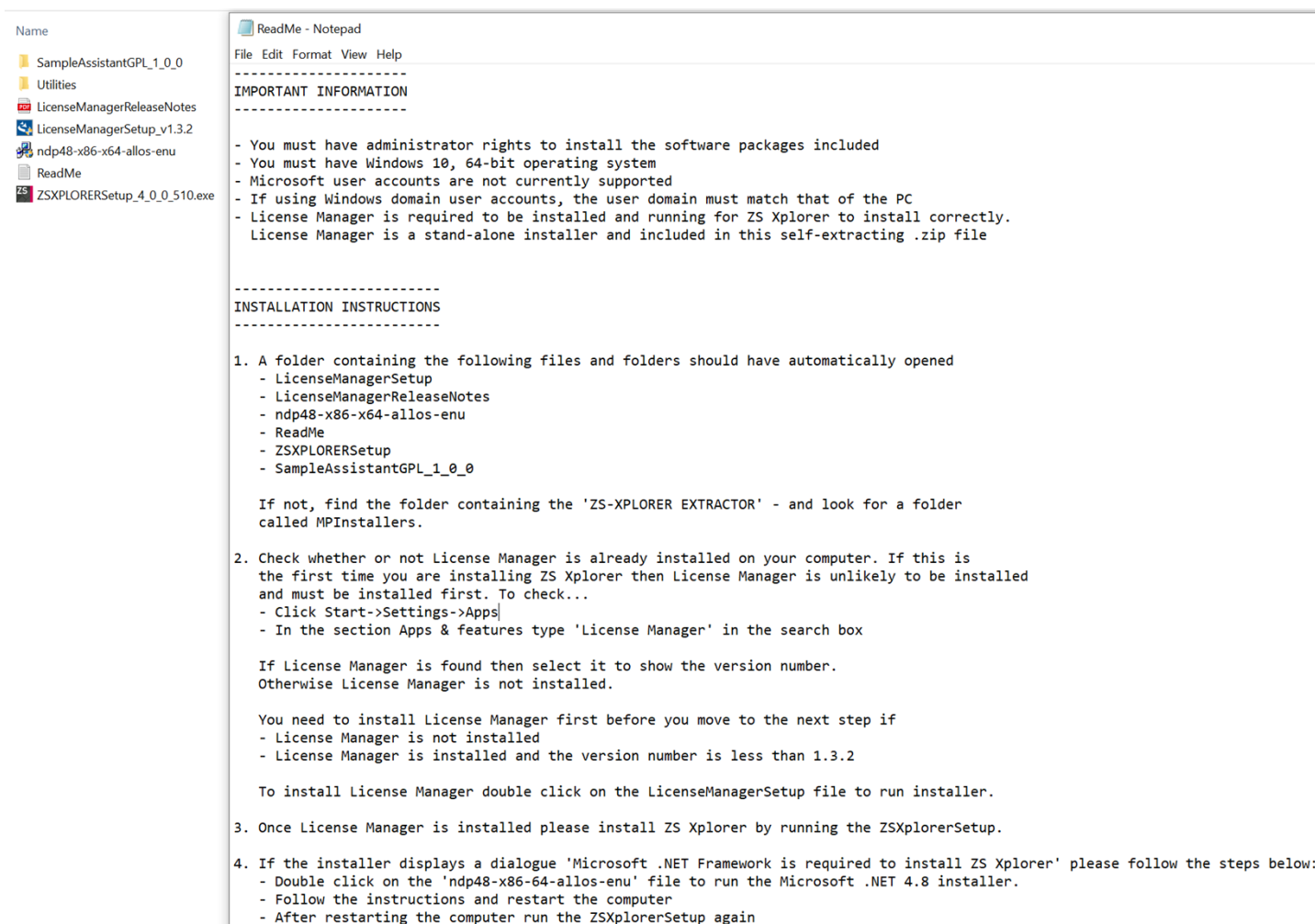


Figure 2 Extracted installation files and ReadMe file.

.NET Framework 4.8 Installation

Microsoft .NET Framework 4.8 component is a requirement for ZS Xplorer software to run correctly and must be installed prior to the installation of ZS Xplorer. If you do not have the correct version installed the ZS Xplorer installer will warn you and won't proceed until the correct version of .NET Framework is installed. Windows 10 versions from 1903 include .NET 4.8 or higher and will not require updating.

License manager Installation

The Malvern Panalytical license manager component is a requirement for the ZS Xplorer software to run correctly and must be installed prior to the installation of ZS Xplorer.

Please update to the new version of license manager even if previous installed to allow system to work as expected. Version 2.0.0 is supplied with this installer.sc

ZS Xplorer Installation

During the installation process, you will be prompted with the following message (see fig.3).

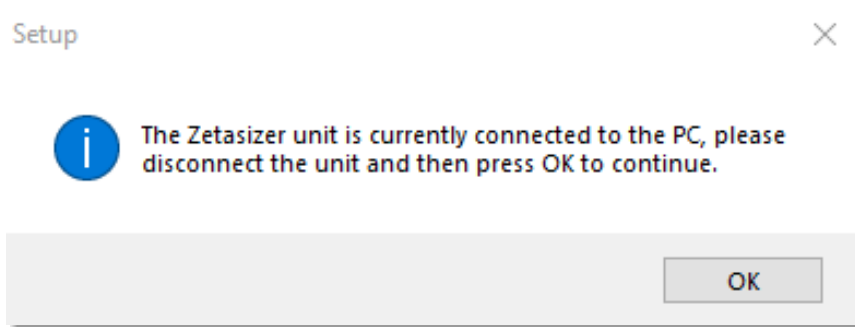


Figure 3 "Disconnect Zetasizer Unit" message.



Note:

You must unplug the USB cable from the computer or Zetasizer and then press OK. If you press the OK button without performing these previous steps, then the installation will not continue.

Microsoft C++ Redistributable

The Microsoft Visual C++ Redistributable must be installed for the ZS XPLOER software to run. This is installed during the ZS XPLOER software installation progress and under certain circumstances can involve the computer needing to restart. Completion of this stage of the installation can take a few minutes and may take over 10 minutes. Whilst these components are being installed a window such as below will be displayed, figure 4.

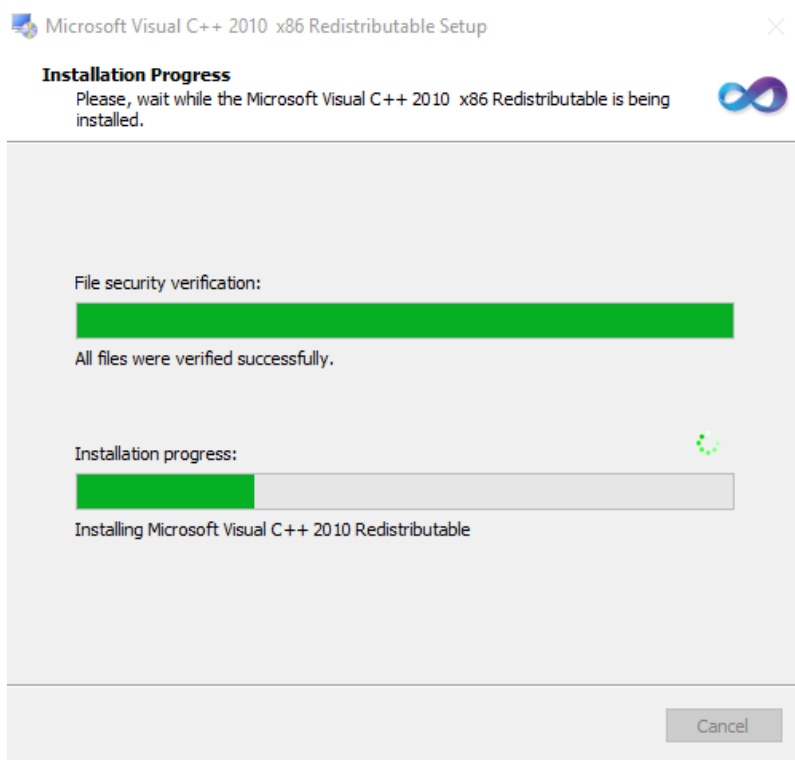


figure 4 Microsoft Visual C++ Redistributable Installation Window

ZS Xplorer Services

As part of the ZS Xplorer installation there are several Windows services and components that are installed. These are listed below:

Services Installed:

Display Name	Version	Description
Trends Analysis Service	1.4.4	Interface and analysis for trends services
Instrument Service	2.0.10	Instrument control layer
Malvern Panalytical Sample Assistant	1.3.0	Zetasizer Sample Assistant interface and control
License Manager	2.0.0	Manages licensing for extended features, such as OmniTrust
Malvern Panalytical Cloud Service	1.4.24029.10	Service that allows access to MP Smart Manager services
Malvern Panalytical Regulated Environment Service	4.2.1977	Authentication service via Windows Account Services
Trend Analysis Repository	4.4.3.0	MongoDB interface

Components Installed:

Name	Version	Description
ZS Xplorer	4.2.0	Main Application
MongoDB	4.4.3.0	Database component
SQLite	3.8.10.2	Database component

Smart Manager

During installation of version 4.2.0 of ZS Xplorer you will be asked if you wish to enable Smart Instrument. This is an optional component that will allow additional Smart Manager Services for your Zetasizer Advance system.

If you have an internet connection and have chosen to make your instrument a Smart Instrument during the ZS Xplorer software installation, your instrument will automatically start uploading key parameters to Malvern Panalytical Cloud Services. We only collect low-level telemetry data from your instrument. We don't collect any of your actual test data, and we can't control your instrument remotely. Our helpdesk uses the telemetry data to help you faster in case of issues.

The data that we do collect is safe with Smart Manager – it's stored and processed securely on the Microsoft cloud. With more certifications than any other cloud provider, Microsoft is committed to security, transparency, and regulatory compliance. And our own information security management system also complies with the strictest international security standards (ISO/IEC 27001:2013).

You can check the status of your connection by locating the Malvern Panalytical Cloud Service application on the Windows Task Bar Tray then right click and choose status.

If you did not allow the service to send data to Malvern Panalytical during the ZS Xplorer software installation, you can simply right click the same application, then click register to do so later.

To find out more about Smart Manager Services go to <https://www.malvernpanalytical.com/en/connected-world/smart-manager>

USB Driver Installation

During the installation of the USB drivers, you may be prompted several times with a message as shown in figure 5.

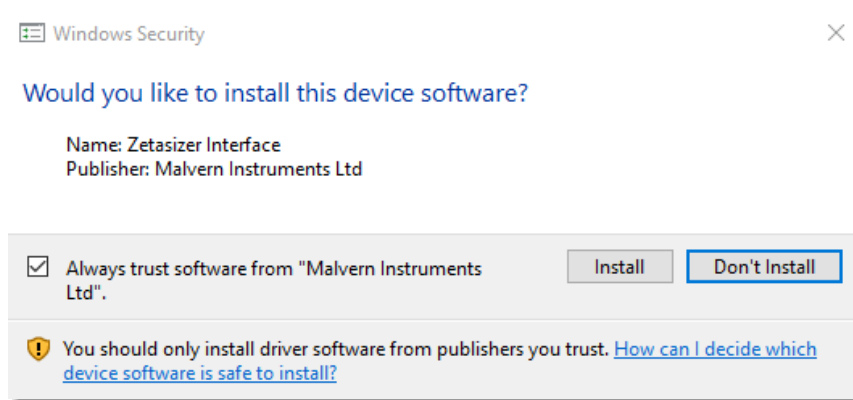


figure 5 Install USB window

This warning can safely be ignored as the software installation has been fully tested on Windows 10. Press **Install** to continue installation of the USB drivers.

Connecting the Zetasizer to the computer

When the software has been installed and the instrument has been connected via the USB port, and switched on, the ZS XPLOER software may need to upgrade the firmware on the Zetasizer, in which case the status icon on the lower right of the software screen will indicate such (see *figure 6*).

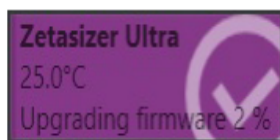


figure 6 instrument firmware updating status icon

Users should not disconnect or power off their PC or instrument during normal firmware updating. In some rare occasions the firmware may fail to update correctly, in such circumstances a notification will be displayed indicating the issue – please restart the instrument and software to reset and repeat the firmware upgrade process.

With the correct firmware version installed the Zetasizer will connect to the instrument. A successful connection is indicated with an icon in the corner of the software (see *figure 7*) showing green and with a tick.

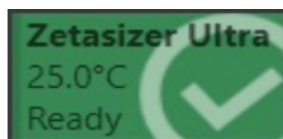


figure 7 Instrument connected icon

Uninstall Procedure

The software can be uninstalled using the standard Apps & Features panel in Windows Settings.

Running the installer with the ZS Xplorer software running

If the installer is run whilst the software is running, the window in *figure 8* will display.

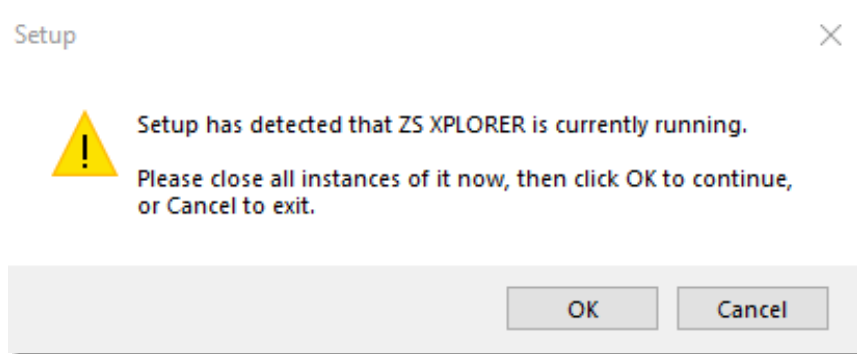


figure 8 Running installer with software open

Connecting the MPT-3 Titrator to the PC

Ensure the computer is turned on and connected to a Zetasizer Advance system.

Connect the MPT-3 Autotitrator to the computer using the USB cable provided, ensuring that it is turned on. Click on the settings button in the top left corner of the ZS XPLOER software (see figure 9).

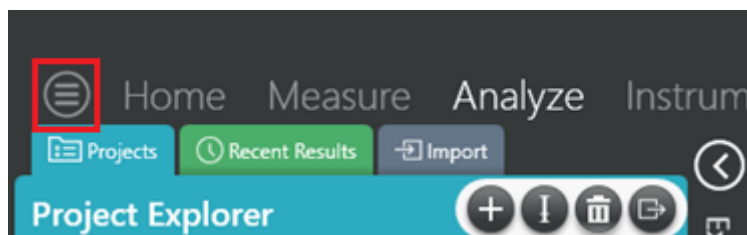


figure 9 Software options

Click Options and navigate to the Titrator tab as seen in figure 10.

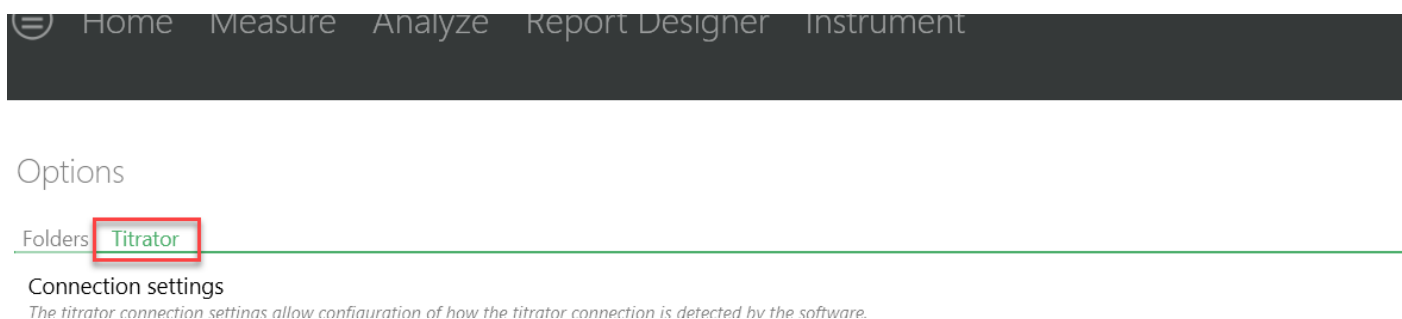


figure 10 Titrator options page

On the COM Port drop down menu, select USB Serial Port (COMXX), as shown in figure 11. (Note that the COM port number and description may vary). If the titrator has been detected on this port, then a green tick will be visible (see figure 11).

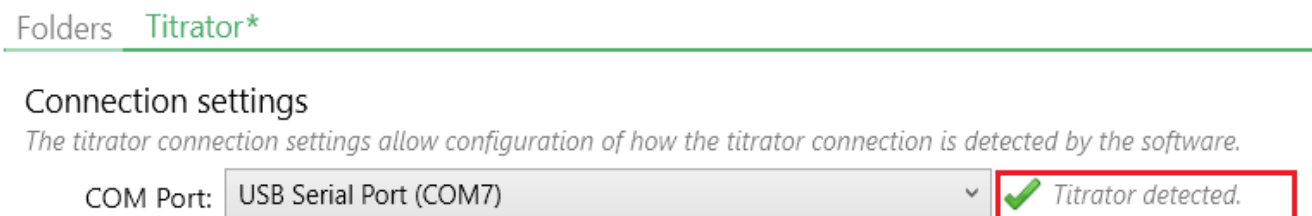


figure 11 Titrator successfully detected

If the titrator is not detected on the selected COM port, then a red exclamation icon will be displayed with a message (see figure 12).

Connection settings

The titrator connection settings allow configuration of how the titrator connection is detected by the software.

COM Port:  Titrator not detected.

figure 12 Unable to detect titrator

Once the titrator has been detected, click to save the settings.

Once the settings are saved an icon and a saved message will appear next to the saved COM port as shown in figure 13.

Folders **Titrator**

Connection settings

The titrator connection settings allow configuration of how the titrator connection is detected by the software.

COM Port:  Saved.

figure 13 COM port saved

The titrator icon at the bottom right of the screen should turn green indicating that the titrator is successfully connected as shown in figure 14.



figure 14 Titrator successfully connected

ZS Xplorer – Backup & Restore

What to backup

By installation default, this version of ZS Xplorer application uses C:\ProgramData\Malvern Instruments\ZS XPLOER and its subfolders for configuration and user created output files. For ease, we would suggest this is the simplest folder to backup and restore.

To create a backup, we recommend that you consult your IT department to select the best method to achieve this. For pharmaceutical regulated environments, you should also consult your validation department - as they may have specific compliance requirements, and/or recommendations. Backup frequency and type e.g., full, incremental, or differential, along with consistency checking, should be considered when choosing the most appropriate backup methodology.

Table 2 provides information on the location and details of the important files and folders used by ZS Xplorer as well as our recommendations on backing up of data.

It is at the discretion of individual organization to define a backup process that is appropriate to their needs and the criticality of their data.

All file types used by ZS Xplorer can be copied to a secure location, we recommend that this be done at times when the system is not in use. Backups should be full backups (not differential) and a history of backups is retained to avoid overwriting a good backup with a corrupt version.

How to restore

In this section we cover the two most likely reasons why you want to restore backup files. The first being accidental deletion of files, or to replacing corrupted files for a working installation of the ZS Xplorer application.

The second reason might be because the primary drive, on which the ZS Xplorer application was installed upon, has been replaced or a fresh operating system has been installed, both of which requires the reinstallation of the ZS Xplorer application software.

It is important to note that when reinstalling the ZS Xplorer application, the version being installed must be same or later, as some files may not be backwards compatible with earlier versions of the application software.

Scenario 1 - restoring files to an existing installation:

1. Make sure the ZS Xplorer application is NOT running.
2. Restore/copy the required files from your backup to the destination folder, replacing the deleted or corrupted file/s.
3. Start ZS Xplorer and verify the recovered file/s are working as expected.

Scenario 2 – restoring files for a fresh reinstallation of ZS Xplorer.

1. If your backup contains the complete ZS Xplorer folder, subfolder, and files, simply restore/copy this folder to C:\ProgramData\Malvern Instruments\. This folder will need to be manually created.
2. Install your existing version of ZS Xplorer or later.
3. Start the application as normal and verify everything works as expected and that the software connects to the Zetasizer instrument.

Table 2 - ZS Xplorer file structure

File Name	File Extension	Location	Backup?
Cells	.data	%ProgramData%\Malvern Instruments\ZS XPLORER\Cells	Not required – auto-regenerated if deleted
Materials & Dispersants	.data	Shared: %ProgramData%\Malvern Instruments\ZS XPLORER\Materials Individual: %userprofile%\Documents\Malvern Instruments\ZS XPLORER\Materials	Defaults are auto-regenerated, however can be user configured – backup recommended
Measurement data (export location)	.zmes	Location set via option in ZS Xplorer	This is a temporary export location only – so user discretion on importance of any files here
Methods	.zskd	Shared: %ProgramData%\Malvern Instruments\ZS XPLORER\Methods Individual: %userprofile%\Malvern Instruments\ZS XPLORER\Methods Also, any other folders the user selects.	Recommended if custom methods used

Reports	.zrep	Shared: %ProgramData%\Malvern Instruments\ZSXPLORER\CustomReports Individual: %userprofile%\Malvern Instruments\ZS XPLORER\Reports For reports with custom headers or logos, there is an additional folder:%ProgramData%\Malvern Instruments\Malvern.Reporting	Default reports auto-regenerated on deletion – recommended if custom reports used
pH probe calibration	.cal	%ProgramData%\Malvern Instruments\ZS XPLORER\Titrator	Not necessary as can be re-calibrated
Scattering standard	.data	%Program Data%\Malvern Instruments\ZS XPLORER\ScatteringStandards	Recommended
Working file	.db	Shared: %ProgramData%\Malvern Instruments\ZS XPLORER\Working File Individual: %userprofile%\Malvern Instruments\ZS XPLORER\Working File	This is the main working database file that holds measurement records – highly recommended
Program data folder	various	%ProgramData%\Malvern Instruments\ZS XPLORER	This is the main programme data and can be restored by re-installation of the software
Titrator configuration	.xml	%ProgramData%\Malvern Instruments\ZS XPLORER\Titrator	Not required as can be readily set-up in ZS Xplorer
Storage configuration	.xml	%ProgramData%\Malvern Instruments\ZS XPLORER\WorkingFileSettings	Not absolutely required as can be set-up in ZS Xplorer
Studies	n/a	C:\Program Files (x86)\Malvern Instruments\TrendAnalysisData\data	Backup if performing Studies type measurements – see https://www.mongodb.com/docs/manual/core/backups for advice on backing up and restoring Mongo DB data
Sample Assistant Service	n/a	C:\Program Files (x86)\Malvern Instruments\SampleAssistantService	Not required as can be re-installed
Sample Assistant Configuration data	various	%ProgramData%\Malvern Instruments\Sample Assistant	Set-up configuration files: not strictly required to back-up as can be re-configured via software

New Features & Changes

OmniTrust Integration

Sample Assistant has been integrated with OmniTrust, prior to this release the Sample Assistant tab inside of ZS Xplorer was hidden for any customers running in regulated environments.

There are two sides to the OmniTrust integration, the auditing (OmniTrail) and the permissions (OmniAccess).

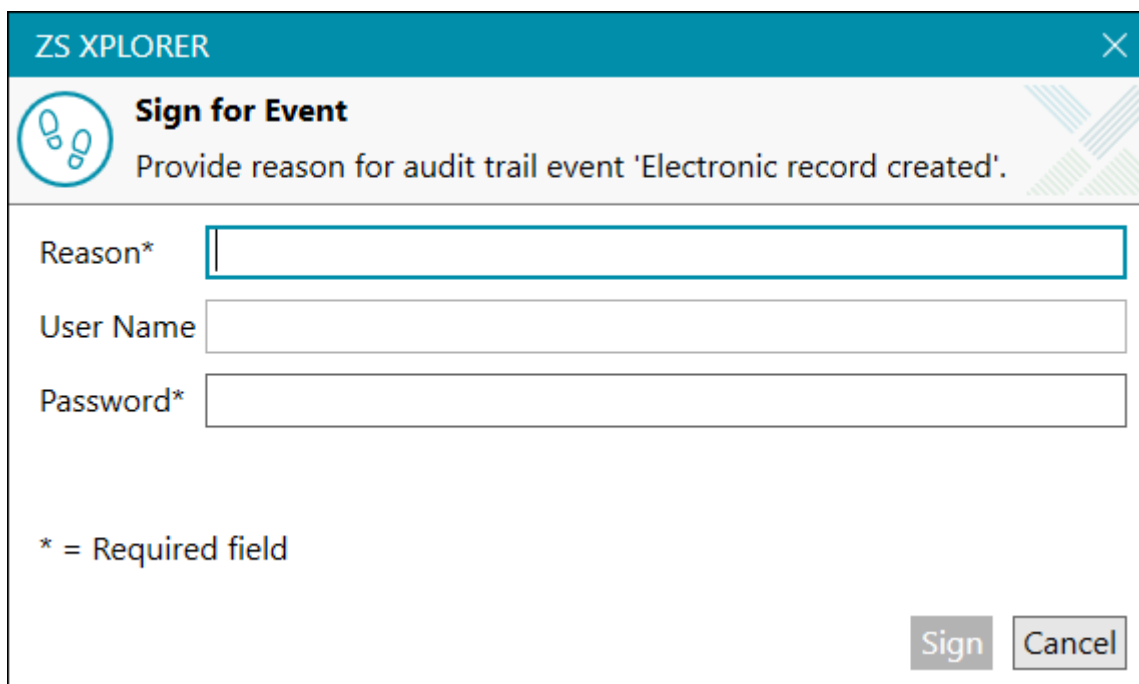
Auditing

Sample Assistant now integrates with audit events; this is only around the creation of measurement result records and adding/removing sessions from the queue. We do not audit the actual session content itself, sessions in Sample Assistant are collections of method files with some additional meta data. The method files are already audited by ZS Xplorer, as are the subsequent results.

So, we consider Sessions to be application state that does not require signing or hashing.

Electronic measurement record created events

ZS Xplorer files Electronic Record Created events when regulated users run measurements. If signing & reason is enabled for this event, then during manual operation the user would expect to see one signing dialog per event. Since Sample Assistant is an automated system, having to sign for each event individually would void all of the benefits. So, this integration ensures that when running measurements through Sample Assistant, the user only has to sign for one Electronic Record Created event. This signing happens at the time they start running the queue. That signature is then reused for all the subsequent electronic record-created events.



ZS XPLORER [Close]

 **Sign for Event**

Provide reason for audit trail event 'Electronic record created'.

Reason*

User Name

Password*

* = Required field

Figure 15 sign dialog to queue measurements

We now utilize the ‘Measurement added to queue’ event type through Sample Assistant, when the user adds a session to the queue the software will file this event.

The event has a “Method/Program” field which we set to the name of the session.

OmniTrail - OmniTrail

System Audit Trail Entries

Entries last retrieved @ Thursday, June 26, 2025 9:08:42 AM

Live Updates

Filters

Special Filters: None

Event timestamp	Event type	
6/5/2025 3:44 PM +01:00	Application stopped	
6/5/2025 3:44 PM +01:00	User logged out	
6/5/2025 3:44 PM +01:00	Application stopped	
6/5/2025 3:44 PM +01:00	User logged out	
6/5/2025 3:11 PM +01:00	User logged in	
6/5/2025 3:11 PM +01:00	Application started	
6/5/2025 3:10 PM +01:00	Application stopped	
6/5/2025 3:10 PM +01:00	User logged out	
6/5/2025 2:54 PM +01:00	Measurement added to queue	
6/5/2025 2:53 PM +01:00	User logged in	
6/5/2025 2:53 PM +01:00	Application started	
6/5/2025 2:53 PM +01:00	Configuration deployed	
6/5/2025 2:53 PM +01:00	Application stopped	
6/5/2025 2:53 PM +01:00	User logged out	
6/5/2025 2:52 PM +01:00	Measurement added to queue	
6/5/2025 2:52 PM +01:00	User logged in	
6/5/2025 2:52 PM +01:00	Application started	
6/5/2025 2:52 PM +01:00	User logged out by regulated environment	
6/5/2025 2:52 PM +01:00	Application stopped unexpectedly	
6/5/2025 2:52 PM +01:00	Configuration deployed	

Details

Event:

Measurement added to queue

Timestamp of event:

Thursday, June 5, 2025 2:54 PM +01:00

Registration timestamp:

Thursday, June 5, 2025 2:54 PM +01:00

Electronic record:

Not applicable

Electronic record type:

Not applicable

Electronic record location:

Not applicable

Sequence number:

696

Client Sequence number:

0

Application started by:

Stewart James - Stewart James

User identifier:

AD\ml\local\Stewart.James

System identification:

UKMAL17001757

Application and version:

ZS XPLORER - 0.0.0

Role:

Administrator

Log in mode:

Not applicable

Signing and Reason: Reason Name:

Not applicable

Method/Program:

Session

K

17

18

19

20

21

22

23

Page 20 of 55

Results per page:

20

Figure 16 Session name recorded in Method/Program field

Measurement removed from queue events

We now utilize the ‘Measurement removed from queue’ event type through Sample Assistant, when the user removes a session from the pending queue the software will file this event.

As with the ‘measurement added to queue’ event, this event will also set the “Method/Program” field to the name of the session.

Note: We do not file these events if the user is removing a session from the completed queue, nor if the session completes naturally. We do not consider these to be ‘removal’ from the queue.

This event does support signing & reason, so if the user has this option enabled, they will see a signing dialog when removing sessions from the pending queue.

Note: Sample Assistant allows the user to clear all pending sessions, they will only be presented with the signing dialog once, and events will be filed for each session using that one signature.

Unaudited methods

ZS Xplorer already enforces that **unaudited** methods cannot be run in regulated environments. Since running is the only thing you can do with Methods in Sample Assistant, any unaudited methods will no longer be displayed in the create session method list.

The loaded method is not a regulated method, it cannot be run in a Regulated Environment

Figure 17 dialog if unaudited methods are attempted to be run in a regulated environment ZS Xplorer installation

NOTE: Audited methods can be run in non-regulated environments, so non-regulated environments see ALL methods as per before.

Permissions

OmniAcces has been integrated into Sample Assistant, a new Sample Assistant category of permissions has been added, and Sample Assistant has been modified to support relevant permissions that pre-existed in ZS Xplorer.

New Sample Assistant permission category

A new category has been added to OmniAccess:

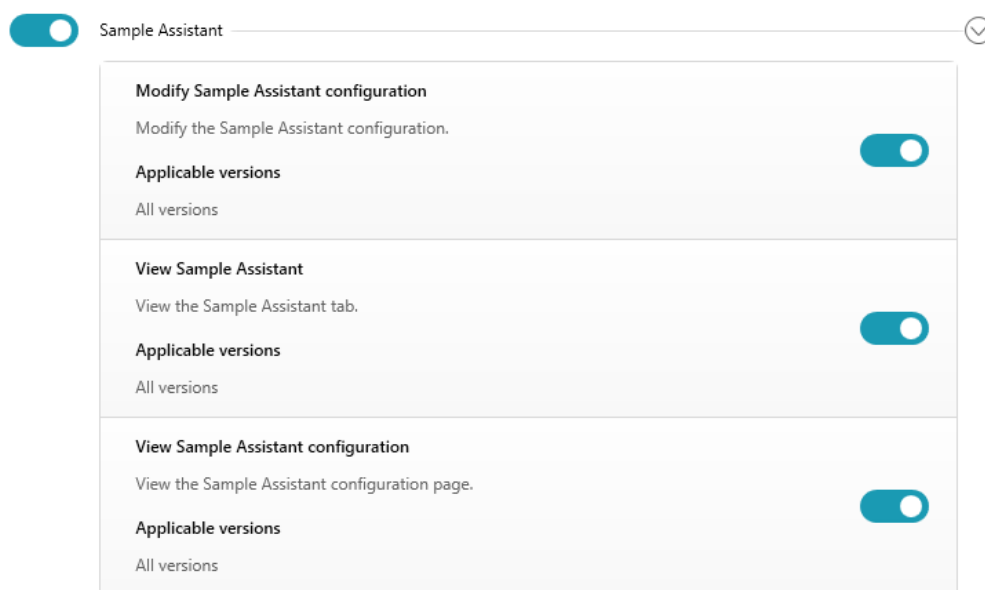


Figure 18 new permission pertaining to Sample Assistant in regulated environments is now available in OmniAccess

Modify Sample Assistant configuration:

Determines whether the user can perform configuration (calibration) of the Sample Assistant components. The configure spanners on the configuration screen will be disabled if the user does not have this permission set.

View Sample Assistant:

Determines whether the user can use Sample Assistant, the Sample Assistant tab will not be visible if the user does not have this permission set.

View Sample Assistant configuration:

Determines whether the user can view the configuration (calibration) screen. The navigate to configuration button will be disabled if the user does not have this permission set.

Create session button

The create session button will be disabled if the user does not have the following permissions set:

- *Open method*
- *Edit sample details*
- *Change destination project*

An informational tooltip is displayed if the user is missing any of the above permissions.

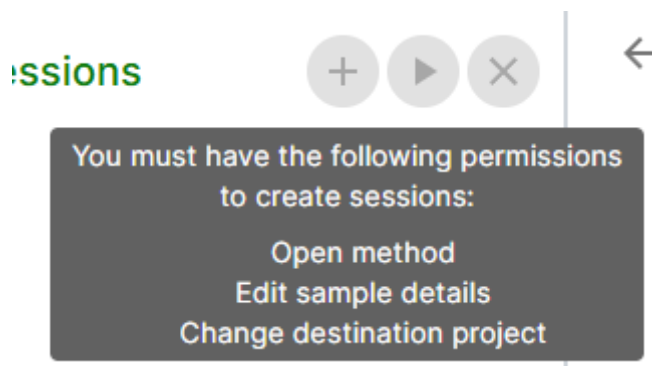


Figure 19 information on tooltip if user does not have correct permissions to create a session in Sample Assistant

Run queue button

The run queue button will be disabled if the user does not have the following permissions set:

- *Create project*
- *Open method*
- *Run method*
- *Edit sample details*

An informational tooltip is displayed if the user is missing any of the above permissions.

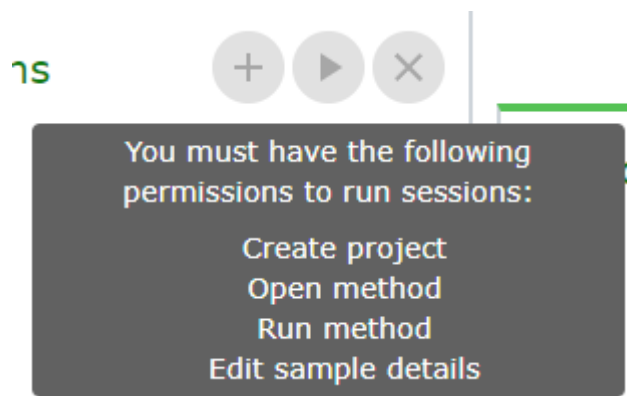


Figure 20 information on tooltip if user does not have correct permissions to run a session in Sample Assistant

Navigate to configuration button

- View Sample Assistant configuration (NEW)

An informational tooltip is displayed if the user is missing any of the above permissions.

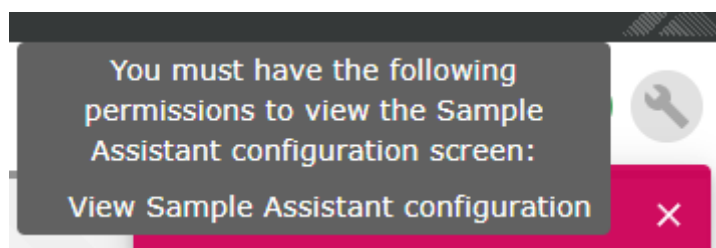


Figure 21 information on tooltip if user does not have correct permissions to view Sample Assistant configuration

Perform configuration buttons

The configuration buttons will be disabled if the user does not have the following permissions set:

- *Modify Sample Assistant configuration (NEW)*

An informational tooltip is displayed if the user is missing any of the above permissions.

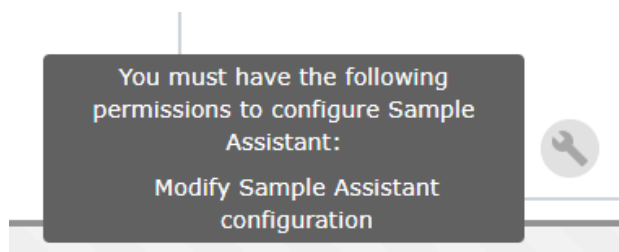


Figure 22 information on tooltip if user does not have correct permissions to modify Sample Assistant configuration

Persistence for Sample Assistant

With previous releases of Sample Assistant, the session queue was completely in memory, this means that if the user turns off the computer for any reason, all their session data would have been lost.

This release now adds functionality to automatically persist this data to a file. Any operation that the user or the system performs on a session, or the queue, is persisted to a file.

Actions such as the following now fully persist:

- Creation of sessions
- Running of measurements & their updated status
- Removal of sessions

Random measurement run order

Currently users can only run measurements in the default order (by row), with this release we have added a new option to the creation of a session to allow for measurements in that session to be ran in a random order.

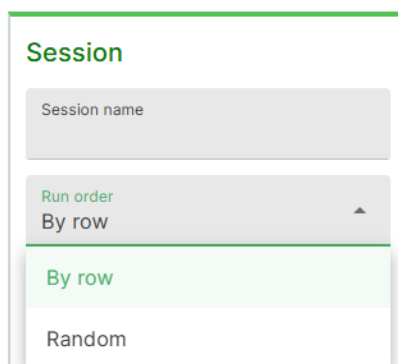


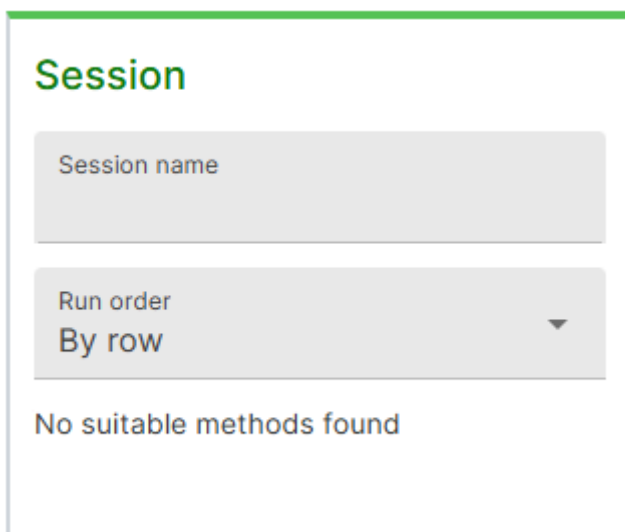
Figure 23 new random order now available in session editor

Users can mix and match run orders on different sessions, for example they could create one session that runs its measurements by row and a separate session that runs its measurements randomly.

When running in random mode, the system will select the next measurement at the time it has completed the previous measurement. This means that the user will not be able to predict which well will be measured next, this prevents users from manipulating the result of a random session by moving cells between wells.

Show text when no methods exist

Previously if the user had no methods that were compatible with a given cell tray, the methods selector would be completely blank. This has been improved with this release to show “No suitable methods found”.



The screenshot shows a window titled "Session" with a green header. Inside, there is a "Session name" text input field. Below it is a "Run order" dropdown menu currently set to "By row". At the bottom of the window, the message "No suitable methods found" is displayed in a blue font.

Figure 24 message when there are no methods available for a selected tray type.

Log error messages are now pushed to Smart Manager

With this release of ZS Xplorer, logs with a category of warning, error or critical are now pushed to Smart Manager.

This does not include the Measurement Log file which is the user-facing log of measurement actions displayed to the user in the software.

Any sensitive information, such as, file paths or method files, are removed from the message prior to being pushed to Smart Manager. This is to ensure that we do not have access to any customer data.

License Manager upgraded to 2.0.0

The copy of License Manager shipped with the ZS Xplorer installer is now version v2.0.0.

Fixed Issues

Options sidebar appearing behind WebView's

A long-standing issue with the Microsoft WebView component would cause the ZS Xplorer sidebar to appear behind our WebView controls for Studies and Sample Assistant.

Microsoft have recently released a fix, and therefore it is fixed with this release of ZS Xplorer.

Startup failure when the selected project did not exist

Addressed a bug that would cause the software to crash on startup if the value in the database for the selected project referred to a project that did not exist.

GAMP 5 Software categorization

In its standard mode of operation, the Zetasizer Xplorer software provides users with a series of standard interfaces and functions that enable the software to be configured to meet specific user business requirements. These interfaces include the ability to define Standard Operating Procedures (SOPs) for sample measurement and create report definitions using pre-defined functions. If users apply these functions, then the software can be considered to be a Category 4 product.

Security Advisories

The following section and table 3 detail any security updates that have been addressed in this release, including fixes for identified vulnerabilities.



Note:

We always recommend updating to the latest software version which will provide you with new features, bugfixes and most importantly, security updates.



Note:

Other products may also be affected by any issue described here. We recommend you regularly check the Software Updates Notifications (SUNs) for all your Malvern Panalytical products, and register on our website to receive updates.

Table 3 Security updates

Reference	Description	Recommendation
HEN-1042	Version 2.00 and earlier of the ZS XPLOER software contains a vulnerability which could allow an attacker to craft malicious measurement (.zmes) and schedule (.zskd) files. Loading one of these malicious files could result in arbitrary code execution. Version 2.10 introduces a fix to completely mitigate this vulnerability.	Upgrade to version 2.10 or later of the software. Never open files from an untrusted source, even if they appear to be non-executable.
HEN-572	Version 1.50 and earlier of the ZS XPLOER software contains a vulnerability in the reports feature which could allow an attacker to craft a malicious report file. Loading a malicious report file could result in arbitrary code execution. Version 2.00 introduces a fix to completely mitigate this vulnerability.	Upgrade to version 2.00 or greater of the software. Never open files from an untrusted source, even if they appear to be non-executable.

Known Issues

The following software bugs have been discovered within the software and will be investigated as part of a future release. Please follow the suggested work-around where they are provided.

Table 4 Known issues in ZS Xplorer version 4.2.0

Reference	Severity	Issue	Workaround
NA	Normal	Regulated Environment customers upgrading to ZS Xplorer v3.31 may need to also upgrade to OmniTrail and OmniAccess V1.4 or later if previous ZS Xplorer version earlier than v2.3.0	Check or Install Omnitrail V1.4 or later and OmniAccess V1.4 or later when using ZS Xplorer v3.31 in a regulated environment if upgrading from ZS Xplorer versions 2.3.0 or earlier
NA	Normal	ZS Xplorer may crash when making a measurement If project size becomes too large. Memory use may spike when a measurement is in progress and large projects can lead to out-of-memory issues.	Do not let project sizes become excessive. We recommend that projects contain a maximum of 500 measurement records, but this may vary dependent on make-up of the measurement types in a project
TFS-182966	Normal	Reports: Parameters path does not fit in list box boundary	Edit report template to allow more room for the parameter to display correctly, if possible
TFS-180690	Normal	Concentration Trends - After selecting multiple measurements, starting the measurement, accepting the solvent scatter dialog, and leaving the confirmation dialog alone while the scattering count measurement completes, the concentration dialog is modal and blocks the confirmation dialog but if you try to abort the concentration dialog, nothing happens.	Accepting the concentration point and then clicking the OK will abort the trend
TFS-180691	Normal	Edit study button may not reactivate at the end of a measurement	Navigate to an intermediate page to refresh the status
TFS-180699	Normal	Concentration trends - Can't see count rate trace during solvent scattering measurement	If you are in doubt about the cleanliness of solvent or buffer, then run the count rate tool and record the attenuation and count rate and use these as manual inputs.
TFS-180693	Normal	Studies not in order	No workaround
HEN-1866	Normal	Count rate live display is not showing during Concentration Trend measurements	No workaround
TFS-180695	Normal	Studies wont load – opening ZS Xplorer and going straight to Studies tab may prevent loading of any saved studies	Click retry and if this fails re-start ZS Xplorer

TFS-180692	Normal	Whilst a measurement is running UI can become slow if user navigates to study selector	Avoid using study selector whilst measurements are proceeding
TFS-172158	Normal	If a user includes a custom dispersant in a study and then updates the dispersant the change is not pulled into the open study until a new study is created or ZS Xplorer is restarted	Avoid editing custom dispersants during creation or measurement of a study without restarting software first
TFS-180693	Normal	Aborting a concentration trend measurement and then selecting all measurement points and re-running will cause the trend to start at the previously aborted measurement point and not the first	All measurement points are measured but may be confusing to users so be aware of issue.
TFS-180697	Normal	Crash after publishing studies measurements after renaming a study if the study name is changed between measurements	Clearing the method list in Measure tab after renaming a Study will prevent the crash/do not rename incomplete Studies
TFS-180672	Normal	Printing a custom report from Report Designer will only show graphs with single color	Print reports from Analyze-Reports tab to ensure correct behavior
TFS-180671	Normal	Trend Builder return to defaults button may not always reset to defaults	Click return to defaults a second time resets them to defaults
220441	Normal	Calibrating a holder that isn't physically installed causes subsequent tool holder calibration to fail	Press the stop button or move the robot arm such that it enters low power state and requires initialization. Follow the onscreen instructions and re-initialize the robot arm.
230891	Normal	Method watcher: Methods change assigned color when edited	No workaround. Ensure users are aware that this may occur and do not rely on color for method identification, check the method title.
N/A	Normal	Sample Assistant will fail to initialize if gripper is rotated out of range (> +/-900 degrees)	Rotate gripper head manually until back withing +/- 900 degrees range
207828	Normal	ZS Xplorer shows all instrument features as disabled on connection	Disconnect the Zetasizer and restart ZS Xplorer and reconnect

Error Reporting

Should persistent problems occur contact the local Malvern Panalytical Helpdesk. To speed up response time include all the following.

- A full-screen screen shot of any error message and everything behind it.
- Full description of what was happening at time of issue and ideally leading up to it.

- Instrument serial number (e.g. MAL1060289), instrument serial number can be found inside the sample cell basin and on the instrument back panel.
- The software version, which can be found as described in a section below.
- The log information is described below.
- And, if relevant and possible, export the relevant measurement data as described in the last section below.

Extracting log information

If an error occurs, further information about the error can be found from the Windows Event Viewer.

Click the Windows Start Button.

Type Event Viewer and press enter.

Navigate to Applications and Service Logs/Zetasizer All Events.

The window will display the most recent errors that have occurred with the ZS XPLOER software.

Error information can be selected and then exported with the Save selected Events button allowing this information to be passed to the Malvern Panalytical team for troubleshooting.

The contents of the measurement log window are logged to file at: *Documents\Malvern Instruments\ZS XPLOER\logs*

For specific issues with Sample Assistant the logs may be of use and these can be found at: *C:\ProgramData\Malvern Instruments\Sample Assistant\logs*

Software version

The Software Version is vital to determining the cause of problems. To retrieve the version number:

Click on **Application Menu** button (figure 25)

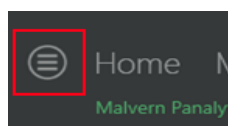


figure 25 Application Menu button

Click on the **About** button.

Read version number (figure 26, below)

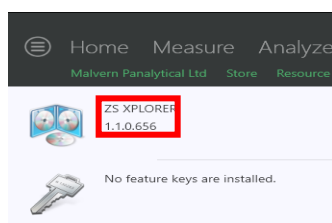


Figure 26 Software Version Number

Extracting measurement data to send

In situations where the errors appear to be related to a specific record or records, the affected records can be exported from the software by selecting them and pressing the export icon, see figure 27, and send the *.zmes file to the Malvern Panalytical team for investigation.

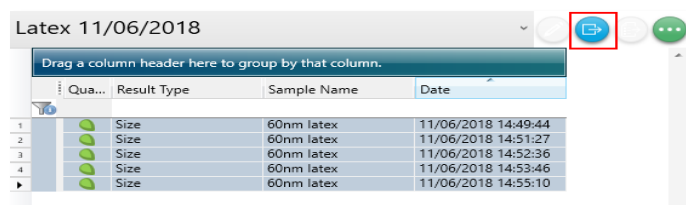


Figure 27 Exporting selected record

End of Contents

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