

NS XPLOER SOFTWARE: v2.0 (PSS0058-01)

Software Update Notification

Introduction

This document details the release of software PSS0058: v2.0 of the NanoSight NS XPLOER software for the NanoSight Pro system. Installation instructions are provided.

Installation

It is assumed that you have the authority to install or update software within your facility. It is also assumed that you have Administrator rights for the system upon which the software is installed, as this is a requirement of the installation process. If you do not have this authority, please consult with your I.T. support department before proceeding.

Compatibility

The NS XPLOER software is compatible with the NanoSight Pro instrument and Windows 10® 64-bit or Windows 11® 64-bit only.



NanoSight Instruments LM10, NS300, NS500 and operating systems Windows XP®, Windows Vista®, Windows 7® and Windows 8® are not supported.

Recommended System Requirements

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

Feature	Specification
Graphics Card	AMD™, Intel™ UHD or Nvidia™ Graphics (Direct X 12, Open GL 4, Open CL 3)
Processor Type	8 th Gen+ Intel Core i7™ Processor (or equivalent)
Memory	16 GB RAM
Hard Disk Storage	512GB Solid State Drive (SATA or NVMe) 1TB Hard Drive (for data storage)
Power Supply	500W minimum
Display Resolution	1920 x 1080 full HD screen resolution running in 16-bit color mode
Connectivity	3x free USB ports (at least one USB 3.0)
Operating System	Windows 10® 64-bit - minimum release 20H1 Windows 11® 64-bit

Table 1: Recommended system requirements

Supported operating systems

NS XPLOER software is compatible with all versions of Windows 10® and Windows 11®. Only 64-bit versions are supported.

Windows XP®, Windows Vista®, and Windows 7® and Windows 8® are not supported.

Supported Languages

- English

Installation Instructions

Before use, the PC operating system must be configured. Please see **Appendix 1** for further information.

The software suite is available on the instrument or as a web download. The downloaded extractor contains the NS XPLOER Setup and License Manager Setup files. License Manager is a prerequisite of NS XPLOER.

Locating the software on the instrument

The software suite is provided on a permanent internal USB by default.

To locate the software installer, open File Explorer in Windows and navigate to the drive labelled 'NS XPLOER'

Installation

Double click on the NS XPLOER install file and a Windows User Account Control popup is displayed.

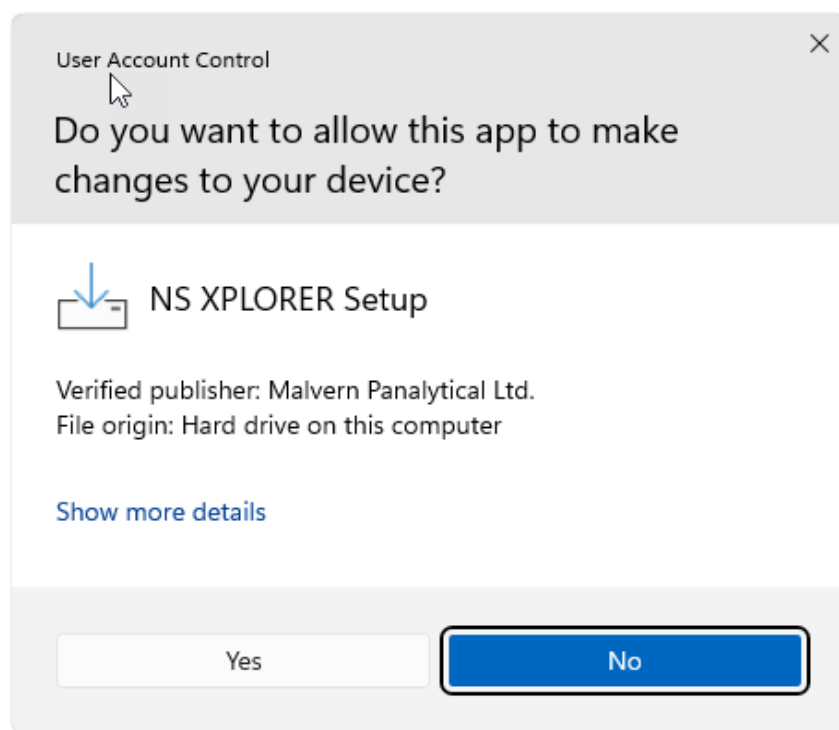


Figure 1: User Account Control

Select Yes button and the NS XPLOER wizard opens.

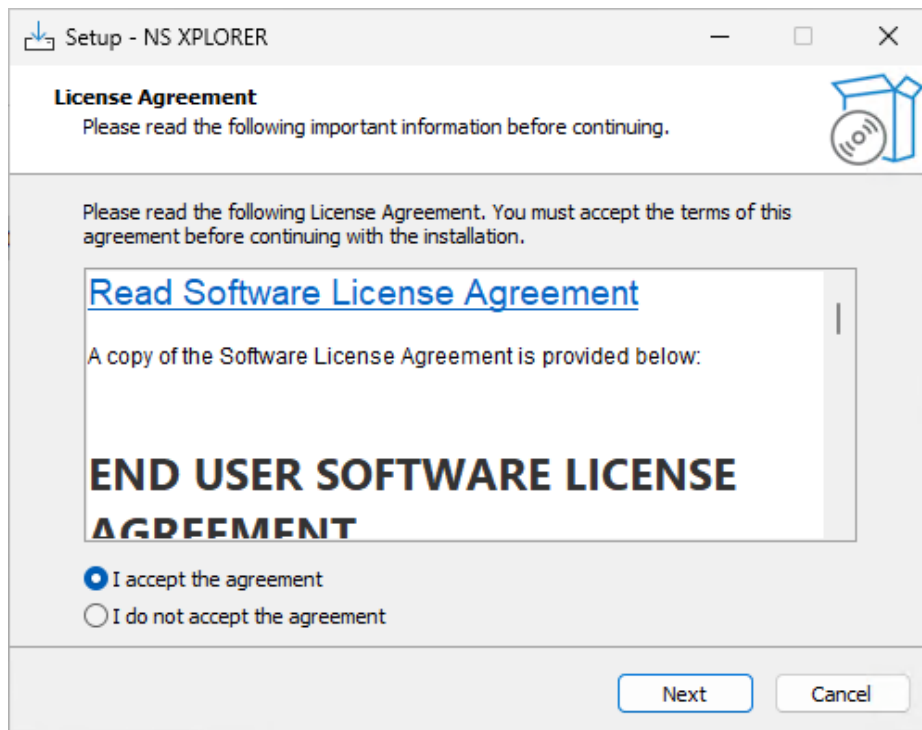


Figure 2: License agreement

Select the box next to “I accept the terms in the License Agreement” then select Next.

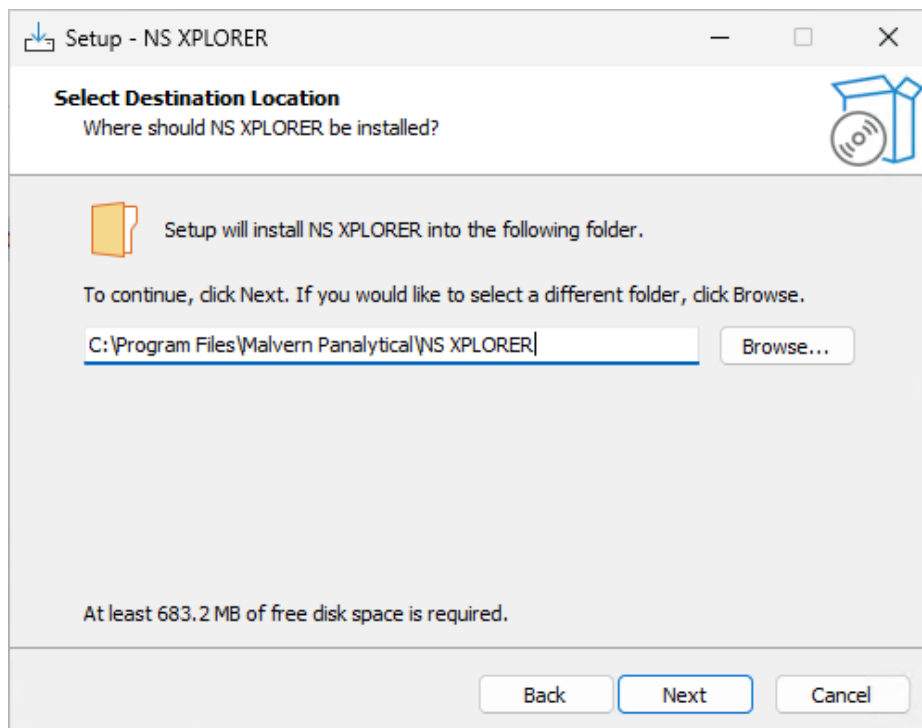


Figure 3: Select destination folder

Select the destination folder, either accepting the default location or browsing the PC for an alternative location and then click Next.

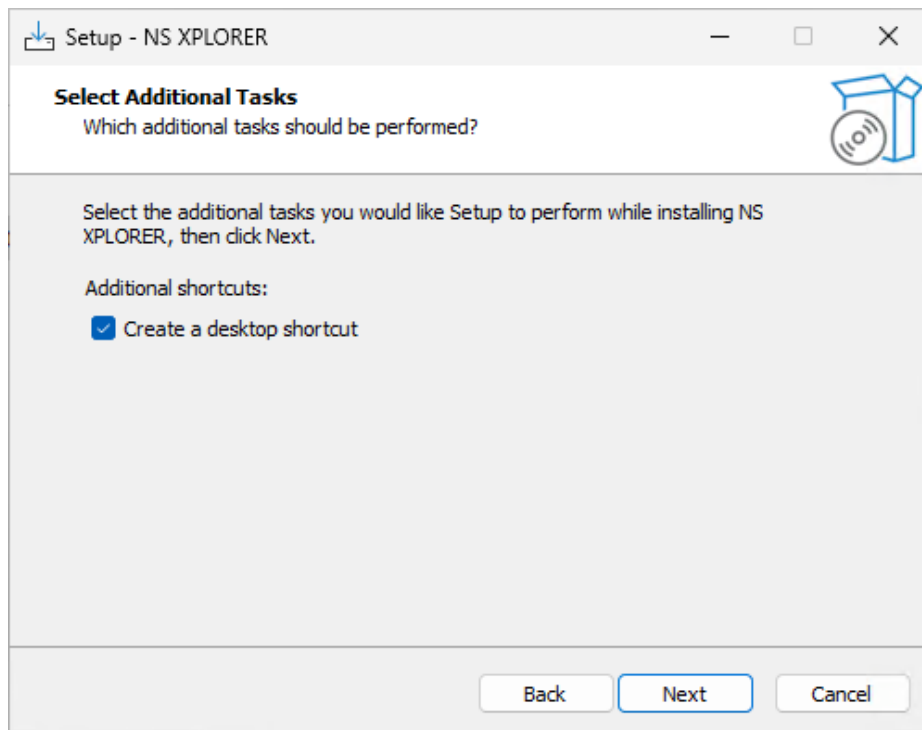


Figure 4: Create desktop shortcut

Choose to have desktop shortcut or not and select Next.

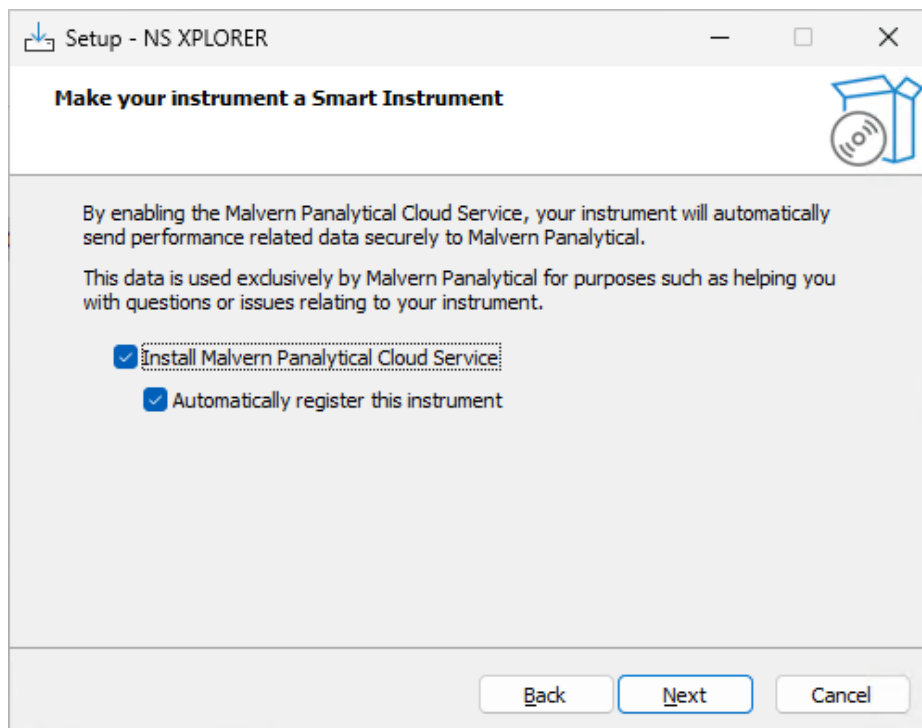


Figure 5: Install Malvern Panalytical Cloud Service

Choose the appropriate tick boxes for Smart Instrument and then select Next

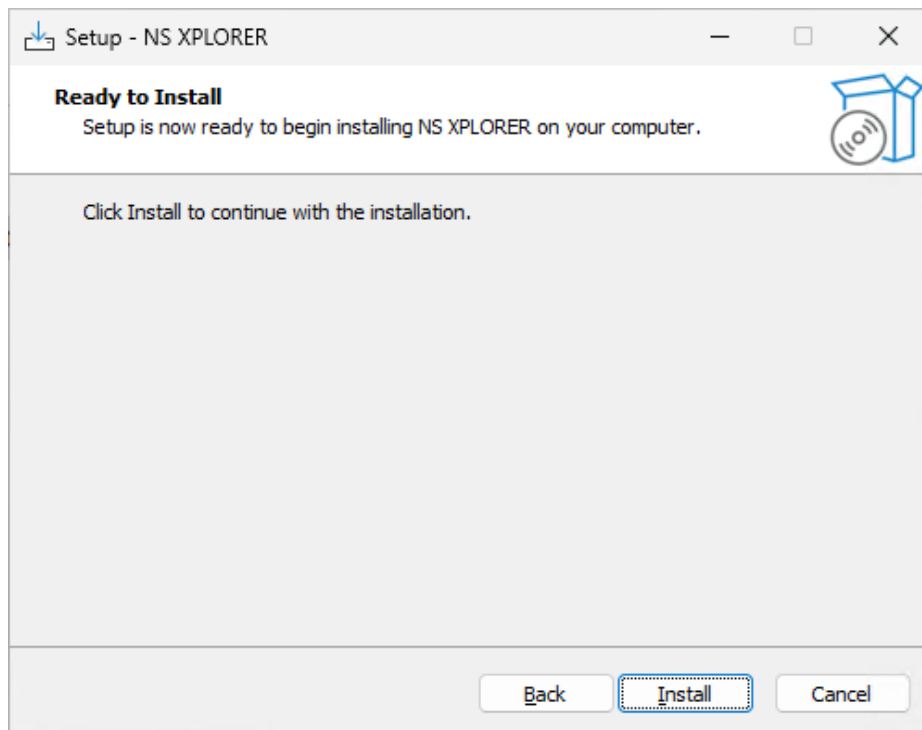


Figure 6: Ready to Install

Click the install button. Installation will begin and firstly install License Manager.

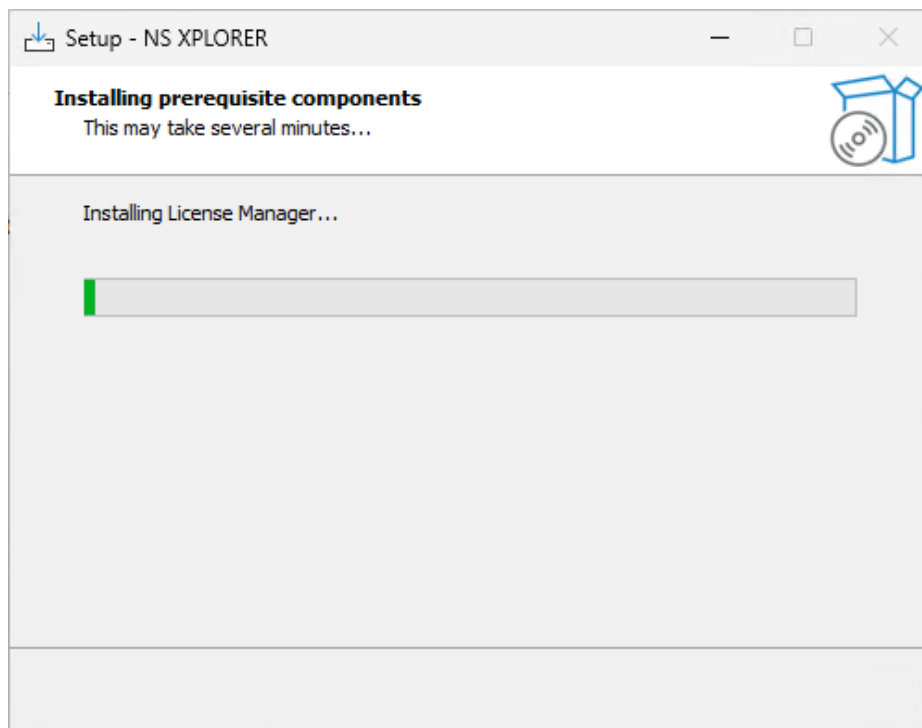


Figure 7: Installing prerequisites

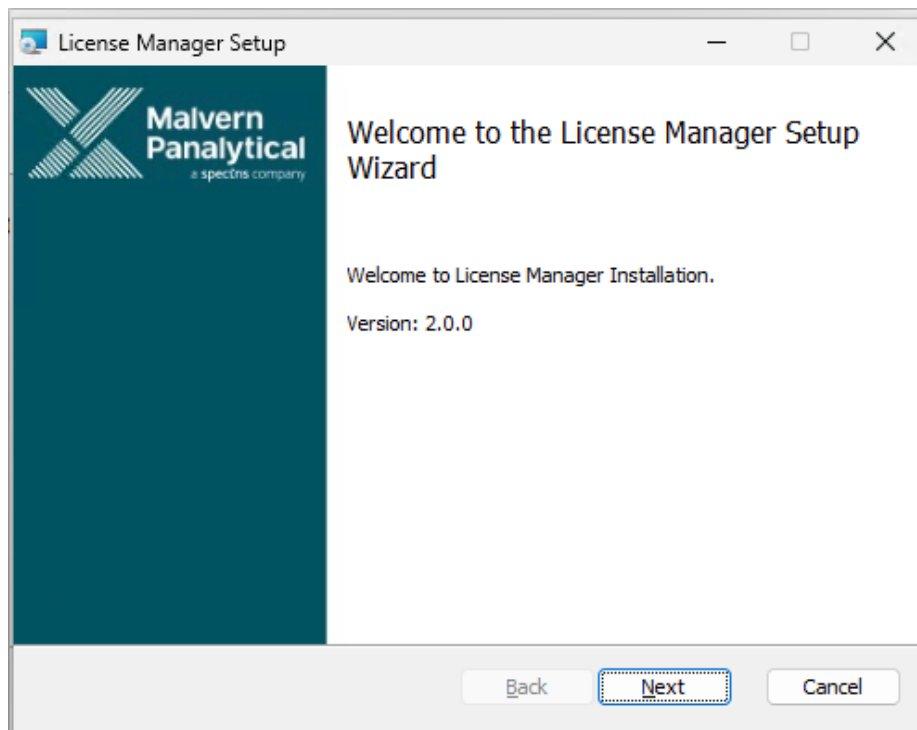


Figure 8: License Manager Wizard

Click Next.

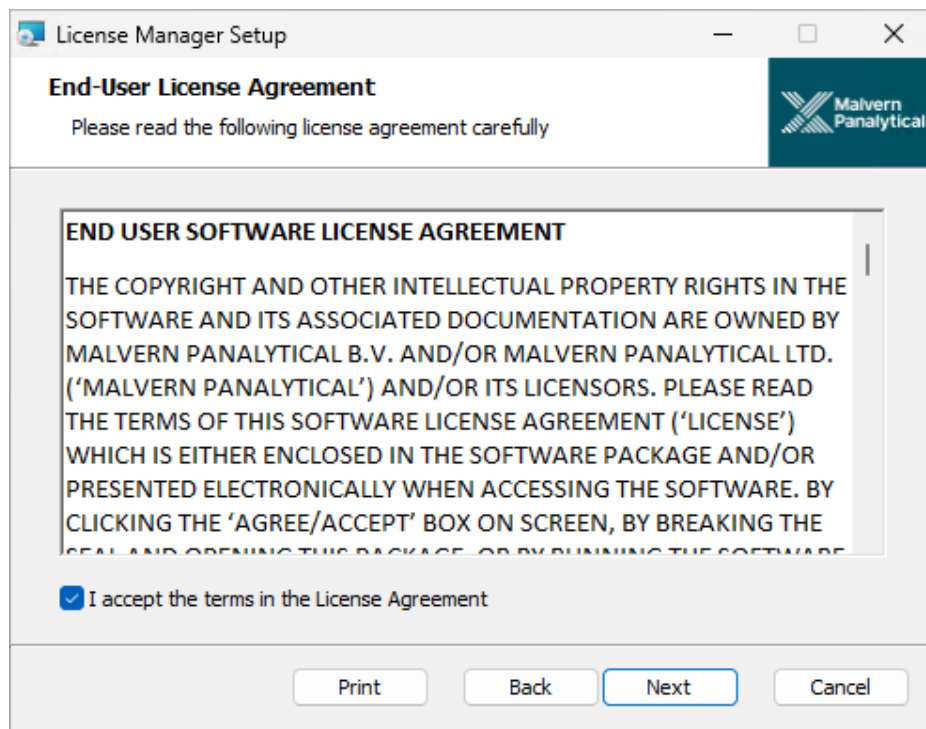


Figure 9: License Manager Agreement

Select the box next to "I accept the terms in the License Agreement" then select Next.

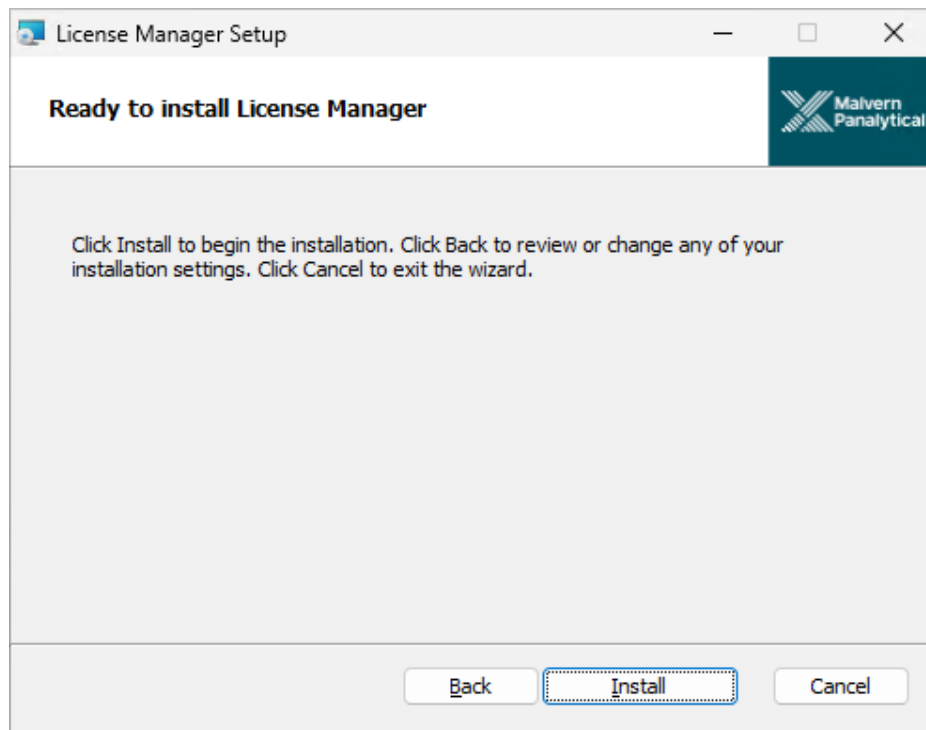


Figure 10: Ready to Install License Manager

Click Install.

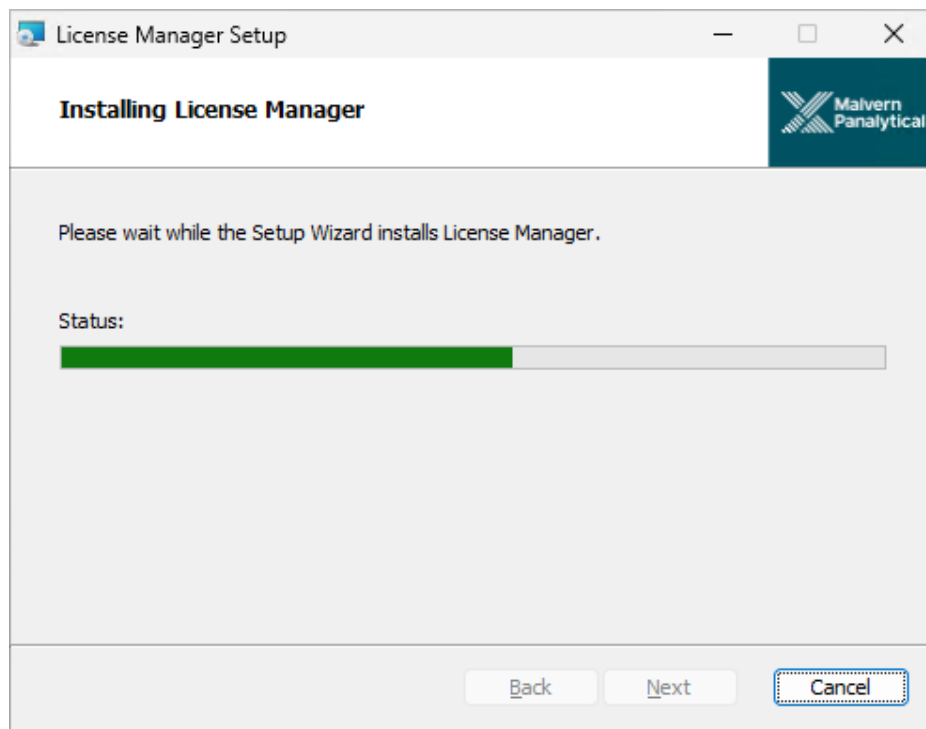


Figure 11: Installing License Manager

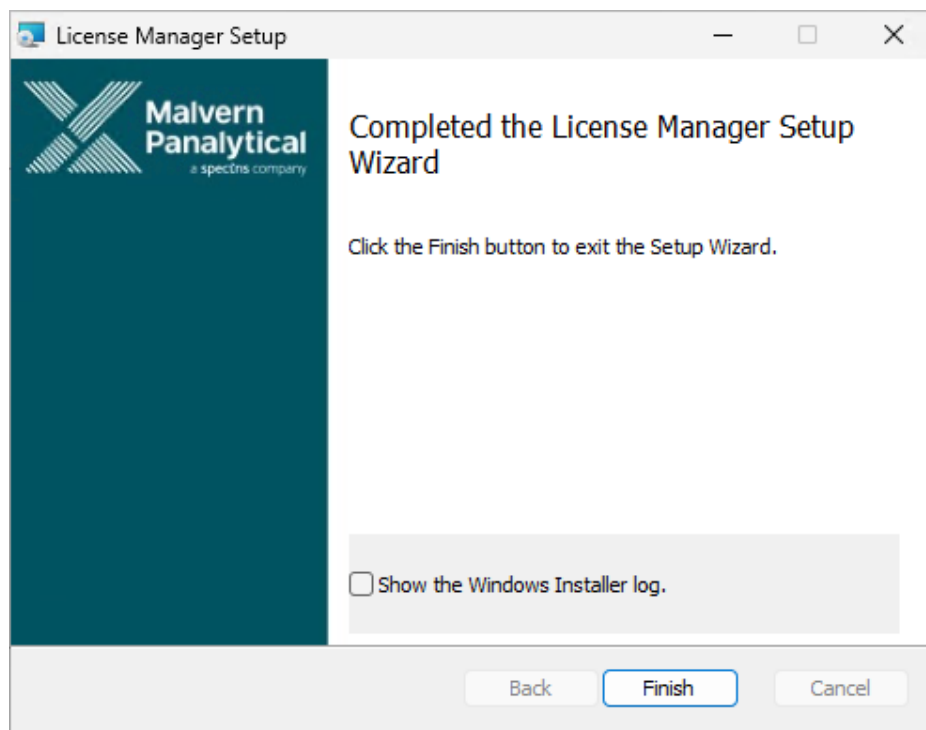


Figure 12: License Manager Wizard Completed

Click Finish.

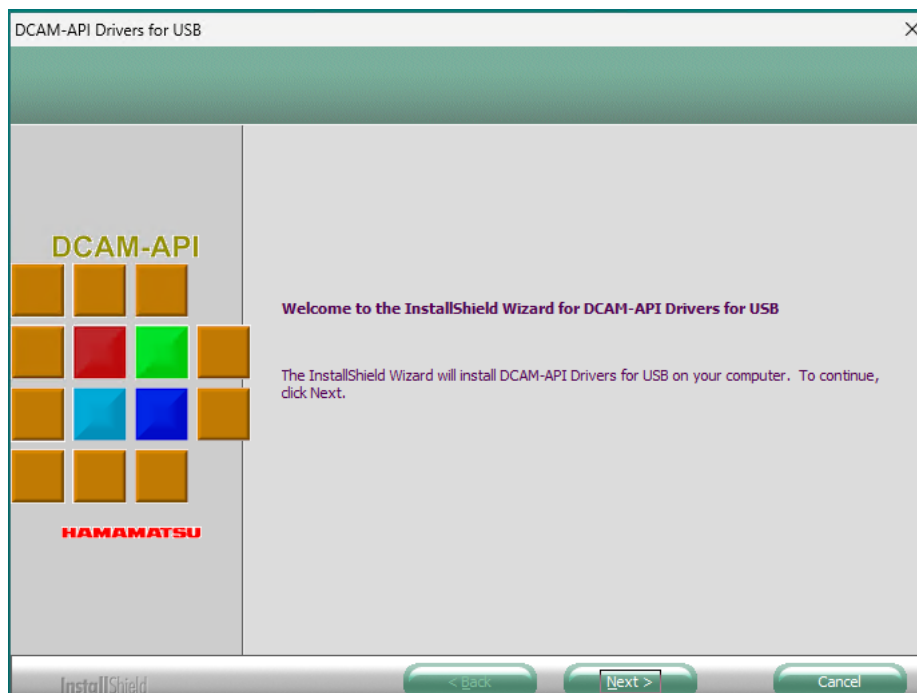


Figure 13: USB Install Wizard

Click Next.

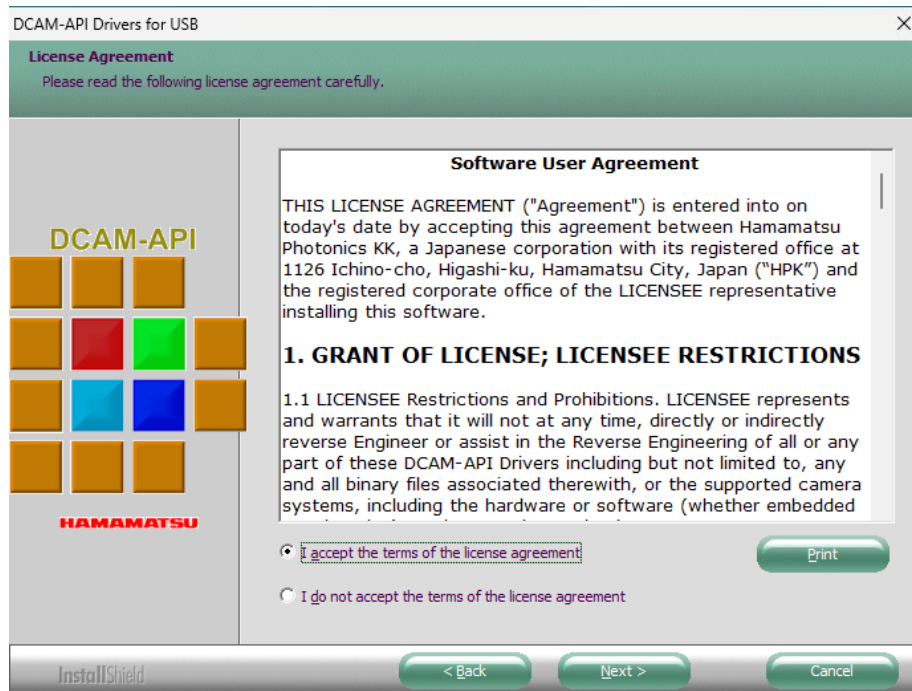


Figure 14: USB Driver Agreement

Select the box next to “I accept the terms in the License Agreement” then select Next.

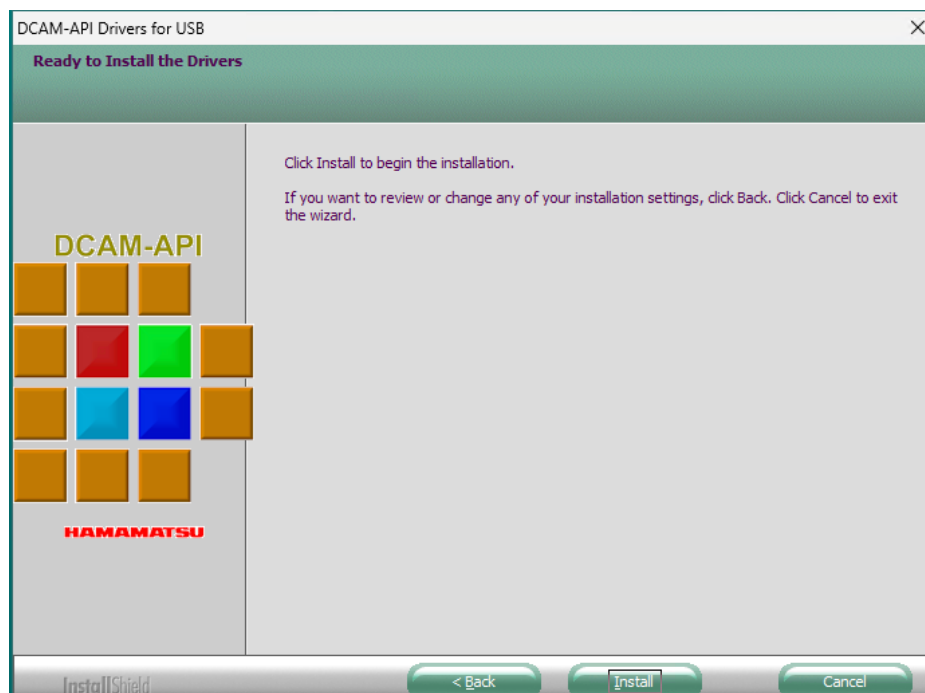


Figure 15: USB Driver Begin Installation

Click Install.

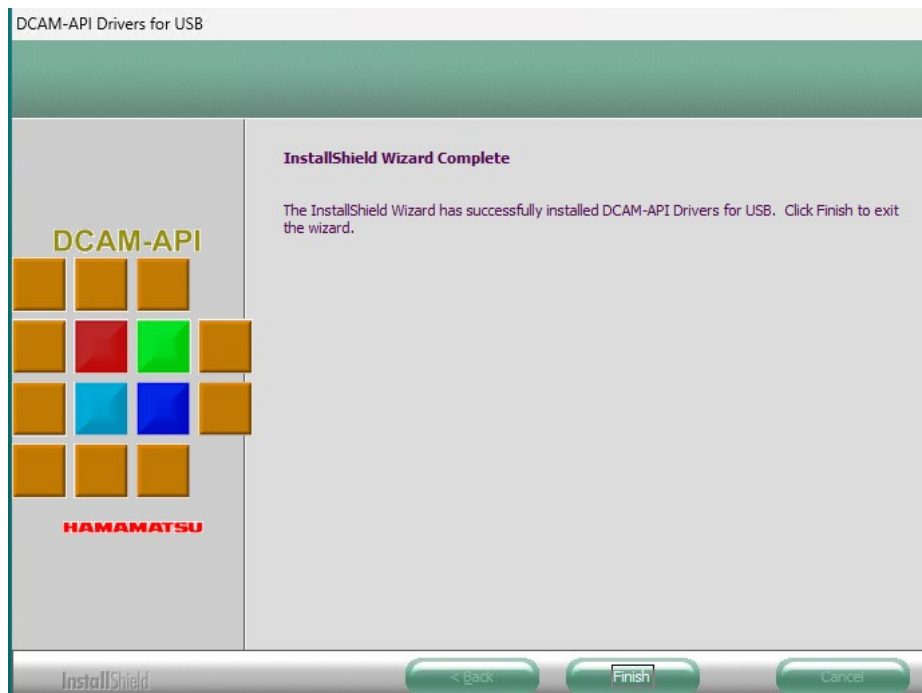


Figure 16: USB Driver Installation Complete

Click Finish. NS Xplorer will continue to install.

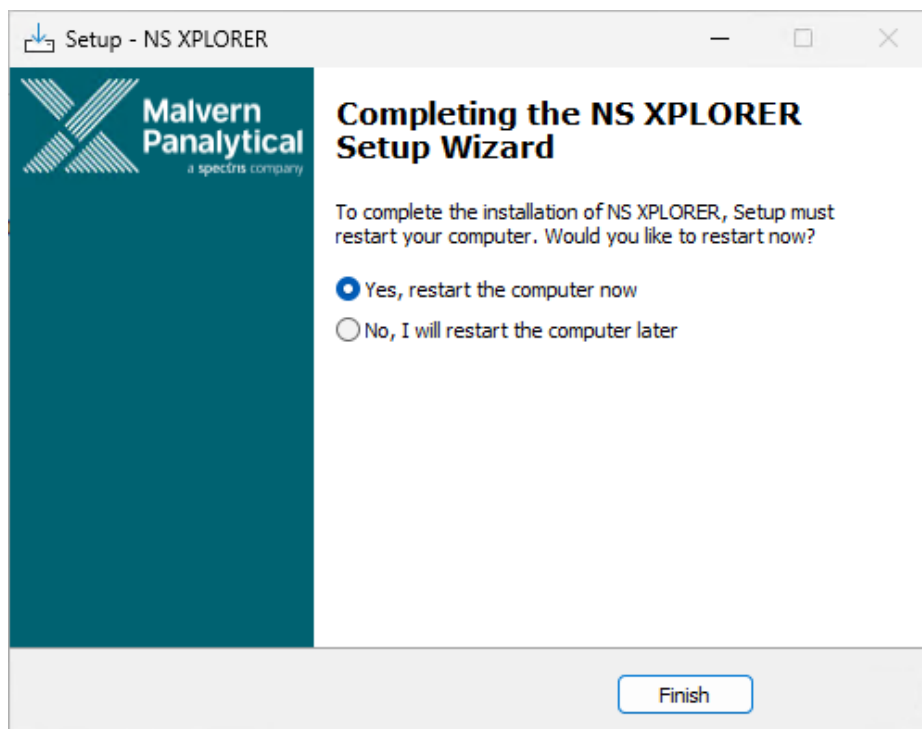


Figure 17: Completing setup

Select Finish and wait for your PC to Restart.

Connecting the NanoSight Pro to a PC

Connect the instrument and syringe pump to any free USB port.

Connect the camera to a free USB 3.0 port.

Note:



Once the software has been installed, connect the instrument to the PC and switch on the instrument before opening the software for the first time.

NS XPLOER software can be opened via double clicking the shortcut on the desktop.



Figure 18: NS XPLOER icon

NS XPLOER launches into the Home Screen and Hardware is detected.

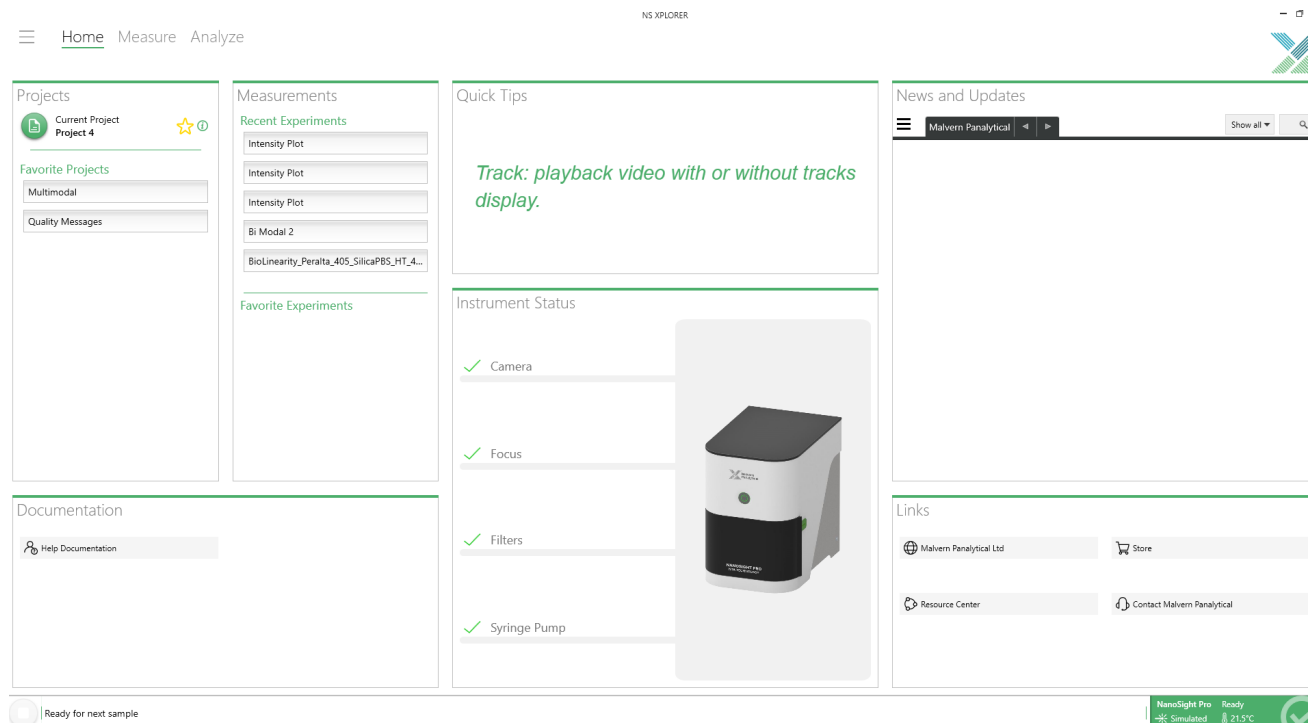


Figure 19: NS XPLOER home screen

A successful connection is indicated with an icon in the corner of the software. See Figure 10.



Figure 20: Instrument connected icon

Windows® settings configuration

For best performance it is recommended that the following changes to Windows® settings are made:

In Control Panel-> Device Manager, expand Universal Serial Bus Controllers

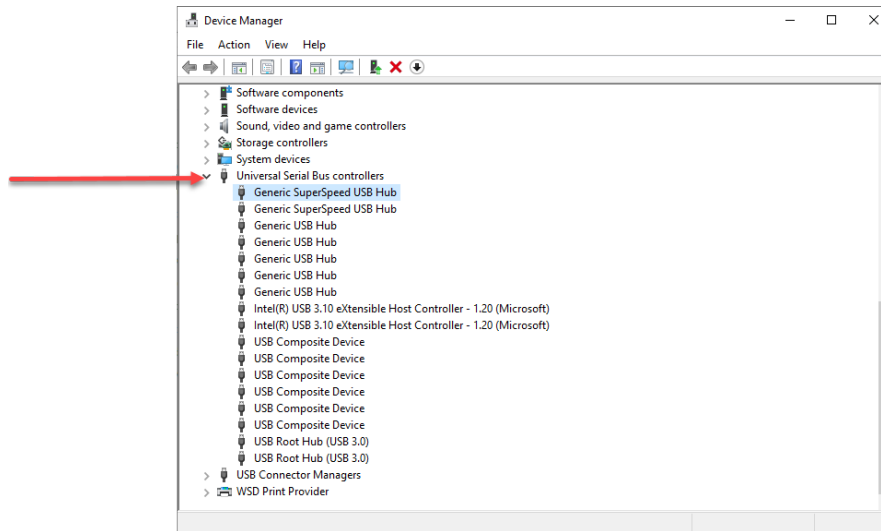


Figure 21: Device Manager

Right-click "Generic USB Hub", click Properties

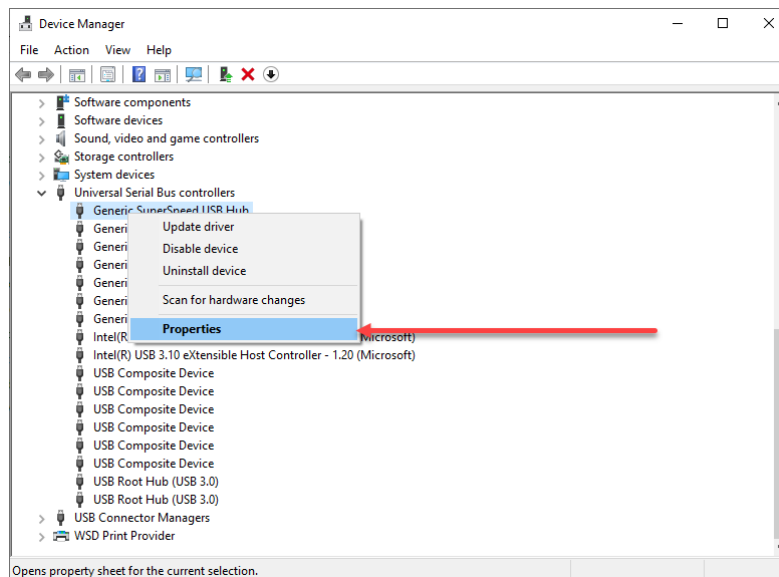


Figure 22: Device Manager Properties

- Click the Power Management tab and uncheck "Allow the computer to turn off this device to save power"

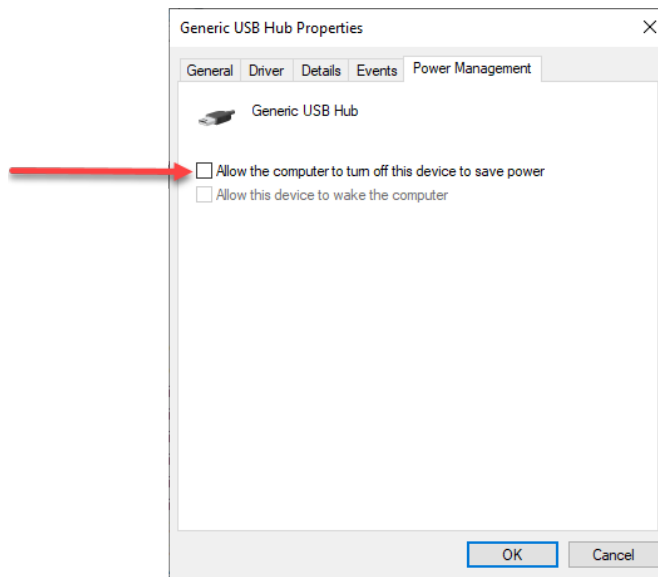


Figure 23: Device Manager Hub

- Repeat this step for all **"Generic SuperSpeed USB Hub"**, **"Generic USB Hub"**, **"Intel® eXtensible Host Controller"** and **"USB Root Hub"** devices.

Uninstall Procedure

The software can be uninstalled using the Add / Remove section of the Windows® 'Control Panel'.

Improvements

Settings and Configuration

- Change camera type from dropdown to textbox on configuration page
- User has the option to save database under individual or common storage
- User can define 'Are you happy with the settings' banner time between 0 and 60 seconds

Measure page

- Ability to load a method without naming the sample first
- Remove properties from tab on method steps
- Loading a method replaces the current method in the method builder
- Created exported method files folder and autofill as default location
- New methods (not applied ones) automatically saved in method manager

Analyze Page

- Exporting selected results and combined results saves as comma delimited files
- Exporting selected results and combined results data uses measurement file name as default

Smart Manager Improvements

- Reports Autofocus errors from both "Autofocus" and the "Auto Camera & Focus" button
- Reports Omni Trust service version

Method Manager (New Feature)

New method manager view on the measure page to store methods in the database so that they can be managed more easily, with the following functionality:

- View method properties
- Edit method (saves changes as new method)
- Apply method
- Delete method (export to .milsample file)
- Import method (import existing .milsample files)
- Export method
- Filter methods by name, state, last 7 days, last 30 days, date range
- Sort methods by created date, name, state

OmniTrust licensed features only

OmniAccess (New Feature)

Added permissions and functionality to disable / enable:

Settings and configuration

- Add new source folder
- Change storage settings
- Create manual audit entry
- Delete existing source folder
- Edit configuration
- Edit user settings
- Measurement banner timeout
- Set existing folder as default

Manage projects

- Create project
- Delete project
- Export project
- Import project
- Open project
- Rename project

Measurement setup and running measurements

- Abort measurement
- Auto Setup
- Camera filters
- Camera focus
- Camera setup
- Preview overlay
- Run measurement
- Syringe pump

Method editing

- Add steps
- Delete method steps
- Duplicate method steps
- Edit dilution factor
- Edit dispersant
- Edit method during measurement
- Edit step properties
- Reorder steps
- View method properties

Method management

- Apply method in initial state
- Approve / Reject method
- Delete method
- Export method
- Import method
- Lock / Unlock method
- Save manual setup method

Analyze Results

- Approve / Reject results
- Edit results
- Lock / Unlock results
- View Analysis page

Reports

- Copy audit trail report
- Create a new report
- Delete report
- Edit report
- Print report
- View audit trail report
- View report

Import and Export measurements

- Export combined results
- Export measurements
- Export selected results
- Import measurements

Move and delete measurements

- Delete capture video
- Delete selected results
- Move selected results

Approve / Reject, Lock / Unlock functionality (New Feature)

Added to each analysis result on Analyze page and each method in new Method Manager feature

- Ability to enable or disable permissions for Approve / Reject and Lock / Unlock
- Button added to measurement or method view (left side) which shows current state of analysis result or method
- Button is interactable when the analysis result or method is selected
- Users can change the state of record using the following logic:
 - Initial state is set to unknown
 - A record can only be locked after it has been approved or rejected
 - Once a record is locked it's approve/reject status can only be changed by unlocking the record again
- Locked analysis results cannot be edited
- Only approved methods can be applied
- Records are shown as invalid for the following reasons:
 - Data integrity compromised (record is shown but no data displayed)
 - Result not processed
 - Result or method not created in regulated environment

OmniTrail (New Feature)

System events logged:

- Software opened
- Software closed
- User logged in
- User logged out
- Configuration deployed
- Authorization failed

Record events logged:

- Manual audit entry
- Measurement started
- Analysis result created
- Measurement aborted
- Analysis result deleted (including multiple selection and via projects)
- Analysis result edited
- Measurement completed
- Measurement failed
- Analysis result imported (including via projects)
- Analysis result moved
- Measurement creation aborted (when a measurement/analysis has started and is aborted by the user before the result is created and saved to disk (i.e. before an electronic record is created))
- Method created
- Method deleted

- Method imported
- Method edited

View approvals report from state button

Signing (New Feature)

Signing and reason enabled for the following events:

- Electronic record created
- Electronic record aborted
- Electronic record added
- Electronic record deleted
- Electronic record modified
- Electronic record approved
- Electronic record rejected
- Electronic record locked
- Electronic record unlocked
- Electronic record moved
- Manual audit entry

Known Issues

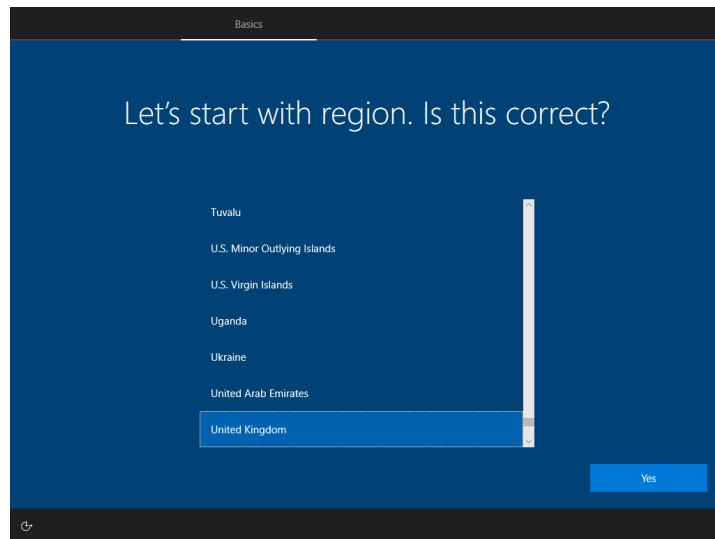
The following software bugs have been discovered within the software and will be investigated as part of a future release. Please follow the suggested work-around.

Reference	Severity	Issue	Workaround
200562	3 - Medium	If FTLA tries to fit a raw distribution the graphs can show a very high peak at 999.5	Resize graph
229382	3 - Medium	3d plot doesn't show axis when printing	Use screenshots
294453	3 - Medium	Reports - Expanded quality data not shown in printed report	Use screenshots
335224	4 - Low	Setup reset button is not greyed out when disabled when running a measurement	None
345423	4 - Low	Sample name doesn't appear to have a character validation for max number	None
345427	4 - Low	Manual Audit doesn't have a character validation for max number	None
345685	4 - Low	Extra sample queue entry when using the Add sample button	Remove extra sample from queue
345726	4 - Low	Focus on measurement manager and Analyze results inconsistent	None – UI only issue

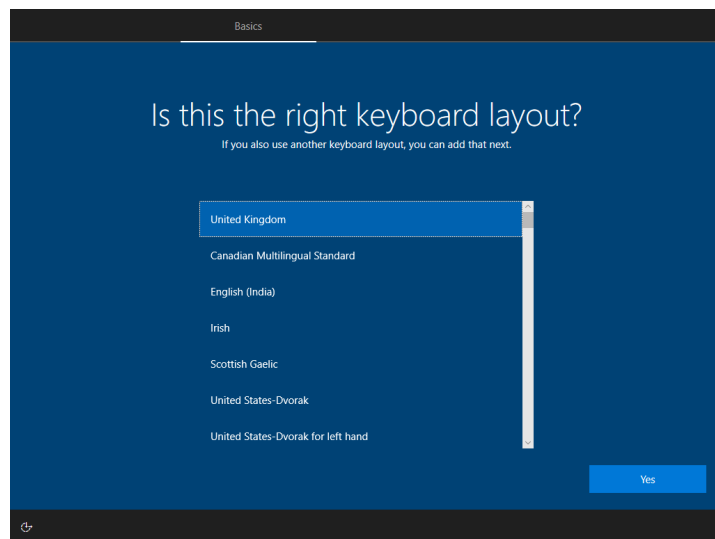
Table 1: Known issues in NS XPLOER v2.0 software.

Appendix 1 – Windows® Installation Instructions

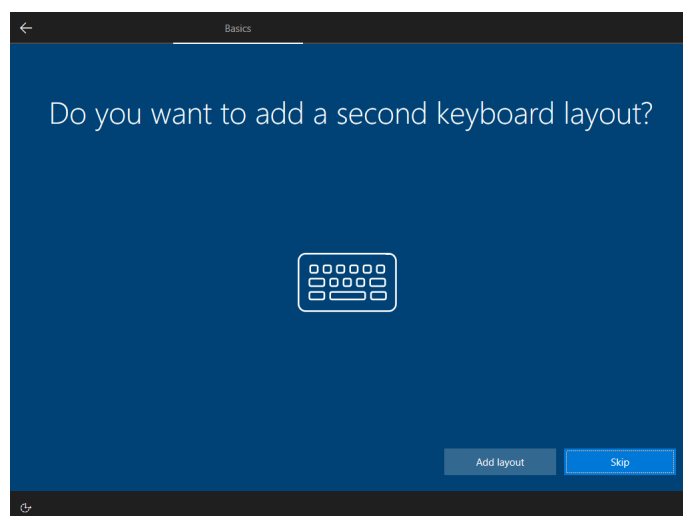
1. Select your region and click **“Yes”** to continue



2. Select your keyboard layout and click **“Yes”** to continue



3. Add a second keyboard layout if required, otherwise click **“Skip”** to continue

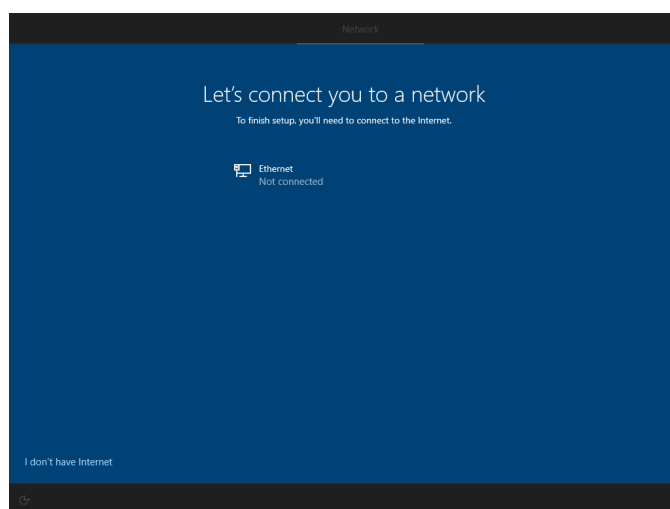


4. Unless you have a Microsoft™ account and are willing to login, it is suggested that you click **“I don’t have Internet”** to continue.

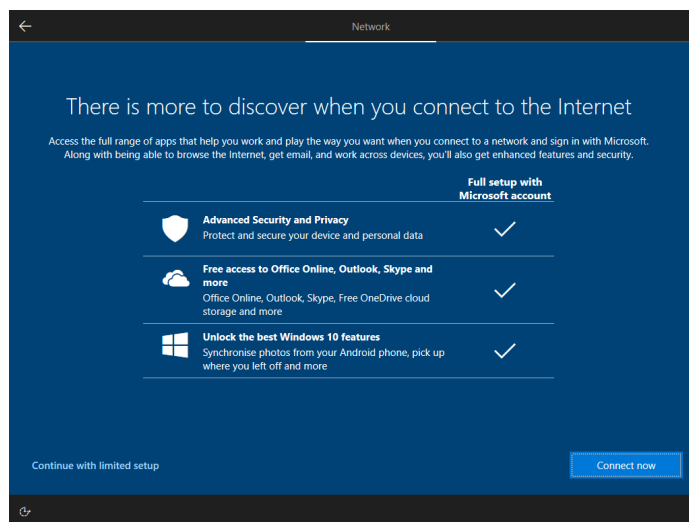


Note:

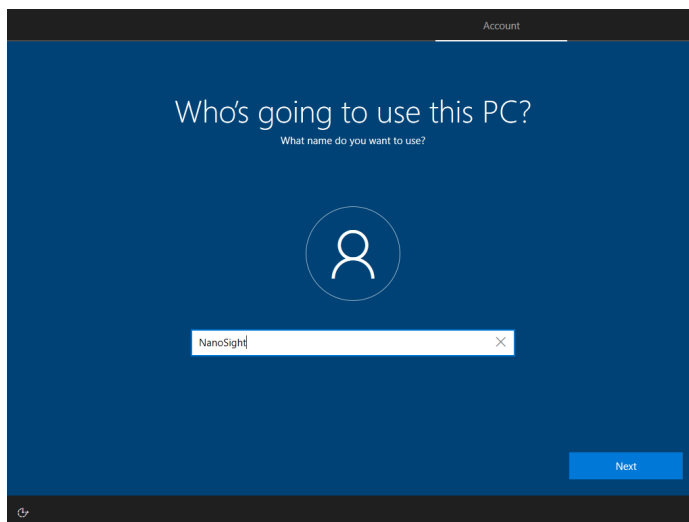
This does not stop you from connecting the PC to the internet (later on), it is only for the purposes of generating a local account as opposed to logging in via a Microsoft™ account.



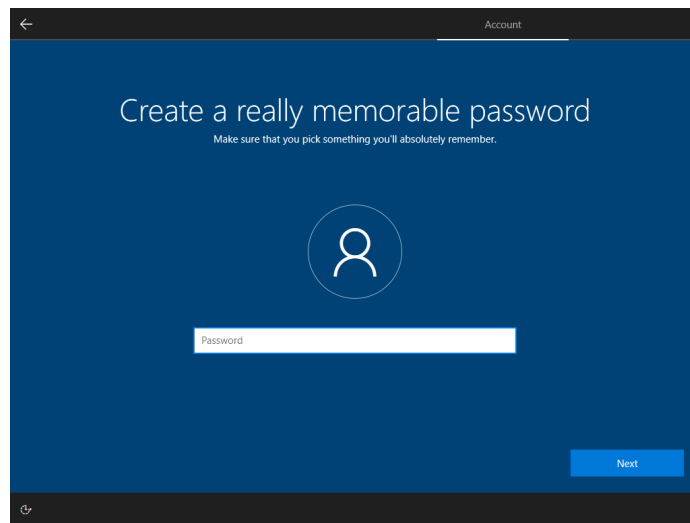
5. Click **“Continue with limited setup”**



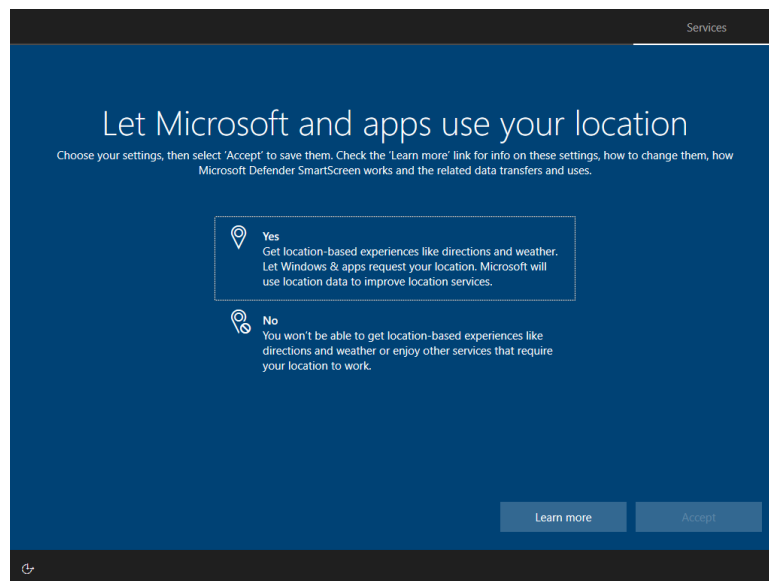
6. Enter your preferred username and click Next to continue



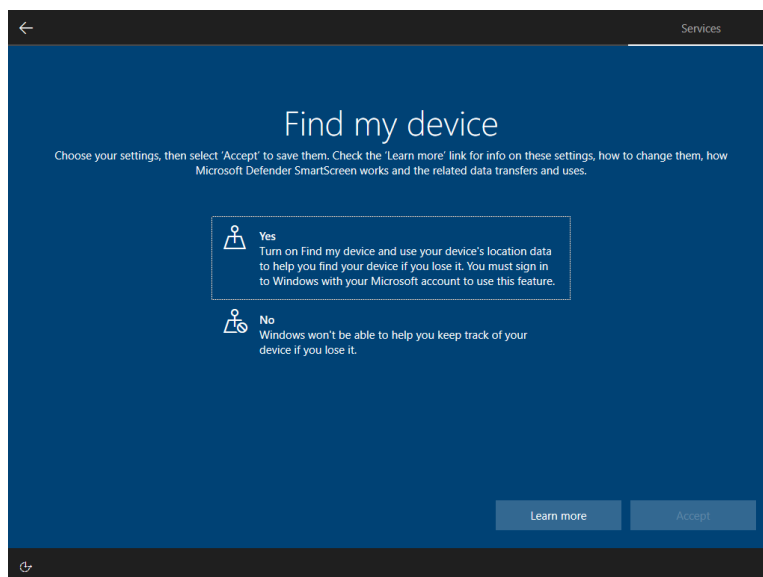
7. Choose a password or leave it blank, and click Next to continue



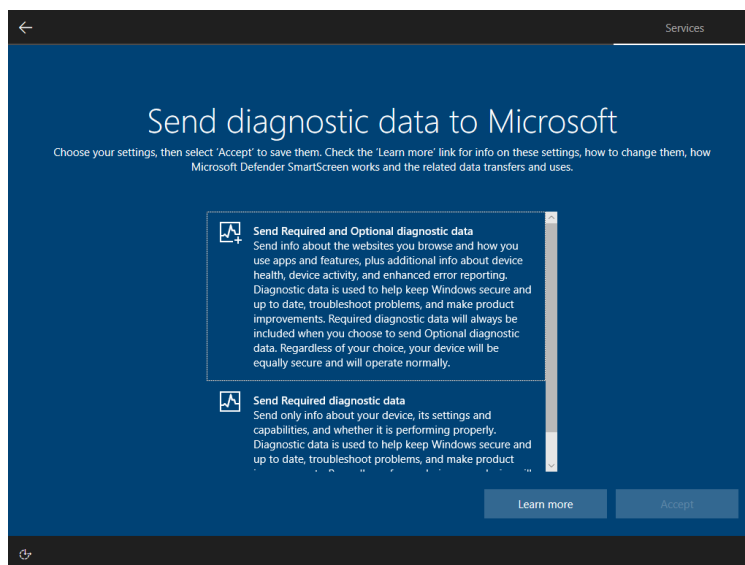
8. Decide whether to allow Microsoft™ to use your location. Click **“Accept”** to continue



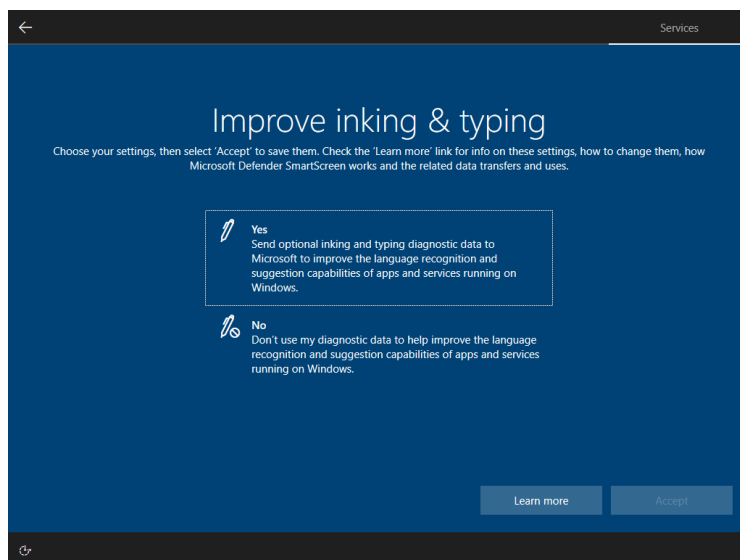
9. Choose yes or no for Find my device, click **“Accept”** to continue



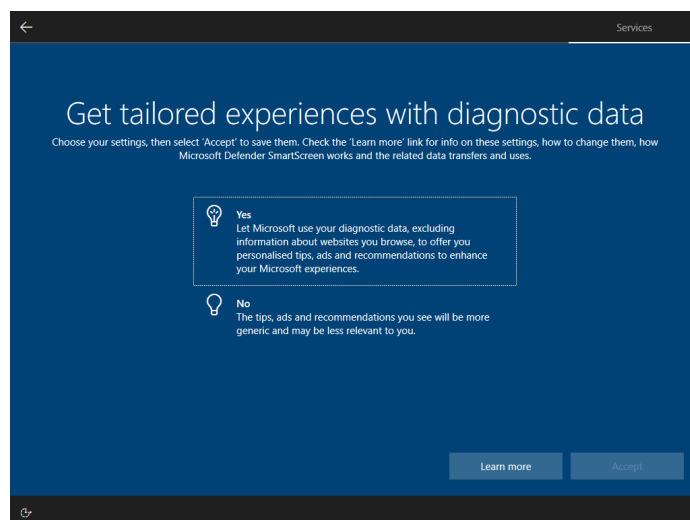
10. Choose the level of diagnostic data to send to Microsoft™. Click **“Accept”** to continue



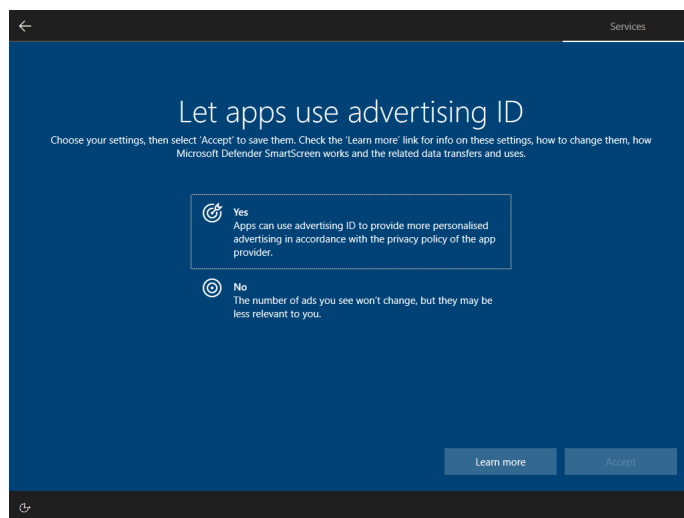
11. Select yes or no for inking and typing, click **"Accept"** to continue



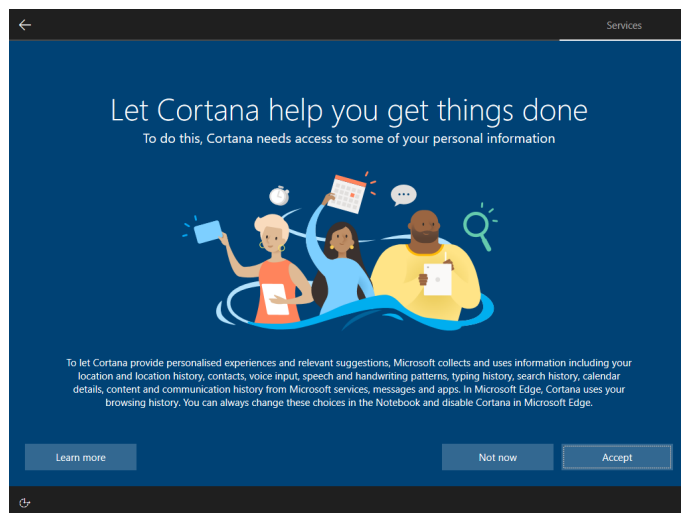
12. Choose whether to accept targeted advertising, click **"Accept"** to continue



13. Select yes or no for advertising ID, click **“Accept”** to continue



14. Setup Cortana™ if required by clicking **“Accept”**. Otherwise click **“Not now”** to finish





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