

PRESENTED BY



**AN ISO/IEC 17025:2017
ACCREDITED CALIBRATION COMPANY**

DALLAS FT WORTH AUSTIN HOUSTON

NICOLSCALES.COM

800.225.8181

[CONTACT US](#)

NICOL SCALES & MEASUREMENT IS AN ISO ACCREDITED CALIBRATION COMPANY THAT HAS PROVIDED CALIBRATION, REPAIR AND SALES OF ALL TYPES OF WEIGHING AND MEASUREMENT PRODUCTS SINCE 1931.

Configuring Nexygen Plus 4.1 Advanced security module

Issue 1.2

CONTENTS

Supported Machines	4
Recommended PC requirements.....	4
Recommended PC Specifications.....	4
SQL server	5
Microsoft Office	5
Installation	5
Installation with internet access	5
Installation without Internet Access	8
Configuring the security module	9
Choosing the Best Database Instances	9
Setting up the database	10
Login Options	11
Adding Groups	12
Permissions	13
Adding and removing users	14
Option Settings	15
Reporting.....	16
Approval.....	16
Reasons	17
Authentication	17
Standards Library / Method Template Library	17
Auto Logout.....	17
Approved Reports	17
Recommended Nexygen Plus Workflow.....	18
Develop and Approve Batch (Test Method)	18
Configure Test Automation.....	19
Approve the Test Method for use.....	20
Save Approved Test method to Standards Library	20
Analyst Conducting Tests.....	21
Analyst Process	21
1. Create New Batch from Standards Library	21
2. Run Sequence of Tests	22
3. Approve Test Results	22
4. .batch File is Auto Archived to specified location.....	22
5. Automatic PDF report created in specified location.....	23

6. Review and approve results (Optional)	24
General Features.....	26
Additional Data for Reports	26
Deleting, re-naming and save as for .batch files.....	26
Aborting a Test.....	27
Failed Authentication.....	27
What is logged in the Audit Trail?.....	28
General.....	28
Always Logged Events	28
Optionally Logged Events.....	28

SUPPORTED MACHINES

LF Plus

LRX Plus

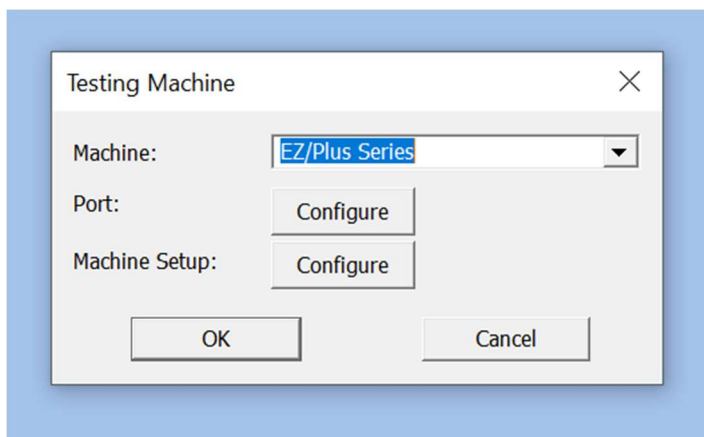
EZ20, EZ50

LR Plus Series

LS series – LS1, LS5, LS2.5, LS5

LD Series LD5, LD10, LD30, LD50, LD100 (Test Result Validation not available)

On first starting NexygenPlus you will be required to select the machine series. All machines above use the setting shown below except the LD series.



RECOMMENDED PC REQUIREMENTS

RECOMMENDED PC SPECIFICATIONS

Windows® 10 Professional

Processor Intel i5

8 GB RAM

256 GB SSD drive

1 free USB port

HD resolution Monitor

Internet access during installation for license activation

Internet access during installation for license activation

Network connection LAN minimum 100 Mbit/s

SQL SERVER

SQL Server 2019 Express is included with NexygenPlus 4.1. An existing instance of SQL Server may be used. Below are supported versions with support end dates.

SQL Version	Microsoft end support
-------------	-----------------------

SQL Server 2012 SP4	2022-07-22
---------------------	------------

SQL Server 2014 SP3	2024-07-09
---------------------	------------

SQL Server 2016 SP2	2026-07-14
---------------------	------------

SQL Server 2017	2027-10-12
-----------------	------------

SQL Server 2019	2030-01-08
-----------------	------------

For usage of SQL Server in NexygenPlus Security Module, any edition (Express, Standard, Enterprise) is supported.

MICROSOFT OFFICE

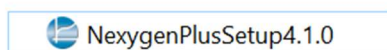
Exporting direct to Excel requires Microsoft Excel.

Report template generation requires Microsoft Word. The template can be created on a different PC, Microsoft Word is not needed to generate the reports.

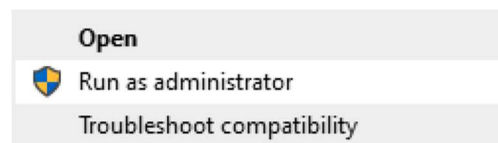
INSTALLATION

INSTALLATION WITH INTERNET ACCESS

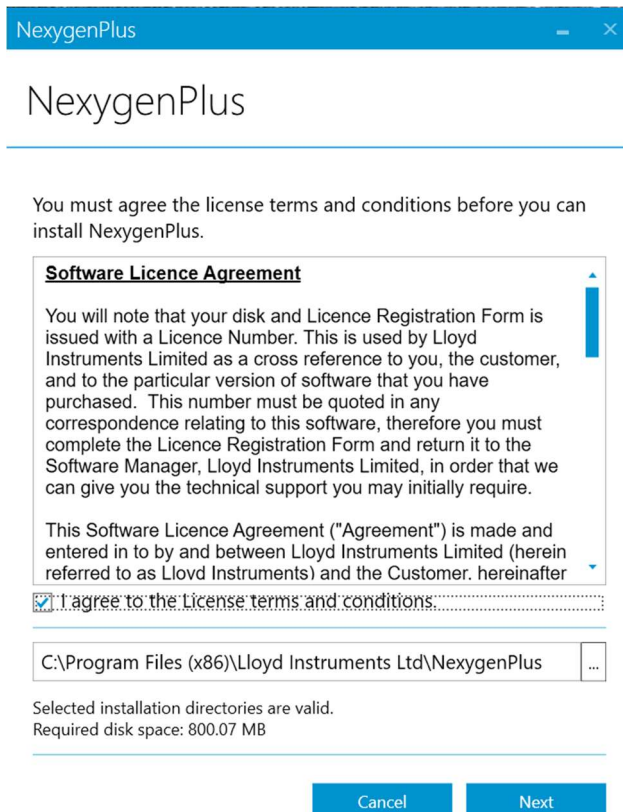
1. Copy the installation file from the USB drive supplied to the local PC



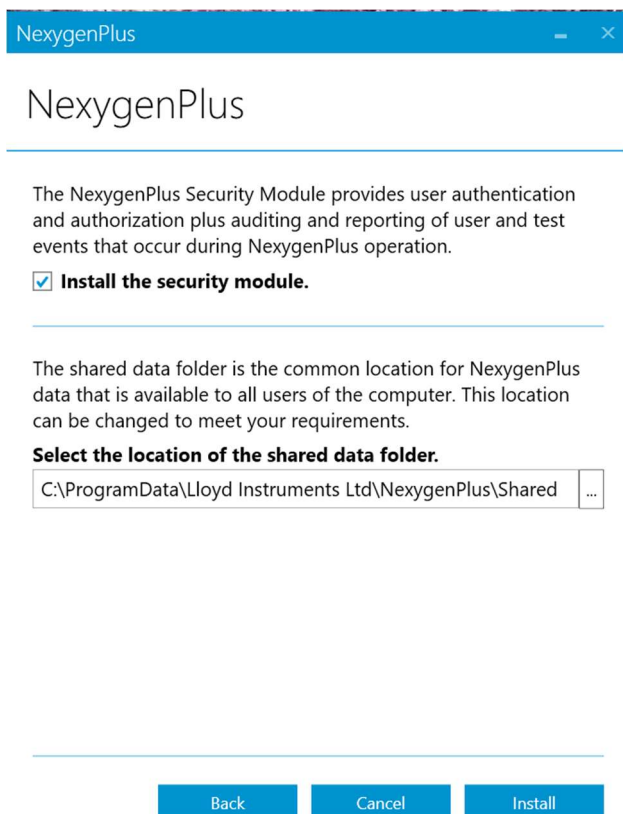
2. Right click the file and run as administrator



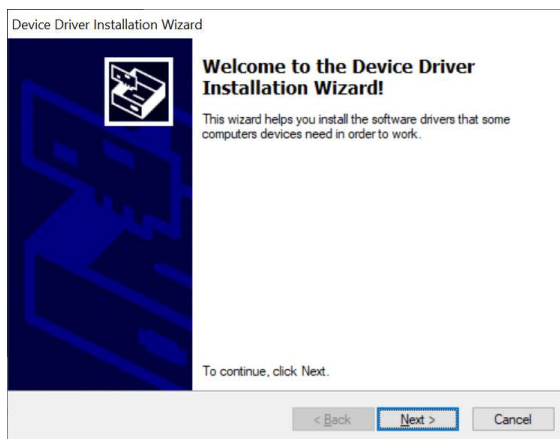
3. Check 'I agree to the license terms and conditions' and press next. The software can only be installed on the local drive.



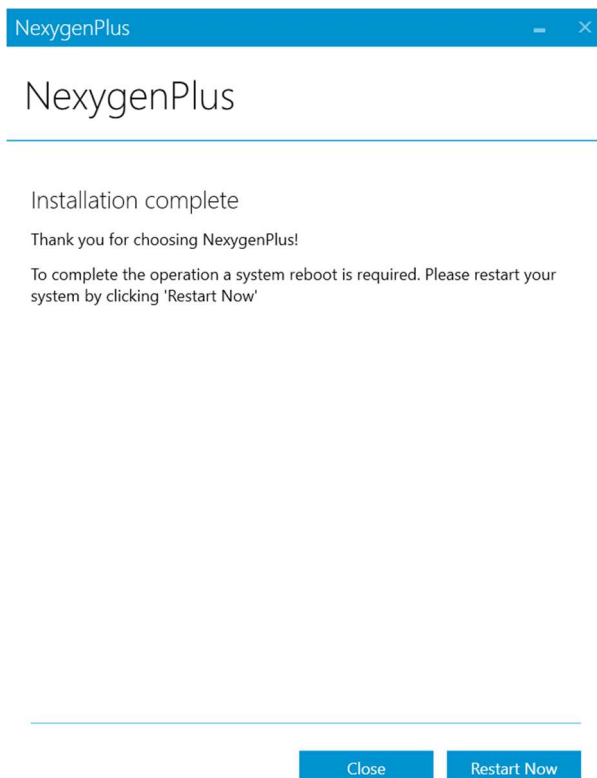
4. Check 'Install security Module' and click install. It is recommended to select a network location for the shared data folder to ensure that files are backed up per your company procedures.



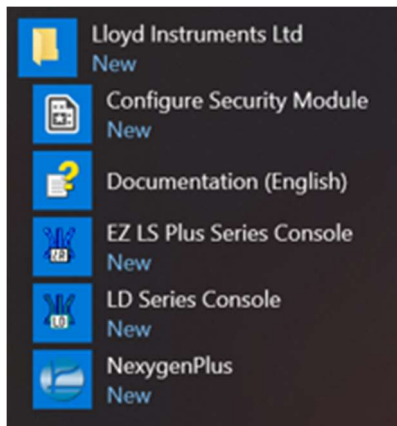
5. You will see 2 additional Windows as shown below, click on next for each. These install drivers for Lloyd test machines.



6. Restart the PC



7. Select 'Configure Security Module' from the Lloyd Instruments Group.



8. Enter the license key and click 'Activate (online)'

Trial 29 days left - Trial ×

Serial Number or License Code

Activate (online) ▼

Continue

INSTALLATION WITHOUT INTERNET ACCESS

Follow the steps as installation with internet access. Except you will need to obtain a new set of license keys. When you reach the screen below press the dropdown on 'Activate Online' and choose offline activation. You will be given a request code that you must send to your contact at Ametek or local distributor who will then issue offline registration keys.

Trial 29 days left - Trial



Serial Number or License Code

Activate (online)



Continue

CONFIGURING THE SECURITY MODULE

CHOOSING THE BEST DATABASE INSTANCES

If using across multiple teams or locations all on the same AD domain, consider first whether to configure a central database or team/location specific databases. The main factors in this decision are that a single AD user can only belong to 1 group and that it may be preferable to split audit trails for greater clarity of data.



■ One Database means

- A USER can belong to only 1 group
- Single Centralized Data Management
- Single Audit Trail for all machines
- Single folder for PDF Reports
- Single Groups & Users Configuration
- Single Approved Test Methods Folder

- Ideal for managing multiple groups of machines across departments, organisations or locations
- A USER can have access to different Groups if the GROUPS are configured in different databases assuming all locations are using the same AD domain



■ Multiple Databases means

- Multiple data locations
- Audit trail per database & organization
- PDF report folder per database & organization
- Multiple groups & users per database & organization
- Methods folder per database & organization

SETTING UP THE DATABASE

IT system admin privileges are required to open the security configurator. This ensures only authorised personnel can access the system and also ensures that they are independent of Nexygen Plus, access to the security module does not give access to Nexygen Plus.

The screenshot shows the 'NEXYGENPlus - Security Module Configuration' window. The status is 'Configured'. The 'Language' is set to 'English'. Under 'Database Engine', 'Use Microsoft SQL Server' is selected (marked with a red '1'). The server name is 'TROGERS-LT\SQLEXPRESS' (marked with a red '2'). The 'SQL Server Database Name' is 'nexygen' (marked with a red '3'). The 'Database Credentials' section shows 'Use trusted connection (requires AD authentication)' selected. The 'User Authentication' section shows 'Use Windows Active Directory (AD) authentication' selected. At the bottom, there are buttons for 'Users', 'Test', 'Options', 'Reports', and 'Finish'.

1. Press **Install** if you wish to use the Microsoft SQL Server Express server supplied. Installation can take several minutes, be sure that it has completed before following the instruction to reboot.
2. After re-boot press **Scan** to locate the server
3. Press **Create** to create the SQL database where audit trail data and test results are stored.

Using a network SQL server

Uncheck the “local host” box. If the scan button does not find the server, you can manually enter the location. For sites with multiple machines, you can share the same database (therefore audit trail and user groups). If separate audit trails and user groups are needed per machine, then choose a new database name and press create. The logged in user will need create database permissions on the SQL server.

To manually create the database.

CreateNexygenDB.sql, can be run with sqlcmd or run it as a query in SQL Server Management Studio.

The file is located in,



> This PC > Windows (C:) > Program Files (x86) > Lloyd Instruments Ltd > NexygenPlus

The file is stored in There are two tags in the file that need first replacing as appropriate:

<DATAFOLDER> - path of folder where SQL Server data file will go

<DBNAME> - name of database, containing only valid file name characters

LOGIN OPTIONS

Nexygen Plus 4.1 supports earlier version of Nexygen Plus legacy databases. It is not recommended to use this function as it does not support all data integrity functionality. Windows Active Directory should be used.

NEXYGENPlus - Security Module Configuration

Status Configured

Language English

Database Engine

☐ None

☒ Use Microsoft SQL Server

TROGERS-LT\SQLEXPRESS Install Scan ☒ local host

☐ Use legacy Access database (not recommended)

SQL Server Database Name

nexygen Create Backup

Database Credentials

☐ No login is required (not recommended)

1 ☒ Use trusted connection (requires AD authentication)

☐ Use the following login

User ID

Password

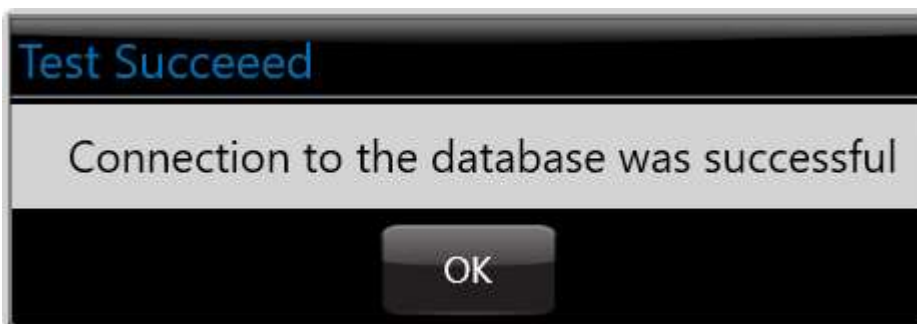
☐ Use legacy NEXYGENPlus authentication (not recommended)

2 ☒ Use Windows Active Directory (AD) authentication

Domain (leave blank if local system only) **3**

Users Test Options Reports Finish

1. Select **Use trusted connection (requires AD authentication)**
2. Select **Use Windows Active directory (AD) authentication**
3. Enter the Domain name.
4. Press **Test**, you should receive this success message



ADDING GROUPS

NEXYGENPlus - Security Module Configuration

Domain Users

Search:

User ID:

Full Name:

Groups

Analysts
Reviewers
Supervisors

Permissions

- ☐ Batch reviewer
- ☐ Can move graph markers
- ☐ Can use Save As command
- ☐ Configure Software Console
- ☒ Control Machine
- ☒ Create batch from standards library
- ☐ Create new batch
- ☐ Create new query
- ☐ Delete rows
- ☐ Edit query
- ☐ Edit tests
- ☒ Repeat batch
- ☐ Repeat test
- ☒ Run query
- ☒ Run tests
- ☐ Set column properties
- ☐ Set graph properties
- ☐ Set row properties
- ☐ Supervisor

Data Folder:

Back Finish

Before adding users, create user groups and permissions. 3 default groups are pre-installed. They can be re-named, edited or deleted. The 3 Groups are configured to allow the following workflow,

Supervisors – Able to create and approve test methods for use

Analysts – Able to run tests using approved test methods. Can approve and digitally sign test results.

Reviewers – Able to open batch files and review/approve results and lock batch for further use. Used as a second reviewer for approval of test results.

It is recommended to select a network data folder for each group. Note the network path should be specified in UNC format eg. [\\nexygen-far-fs01\Group](#)

PERMISSIONS

Set permissions for each group.

Batch Reviewer	A user able to review test results post-test, approve with a digital signature and print a pdf report. Ideal for a reviewer based outside the laboratory.
Can move graph markers	Allows moving of graph markers post-test if used. The audit trail captures the results before and after the move.
Can use Save As command	Allows access to 'Save As' for batches
Configure software Console	Allows access to the software console which is primarily used for hardware settings such as data sources and data rate. If access is allowed changes are recorded in the audit trail
Control Machine	Allows control of the machine using software console
Create batch from standards library	Allows creation of tests from the standards library (method Library), this is a recommended workflow detailed later in the manual.

Create new batch	Allows creation of new batches (methods) recommended for supervisors only
Create new query	Allows creation of query, required for all users for reporting functions
Delete rows	Allows delete of rows. Deletion is logged in the audit trail and hidden in the batch rather than truly deleted. Can be retrieved for review.
Edit query	Allows editing of queries
Edit tests	Allows editing of test methods, recommended for supervisors only
Repeat Batch	Allows creation of a new batch using the same method
Repeat test	Allows repeat of a test. The last test is re-run and replaced. The results of the initial test are logged in the audit trail. A double signoff is then needed to replace it, 1st by the user and 2 nd by a user with 'Supervisor' permission. Reasons can be made mandatory and logged.
Run query	Run query
Run tests	Allows running of tests.
Set Column properties	Allows setting of column properties such as pass/fail criteria and result units
Set graph properties	Allows setting of graph properties such as axes and axes units
Supervisor	Allows a approval of batches (test methods), view audit trail, approve report templates and act as a 2 nd approver for repeating tests.

ADDING AND REMOVING USERS

The search function can be used to locate users, or their ID and full name can be directly entered. Select the group you wish the user to be added to and press >. Adding and removing users and group assignments are recorded in the audit trail.

NEXYGENPlus - Security Module Configuration

Domain Users

Search:

User ID:

Full Name:

Tobias
Ametek

Groups

Analysts
Tobias
Reviewers
Supervisors
Ametek

Permissions

☐ Batch reviewer
☐ Can move graph markers
☐ Can use Save As command
☐ Configure Software Console
☒ Control Machine
☒ Create batch from standards library
☐ Create new batch
☐ Create new query
☐ Delete rows
☐ Edit query
☐ Edit tests
☒ Repeat batch
☐ Repeat test
☒ Run query
☒ Run tests
☐ Set column properties
☐ Set graph properties
☐ Set row properties
☐ Supervisor

Data Folder:

Back Finish



Allows the addition of a digital signing certificates to users if available in your organisation. These are imported as .PFX files. This digital signature with certificate of authenticity verifies the signer's identity and ensures that the document has not been altered after it was signed.

The dialog box is titled 'Tobias' and has a close button (X) in the top right corner. It contains two input fields: 'Certificate:' and 'Signature (optional):'. Each field has a text input area and a small button with three dots (ellipsis) to its right. At the bottom of the dialog are 'OK' and 'Cancel' buttons.

OPTION SETTINGS

Options settings allow configuration of the level of data integrity and workflows.

The 'Options' dialog box is divided into several sections:

- Reporting**
 - ☒ Print reports to PDF
 - ☒ Prompt user for PDF name and location when running report
 - ☐ Automatically generate PDF in folder: [text field] [button]
- Approval**

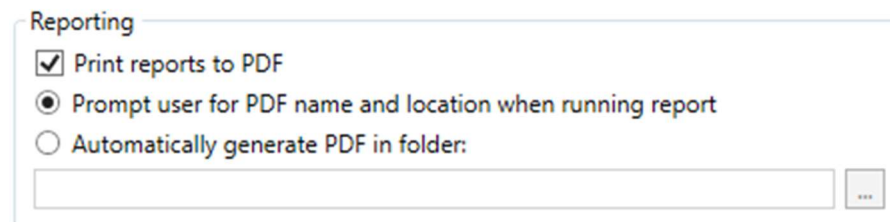
If enabled, changes will be tracked and logged in the audit trail.

 - ☒ Require approval of test setups
 - ☒ Require approval of results
 - ☒ Approve results at end of test automation sequence
 - ☒ Use only approved report templates
- Reasons**
 - ☐ Reasons for changes are not to be recorded
 - ☐ Reasons for changes may optionally be recorded
 - ☒ Reasons for changes are mandatory
- Authentication**
 - ☒ Re-authenticate user on repeat test, granting approval or providing reasons
- Results**
 - ☒ Log test results in audit trail
- Standards Library**

[text field: C:\ProgramData\Lloyd Instruments Ltd\NEXYGEN Plus\Shared\Standards Li] [button]
- Automatic Logout**
 - ☐ Always logout manually
 - ☒ Automatically logout after inactivity: [text field: 30] min [dropdown: v]

At the bottom are 'OK' and 'Cancel' buttons.

REPORTING



Reporting

☒ Print reports to PDF

☒ Prompt user for PDF name and location when running report

☐ Automatically generate PDF in folder:

xxx

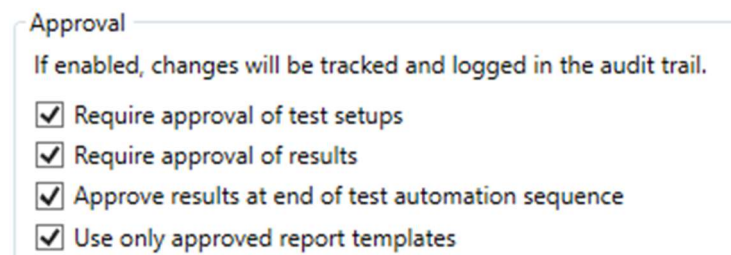
This option prints directly to PDF without using Microsoft Word and is recommended. The report template is created as a Word template however it is not necessary to have Word installed on the local PC for PDF printing. Template can be created on another workstation and transferred or used from a network location.

Reporting printing is logged in the audit trail.

Automatically generate PDF in folder will create the pdf with the name of the batch file followed by a unique number which is the count of clock ticks since 01/01/1970

It is recommended to select a network folder for PDF reports. Note the network path should be specified in UNC format eg. [\\nexygen-far-fs01\Group](#)

APPROVAL



Approval

If enabled, changes will be tracked and logged in the audit trail.

☒ Require approval of test setups

☒ Require approval of results

☒ Approve results at end of test automation sequence

☒ Use only approved report templates

Approval has 2 methods.

1. Clicking **Approve** logs the approval in the batch and audit trail using the credentials of the current logged in user.
2. If **Re-authenticate user** under **Authentication** is checked, the user will be required to enter their credentials to digitally sign the batch and audit trail. This is the default and recommended method.

Require approval of test setups – Changes to test setups (methods) will be tracking in the audit trail including values before and after and reasons if set to be recorded. Users with **Supervisor** permission can approve a test setup (method) for use by users without **Supervisor** permission. This means that Users can only perform tests using approved methods and is recommended. If a supervisor subsequently edits an approved test setup its approval status is removed and will require re-approval after the change.

Require Approval of Results – At the end of a test the user is prompted to accept/reject the test. Rejecting does not delete the data it marks it as not approved.

Approve Results at end of test automation sequence – If using the recommended test automation method the user will only be asked for results approval at the end of the test sequence and all test will be timestamped with approval together. Approve results at end of sequence will overrule approval of test results test by test.

Use only Report templates – Only templates defined in the approved templates list can be used for report generation, see Approved Reports section

REASONS

Forces the user to enter reasons following a change to critical data. Recommended set to mandatory. The reason is logged in the audit trail.

Reasons

- ☐ Reasons for changes are not to be recorded
- ☐ Reasons for changes may optionally be recorded
- ☒ Reasons for changes are mandatory

AUTHENTICATION

Authentication

- ☒ Re-authenticate user on repeat test, granting approval or providing reasons

Forces the user to enter their credentials to digitally sign these actions.

STANDARDS LIBRARY / METHOD TEMPLATE LIBRARY

Standards Library

C:\ProgramData\Lloyd Instruments Ltd\NEXYGEN Plus\Shared\Standards Li ...

Specifies the location of the **Standards Library** for storing of approved batches (test methods)

It is recommended to select a network folder for the standards library. Note the network path should be specified in UNC format eg. [\\nexygen-far-fs01\Group](#)

AUTO LOGOUT

Automatic Logout

- ☐ Always logout manually
- ☒ Automatically logout after inactivity:

30

min

Set time limit for auto-logout of Nexygen Plus.

APPROVED REPORTS

If **Use only approved report templates** is selected under **Approval** only the selected templates can be used for report generation. Store the templates on the network.

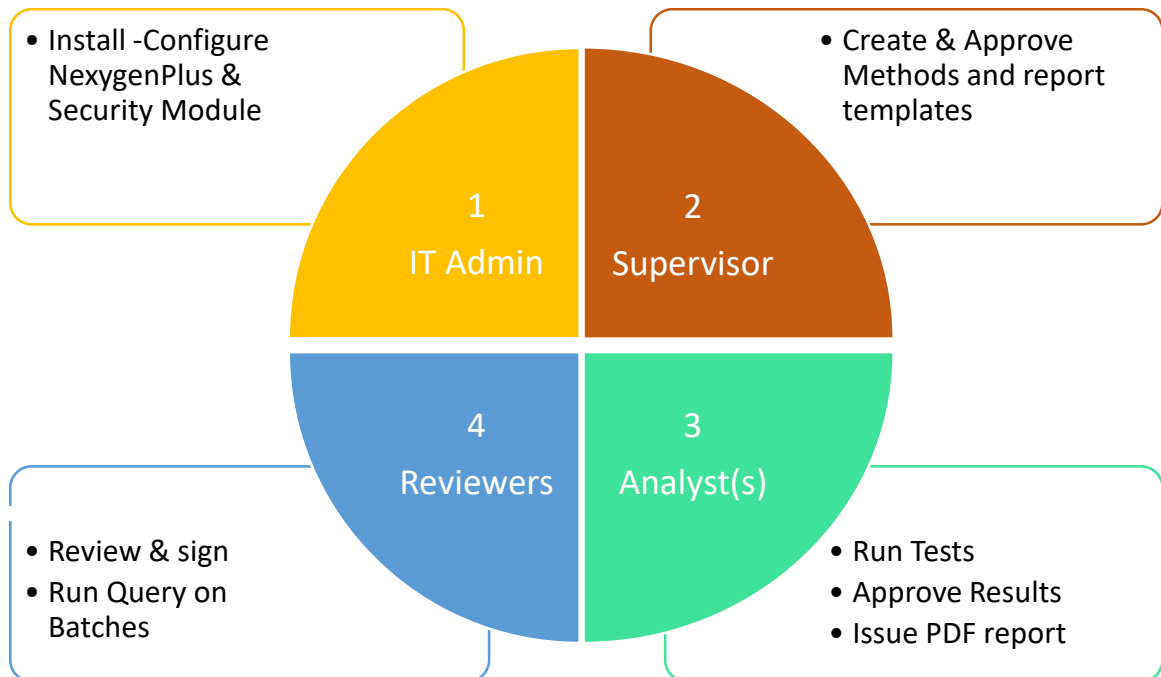
Approved Reports



Select Word report template:

C:\ProgramData\Lloyd Instruments Ltd\NEXYGEN Plus\Shared\Data\4.1\reports\Nezygen 4.1 Example Re

RECOMMENDED NEXYGEN PLUS WORKFLOW



DEVELOP AND APPROVE BATCH (TEST METHOD)

User assigned to the **Supervisors** group or another group with **Supervisor** permission develops a test method. During development of the method changes are tracked in the audit trail database with values before and after.

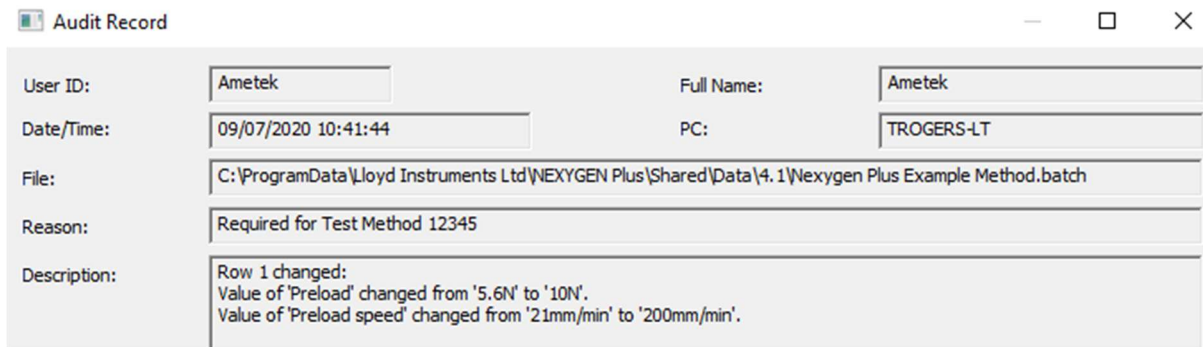
1. User prompted for **Reason** for the change

A screenshot of a dialog box titled "Test Changed: 1". It contains a text input field with the text "Required for Test Method 12345" and an "OK" button at the bottom.

2. **AD authentication** to digitally sign the change

A screenshot of an "Authenticate" dialog box. It includes fields for "User ID:" (containing "Ametek") and "Password:". There is a "Change" button next to the password field. A checkbox labeled "Remember my user ID" is checked. At the bottom, there are "OK" and "Log Out" buttons.

3. Changes written to the audit trail



User ID:	Ametek	Full Name:	Ametek
Date/Time:	09/07/2020 10:41:44	PC:	TROGERS-LT
File:	C:\ProgramData\Lloyd Instruments Ltd\NEXYGEN Plus\Shared\Data\4.1\Nexygen Plus Example Method.batch		
Reason:	Required for Test Method 12345		
Description:	Row 1 changed: Value of 'Preload' changed from '5.6N' to '10N'. Value of 'Preload speed' changed from '21mm/min' to '200mm/min'.		

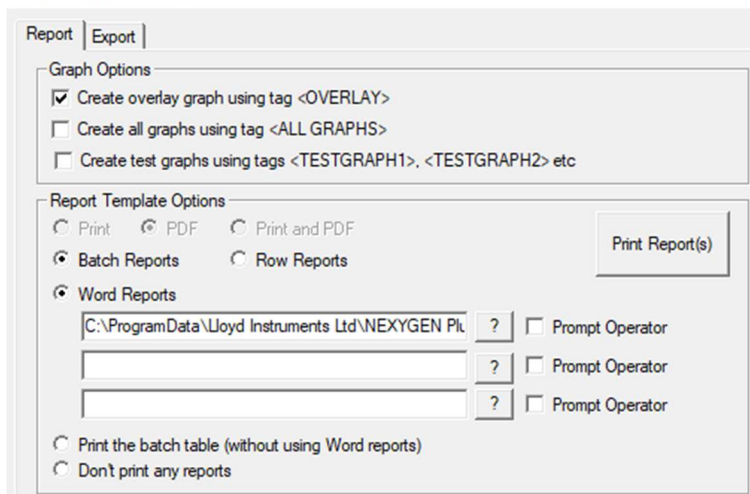
CONFIGURE TEST AUTOMATION

It is critical to configure test automation to make use all data integrity features.

Archive Batch To allows the batch containing the 5 tests to be auto archived to a secure network location (Use UNC name) with the filename amended to include timestamp of first and last test.

Run Report or export allows auto saving of a digitally signed PDF to a secure network location specified in the security configurator using a template approved for use.

Report/Export Settings



Report | Export

Graph Options

- ☒ Create overlay graph using tag <OVERLAY>
- ☐ Create all graphs using tag <ALL GRAPHS>
- ☐ Create test graphs using tags <TESTGRAPH1>, <TESTGRAPH2> etc

Report Template Options

Print PDF Print and PDF

Batch Reports Row Reports

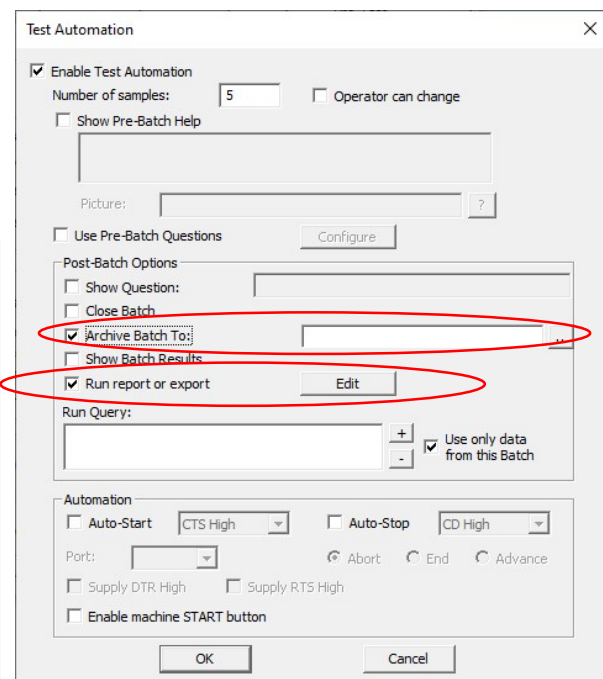
Word Reports

C:\ProgramData\Lloyd Instruments Ltd\NEXYGEN Pl. ? Prompt Operator

Print the batch table (without using Word reports)

Don't print any reports

Print Report(s)



Test Automation

☒ Enable Test Automation

Number of samples: 5 ☐ Operator can change

☐ Show Pre-Batch Help

Picture: ?

☐ Use Pre-Batch Questions Configure

Post-Batch Options

- ☐ Show Question:
- ☐ Close Batch
- ☒ Archive Batch To: ?
- ☐ Show Batch Results
- ☒ Run report or export Edit

Run Query: + - ☒ Use only data from this Batch

Automation

☐ Auto-Start CTS High ☐ Auto-Stop CD High

Port: Abort End Advance

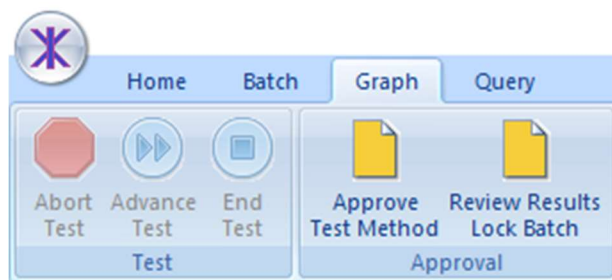
☐ Supply DTR High ☐ Supply RTS High

☐ Enable machine START button

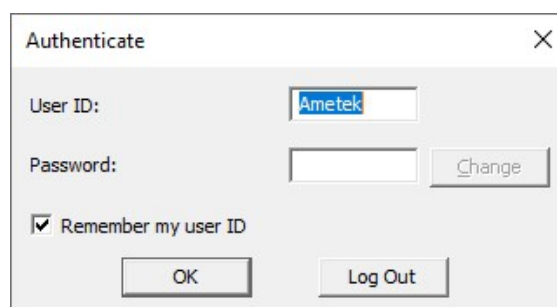
OK Cancel

APPROVE THE TEST METHOD FOR USE

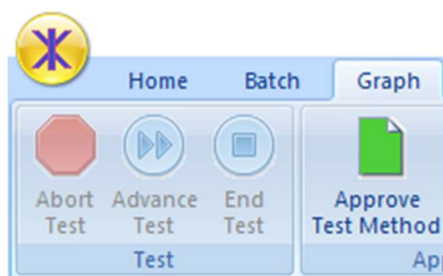
Supervisor approves test method



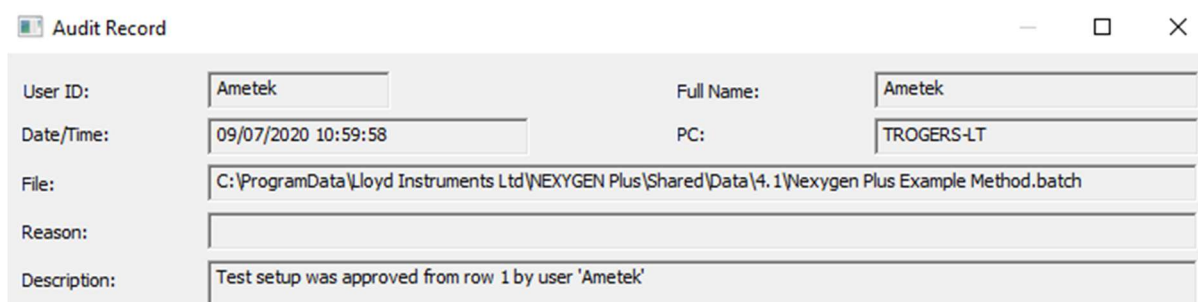
Authenticate approval of test method



Icon turns green



Approval logged in audit trail and batch



SAVE APPROVED TEST METHOD TO STANDARDS LIBRARY

Save the approved batch file to the **Standards Library** where it can be used as a test method template by standard users.

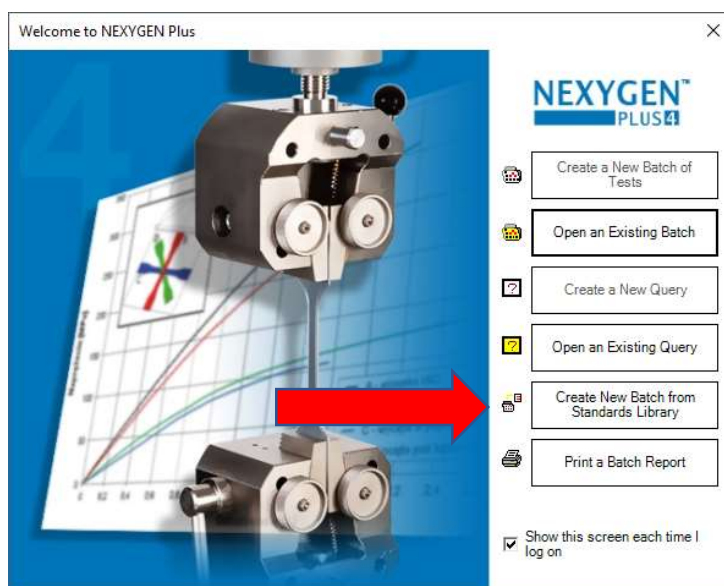
ANALYST CONDUCTING TESTS

ANALYST PROCESS

Steps 4 and 5 are automatic and configured in the test method template in the standards library



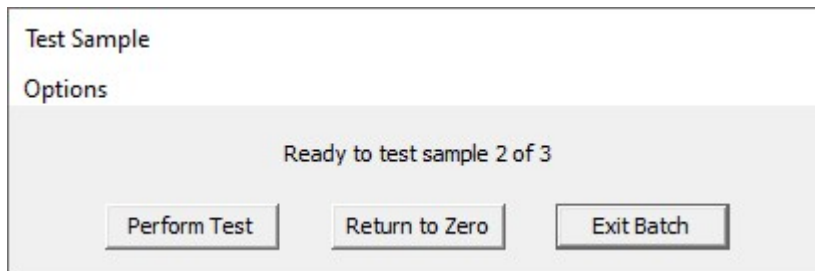
1. CREATE NEW BATCH FROM STANDARDS LIBRARY



Select the method template required – note only supervisor approved methods can be used.

Enter filename for new batch of tests.

2. RUN SEQUENCE OF TESTS



If the security module user group option below is selected it is possible to re-test a sample if the test is invalid. This can be done immediately after the test only. Select 'Repeat' from the options menu above or select re-test at the end of the last test in a sequence. A double sign off is required, first the analyst then a supervisor.

☒ Repeat test

3. APPROVE TEST RESULTS

Analysts sign off can be after every individual test or just once after the sequence of tests using the security module option below,

☒ Approve results at end of test automation sequence

If selected the approval for all tests will be added to the audit trail after a single sign off after the last test,

10/08/2020 10:26:19	Ametek	Ametek	TR...	Results approved for row 11 by user 'Ametek'
10/08/2020 10:26:19	Ametek	Ametek	TR...	Results approved for row 12 by user 'Ametek'
10/08/2020 10:26:19	Ametek	Ametek	TR...	Results approved for row 13 by user 'Ametek'

4. .BATCH FILE IS AUTO ARCHIVED TO SPECIFIED LOCATION

The Windows user can have write access to the folder but not read access and therefore cannot delete the file after archive.

.batch file is stored with date/time of first and last test added to filename

in_10082020 092031_10082020 104633.batch

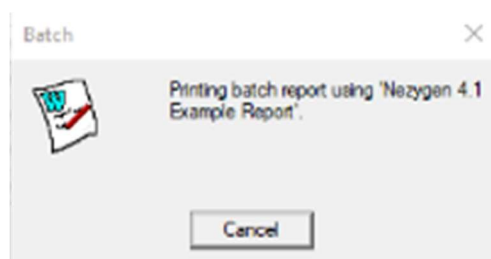
Audit trail logs the event,

User ID:	Ametek	Full Name:	Ametek
Date/Time:	10/08/2020 10:46:59	PC:	TROGERS-LT
File:	C:\ProgramData\Lloyd Instruments Ltd\NexyGenPlus\Shared\Data\kevin.batch		
Reason:			
Description:	Archiving batch tests from 10/08/2020 09:20:31 to 10/08/2020 10:46:33. Number of tests = 16. Archive file: 'C:\ProgramData\Lloyd Instruments Ltd\NexyGenPlus\Shared\Data\kevin.batch'		

As the file has been renamed the audit trail also logs the event,

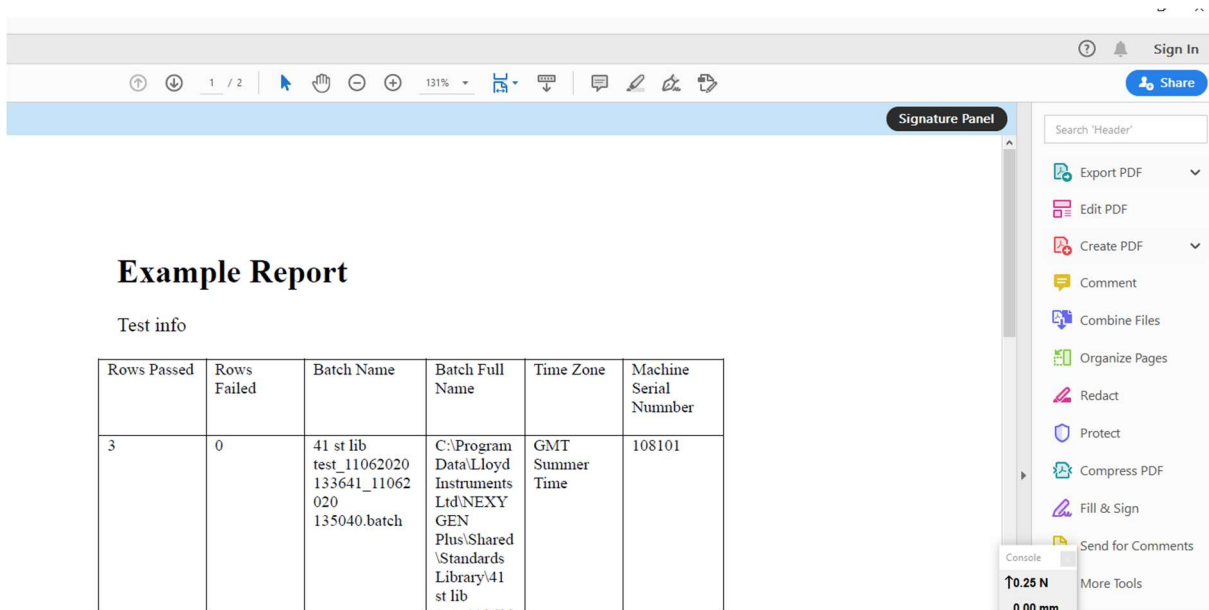
Description:	File renamed from 'C:\ProgramData\Lloyd Instruments Ltd\NexyGenPlus\Shared\Data\kevin.batch' to 'C:\ProgramData\Lloyd Instruments Ltd\NexyGenPlus\Shared\Data\kevin.batch'
--------------	--

5. AUTOMATIC PDF REPORT CREATED IN SPECIFIED LOCATION



The PDF report is created using the approved report template. If a digital signing certificate has been added to the user configuration the signing certificate password needs to be entered.

A signed pdf is then placed into the configured report folder. The pdf filename is the batch filename followed by a unique number generated by the number of clock ticks since Jan 1 1970.



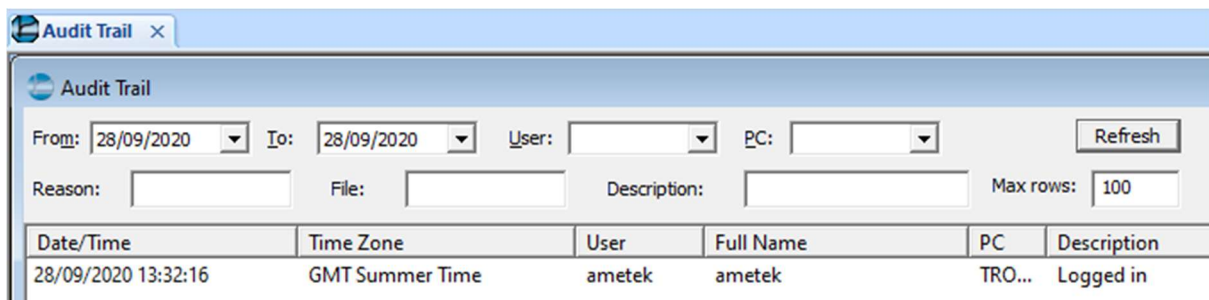
6. REVIEW AND APPROVE RESULTS (OPTIONAL)

The group permission 'Reviewer' allows review and sign-off of completed test batches.

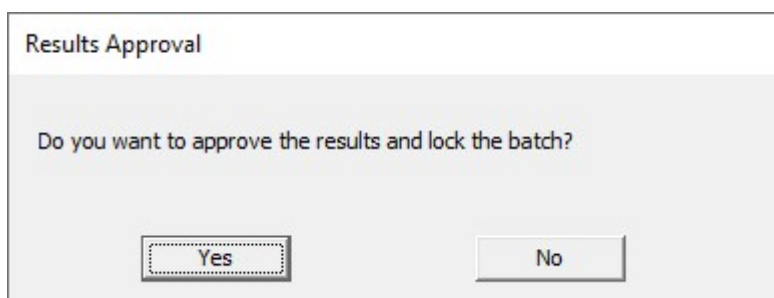
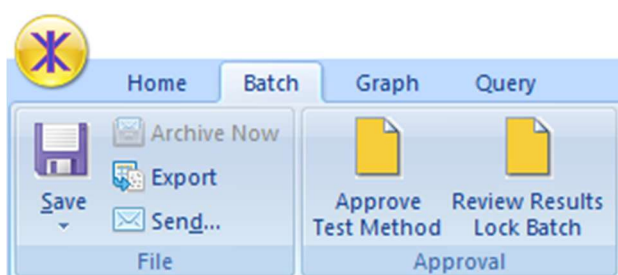
Permissions

- ☒ Batch reviewer
- ☐ Can move graph markers
- ☐ Can use Save As command

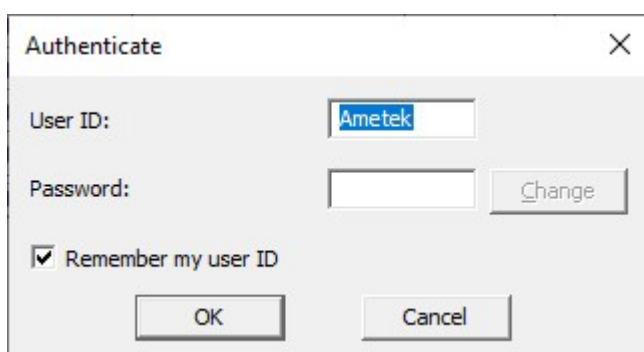
The audit trail can be viewed at the same time and filtered using the fields,



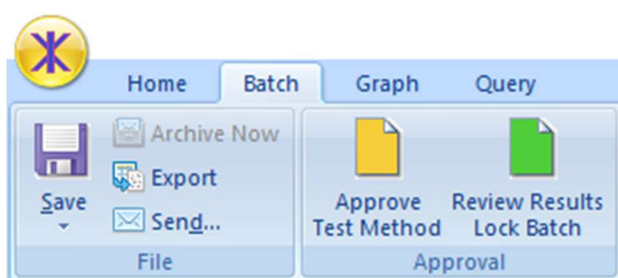
Use the 'Review Results and Lock Batch icon' displayed above the batch table.



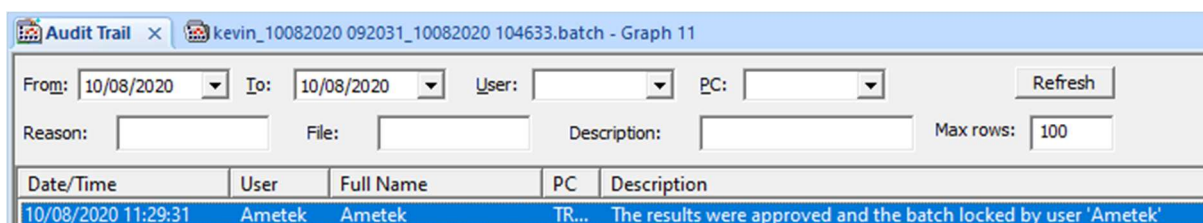
Authenticate,



Icon turns green,



The batch is now open to view, but no further tests can be added. The audit trail is updated.



GENERAL FEATURES

ADDITIONAL DATA FOR REPORTS

A report can contain the signatures for each step of the process including, method approval, result approval and reviewer approval.

Time Zone	Test Method Approved?	Test Method Approved By	Test Method Approval Timestamp	Approved Results?	Results Approved By	Results Approval Timestamp
GMT Summer Time	True	Ametek	10/08/2020 11:49:07	True	Ametek	10/08/2020 11:49:19

Key hardware configuration parameters can also be included such as,

- Machine type and serial Number
- Machine firmware version
- Software version
- Loadcell serial number
- Parameter settings

Machine Setup Scheme	Automatic Sample Stiffness	Machine Stiffness Compensation	Data Rate	Software Version	Embedded Version	Load Cell Rating
Default	True	False	1000.0 /s	4.1.0.624	2.1 Issue 1	1000.0 N

DELETING, RE-NAMING AND SAVE AS FOR .BATCH FILES

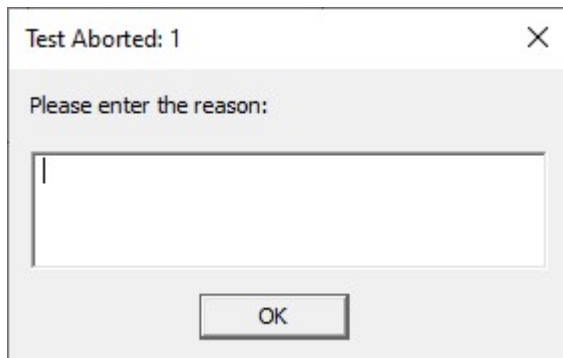
Logging of deleted or re-named .batch files. Delete, re-name and optionally auto-save are blocked within Nexygen Plus for users without 'Supervisor' privileges. The audit trail captures deleting and re-naming of .batch files stored in the configured data folder if actioned from within Nexygen Plus or Windows Explorer (if Nexygen Plus is open at the time).


Audit Record
—
□
×

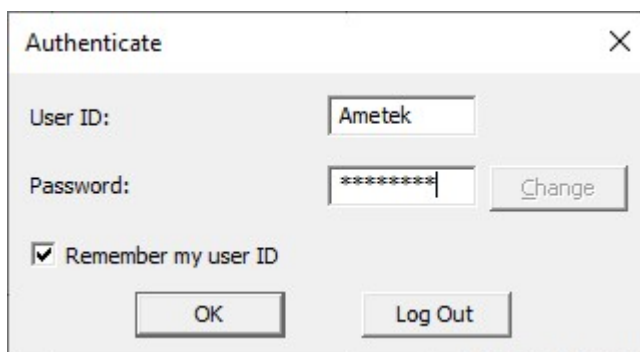
User ID:	Ametek	Full Name:	Ametek
Date/Time:	10/08/2020 11:37:52	PC:	TROGERS-LT
File:			
Reason:			
Description:	Deleted file: C:\ProgramData\Lloyd Instruments Ltd\NexygenPlus\Shared\Data\41 archive\41 test end july_27072020 112.		

ABORTING A TEST

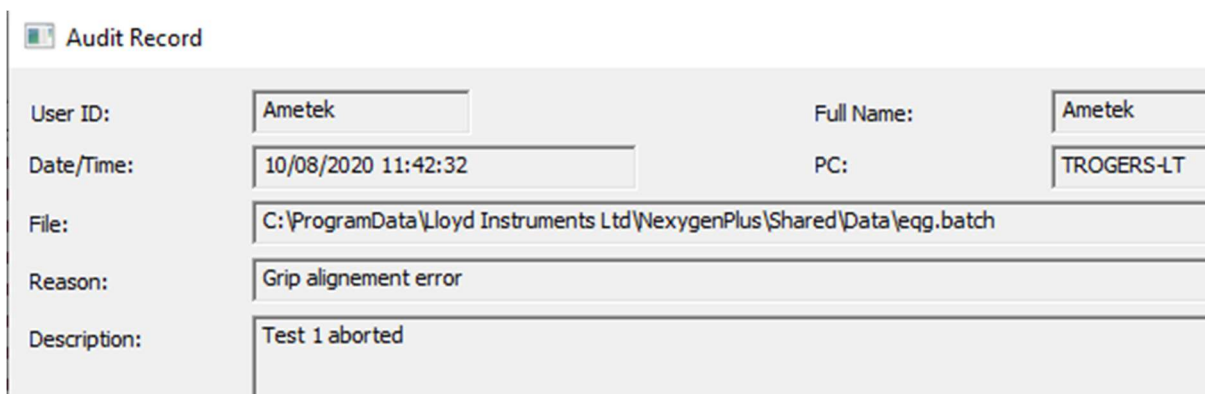
If a test is aborted the action is logged in the audit trail following entering of reasons and digital signature of analyst.



A dialog box titled "Test Aborted: 1" with a close button (X) in the top right corner. Below the title bar, it says "Please enter the reason:". There is a large text input field with a cursor at the beginning. At the bottom, there is an "OK" button.



An "Authenticate" dialog box with a close button (X) in the top right corner. It contains fields for "User ID:" (with "Ametek" entered) and "Password:" (with "*****" entered). To the right of the password field is a "Change" button. Below these fields is a checkbox labeled "Remember my user ID" which is checked. At the bottom are "OK" and "Log Out" buttons.



An "Audit Record" window showing a table of audit data. The table has two columns: "Field" and "Value".

Field	Value
User ID:	Ametek
Full Name:	Ametek
Date/Time:	10/08/2020 11:42:32
PC:	TROGERS-LT
File:	C:\ProgramData\Lloyd Instruments Ltd\NexygenPlus\Shared\Data\eqg.batch
Reason:	Grip alignment error
Description:	Test 1 aborted

FAILED AUTHENTICATION

A failed authentication is logged in the audit trail.

Audit Record			
User ID:	Ametek	Full Name:	Ametek
Date/Time:	10/08/2020 11:27:53	PC:	TROGERS-LT
File:			
Reason:			
Description:	Windows failed to logon user 'Ametek'		

WHAT IS LOGGED IN THE AUDIT TRAIL?

GENERAL

Audit logging is applicable when the security module is enabled.

Audit log entries in general contain:

- The current date/time/zone
- ID and name of user
- Computer name
- Description
- Reason (if applicable)
- Test file (if applicable)

ALWAYS LOGGED EVENTS

The following events are specifically logged:

- User logged in
- User logged out
- Changes to machine setup scheme in PC console
- Any machine error event that occurs
- Required user authentication has failed (i.e. login, or optional authentication criteria), or is cancelled
- A report is printed (whether to printer or PDF), or previewed
- Permission denied relating to some action
- Changes made to a user (i.e. add, remove)
- Changes made to a group (i.e. add, remove, rename, change permissions, change data folder)
- File was deleted or renamed in a configured group data folder while NexygenPlus is running
- Default test units were changed (i.e. Force, Extension etc)
- Auto-save settings were changed
- Auto-archive settings were changed
- Security Configurator Options were changed

OPTIONALLY LOGGED EVENTS

The following entries apply if the relevant options are enabled in the Security Configurator:

- Changes to test setup
- Changes to test results
- Reasons are entered
- There was an attempt made to run a non-approved report
- User re-authentication was cancelled
- Security Configurator approved Reports were changed