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LABWORKS 7.1 Installation Certification Document

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LABWORKS Installation Certification Document

The LABWORKS Installation Certification Document provides a set of tests that can be executed by the customer to certify that their install or upgrade is working as expected.

This document describes the Test Configuration, Test Execution and Expected Results.

Following will be the high level workflow for the tests to be performed:

- Setting up an analysis code (one for each type- single component, multi component, container)
- Setting up a location code
- Logging a sample
- Entering results
- Importing data (using scan daemon, multi component transfer and PR6)
- Performing calculations using the built-in calculation engine and excel
- Validating results
- Generating a report
- Creating a QA/QC batch

Pre-requisites

LABWORKS configurations as defined in Installation Guide and Admin Guide.

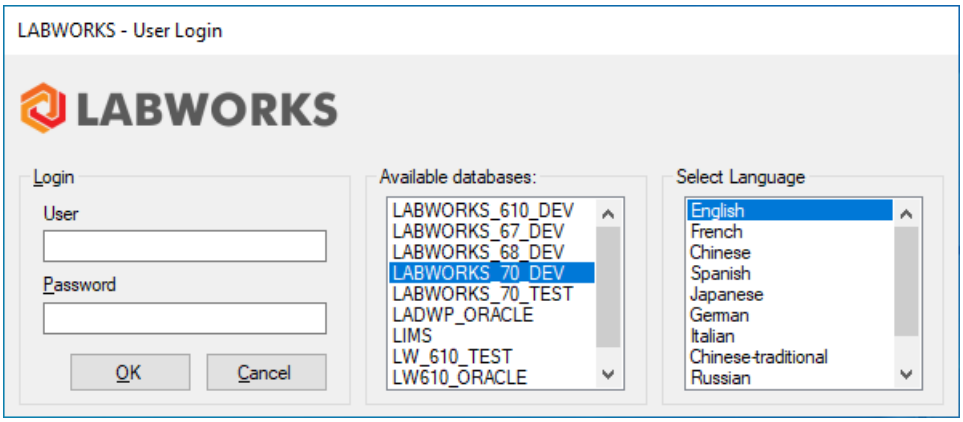
Test Summary

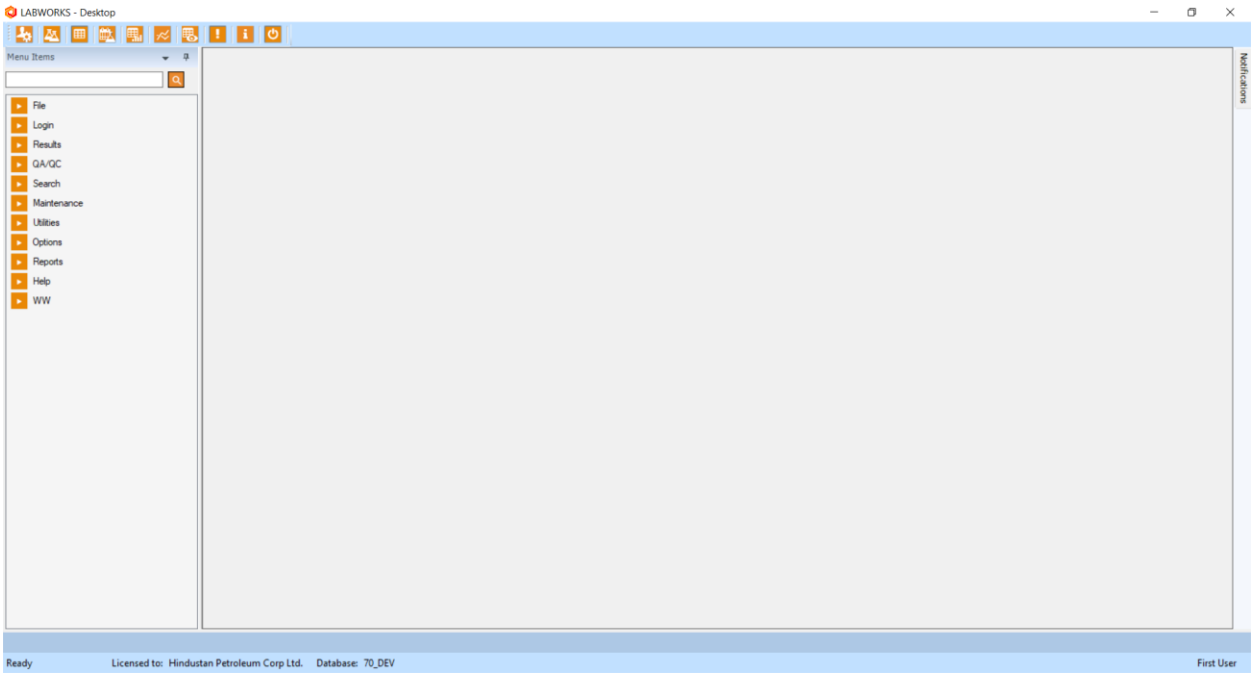
Installation Tests

1. User Management

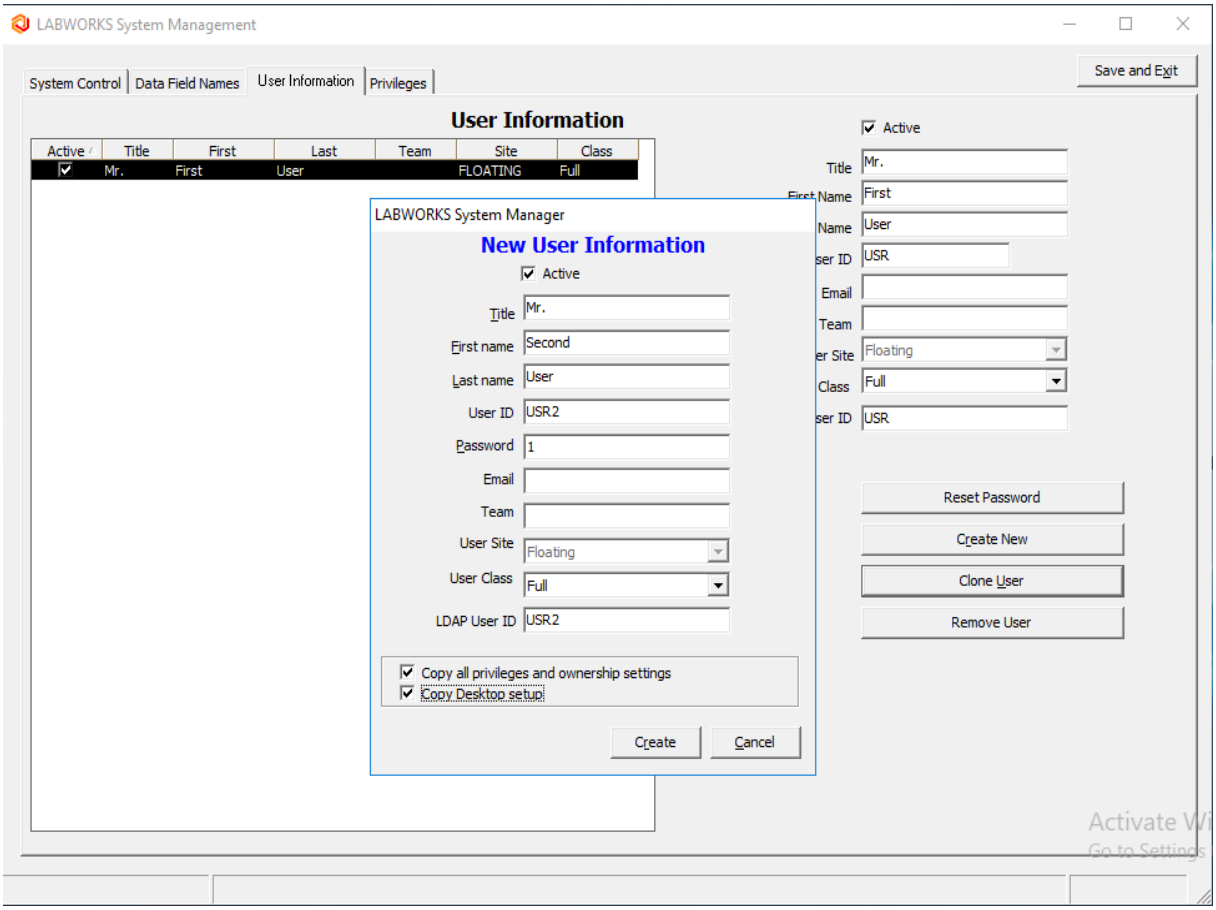
1.1. Create User

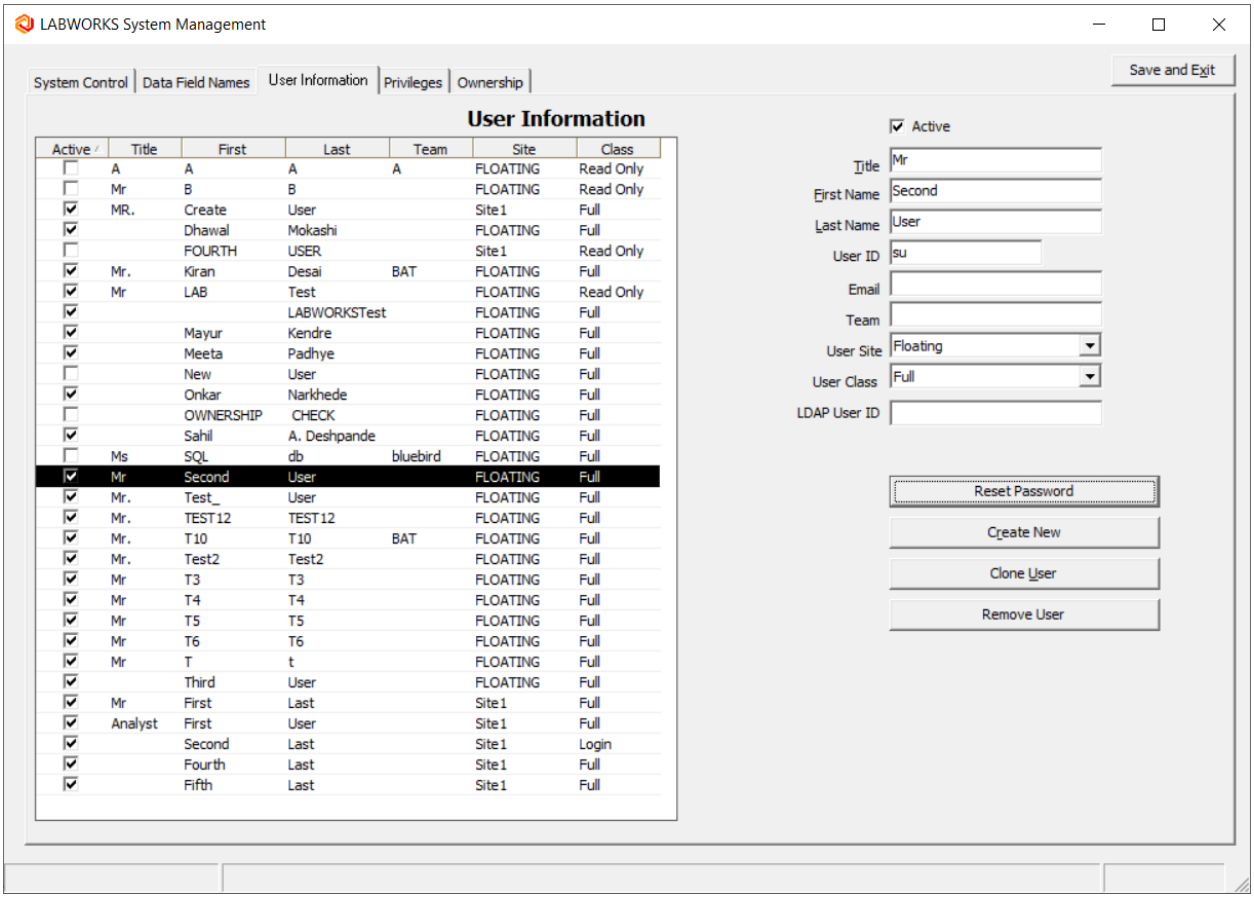
1) Launch LABWORKS Application and enter username/password credentials





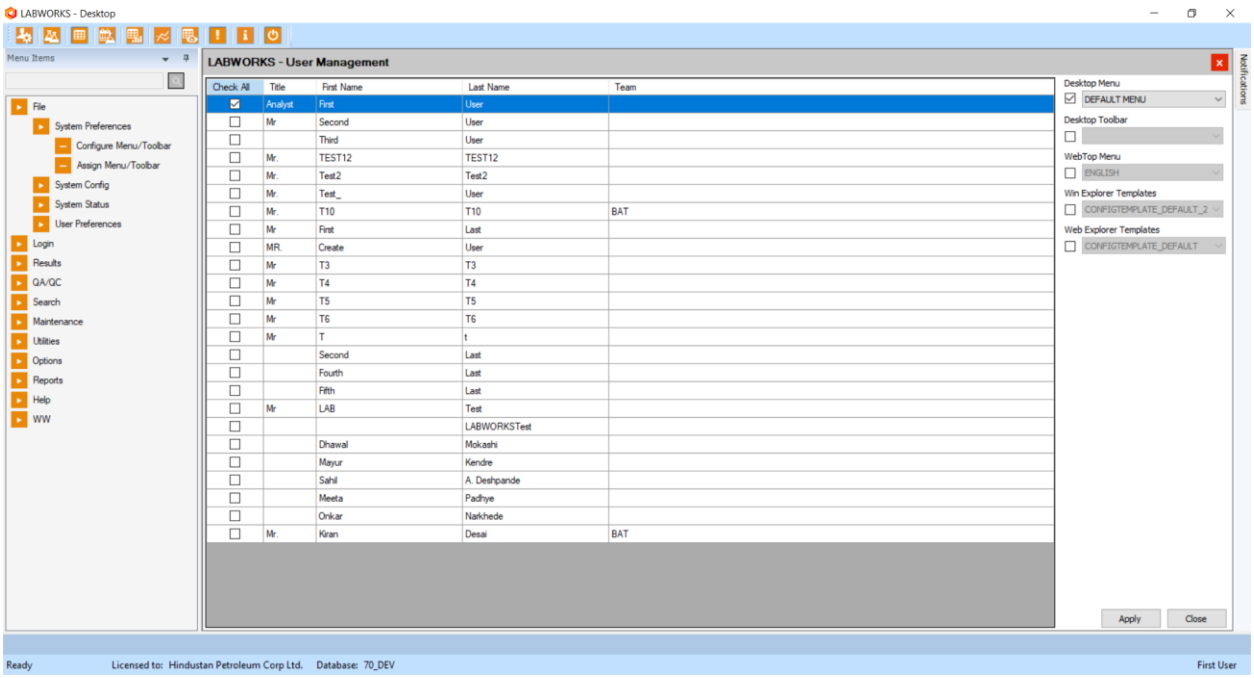
2) Navigate to File → SYSTEM MANAGER application. Click on “Create New” button. Enter user information and click “Create” button. Configure user privileges.





1.2. Assign Menu

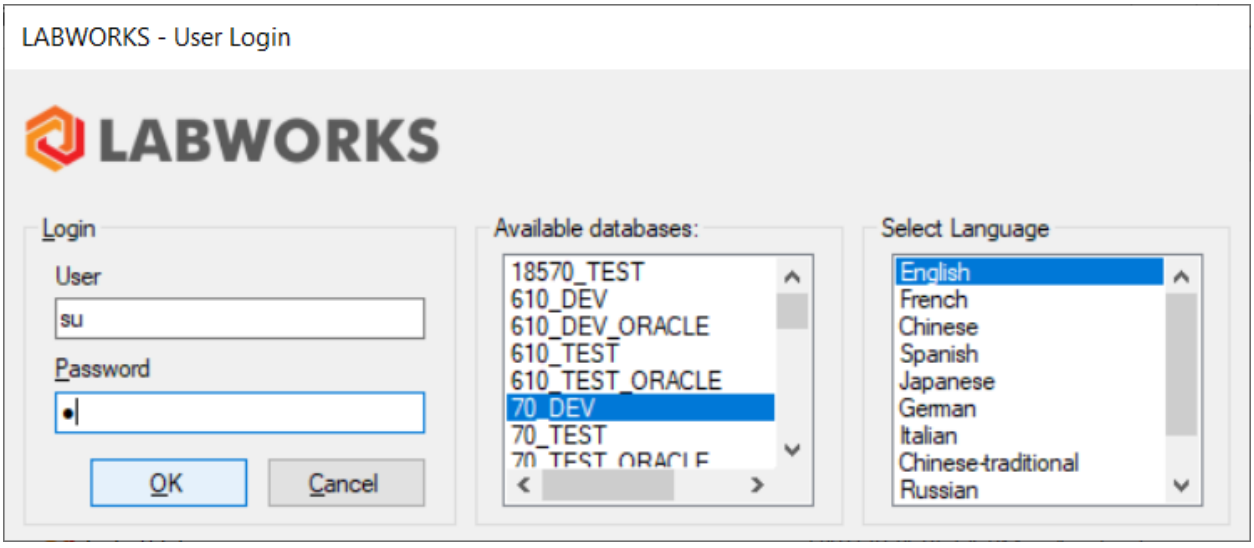
1) Assign default menu to the newly created user.

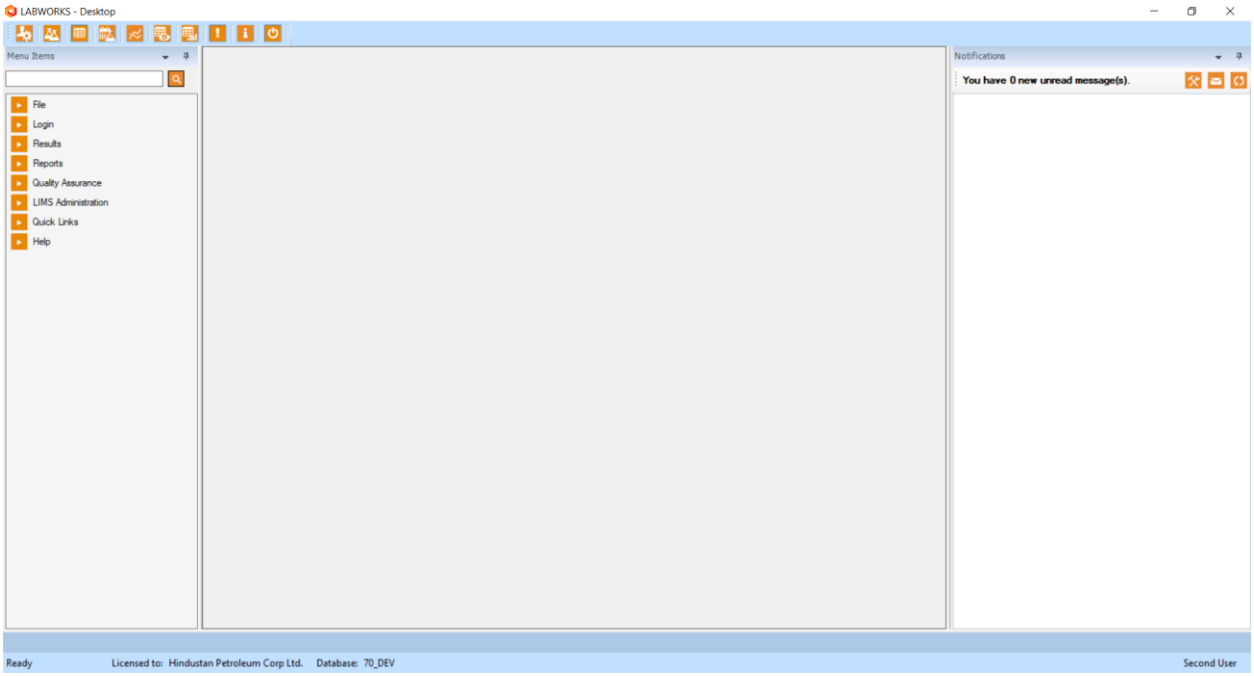


2. Location List Maintenance

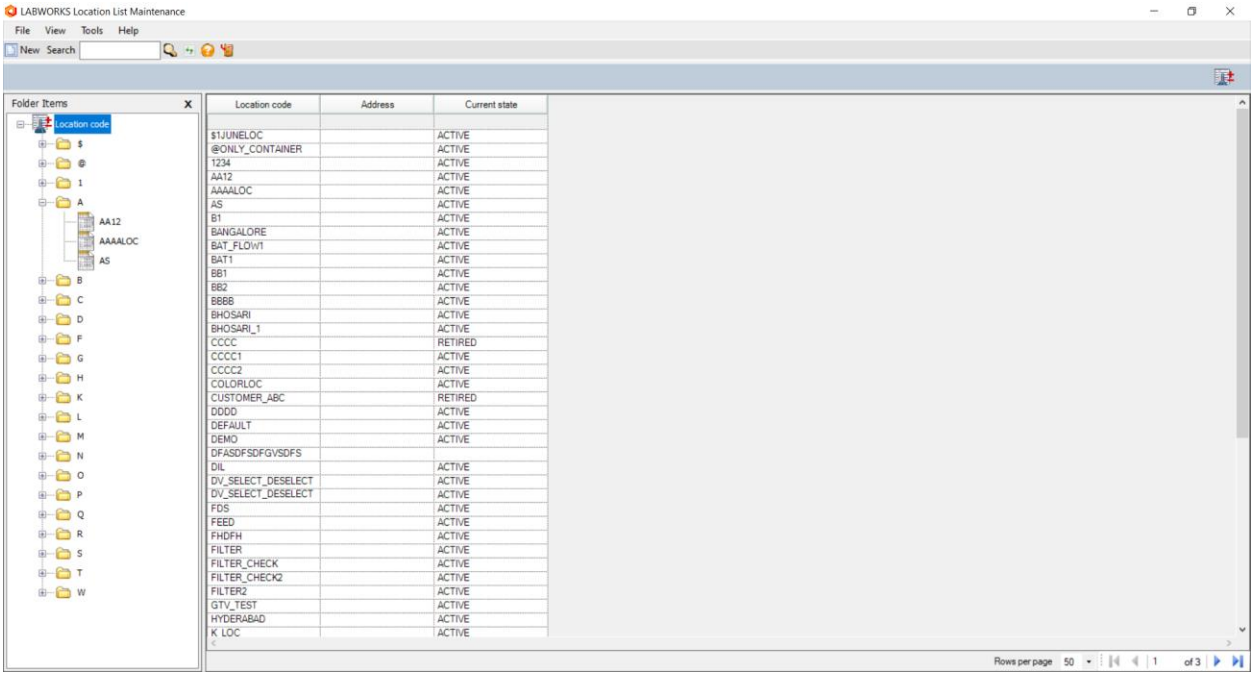
2.1. Create Location Code

1) Launch LABWORKS Application and login using newly created user.





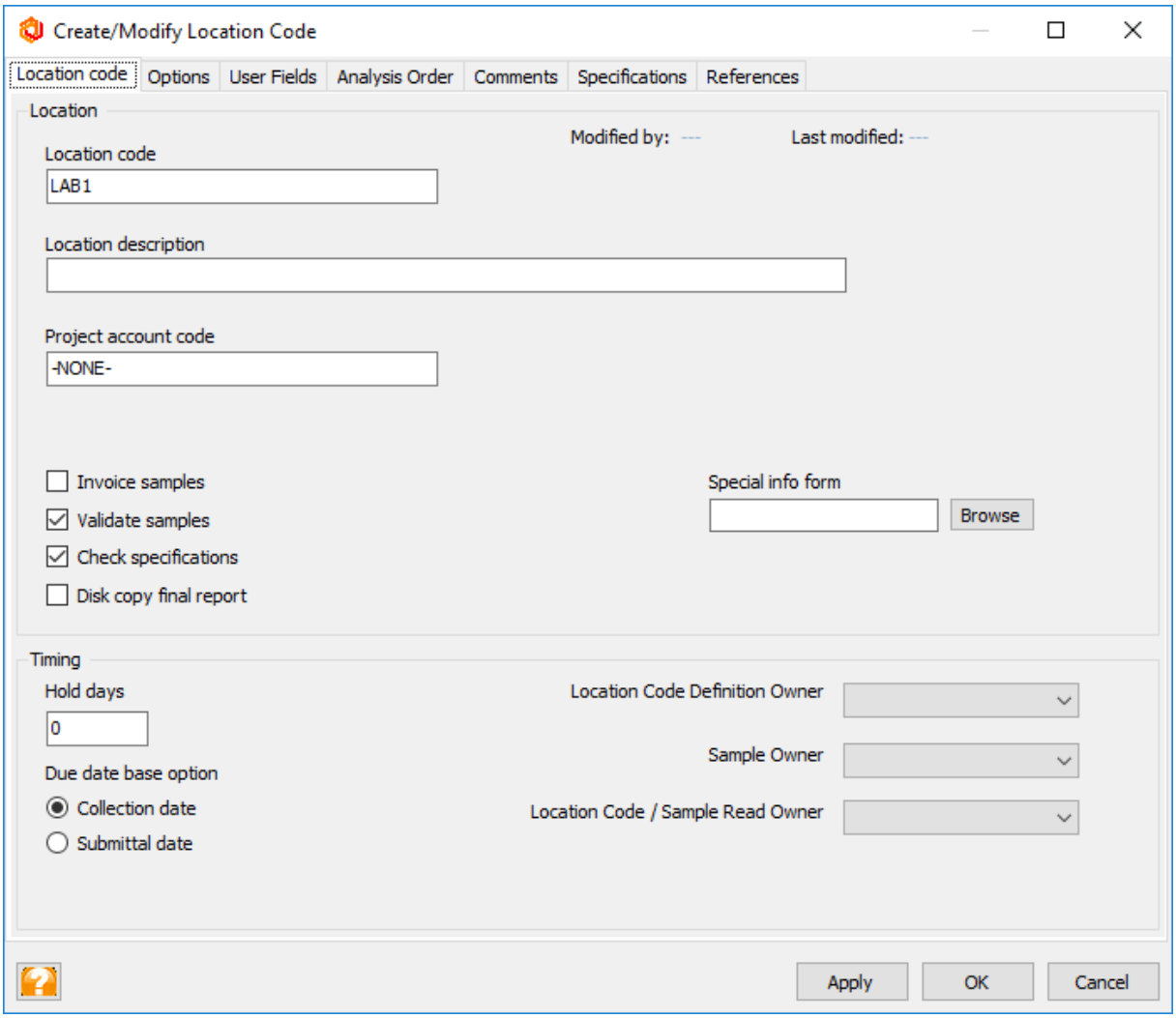
2) Click on Location List option



3) Click on 'New' Button
4) Enter following information
   1. Location code
   2. Location Description
   3. Hold Days

4. Select Due date base option
5. Select Invoice Samples check box
6. Select Validate Sample Check box
7. Select Check Specification Check box
8. Disk Copy Final Report Check box

5) Click on Apply
6) Click on OK

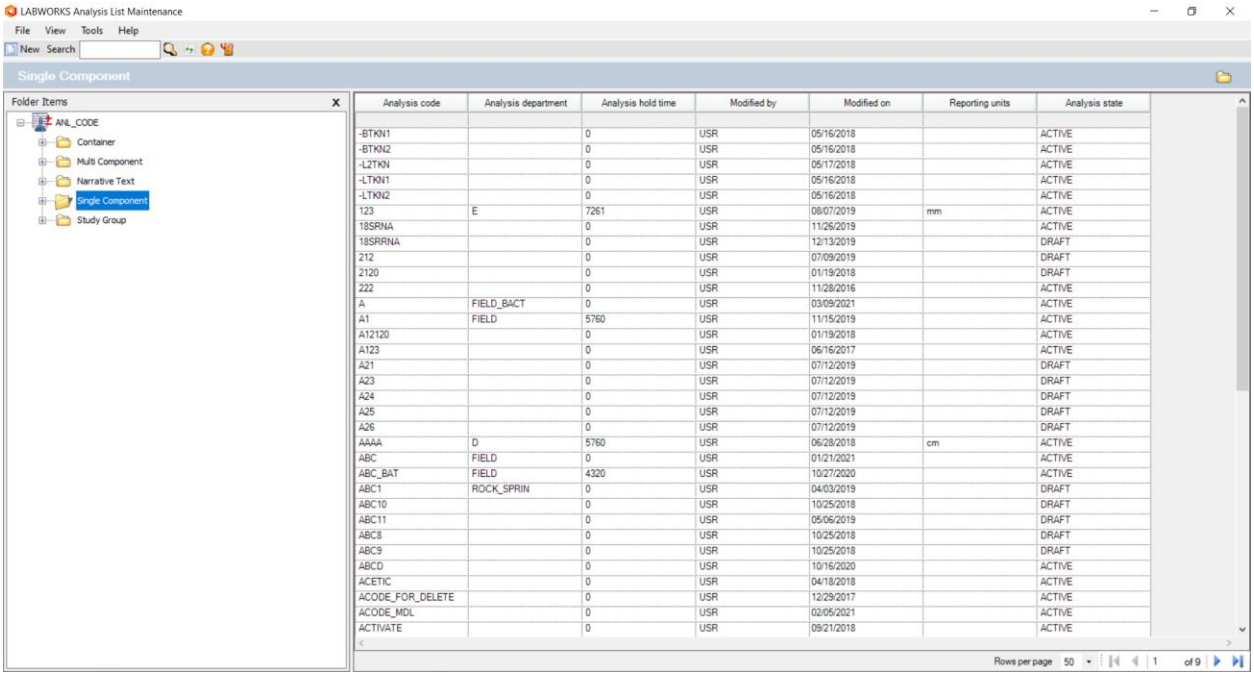


7) Location code should be added in Location Code list. (e.g. LAB1)

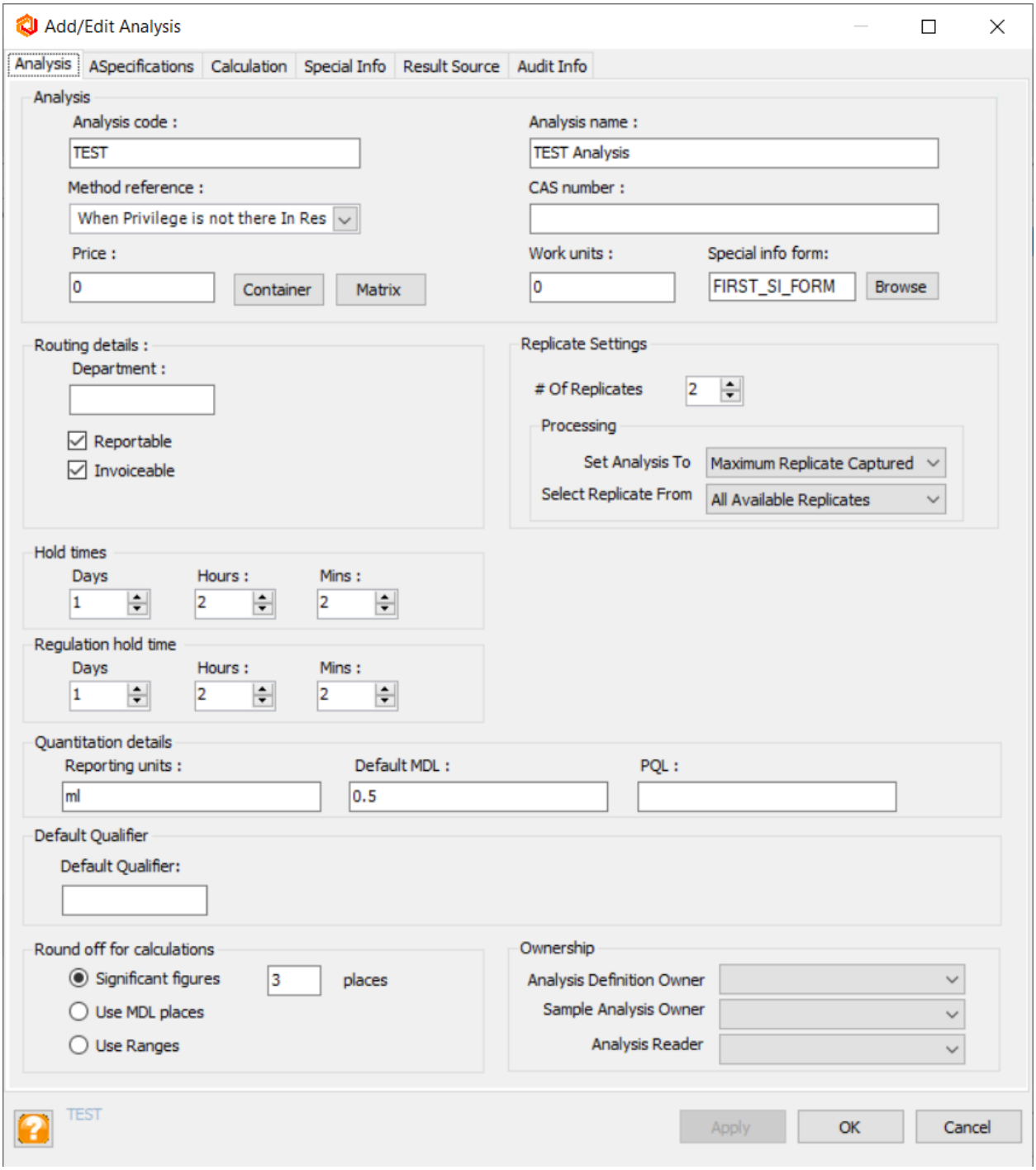
3. Analysis Maintenance Application

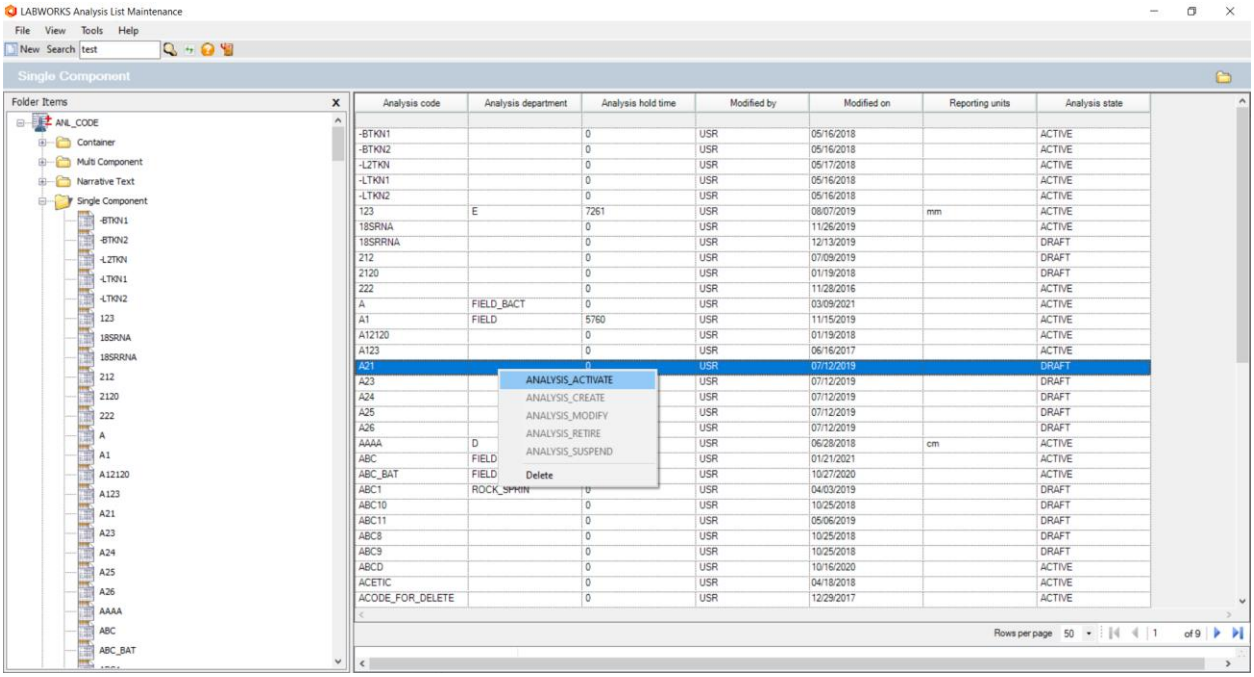
3.1. Create Analysis Code

1) Launch Analysis Maintenance.
   Click on Analysis List maintenance application. Click on New button on 'LABWORKS Analysis List Maintenance' window.

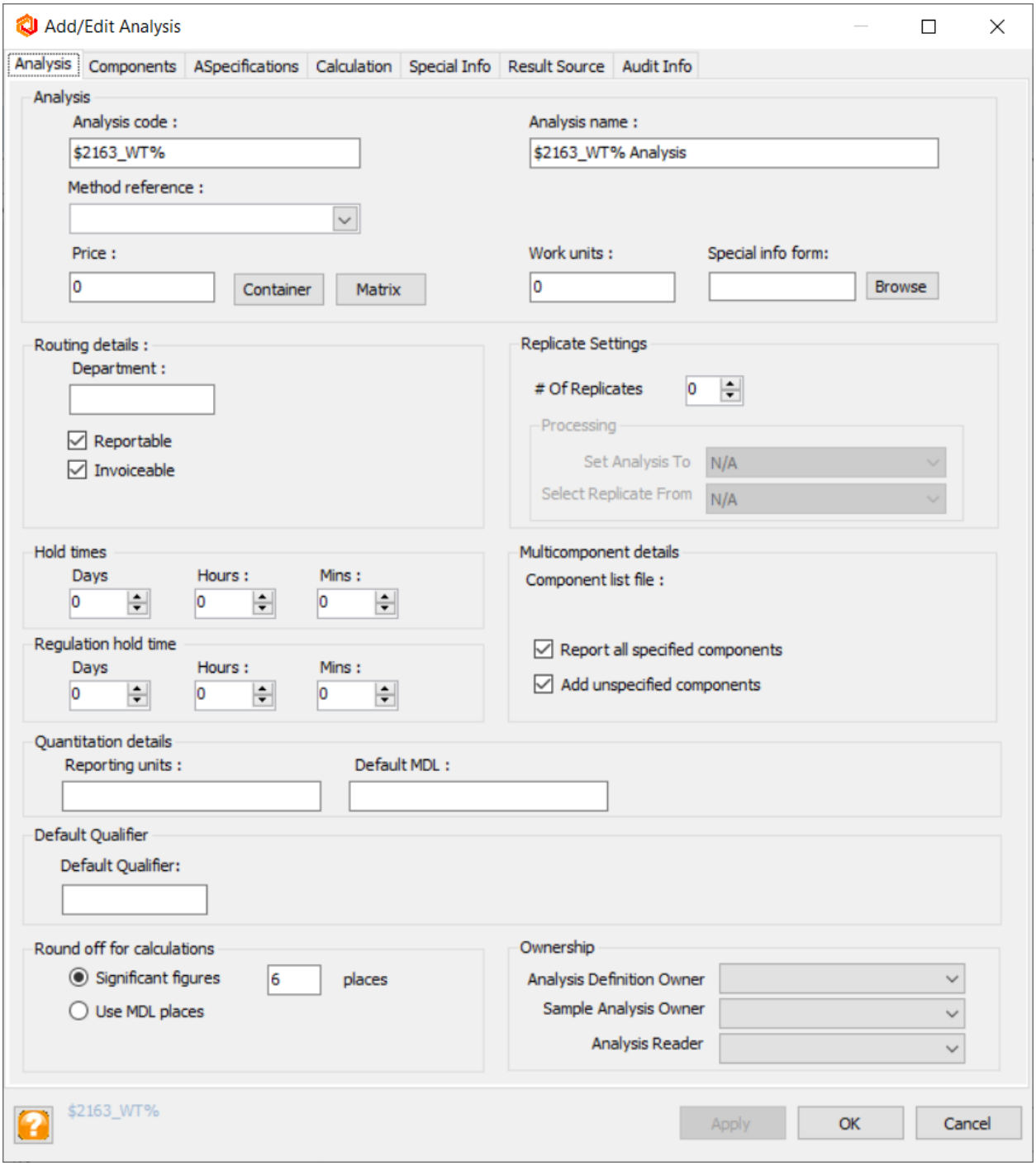


2) 'Add/Edit Analysis' window should open.
   1. **Single Component Analysis:** Click New. Enter Analysis code and Analysis name. Click Apply. Click OK. Select the newly created Analysis code and right click. Select ANALYSIS_ACTIVATE option.

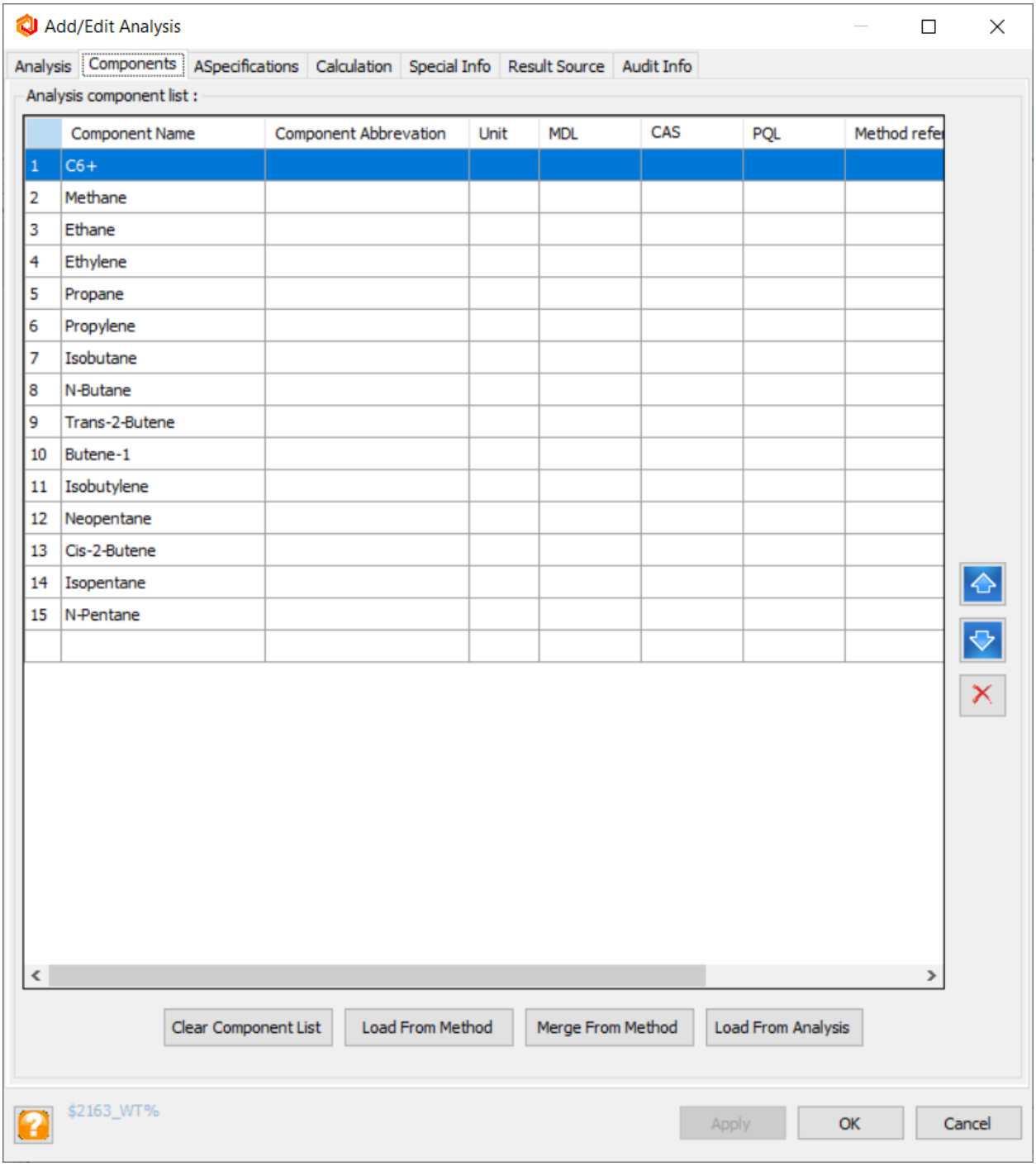




2. **Multi-Component Analysis:** Click New. Enter Analysis code starting with $ and enter Analysis Name=. Click Apply. Click OK.

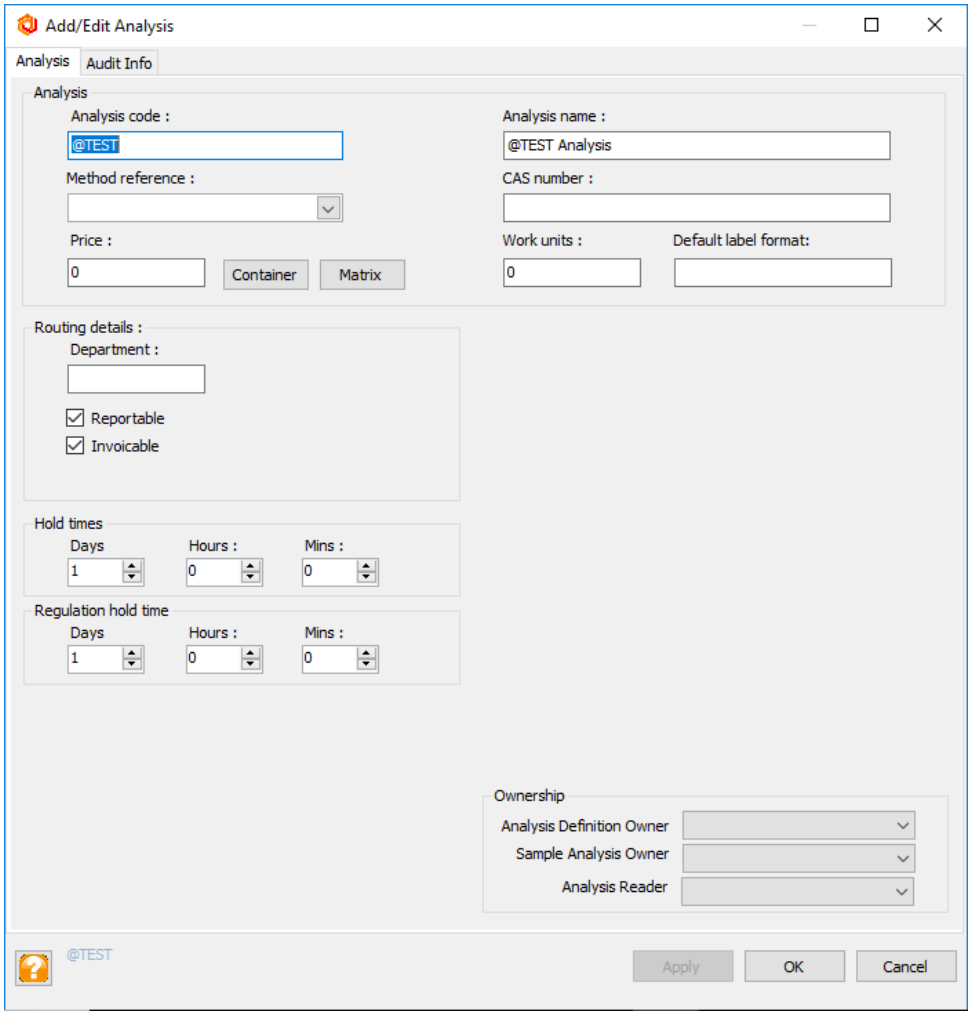


Go to Components tab and add Analytes. Click Apply. Click OK.

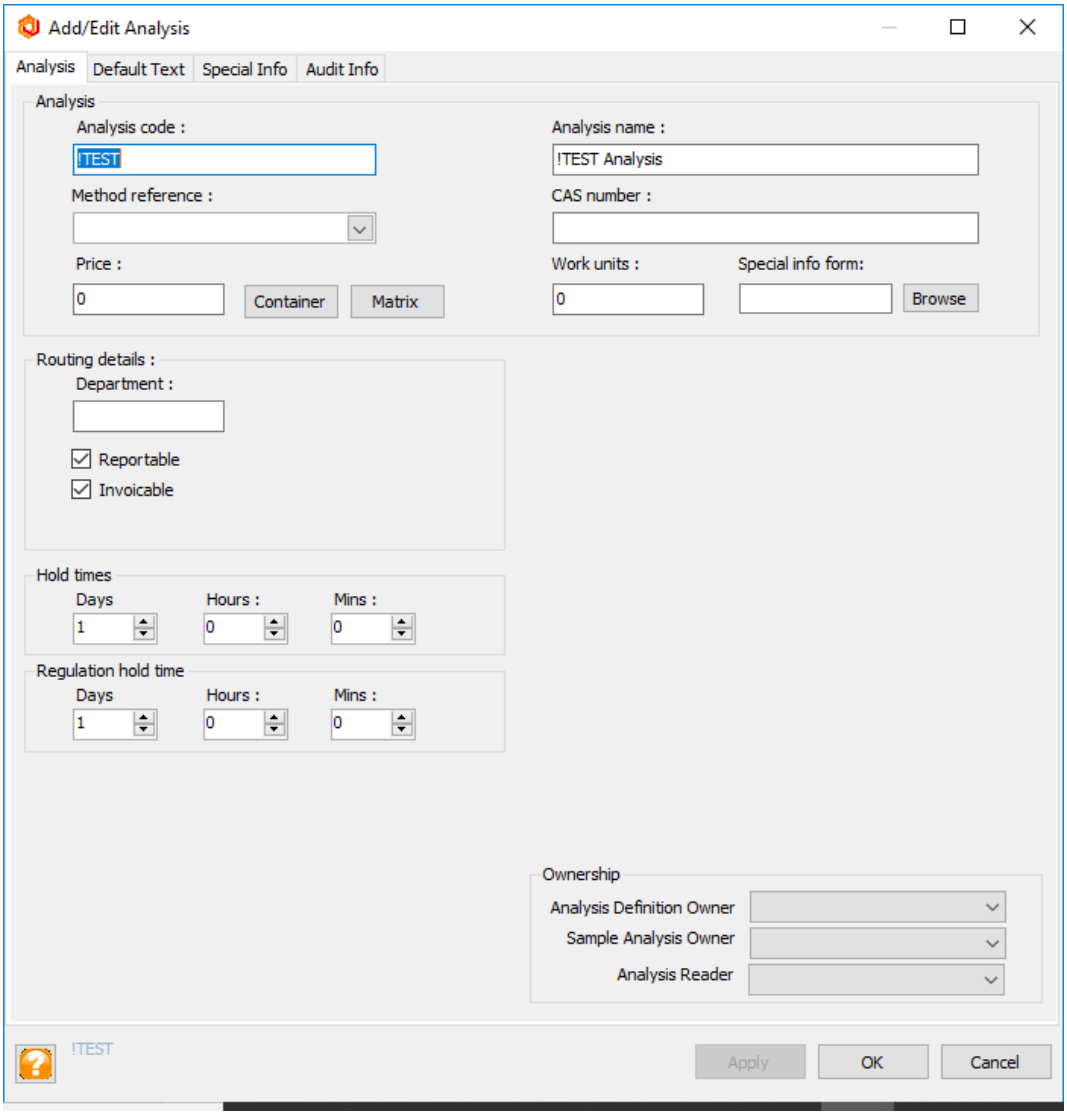


Select the Analysis code and right click. Select ANALYSIS_ACTIVATE option.

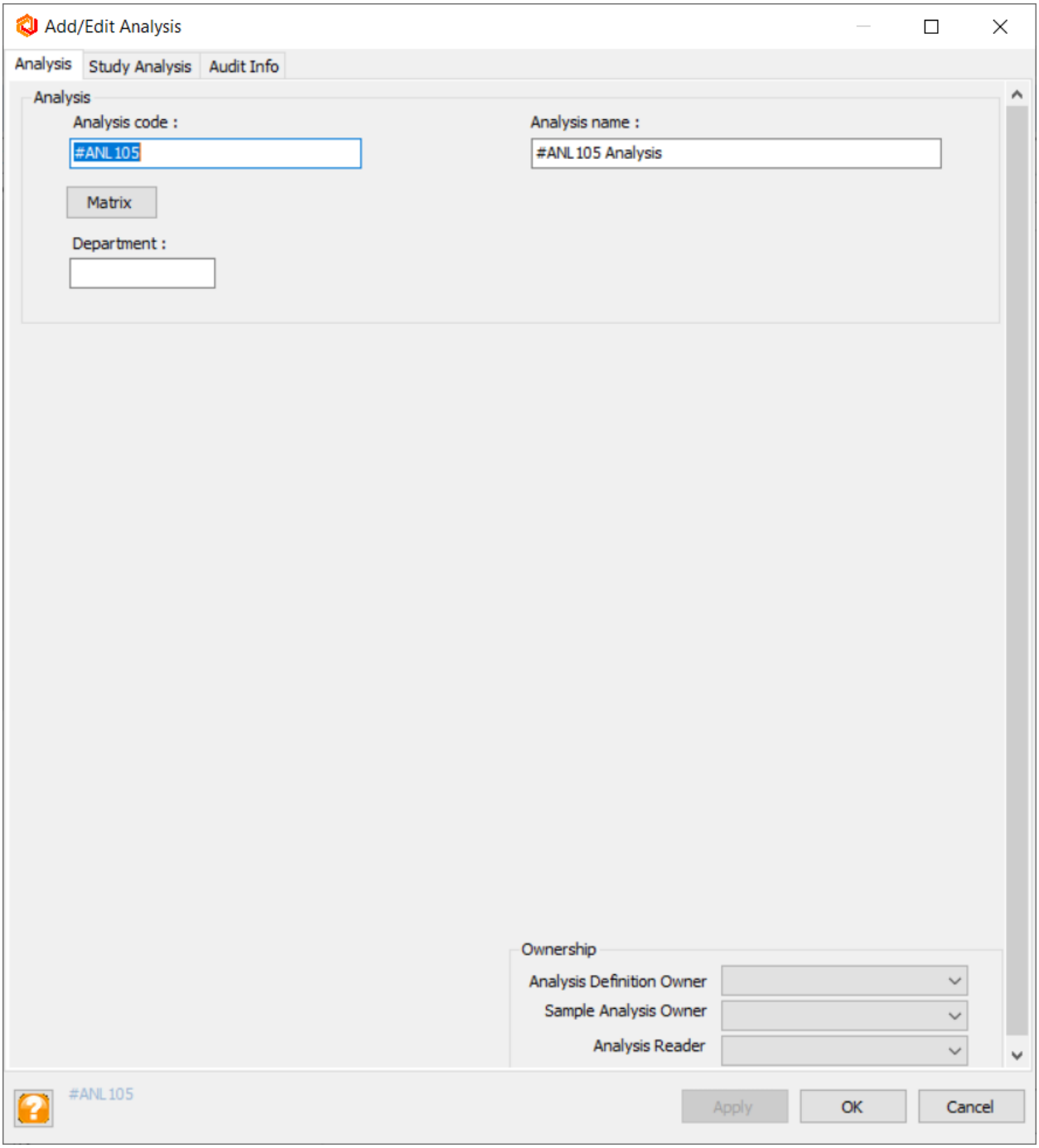
3. **Container Analysis:** Click New. Enter Analysis code starting with @. Click Apply. Click OK. Select the Analysis code and right click. Select ANALYSIS_ACTIVATE option.



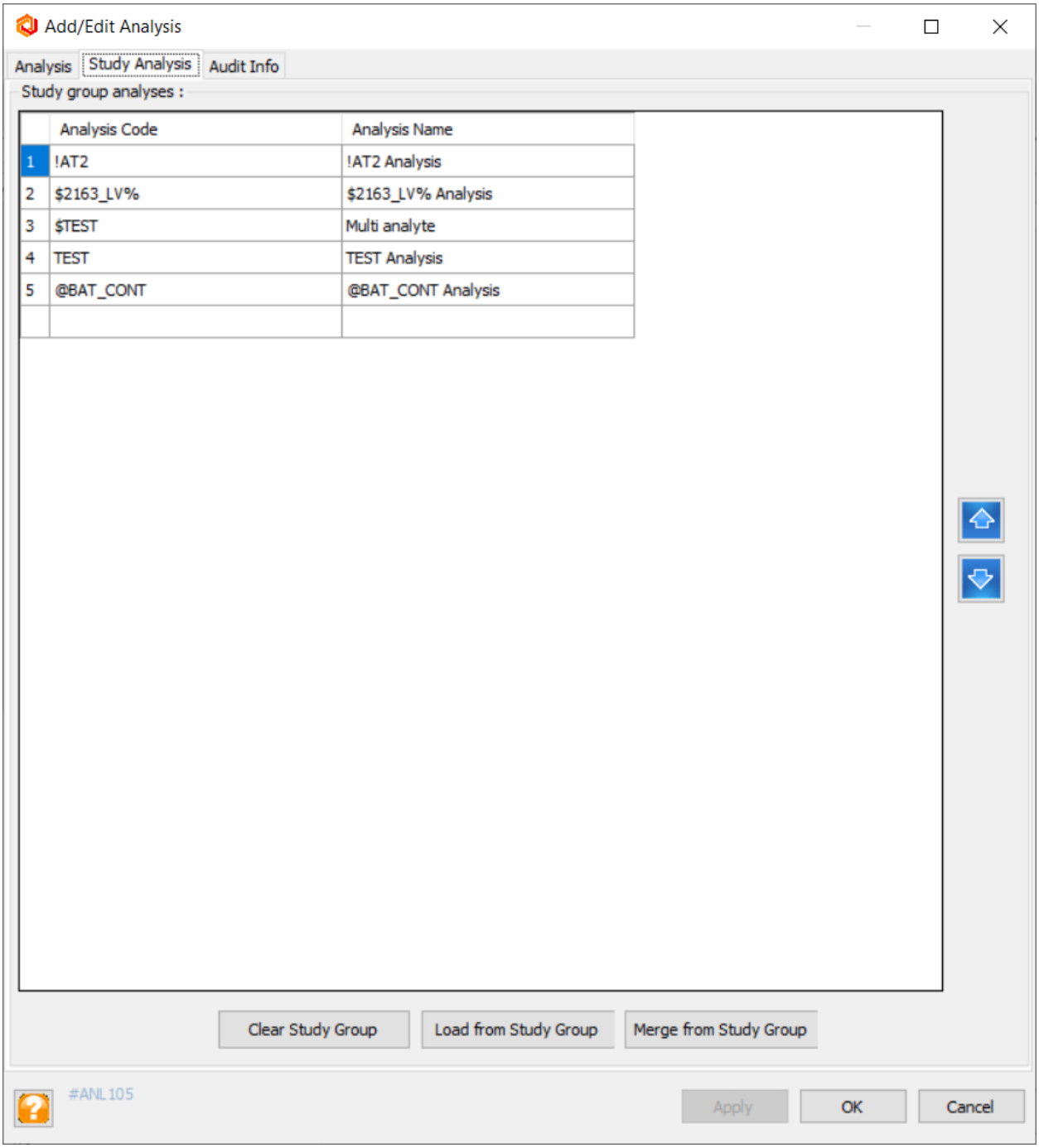
4. **Narrative Analysis:** Click New. Enter Analysis code starting with ! Click Apply. Click OK. Select the Analysis code and right click. Select ANALYSIS_ACTIVATE option.



5. **Study Group Analysis:** Click New. Enter Analysis code starting with #. Click Apply.



Go to second tab and add analyses. Click Apply. Click OK.

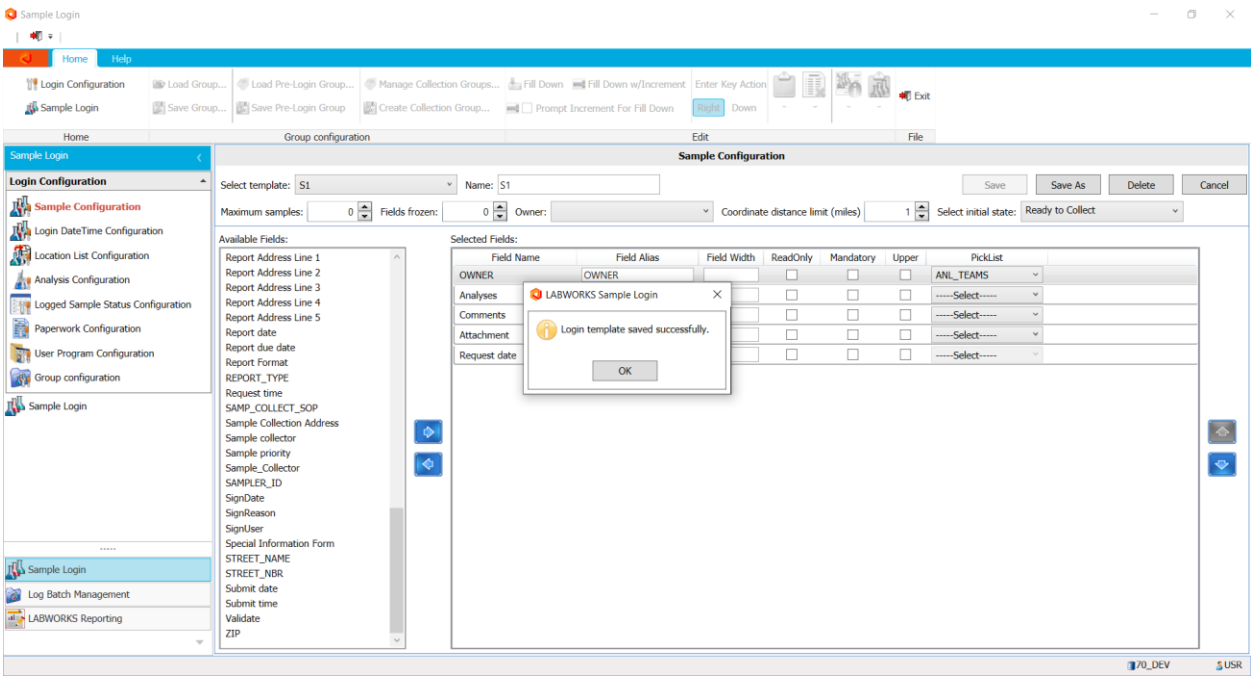


4. Sample Login

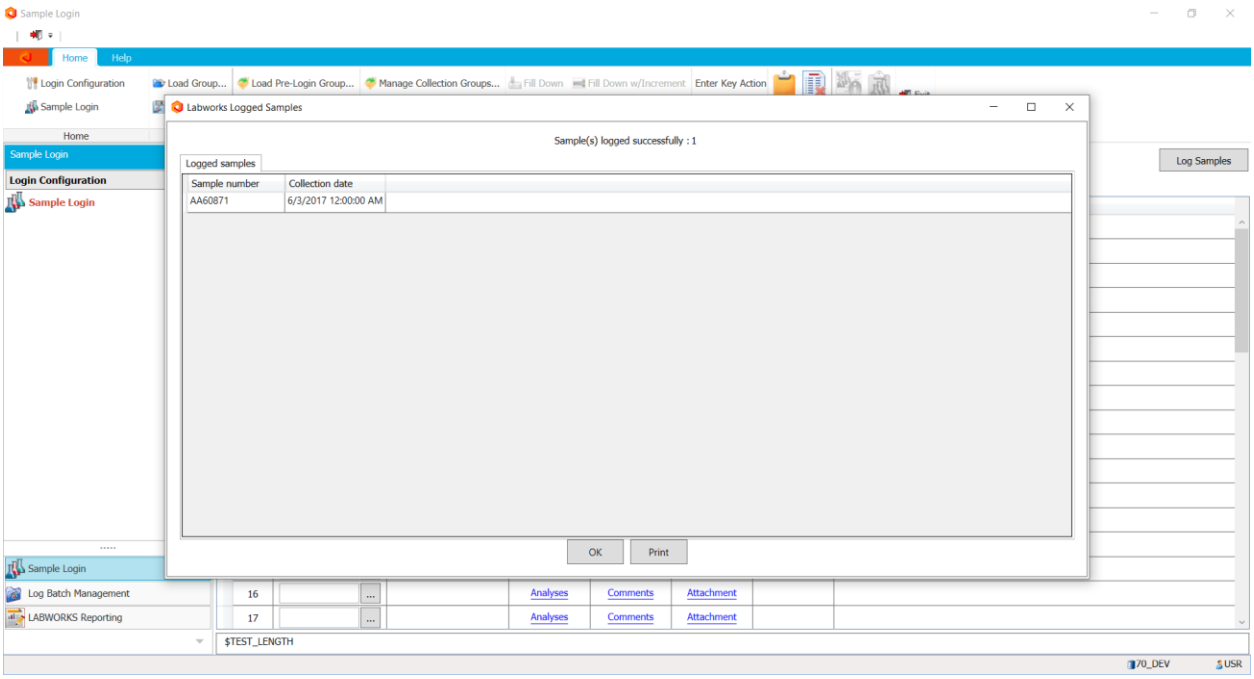
4.1. Login a sample

1) Click on 'LWSampleLogin.exe' application. Select database, enter username, password and click on 'Ok' button. Click on 'Login Configuration' menu from toolbar. Click on 'Select Template' dropdown.

2) Enter name of the new template to be added in 'Name' textbox. Select any one field from 'Available Fields' list and click on forward arrow. Verify selected field name after adding it to 'Selected Fields'. Click on 'Save' button.
3) 'Login template saved successfully' message should be displayed.



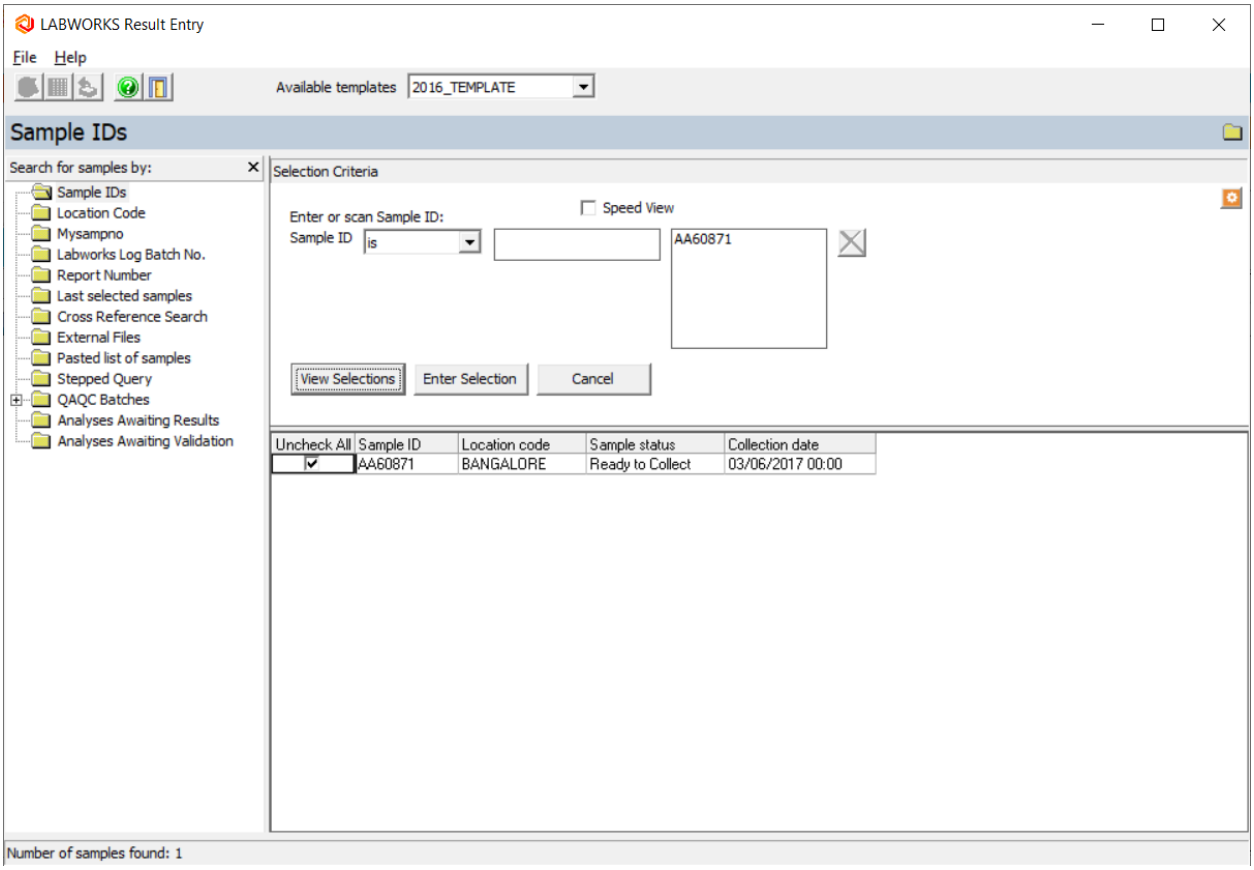
4) From 'Sample Login' window, select template name created in the previous step. Click on ellipsis button for the location code from the grid. Select one or more location code and click on close button.
5) Change the Replicate Settings from Analysis Details pop-up message. Enter number of Replicates, Set analysis To, Select Replicate From fields.
6) Click on 'Log Samples' button. Click on 'Ok' button.
7) Application should log new samples and display 'Labworks Logged Samples' window.



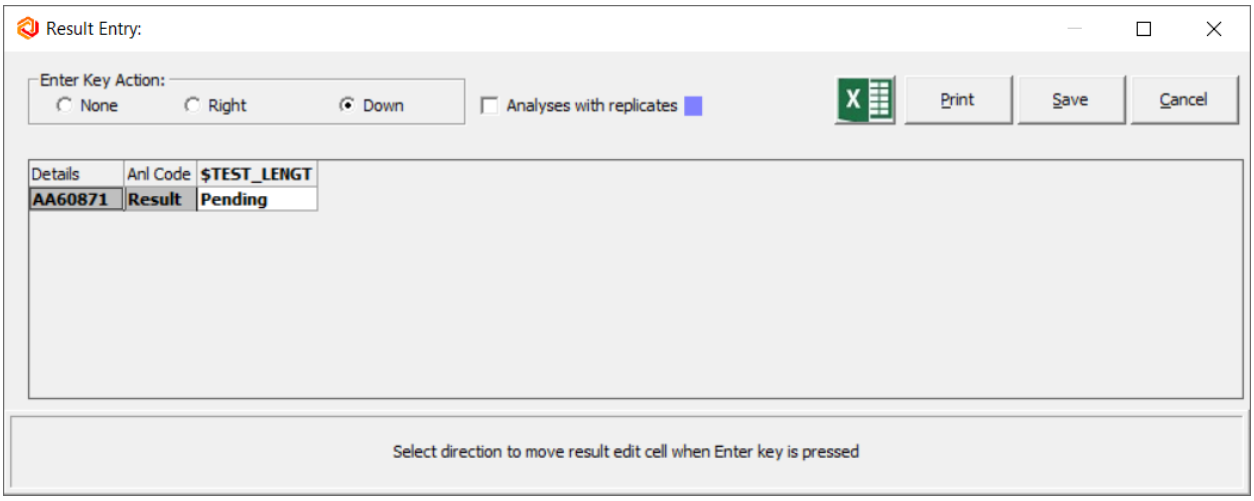
5. Result Entry

5.1. Result Entry

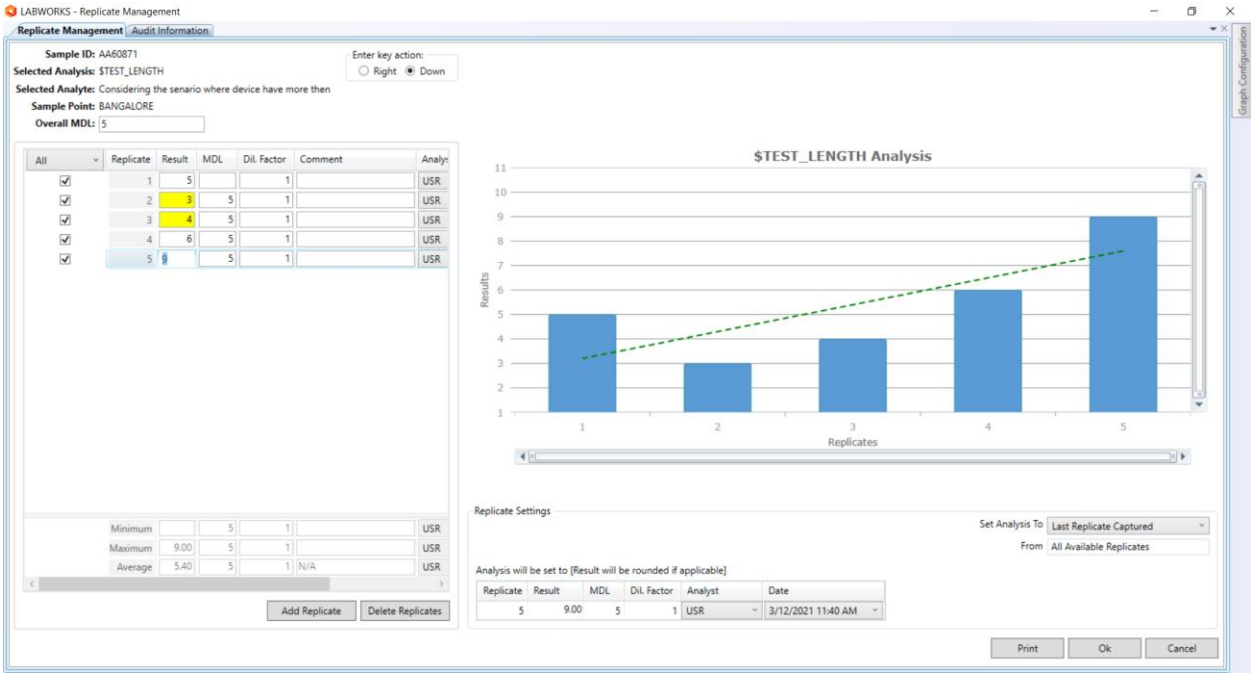
1) Click on ' ResultsEntry6.exe ' application. Click on Result Entry. Select Sample ID. Enter Sample Number. Click on View Selections. Click on Enter Selection.



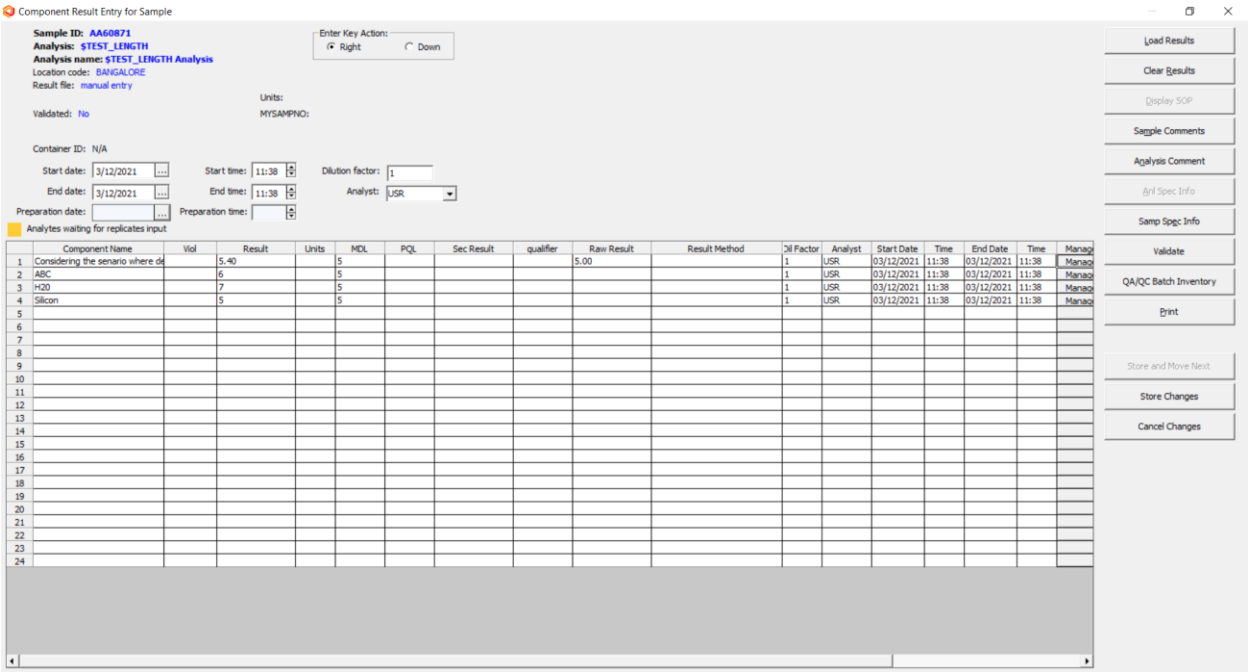
2) In Result Entry window, enter results for all analysis.



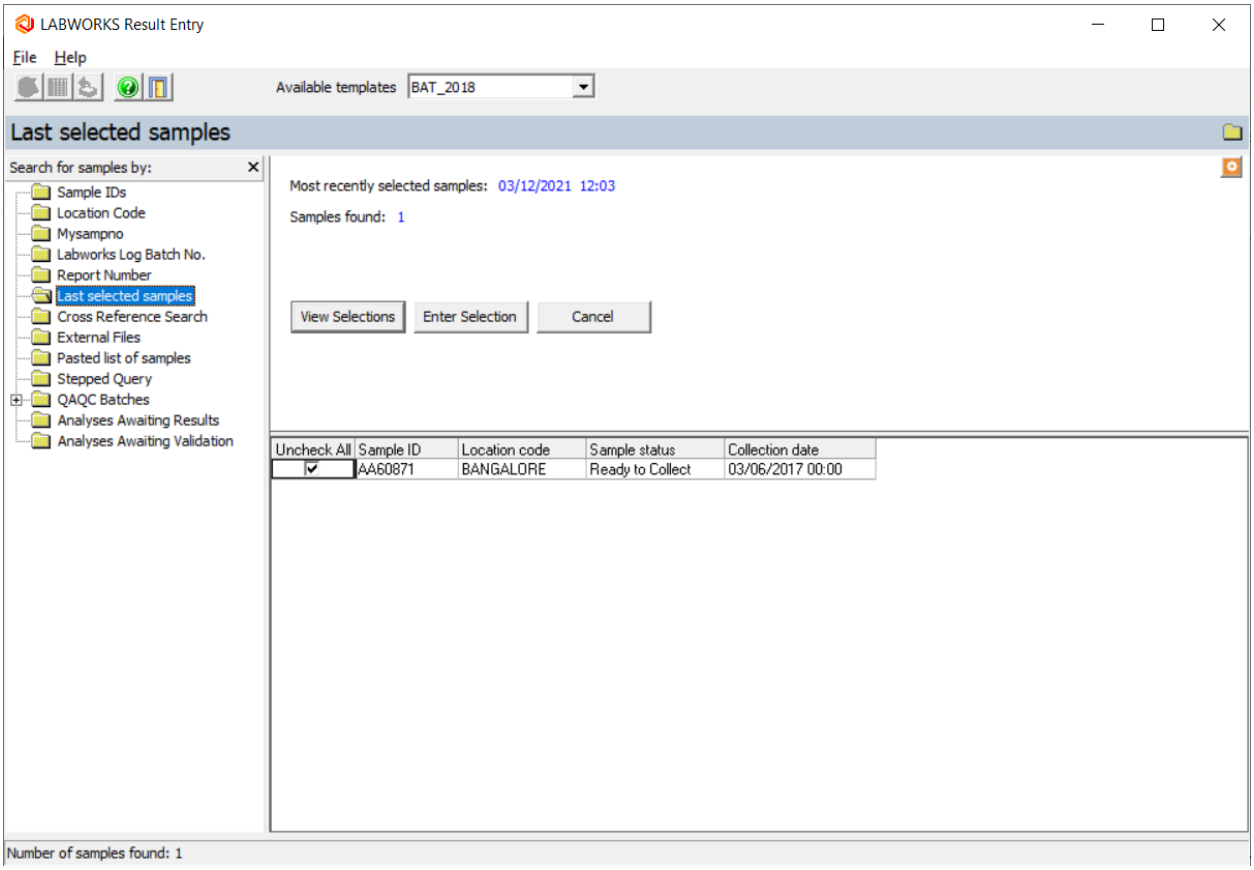
3) User should be able to view already added replicate information for single and multi-component analysis samples.
4) If logged-in user has “Add/Delete replicates” rights then replicates should be added or deleted and result value should be changed accordingly.



5) Click on “Store Results” button for Multi-Component Analysis.



6) Click on “Save” button for analysis other than Multi-Component.
7) Select Last Selected Samples. Click on 'View Selection'. User should view previously stored results.



6. Importing Results

6.1. Result Entry

6.1.1. PR6 File Format – Single Component

1) Pre-requisite -
   1. Create Analysis SC1, SC2.
   2. Create new Sample with analysis SC1 and SC2.
   3. Create PR6 input file for the newly created samples.
2) Launch ResultsEntry6.exe. Go to Import instrument Results. Select Labworks PR6 file format. Select PR6 input file. Click ok.
3) Click “Save” on Result Entry Screen.

6.1.2. PR6 File Format – Multi-Component:

1) Pre-requisite -
   1. Create Analysis $TestMCT with components A and B.
   2. Create new Sample with analysis $TestMCT.
   3. Create PR6 input file for the newly created samples.
2) Launch ResultsEntry6.exe. Select sample created in step 1. Go to Modify Results for $TestMCT Multicomponent Analysis. Click on Load Result. Select Labworks PR6 file format. Select PR6 input file.

3) Click on Store Result. Click on Save Results.

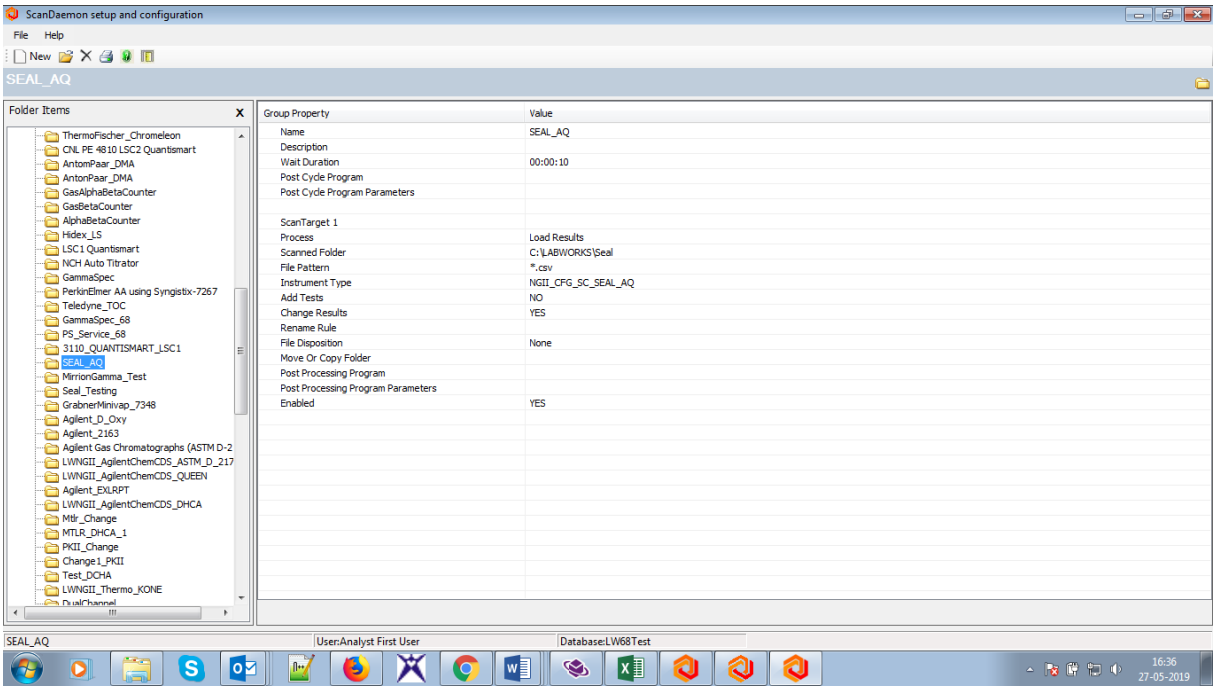
6.2. Multi-Component Transfer

6.2.1. PR6 File Format

1) Pre-requisite
   1. Create Analysis $TestMCT with components A and B.
   2. Create new Sample with analyiss $TestMCT.
   3. Create PR6 input file for the newly created samples.
2) Launch LW Multicomponent Transfer application (LWMultiComponentTransfer.exe). Login with valid credentials.
3) Select result file mode. Click Add file to List. Select Labworks PR6 file format. Select updated PR6 file. Click Find Samples. Click Review. Close Result Review sample window.
   Click Save Results. Launch Results Entry. Open the sample details for which results is posted.

6.3. Scan Daemon

1) Go to C:\LABWORKS\LWEXE\Server path. Launch ScanDaemon Setup and Configuration application (LWScanDaemonConfiguration.exe). Create a ScanGroup by entering appropriate ScanGroup properties. Click “OK” button.



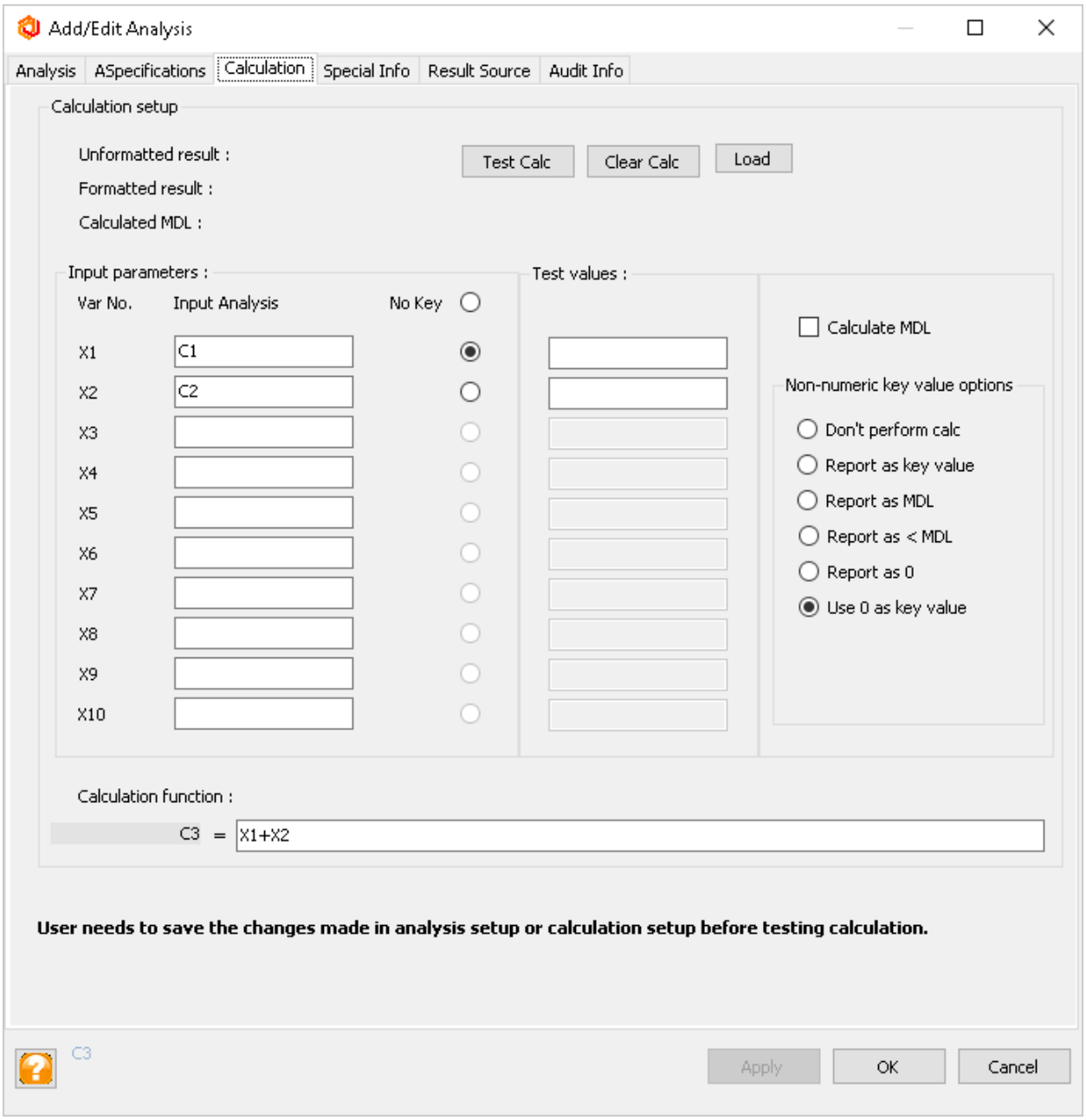
4) Go to C:\LABWORKS\LWEXE\Server path. Launch 'LW Service Controller' application (LWServiceControllers.exe). Click on 'ScanDaemon Service Controller' tab. Select Scan Group from 'Available Scan groups' dropdown and click on 'Start group scanning process' button. Status should be displayed as “Waiting” in Orange color.
5) Let the application scan the files as configured for the scan group through the service.
6) Launch Result Entry application. Check that all the results corresponding to the respective samples are displayed.

7. Performing Calculations

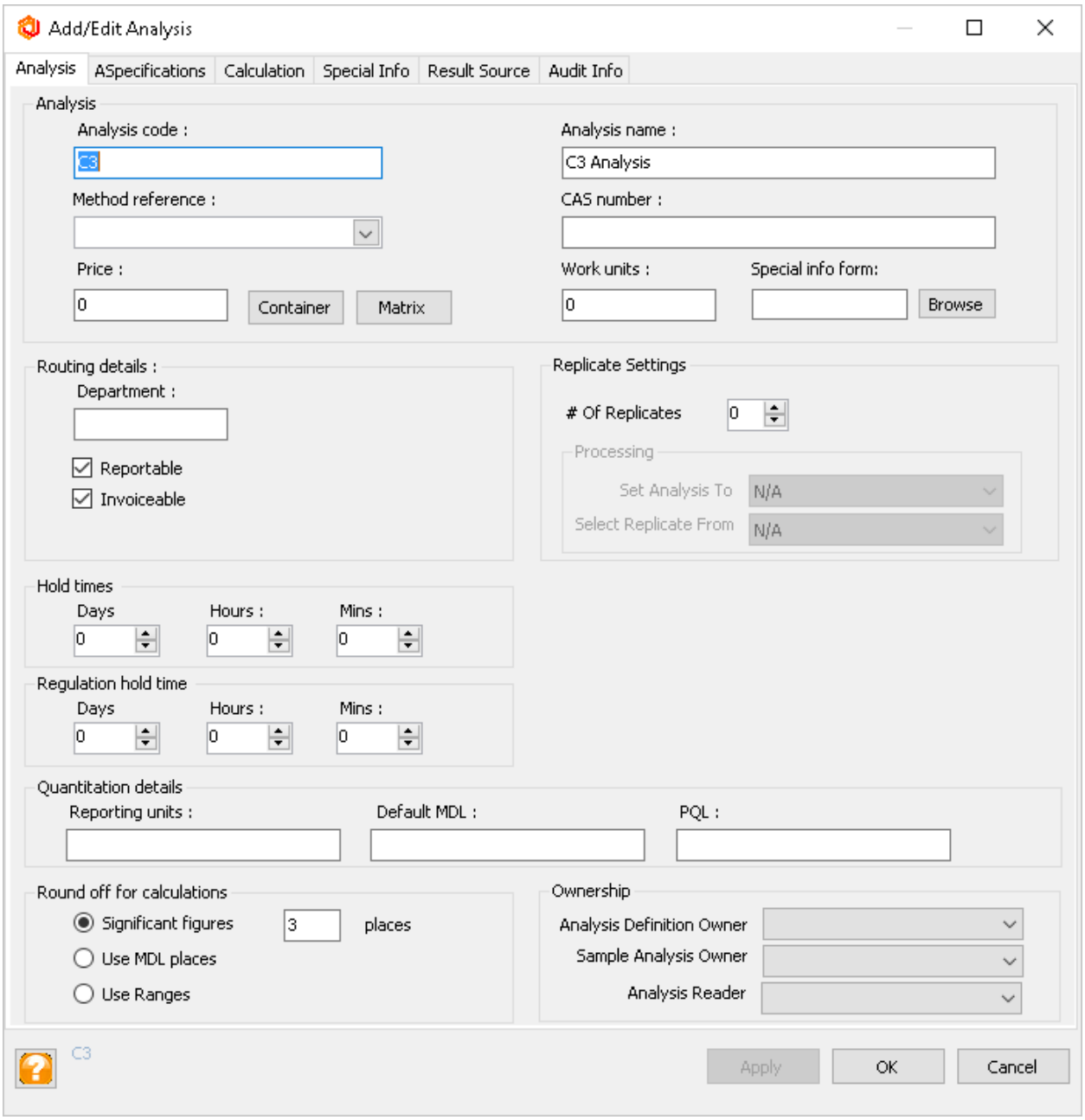
7.1. Built-in

1) Precondition :
   Go to System Manager Application and select Use_Calculation_Engine checkbox.

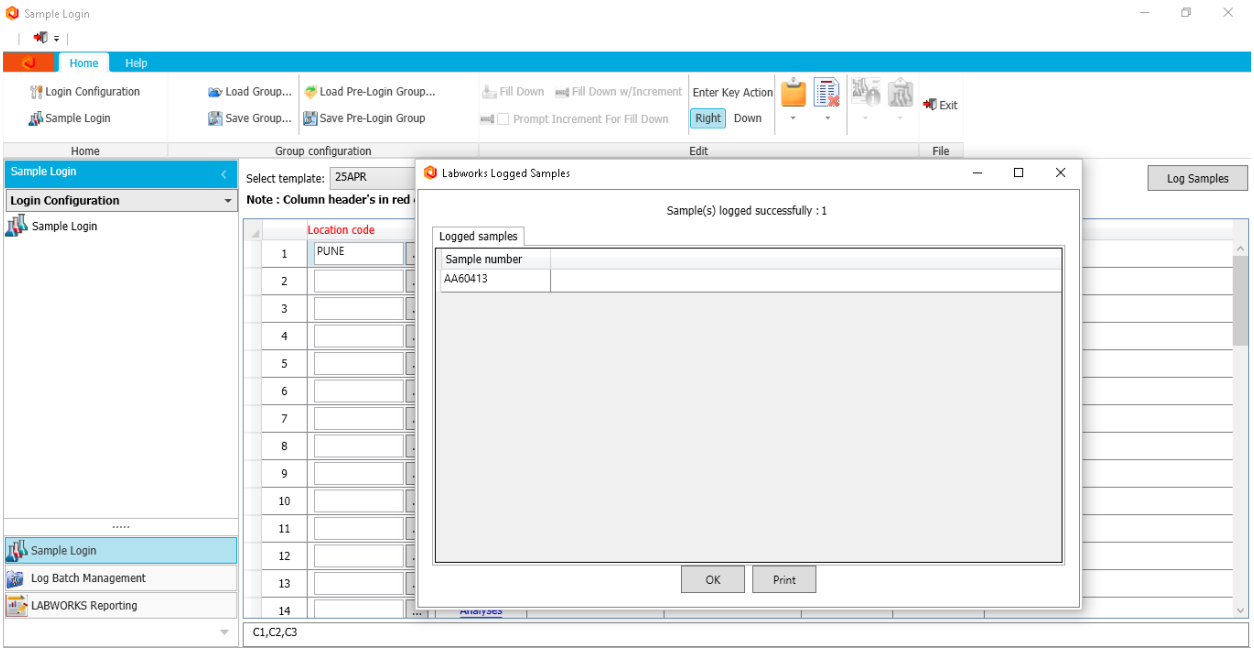
2) Create ACODEs C1, C2 & C3. Define calculation for ACODE C3, Calculation tab has X1=C1, X2=C2. Calculation function=X1+X2. Create a sample with ACODEs: C1, C2 and C3.



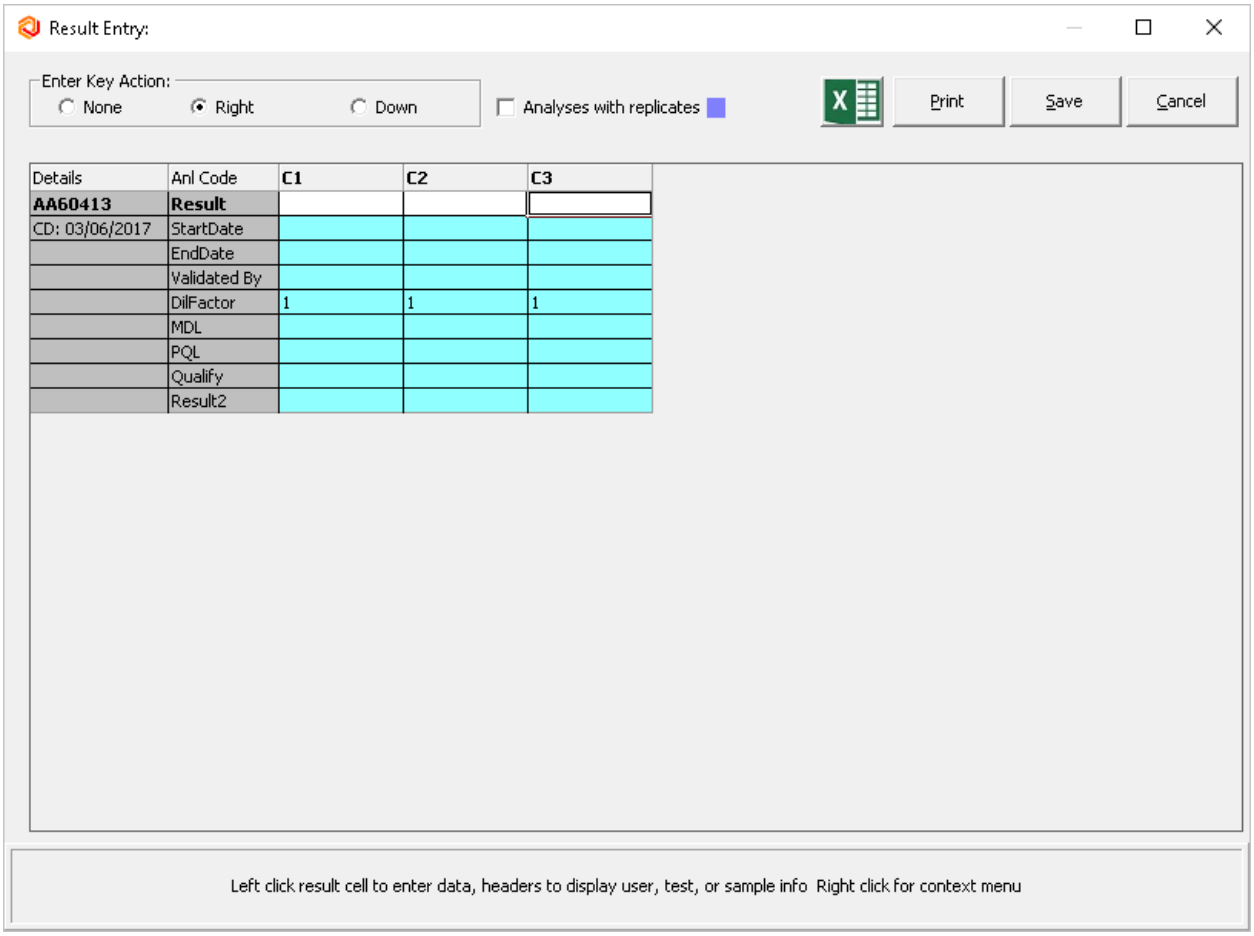
3) On Analysis Maintenance, select radio button “Significant Figures” and enter no. of places as 3.



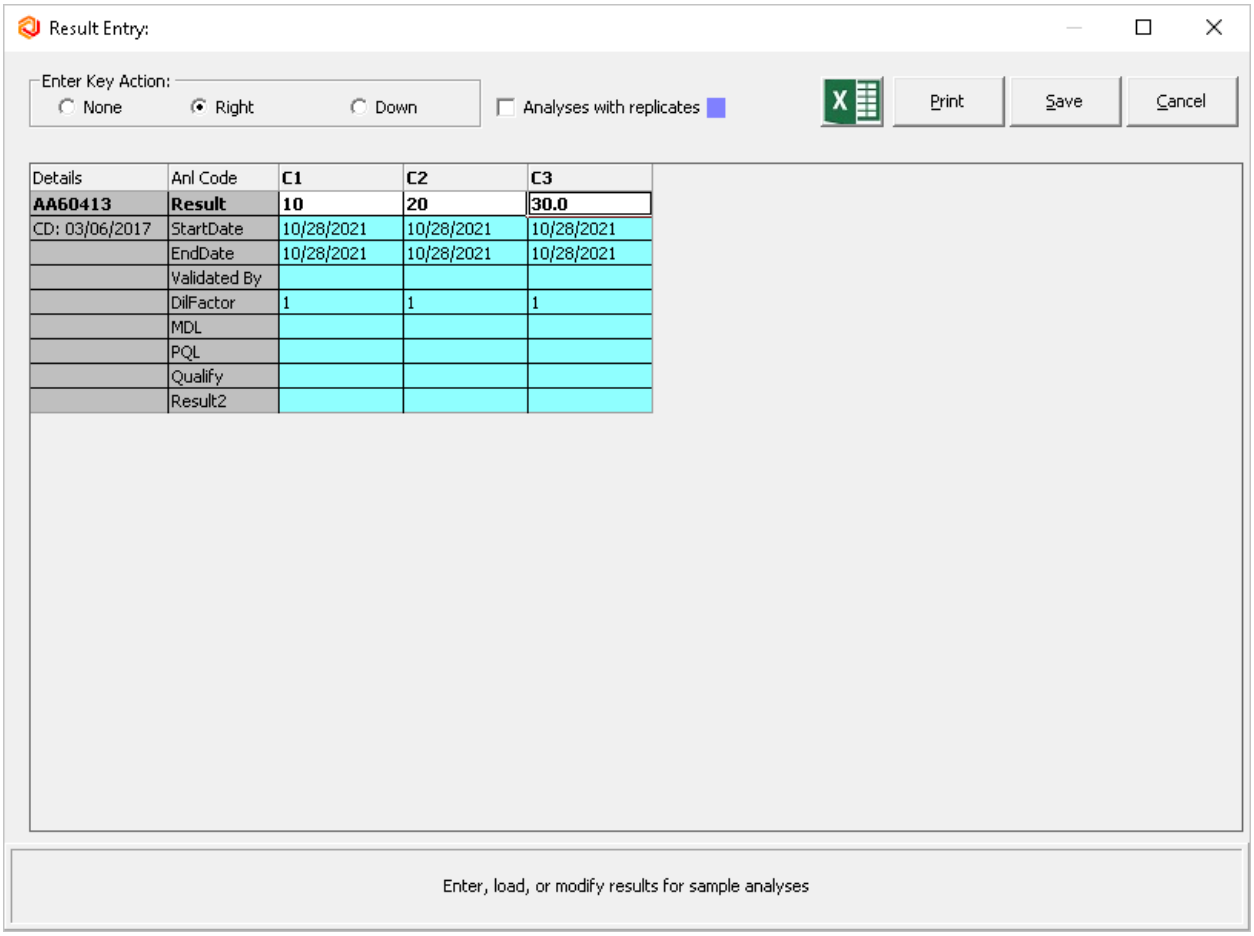
4) Create a sample ID with ACODES: C1, C2 and C3.



5) Launch Result Entry application. Click on Result Entry. Select Sample ID. Enter Sample Number. Click on View Selections. Click on Enter Selection.

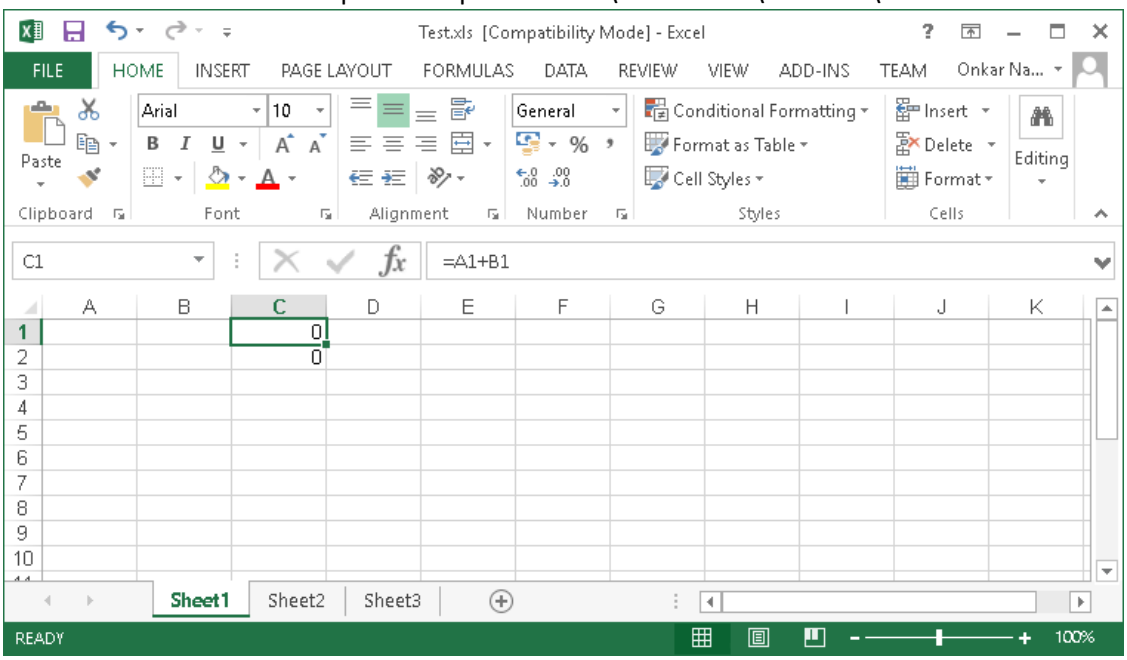


6) Enter results for analysis C1 and C2. Result value should be automatically calculated for C3.

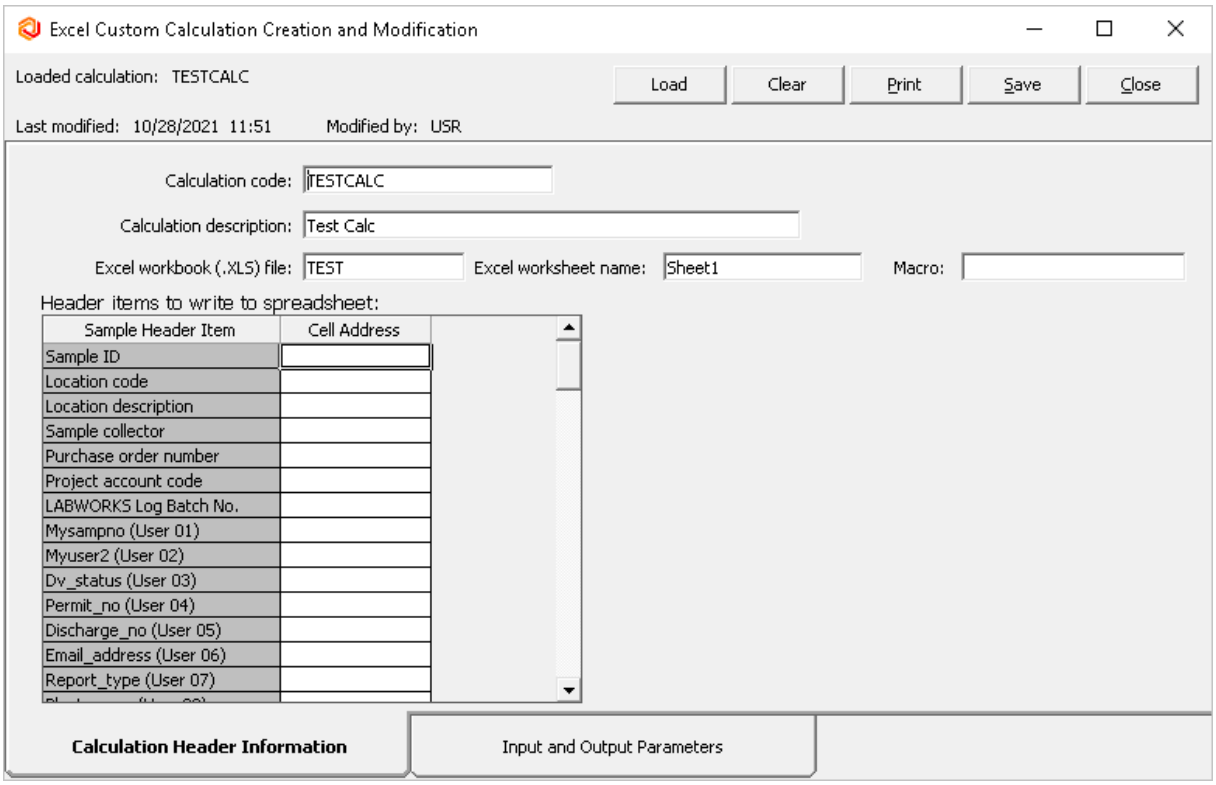


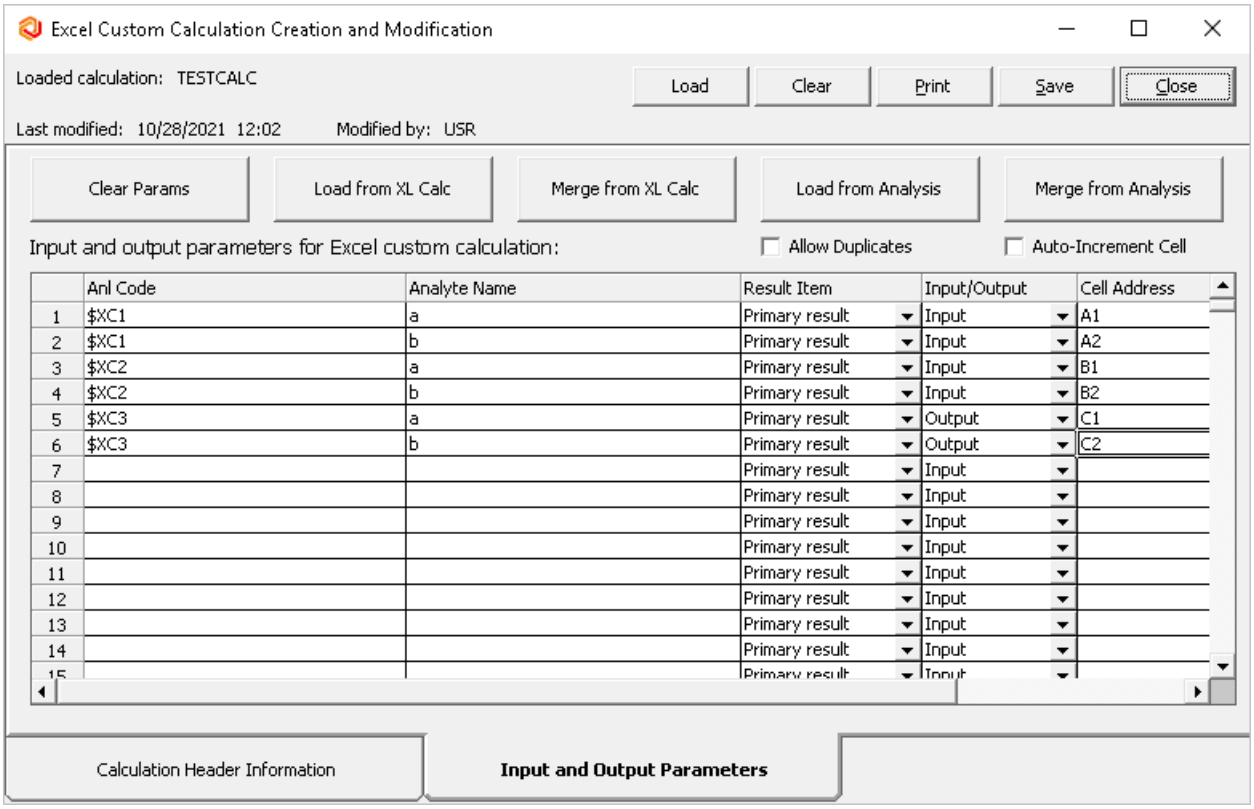
7.2. Excel

1) Create excel calculation template and place it at C:\LABWORKS\LWDATA\xlcalc.

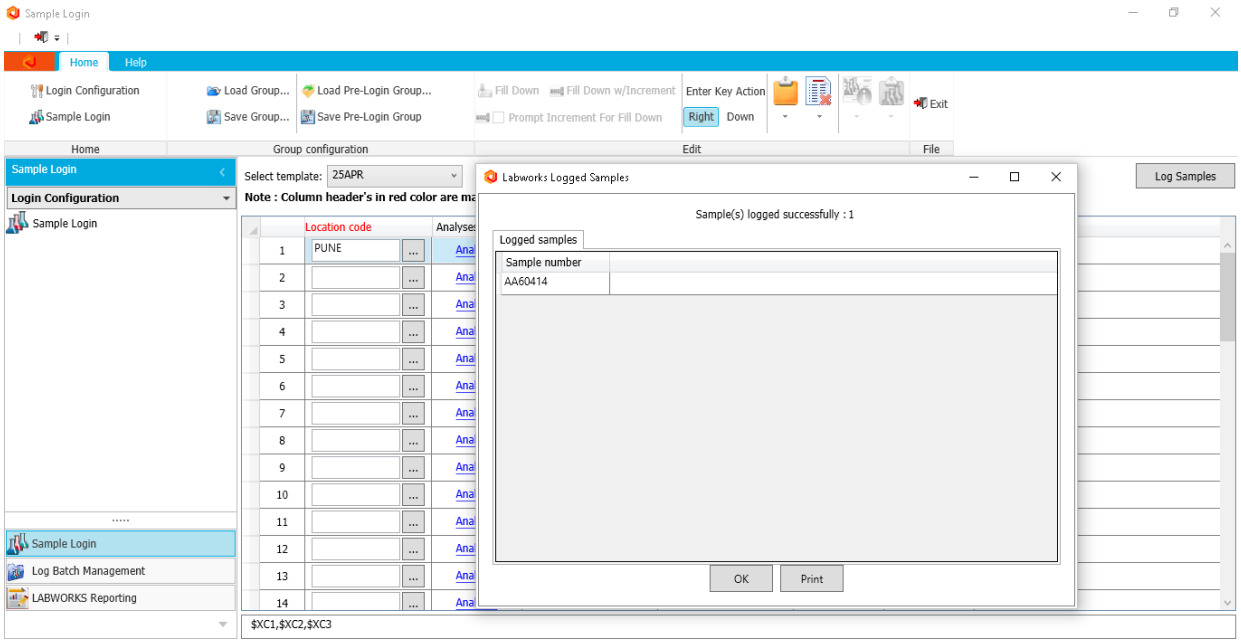


2) Launch Excel Calculation Setup. Click Setup. Click Modify. On Calculation Header Information tab, select .XLS file having result data and calculation formula. Enter Sheet name.
3) On Input and Output Parameters tab, click Load from Analysis and select $XC1, $XC2 and $XC3. For $XC1 and $XC2, select Input and enter cell address. For $XC3, select Output and enter cell address. Click Save.

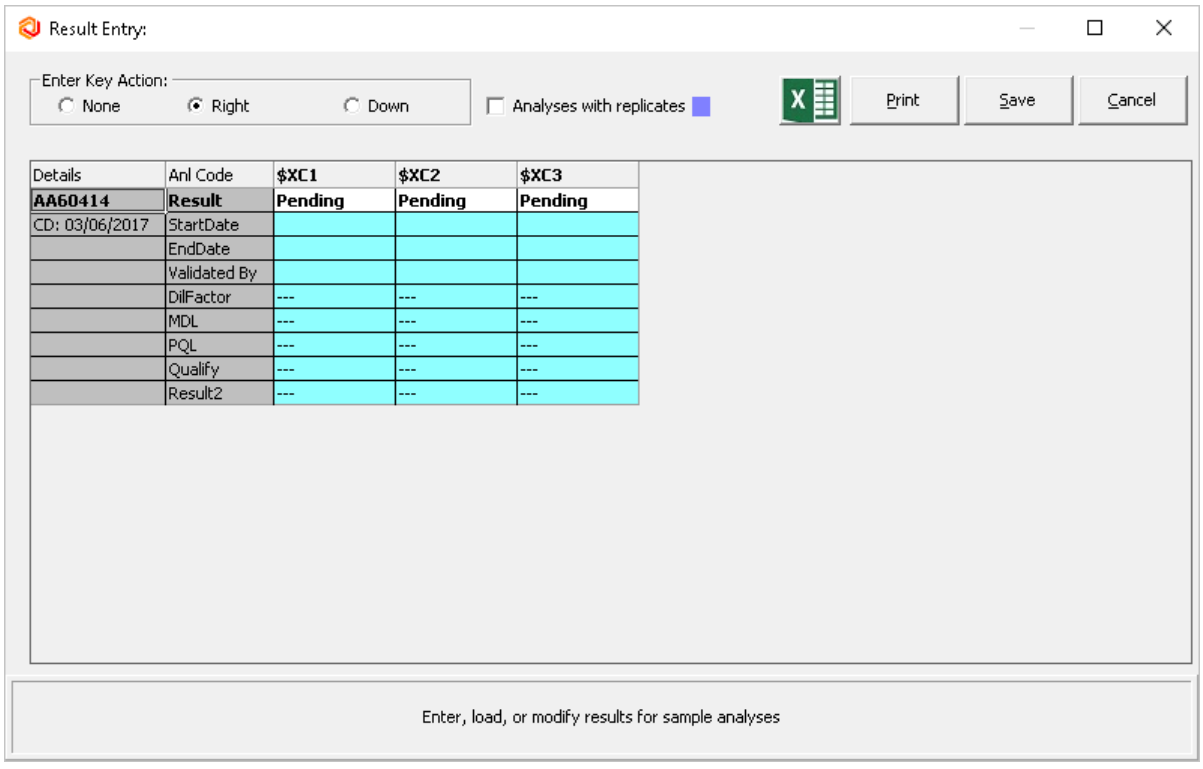




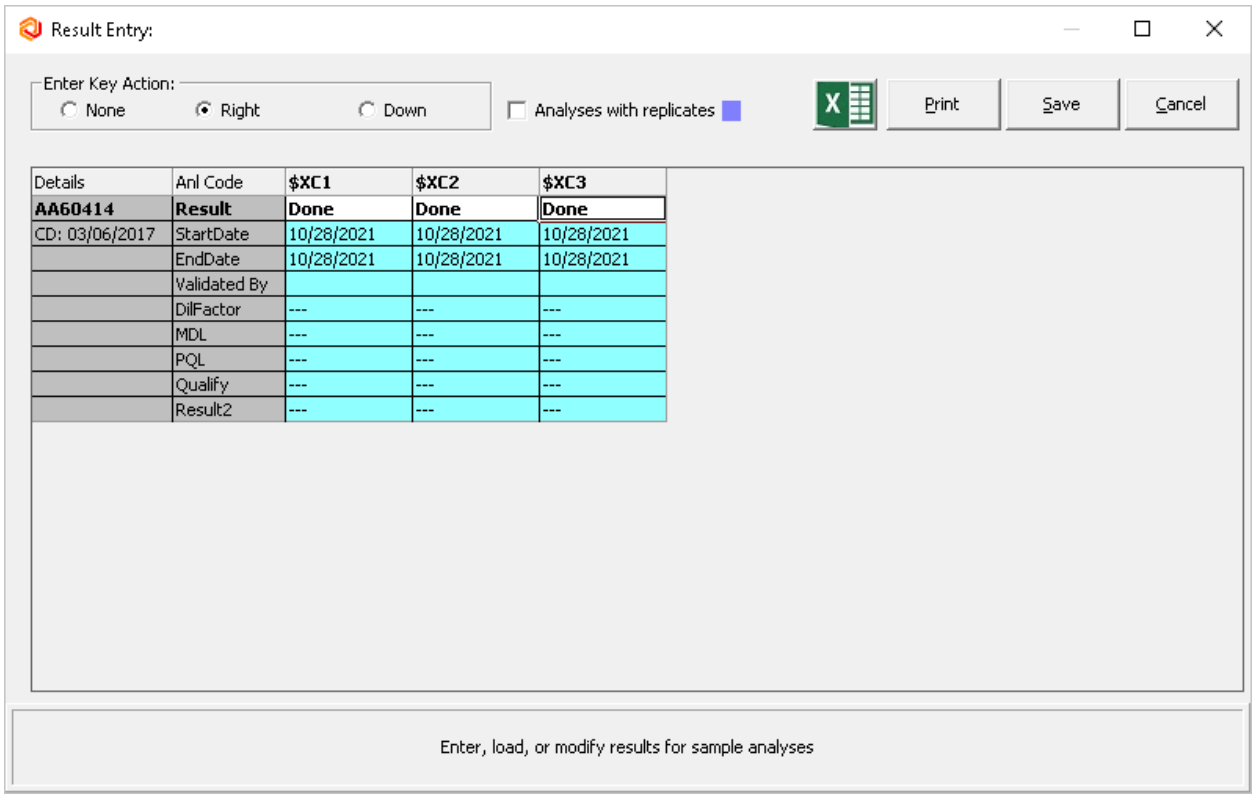
4) Log-in samples for with ACodes created in above steps.



5) Launch Result Entry application. Click on Result Entry. Select Sample ID. Enter Sample Number. Click on View Selections. Click on Enter Selection.



6) Enter results for analysis $XC1 and $XC2. Result value should be automatically calculated for $XC3.

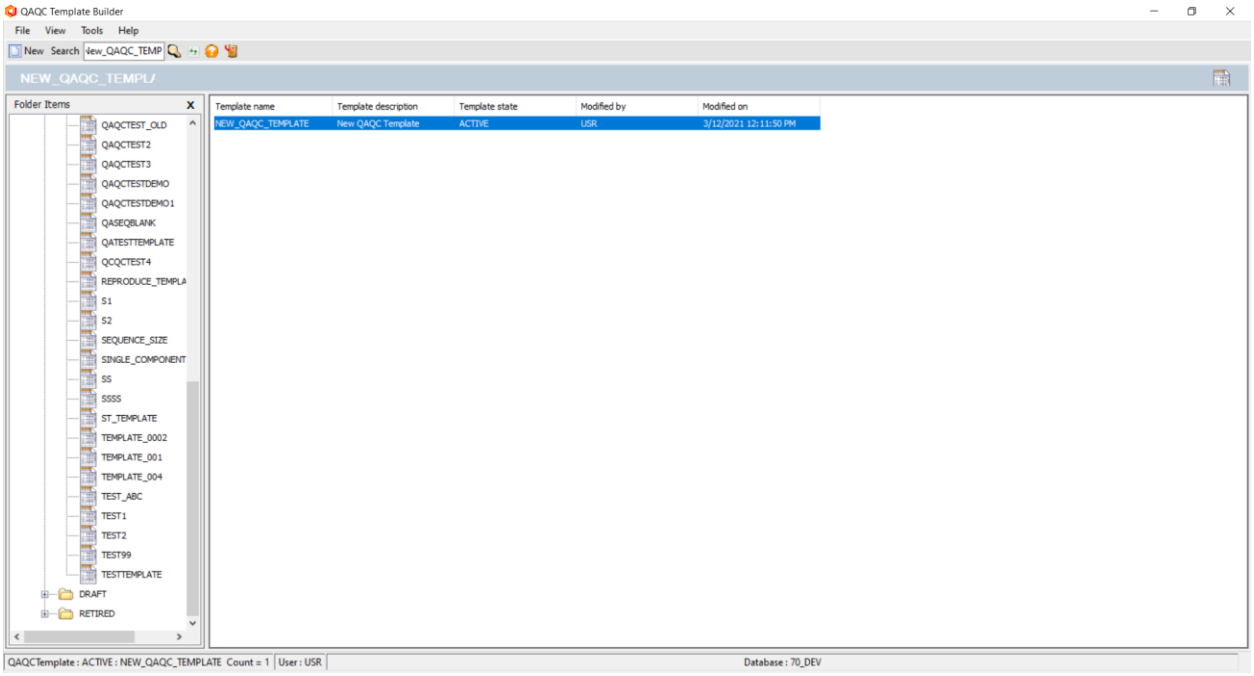


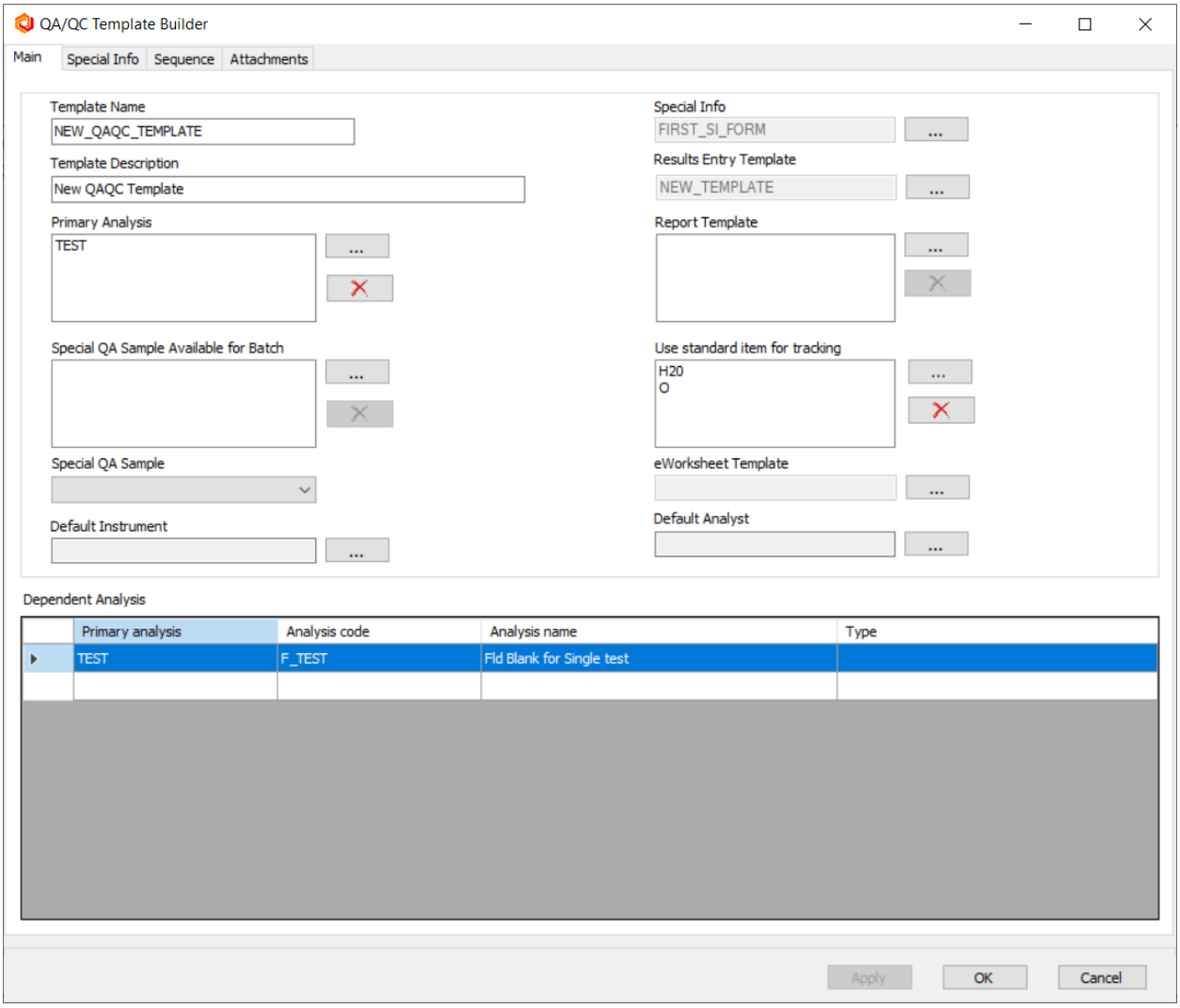
Details	Anl Code	$XC1	$XC2	$XC3
AA60414	**Result**	**Done**	**Done**	**Done**
CD: 03/06/2017	StartDate	10/28/2021	10/28/2021	10/28/2021
	EndDate	10/28/2021	10/28/2021	10/28/2021
	Validated By			
	DilFactor	---	---	---
	MDL	---	---	---
	PQL	---	---	---
	Qualify	---	---	---
	Result2	---	---	---

8. Generate QA/QC Batch

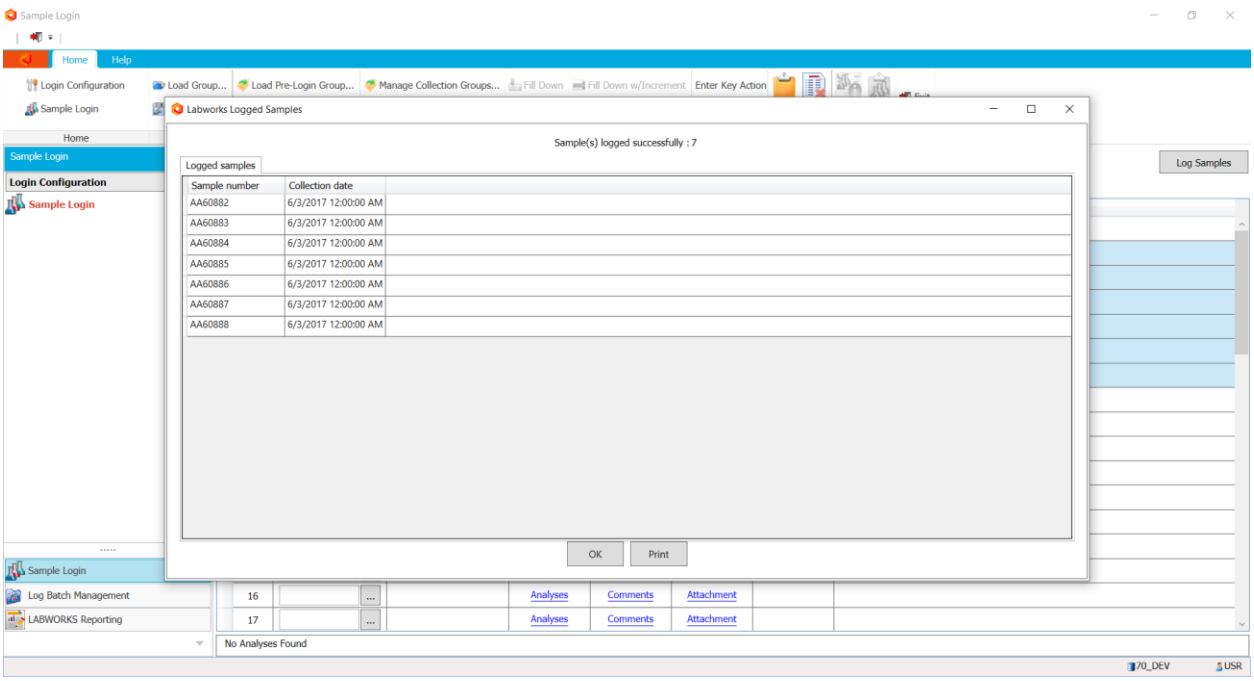
8.1. QA/QC Template Builder

2) Click on ' LWQAQCTemplateBuilder.exe'. Click on 'New' button. Enter the template details in Main tab. Enter the sequence details in Sequence tab. Newly created QA QC Template is displayed in the list.



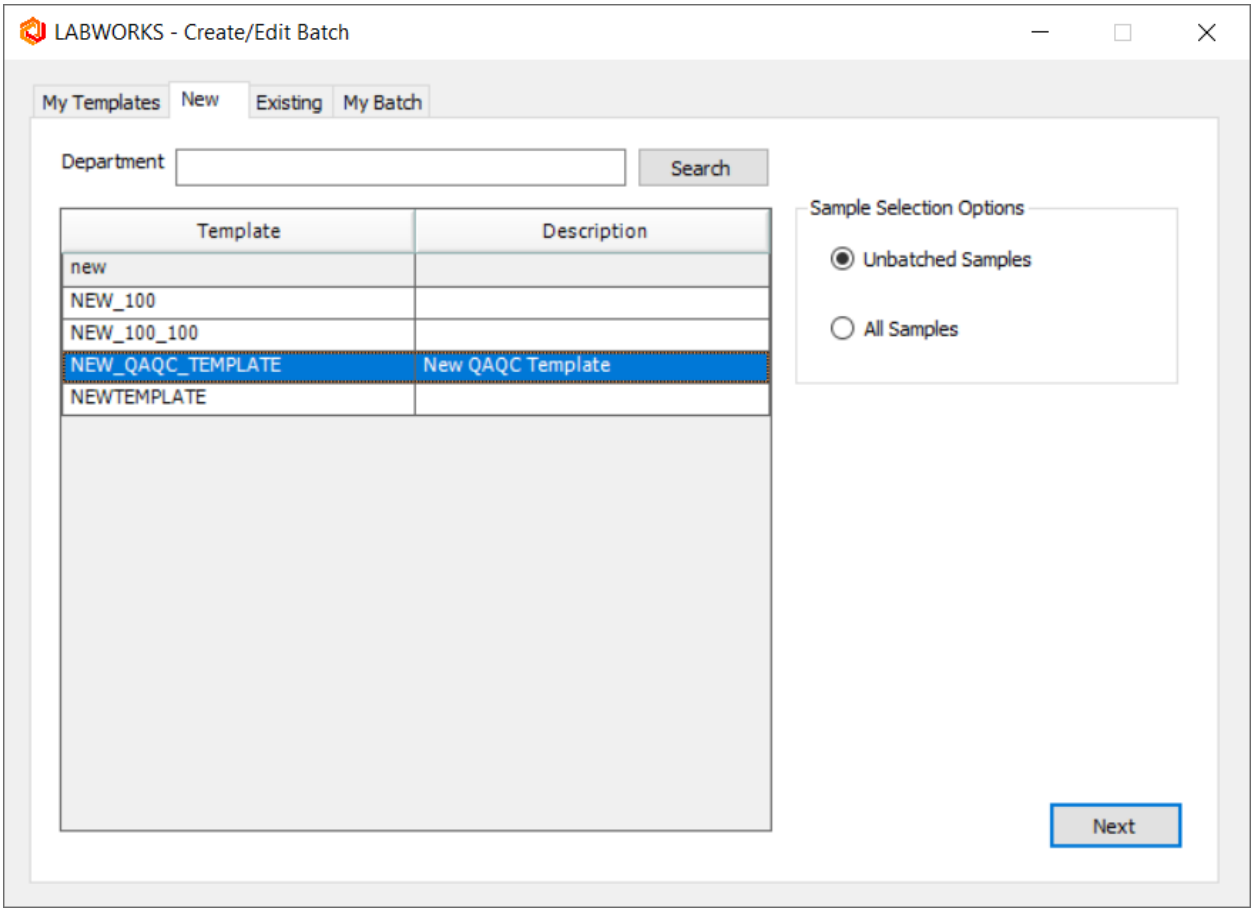


3) Launch “LWSampleLogin.exe”. Login samples to be included in the batch.

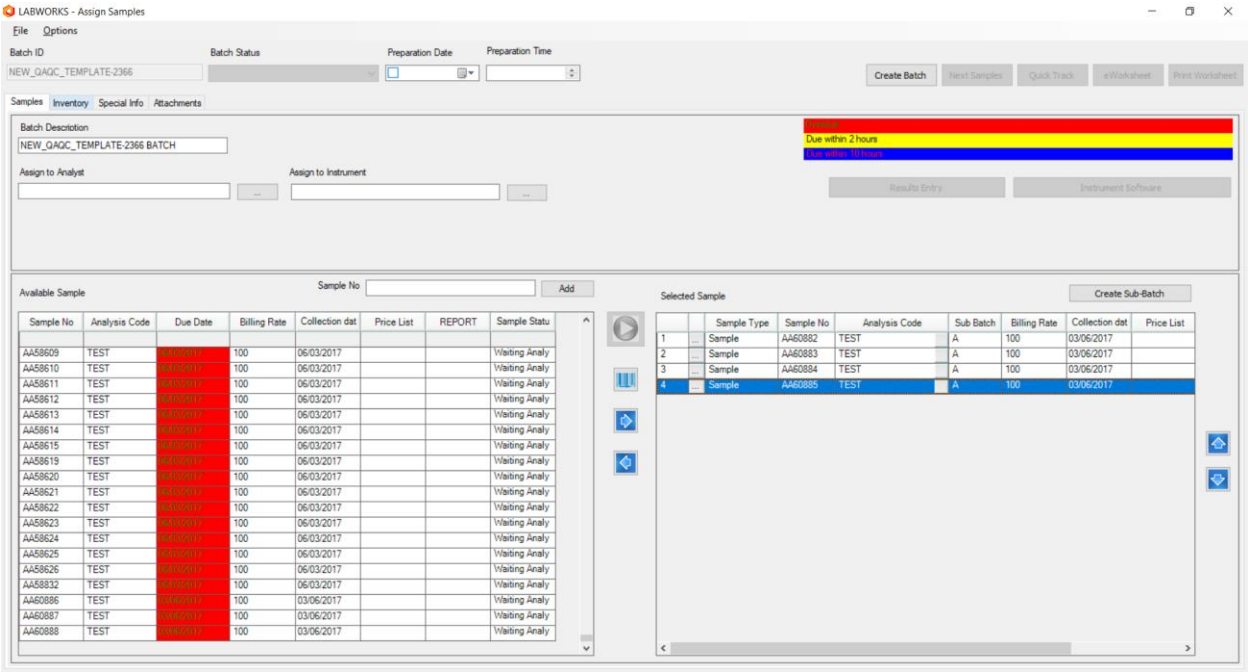


8.2. QA/QC Batch Builder

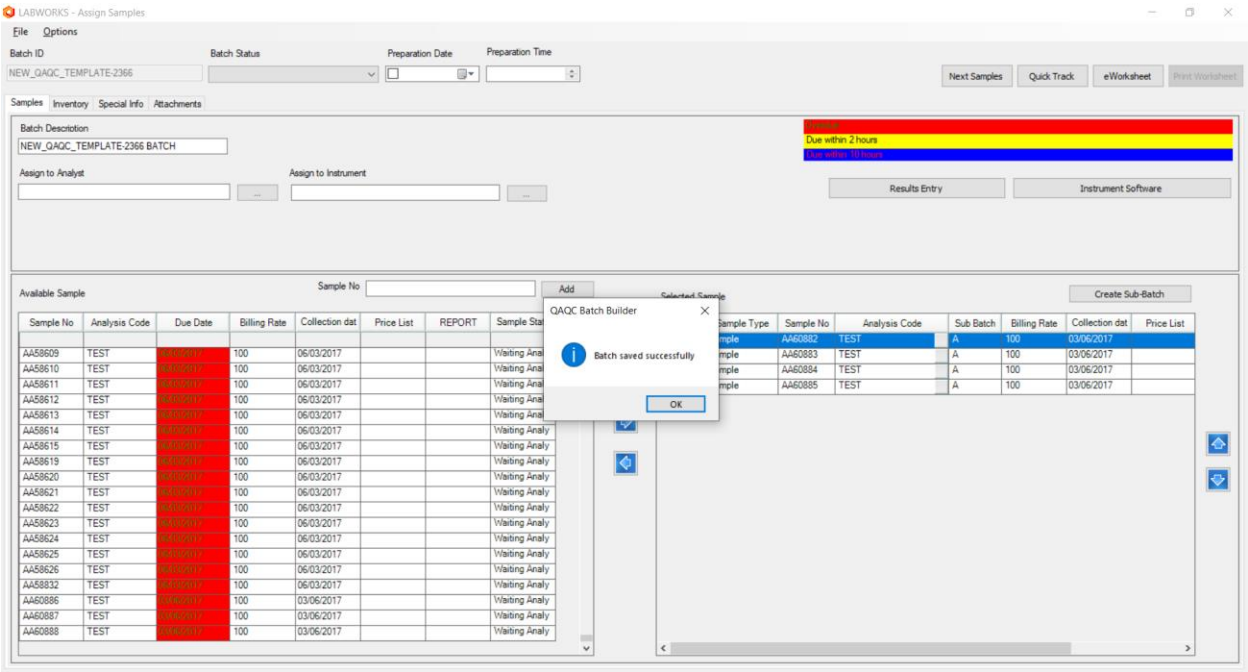
1) Launch “LWQAQCBatchBuilder.exe”. Select the newly created template, radio button for sample selection option as “Unbatched Samples” and click on 'Next' button.



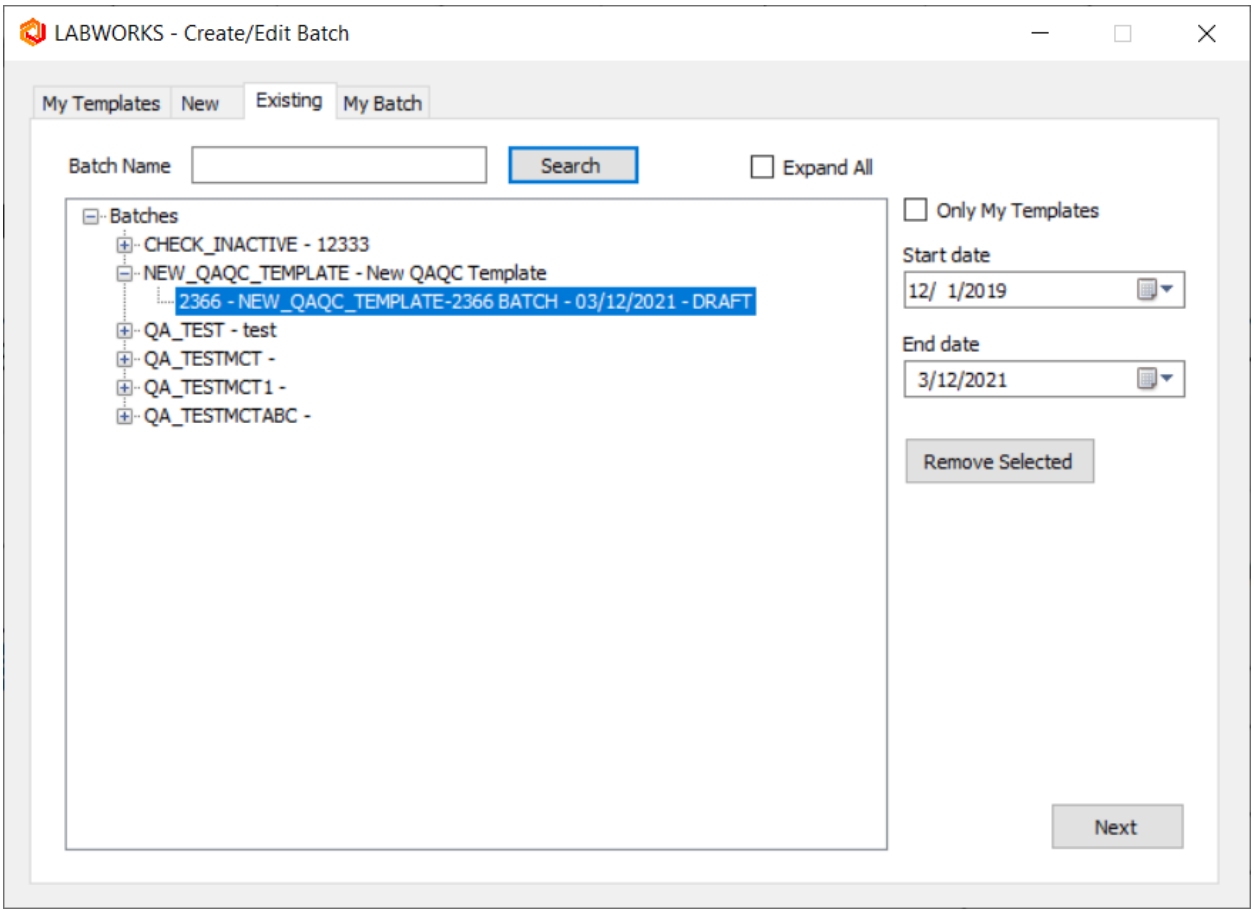
2) Select the samples from “Available Samples” list and click “Auto-fill” button to move the samples to “Selected Sample” list.



3) Click on 'Create Batch' button. “Batch saved successfully” message should be displayed.

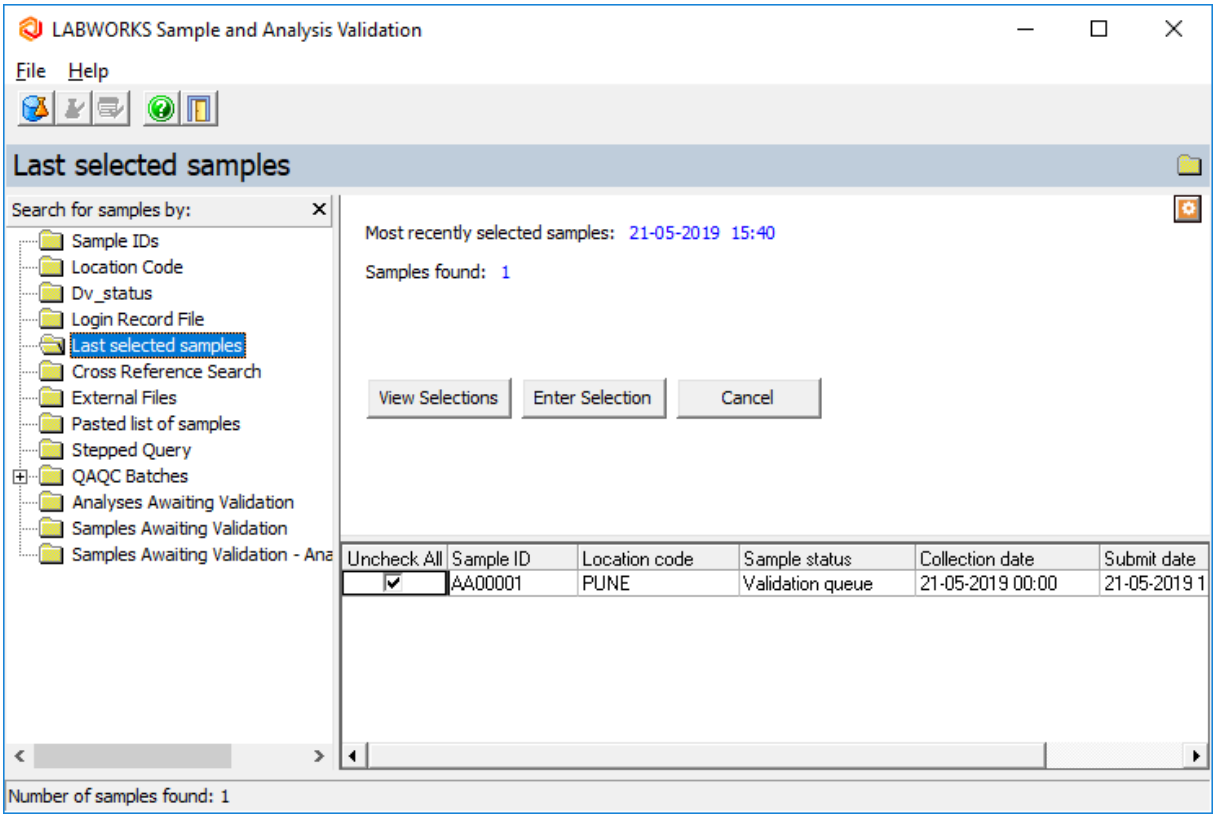


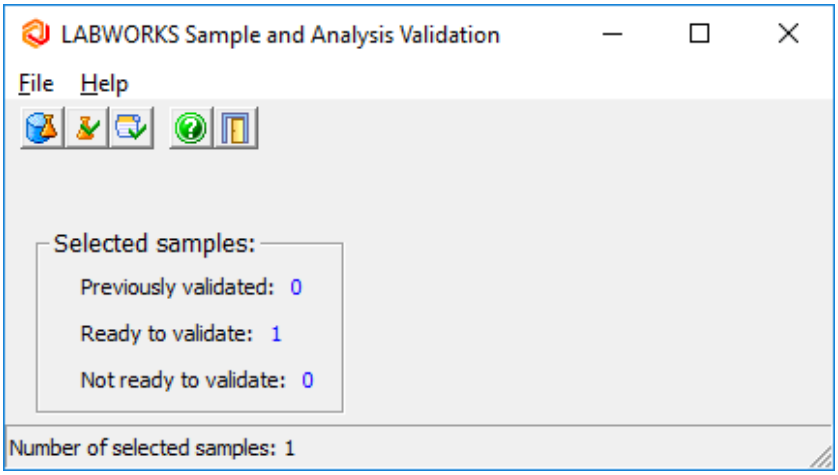
4) Go to “Existing” tab. The newly created batch should be displayed with “DRAFT” status.



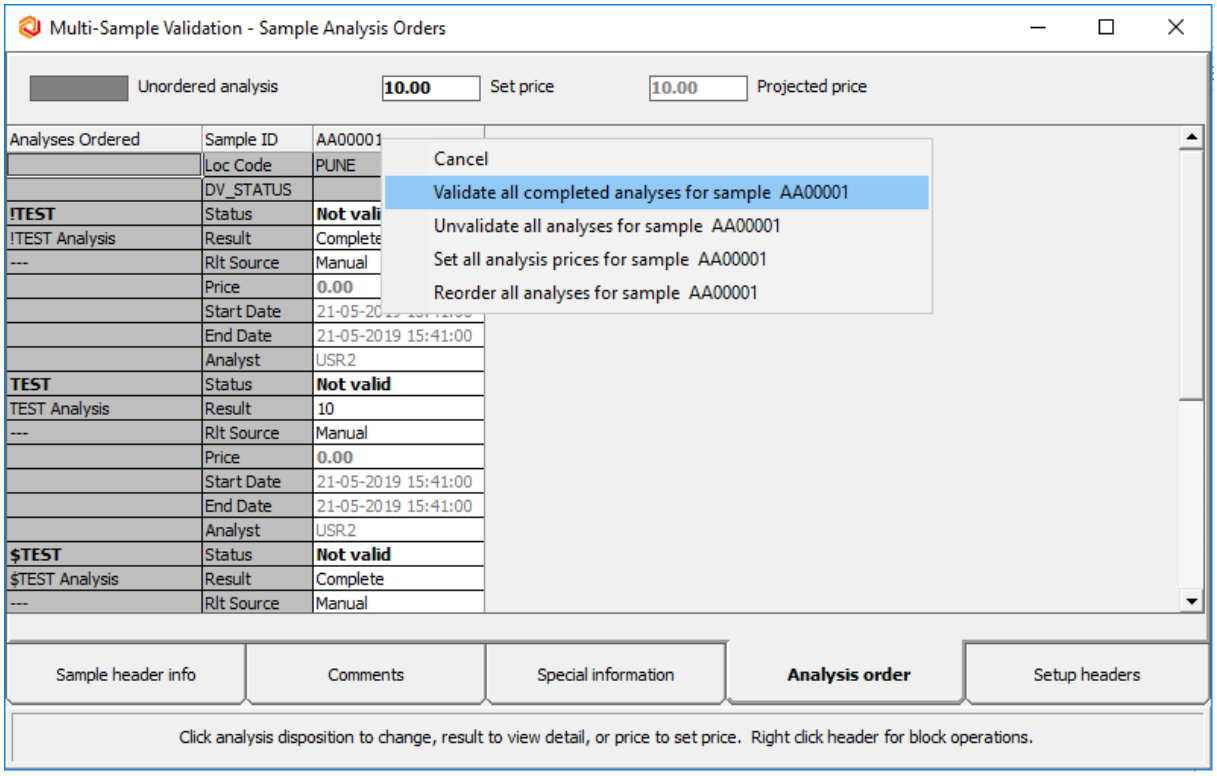
9. Validate Result

1) Launch Sample and Analysis validation application.
2) Select Sample ID option from Search for Sample By. Enter Sample Number (select sample number such that it is already having status as 'Validation queue'). Click on View Selection. Click on Enter Selection.

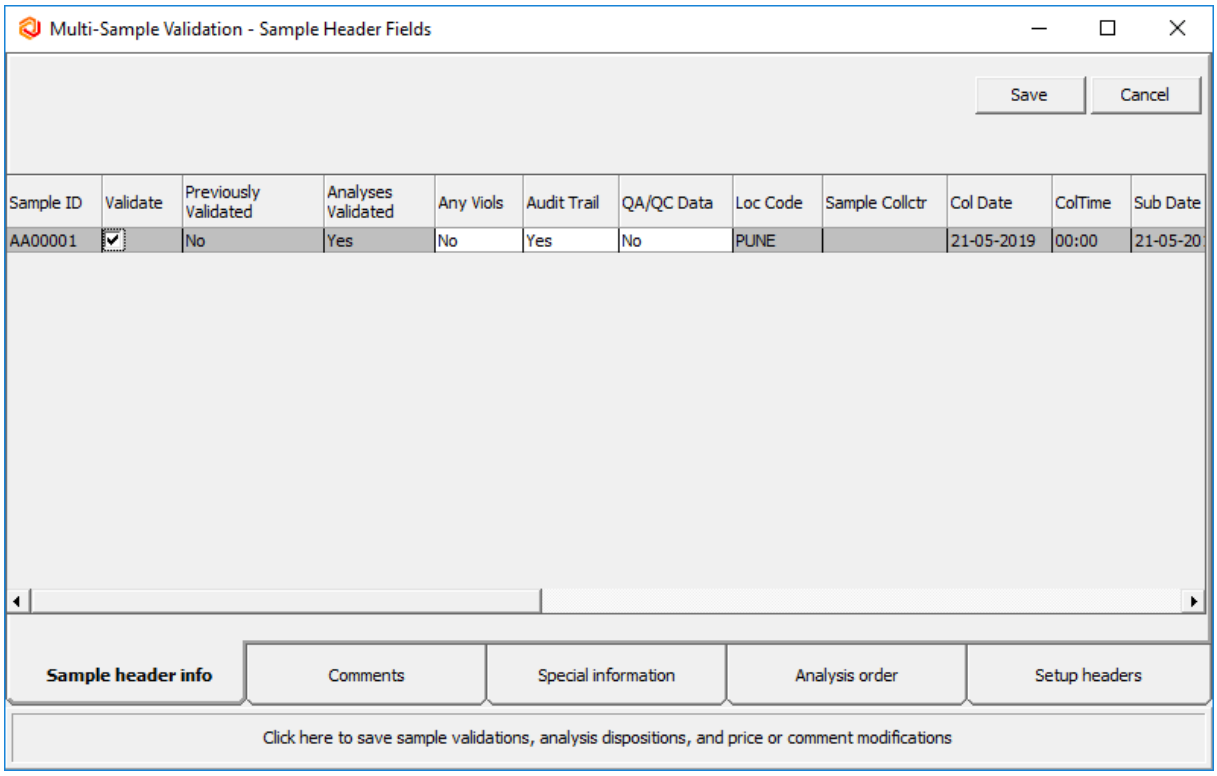




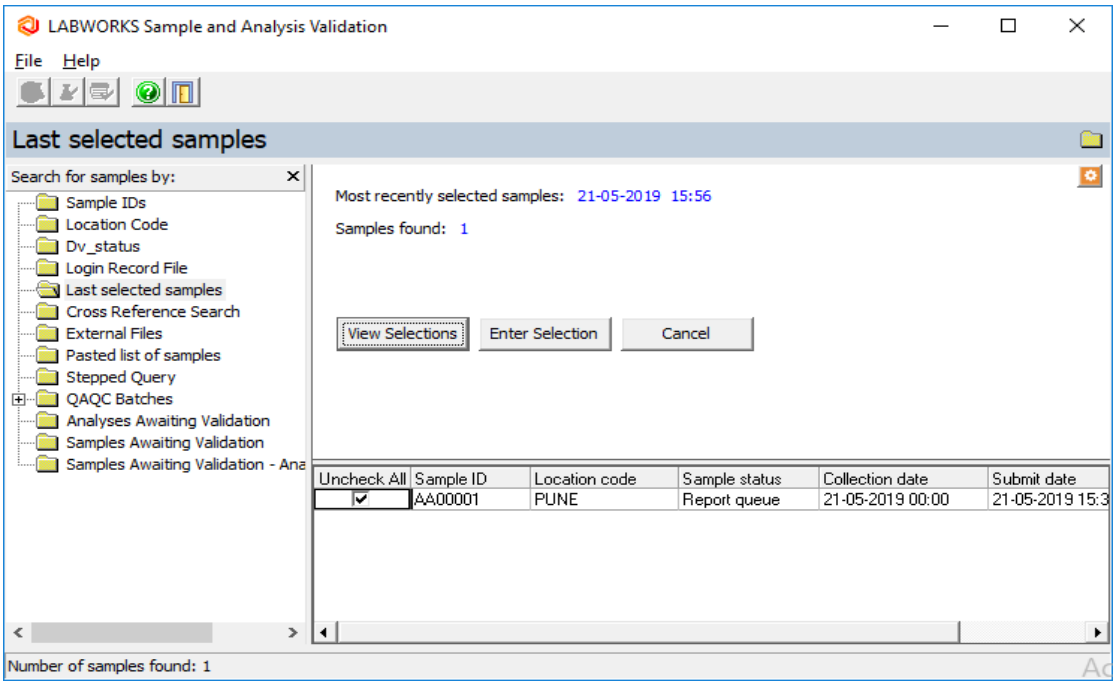
3) Go to 'Analysis Order' Tab. Right Click on Analysis Order column. Select 'Validate all complete Analyses in sheet'.



4) Select 'Sample header info' tab. Select Validate Now check box. Click on “Save” button.



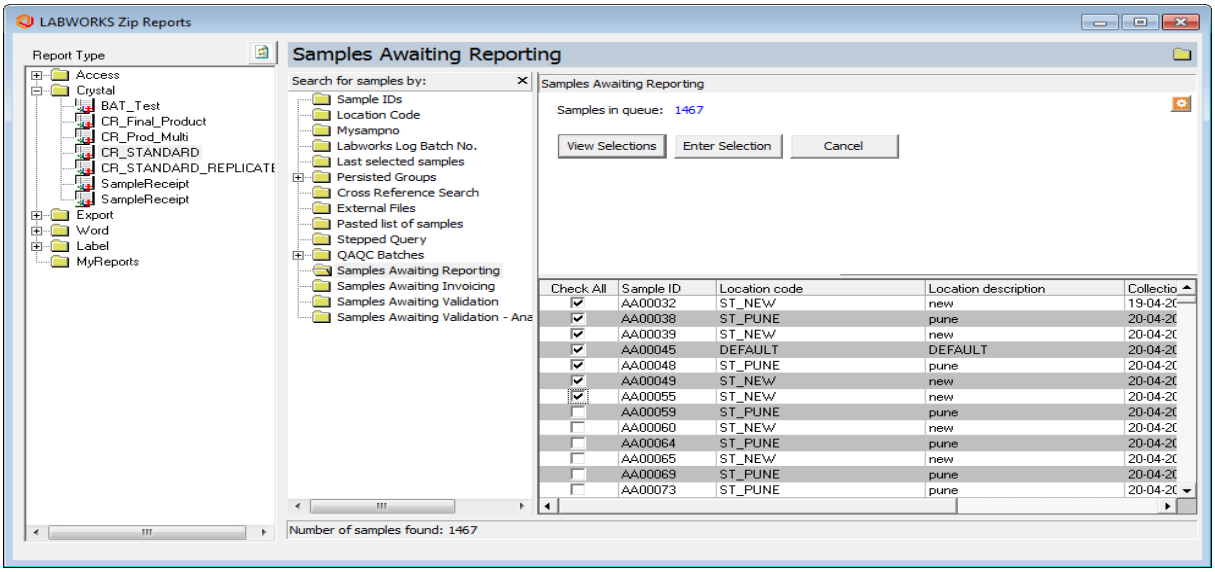
5) Select 'Last Selected Sample' option. Click on View Selection button.



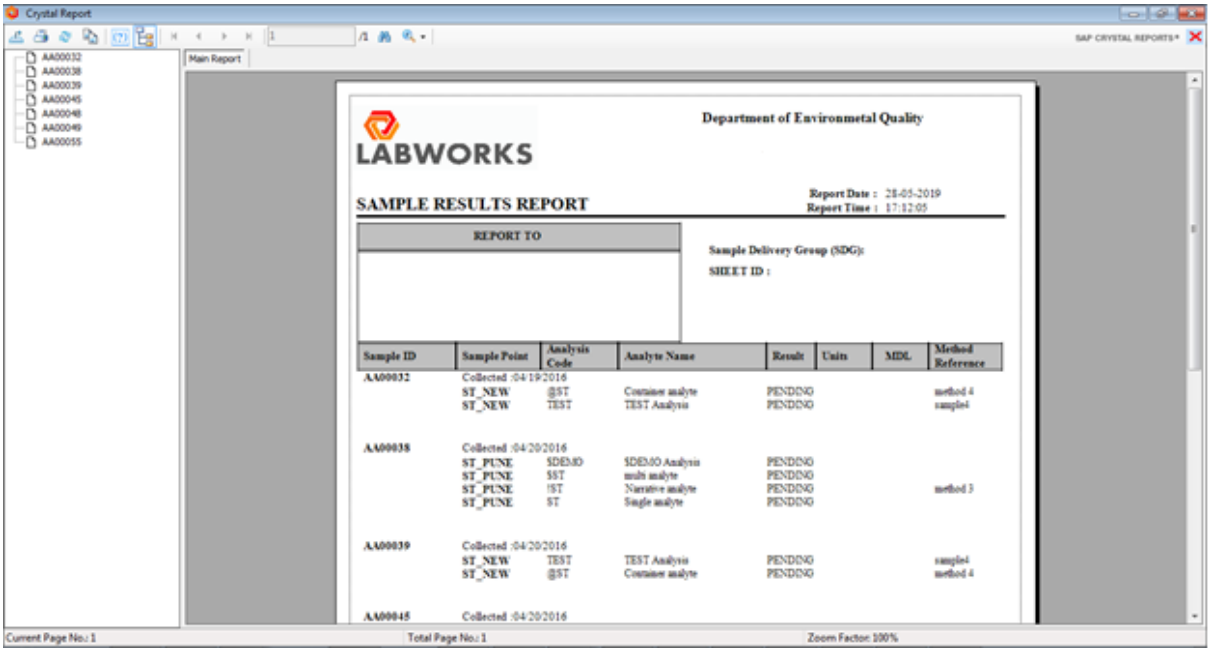
6) Status of the selected sample should be displayed as 'Report Queue'.

10. Generate Report

1) Launch Zip Report (ZipReport6.exe) application with valid LABWORKS credentials. Select “CR_STANDARD” report and select applicable samples using “Sample Search” window. Click “Enter Selection”.

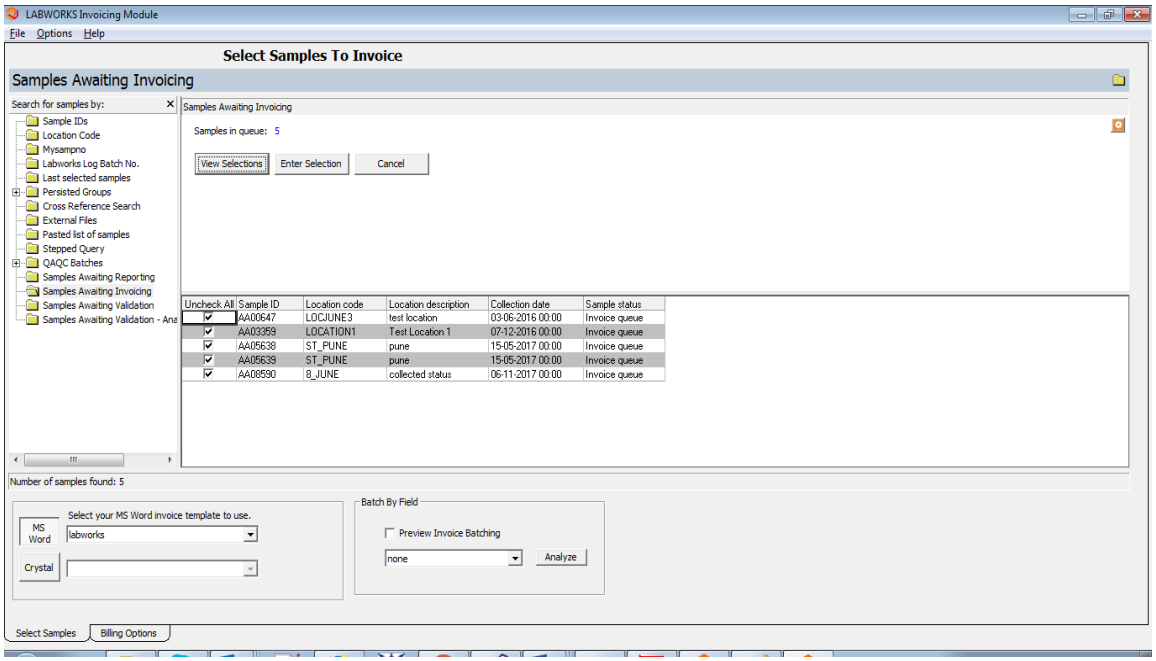


2) Report file is generated.



11. Generate Invoice

1) Launch “Sample Invoice” application (LWWinV6.exe). Select “Samples Awaiting Invoicing” option. Click “View Selection” and “Enter Selection”.



2) Invoice should be generated as per the configured format.