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LABWORKS LIMS v7.1

Upgrade Guide

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Upgrading LABWORKS 7.0.0.xxx to LABWORKS 7.1.0.xxx

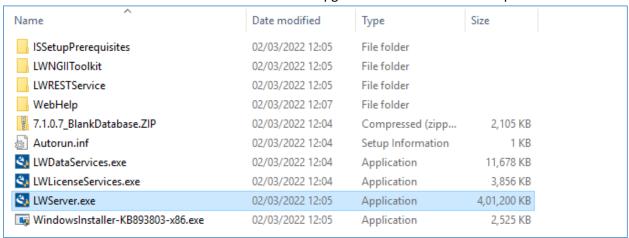
Prerequisite – LABWORKS 7.0 Installer with any version must installed on workstation.

Note – LABWORKS Server installer will not upgrade License Service, Data Service and LABWORKS Client automatically. Every LABWORKS Installer i.e. LWServer, LWLicenseService , LWDataServices and ClientSetup needs to be individually upgrade as per below steps.

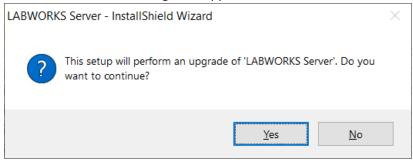
Upgrade Steps -

1. LABWORKS Server upgrade

a. Double click on "LWServer.exe" file to launch Server upgrade. Refer below screen capture.

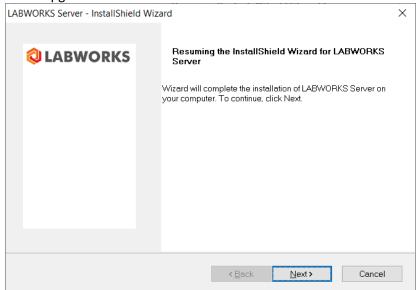


b. Below confirmation message will appear.

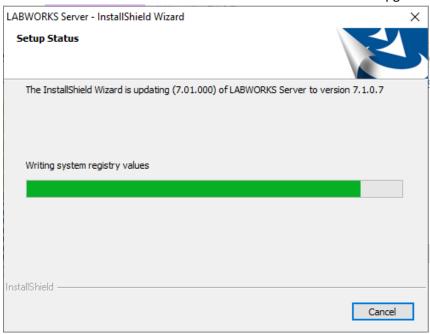


- c. Click on "Yes" button to continue with LABWORKS Server upgrade.
- d. LABWORKS Server upgrade will start. Refer below screen capture.



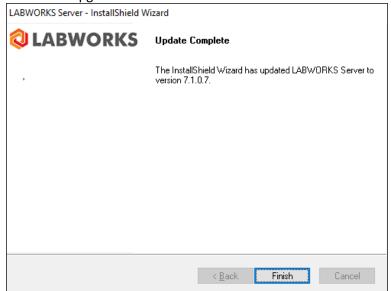


e. Click on "Next" button to continue with the LABWORKS Server upgrade.



f. After completing LABWORKS Server upgrade below confirmation window will appear.





g. Click on "Finish" button to close the LABWORKS Server upgrade installer.



- 2. LABWORKS Database upgrade
 - a) Running Database Scripts and Update Tool

Update the Existing Database and Run the Update Tool.

LABWORKS 6.X to latest LABWORKS version

Step	User Input/Action	Expected Results
1	Use the Database tools to run either, LWScripts-SQLServer.sql or LWScripts-Oracle.sql, depending on your database system.	Scripts run.
2	Run the Update tool.exe using update files for all versions between your current and 7.1. Example, if upgrading from 6.6, then run the updatetool using LW67Release.xsp, LW68Release.xsp, LW69Release.xsp, LW610Release.xsp, LW70Release.xsp and LW71Release.xsp.	Updatetool.exe is run.
3	Run the utility, LWMigrationUtility.exe to update database tables new to latest LABWORKS version	Database tables are updated to latest LABWORKS version

Note: When upgrading an existing database it is recommended to run Lwwsystem6.exe from the C:\Labworks\Client folder because there are new applications-based privileges associated with the new Desktop.

The **LWMigrationUtility** was introduced in LABWORKS 6.2. It is used to copy data from an old format to a new format. In LABWORKS 6.2, the data storage for, AUDITTRAIL, CalcDefs, DMR, Specifications, and Special Info Forms has been updated. LWMigrationUtility should only be run if needed. See Appendix B for when and which options should be used for LWMigrationUtility. Running LWMigrationUtility on previoulsy migratated values like RLTSPECS can overwrite changes you made after the privous migration. LWMigrationUtility should only be run once or each object type.

AuditTrail. AuditTrail's data storage format changed in LABWORKS 6.0 from AUDTRAIL to AUDITTRAIL table. LWMigrationUtility converts records from AUDTRAIL (5.8) to AUDITTRAIL format.

CalcDefs. Internal LABWORKS Calculation Definitions were limited to 10 inputs. LABWORKS 6.2 adds a new table, CALCPARAMS which removes this 10 input limitation. LWMigrationUtility converts records from CALCDEFS to CALCPARAMS. Added in 6.2

DMR. (Optional Program, see DMR Documentation for specific detail.) LWMigration utility moves data into the primary LABWORKS database from the external DMR data storage previously used. Added in 6.2

RLTSPECS. RLTSPECS data storage has been changed to RESULTSPECS. This new format provides a better platform for extending what specifications can be defined. Additional specification capabilities will become available in future versions of LABWORKS Added in 6.2

SIFORM. Special Info Forms prior to LABWORKS 6.2 used multiple tables for storing defaults for Location Codes, Analyses and storing data for samples and analyses. All this data is now stored in the LABOBJSPECINFO table. Additionally, a field is added to the SIFORMDEF table to create a unique identifier for each field. This unique identifier allows for modifying a Special Info Form without losing the association between the fields and their values. Added in 6.2

MAILLIST. Migration of data from MLADDRESSES/SAMPMAILLIST to LABOBJMAILLIST Added in 6.4

COMMENTS. Migration of data from COMMENTS/DLCOMMENTS to LABOBJCOMMENTS Added in 6.4 © Copyright 1998-2022 Labworks LLC. All rights reserved.





RESULT. Addition of CHECKSUM data. Checksum is used to verify no one has modified the data outside of the LABWORKS application. Added in 6.4

USERHEAD. Addition of encrypted password. Added in 6.4

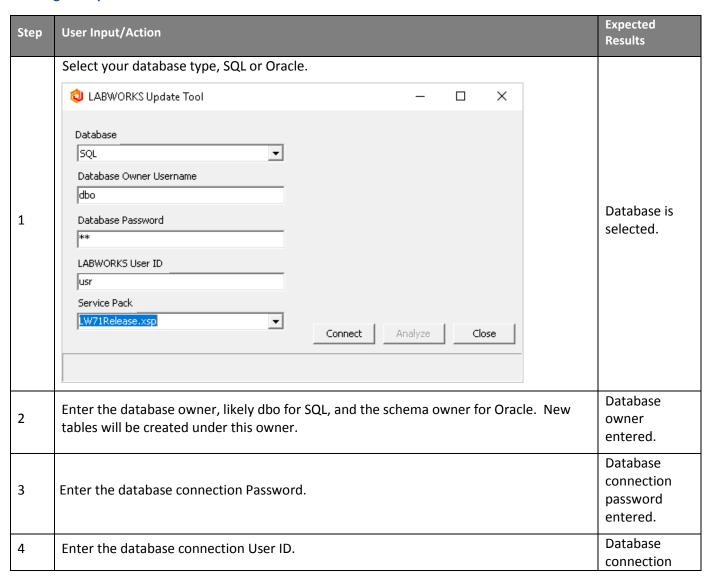
Migrate USERHEAD to FIPS Compliance. Migration of USERHEAD data to FIPS compliant using FIPS compliant encryption algorithm. Added in 6.10

Migrate RESULT to FIPS Compliance. Migration of RESULT data to FIPS compliant using FIPS compliant encryption algorithm. Added in 6.10

Migrate AuditTrail to FIPS Compliance. Migration of AuditTrail data to FIPS compliant using FIPS compliant encryption algorithm. Added in 6.10

LABWORKS 6.4 has new security features for Encrypted passwords and Checksums on result data. If upgrading from 6.2 or 6.3 the migration utility needs to be run and the options for RESULT and USERHEAD need to be run.

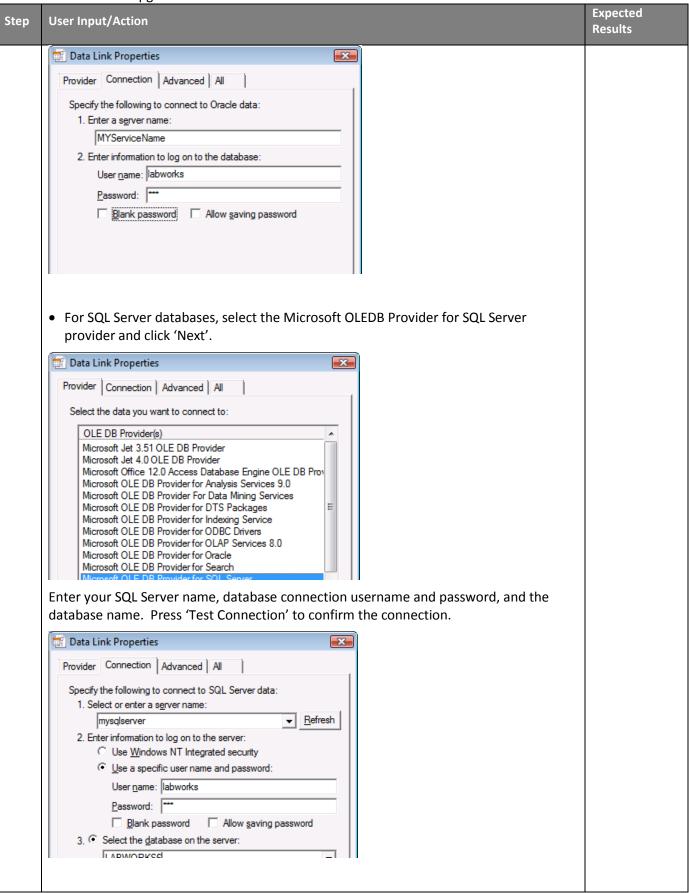
Running the Update Tool



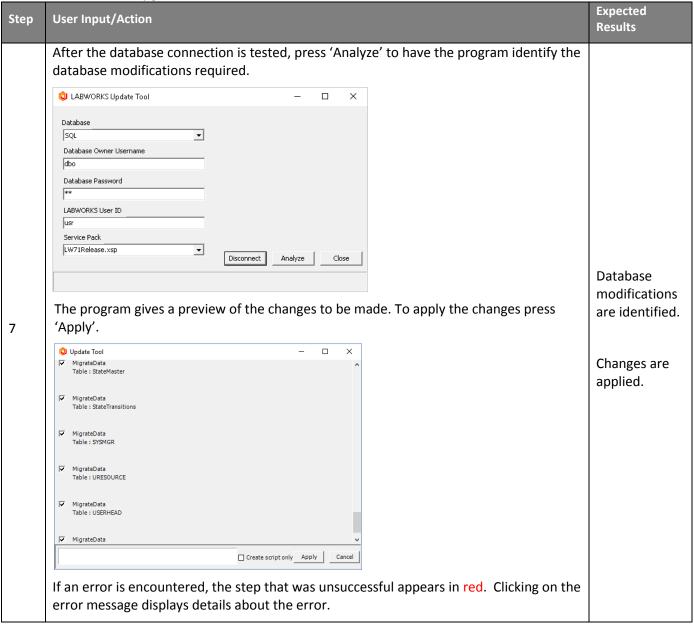


Step	User Input/Action	Expected Results
		User ID entered.
	Select the Service pack.	
	The file LW71Release.xsp updates the database from 7.0 to 7.1 Desktop format.	
5	Run the Update tool.exe using update files for all versions between your current and 7.1. Example, if upgrading from 6.6, then run the updatetool using LW67Release.xsp, LW68Release.xsp, LW69Release.xsp, LW610Release.xsp, LW70Release.xsp and LW71Release.xsp.	Service pack selected and run.
	The service pack I18NTables.xsp is used to add additional language strings to the LABWORKS database and is used only if needed for multi-language sites.	
	The service pack LW62DMRRelease.xsp is required for sites that are using the LABWORKS Discharge Monitoring Reports.	
	For Oracle databases, select the Microsoft OLEDB Provider for Oracle provider and click 'Next'. Enter your Oracle service name as the server name, database connection username and password. Press Test Connection to confirm the connection. Data Link Properties Data	
6	Provider Connection Advanced All Select the data you want to connect to: OLE DB Provider(s) Microsoft Jet 3.51 OLE DB Provider Microsoft Office 12.0 Access Database Engine OLE DB Provider Microsoft OLE DB Provider for Analysis Services 9.0 Microsoft OLE DB Provider For Data Mining Services Microsoft OLE DB Provider for DTS Packages Microsoft OLE DB Provider for Indexing Service Microsoft OLE DB Provider for ODBC Drivers Microsoft OLE DB Provider for ODBC Drivers Microsoft OLE DB Provider for Oracle Microsoft OLE DB Provider for Oracle Microsoft OLE DB Provider for Search	Connection to the database is established.







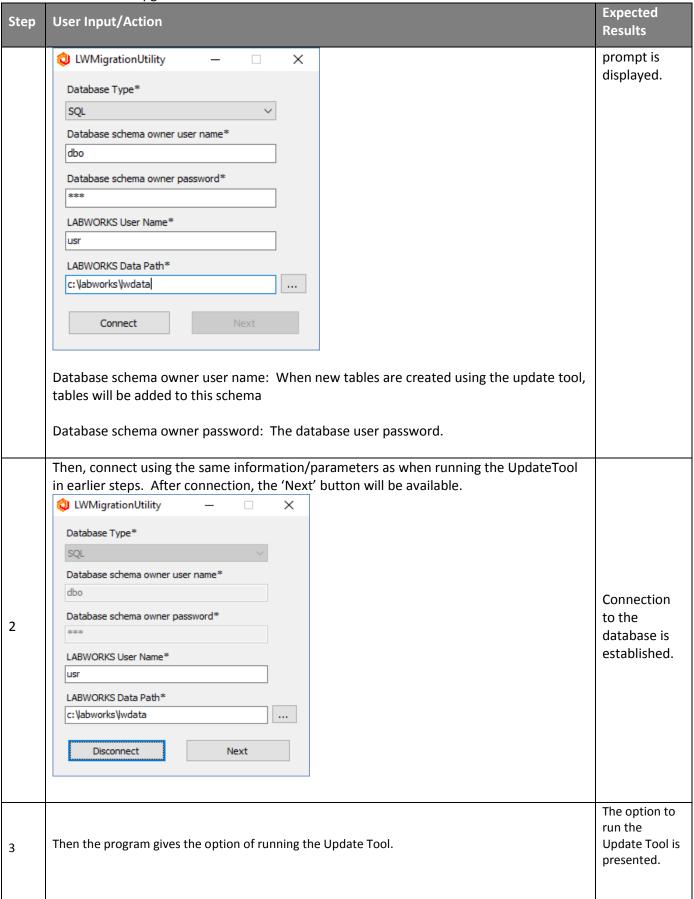


b) Running LWMigration Utility

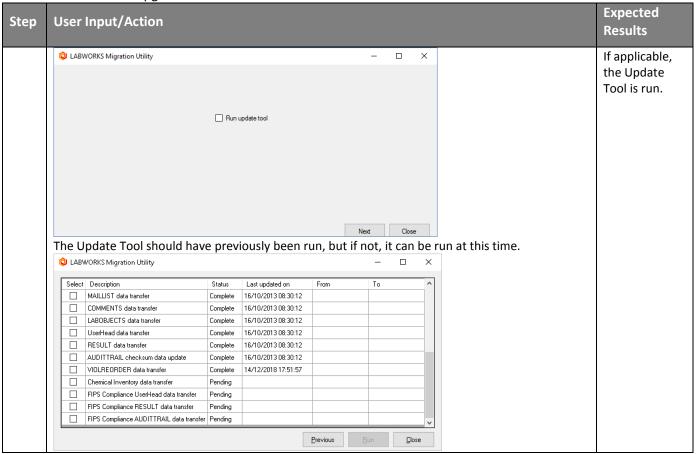
Note: If upgrading from 6.4 or 6.5 the LWMigrationUtility is only requried for ViolationReorder or FIPS Encryption Migration. Re-migrating data that has been migrated can overwrite data that has been updated after a migration.

The LWMigrationUtility requires a valid LABWORKS login to the database, thus requiring Gateway Administrator be configured and the LWLicenseServices be running.

Step	User Innut/Action	Expected Results
1	When LWMigrationUtility.exe starts it prompts for information about the database and	LWMigration
	users.	Utility



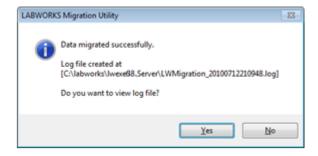




The LABWORKS Migration Utility provides a method for migrating each type of data independently. And for data conversions that are sample related and may take long periods of time to process, the sample range can be defined. (Sample Special Info, RESULT data transfer, FIPS Compliance RESULT data transfer). Date range can be defined for AUDITTRAIL checksum data transfer, FIPS Compliance AUDITTRAIL data transfer.

For each process in the migration the program stores the date the conversion was last executed. When doing an upgrade to LABWORKS 7.1, the programs will store their data in the new formats described earlier. Working with LABWORKS product specialist and support specialist, best practices for the migration process can be worked out for your configuration and change management processes.

When the Migration Utility is finished it provides a log file with a count of the number of records that were migrated.



The log file can be helpful if there are errors in migrating data to the new format.

c) Running NGMigration Utility

NGMigrationTool is a common tool for various migrations. It needs to be executed when updating a version. Follow the instruction below for more details about each migration task.

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This kind of migration is required to update from 6.9 or earlier to 7.1 or later.

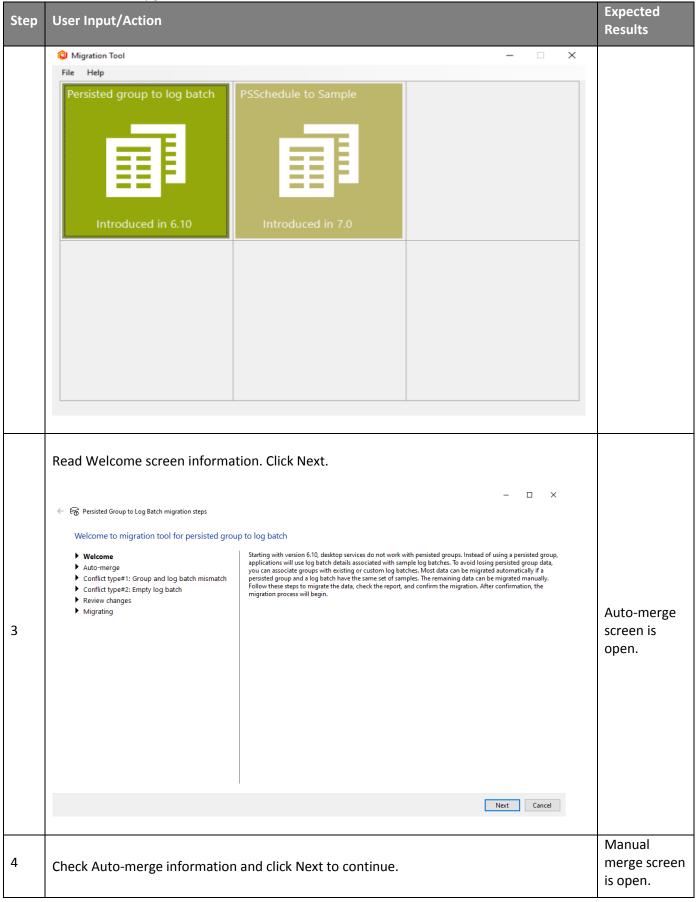
Starting with 6.10, Desktop services do not work with persisted groups. Instead of using persisted groups, applications use log batch details associated with sample log batches. To avoid losing persisted group data, it can be associated with existing or new log batches using NGMigrationTool.



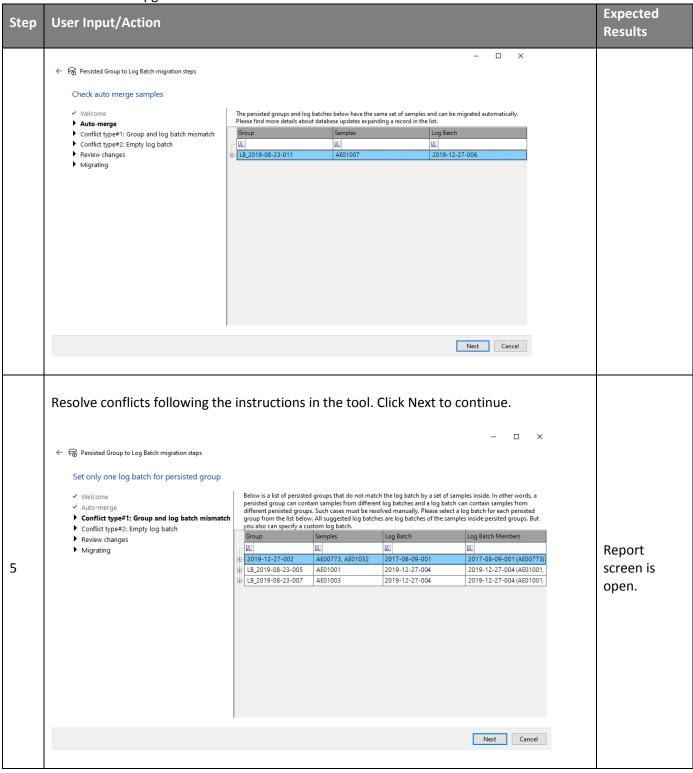
Note: NGMigrationTool can be run repeatedly to change the migration. It is available because the old relationships between persisted groups and samples are not removed from the database after the migration.

Step	User Input/Action	Expected Results
1	Run NGMigrationTool from LABWORKS\LWEXE\Server\NGMigrationTool.exe	Authenticatio n window is open.
	Select a database. Provide your login and password to access the database. LABWORKS - User Login Viser LABWORKS MOBILE Password OK Cancel Available Databases Select Language English French Chinese Spanish Japanese German Italian Chinese-traditional Russian	NGMigration Tool window is open.
2	Select "Persisted group to log batch" tile.	The migration wizard runs.

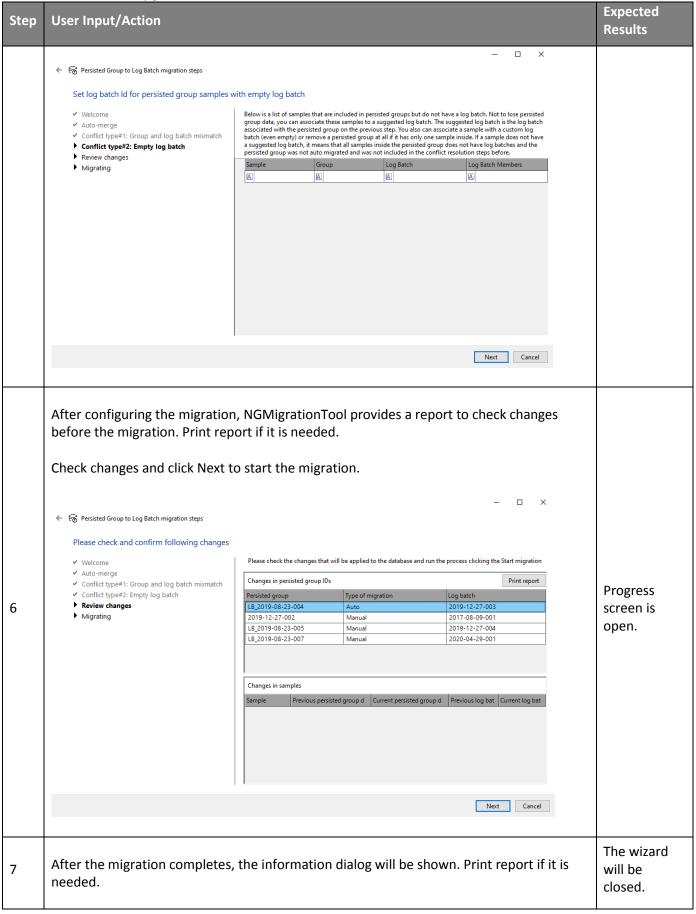




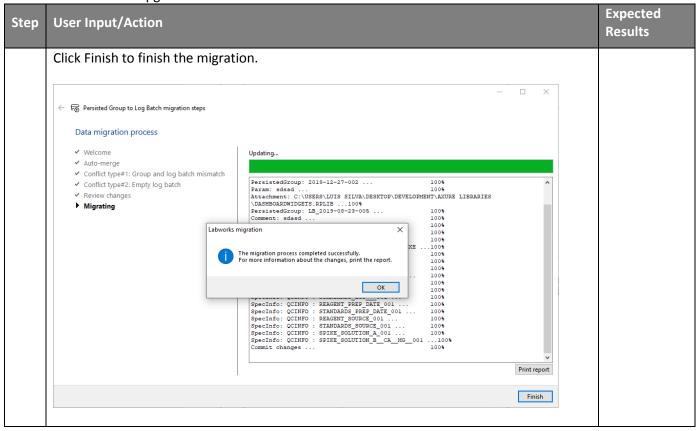












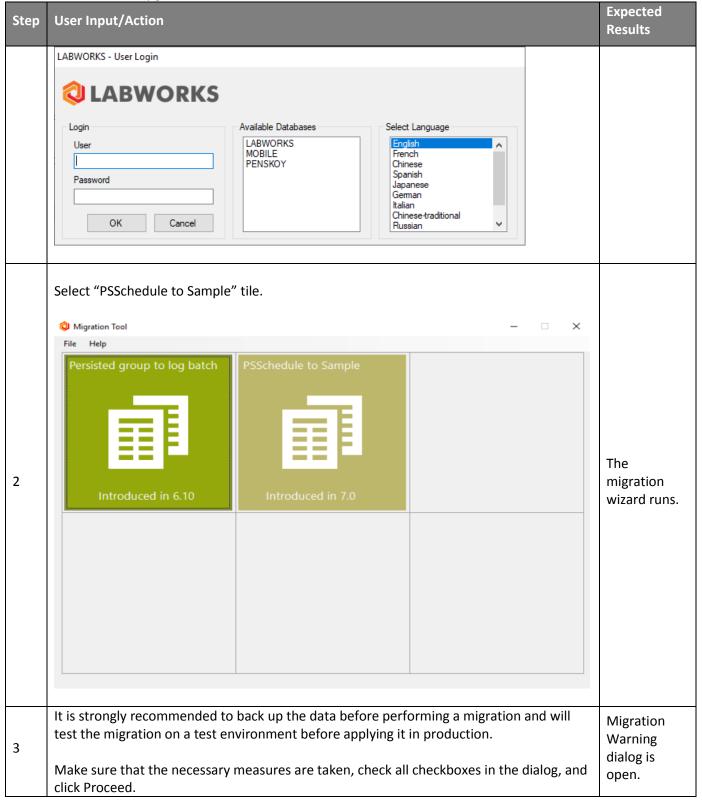
Migration: PSSchedule to Sample

This kind of migration is required to update from 6.10 or earlier to 7.1 or later.

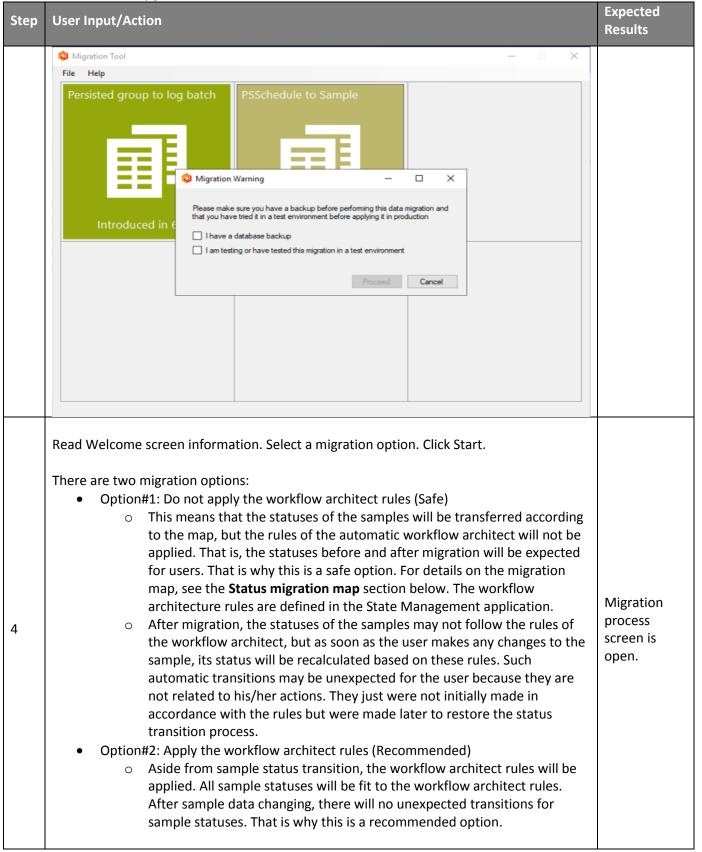
Starting with 7.0, scheduled samples DB structure has been changed. Desktop services do not work with PSSchedule table. Instead of using PSSchedule table, applications will use Sample table. To avoid losing scheduled samples data, it is necessary to migrate it in Sample table using NGMigrationTool.

Step	User Input/Action	Expected Results
1	Run NGMigrationTool from LABWORKS\LWEXE\Server\NGMigrationTool.exe	Authenticatio n window is open.
	Select a database. Provide your login and password to access the database.	NGMigration Tool window is open.

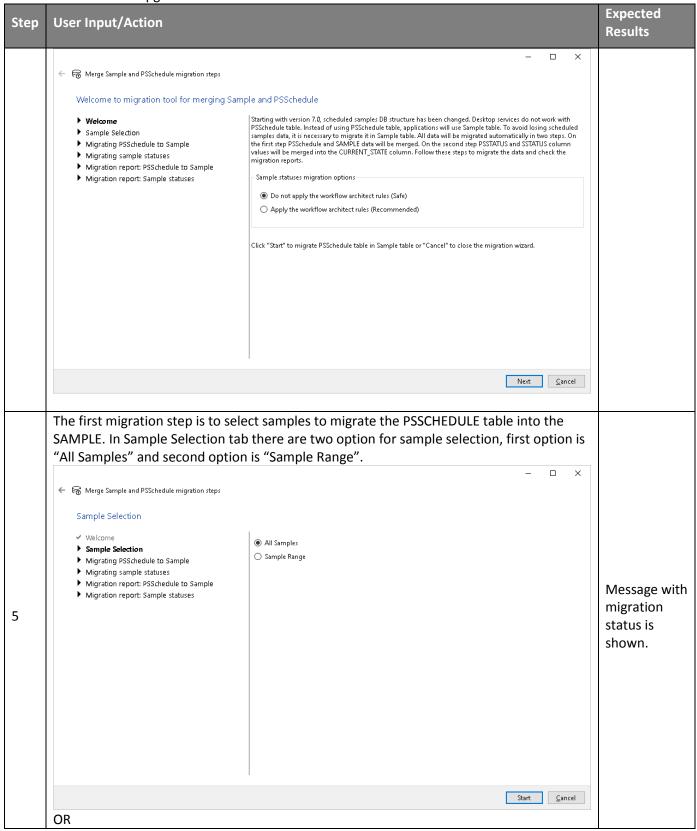




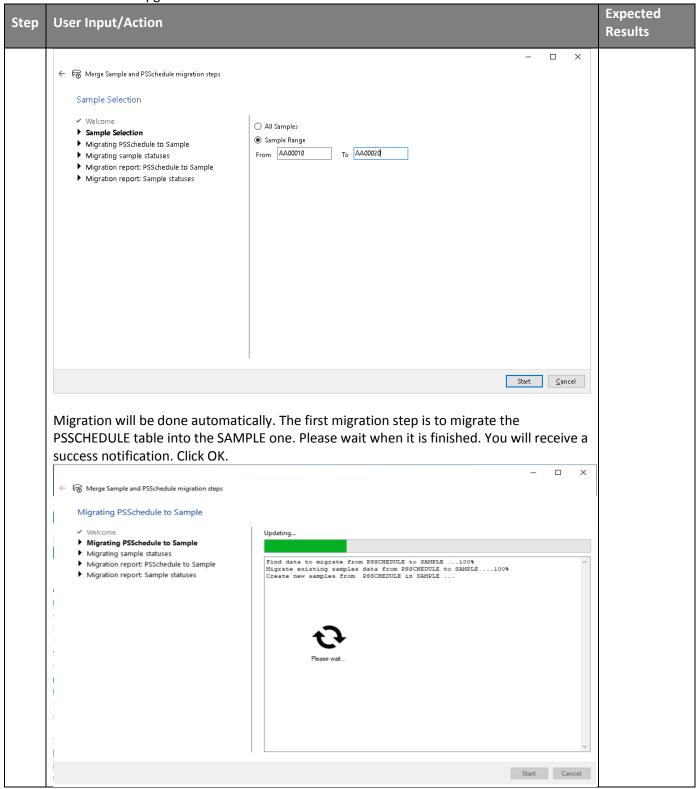




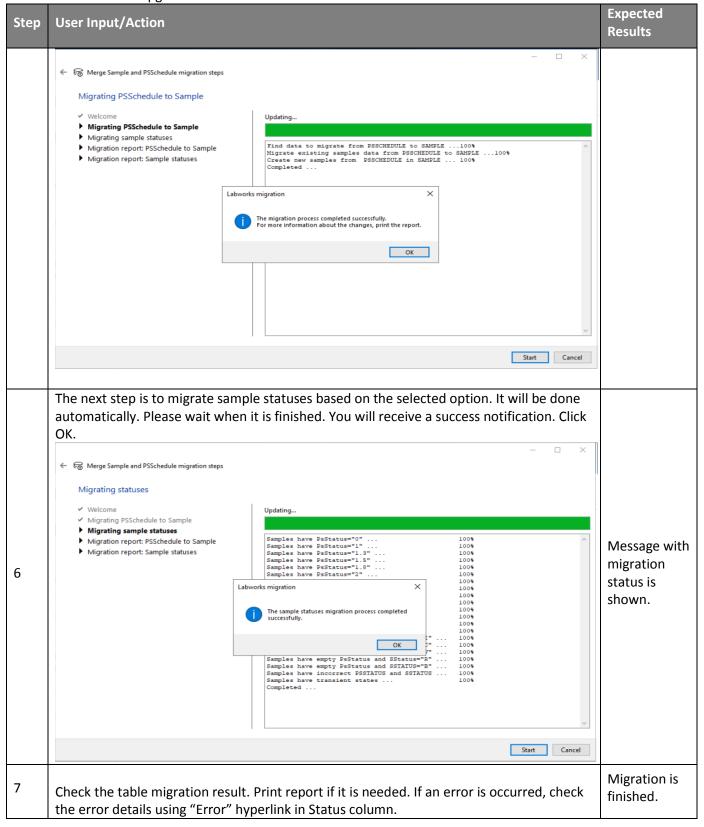




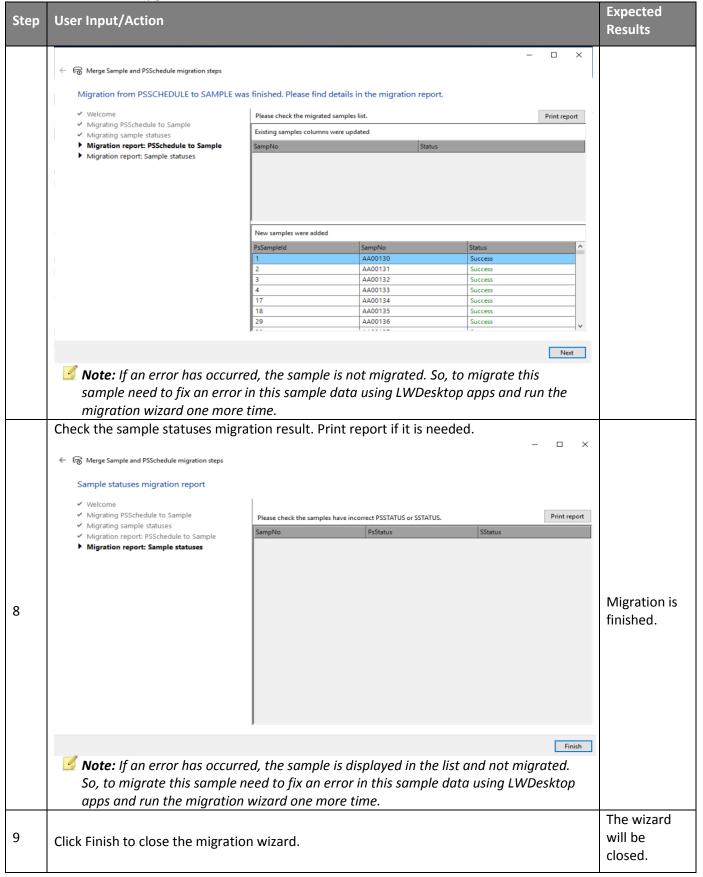








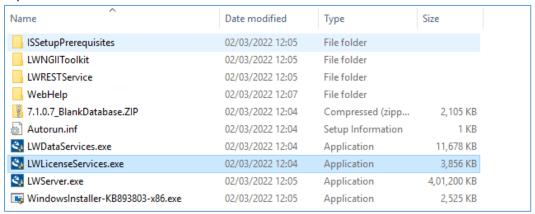




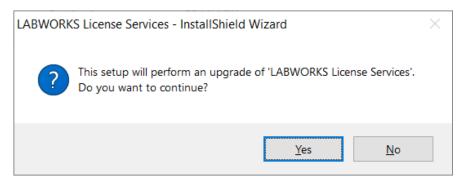


3. LABWORKS License Services upgrade

a. Double click on "LWLicenseService.exe" file to launch License Services upgrade. Refer below screen capture.



b. Below confirmation message will appear.

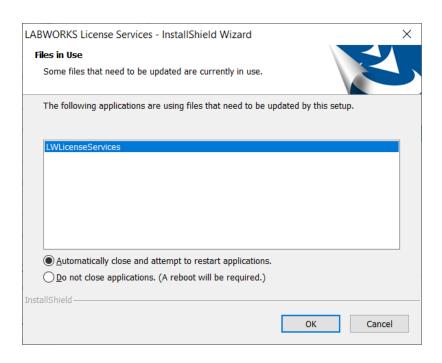


- c. Click on "Yes" button to continue with LABWORKS License Services upgrade.
- d. LABWORKS License Services upgrade will start. Refer below screen capture.

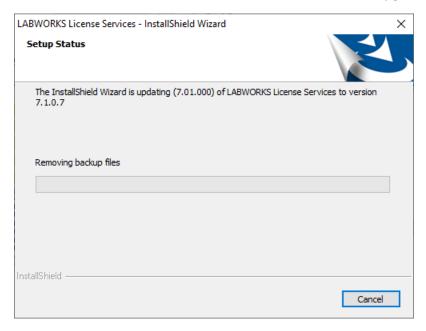




e. Click on "Next" button to continue with the LABWORKS License Services upgrade. If License service is running then below confirmation message will appear.

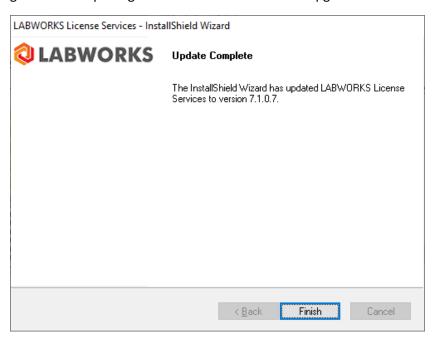


f. Select the first option i.e. "Automatically close and attempt to restart applications." And click on "OK" button to continue with the LABWORKS License Services upgrade.





g. After completing LABWORKS License Services upgrade below confirmation window will appear.

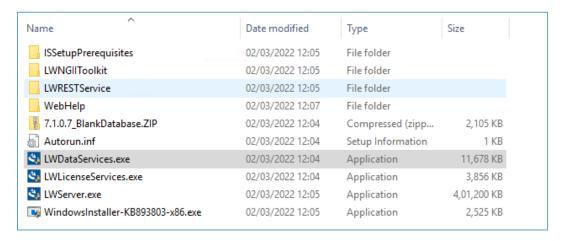


h. Click on "Finish" button to close the LABWORKS License Services upgrade installer.

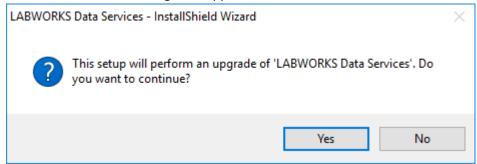


4. LABWORKS Data Services upgrade

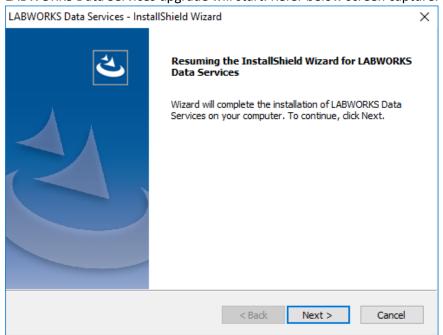
a. Double click on "LWDataServices.exe" file to launch Data Services upgrade. Refer below screen capture.



b. Below confirmation message will appear.

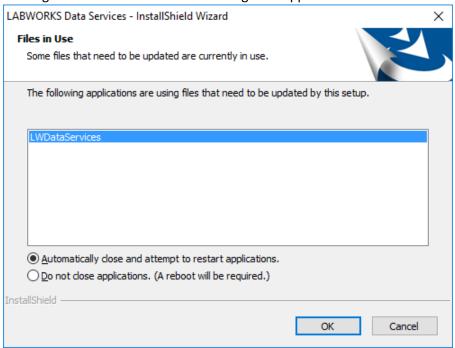


- c. Click on "Yes" button to continue with LABWORKS Data Services upgrade.
- d. LABWORKS Data Services upgrade will start. Refer below screen capture.

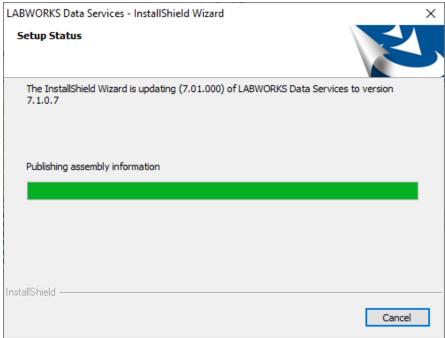




e. Click on "Next" button to continue with the LABWORKS Data Services upgrade. If Data service is running then below confirmation message will appear.

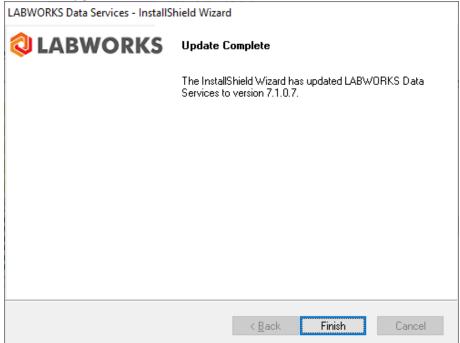


f. Select the first option i.e. "Automatically close and attempt to restart applications." And click on "OK" button to continue with the LABWORKS Data Services upgrade.



g. After completing LABWORKS Data Services upgrade below confirmation window will appear.



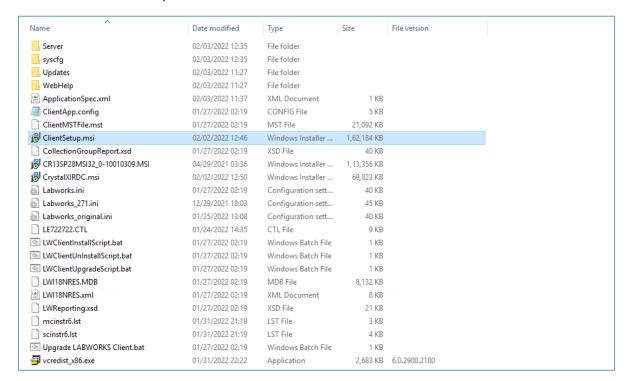


h. Click on "Finish" button to close the LABWORKS Data Services upgrade installer.



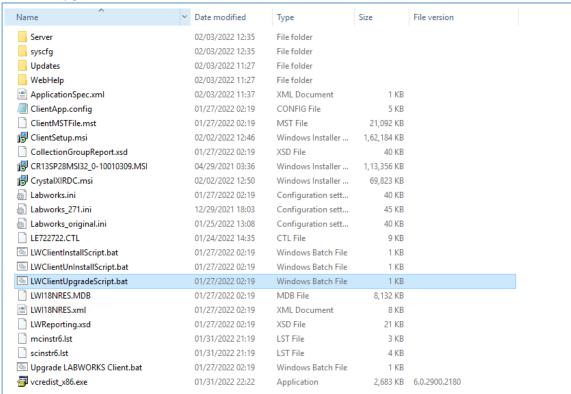
5. LABWORKS Client upgrade

a. Go to the "\\LABWORKS\LWEXE" LABWORKS Server folder where LABWORKS Client Installer exist. Refer below screen capture.

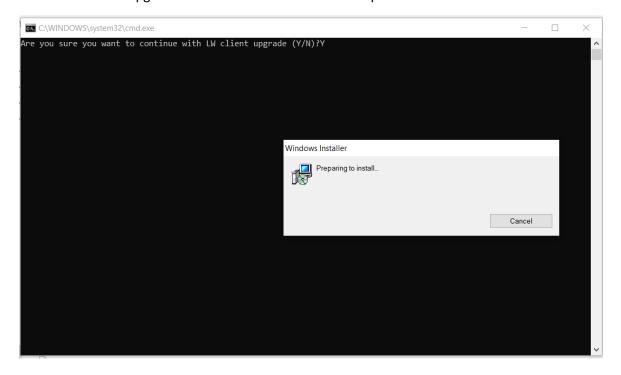


b. Double click on "Upgrade LABWORKS Client.bat" file to launch Client upgrade. Refer below screen capture.

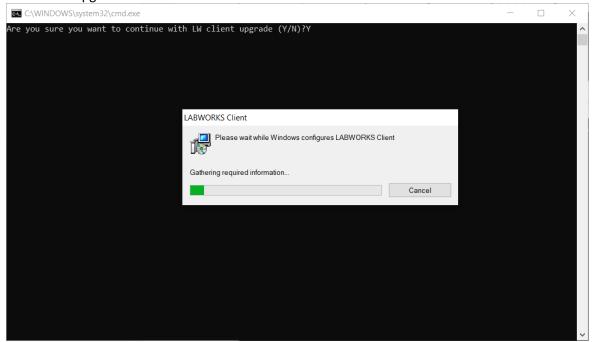


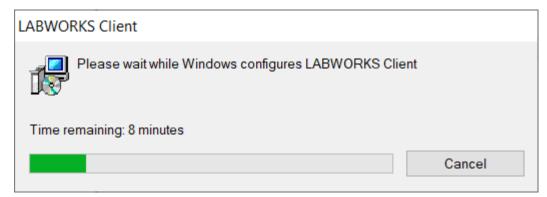


LABWORKS Client upgrade will start. Refer below screen capture

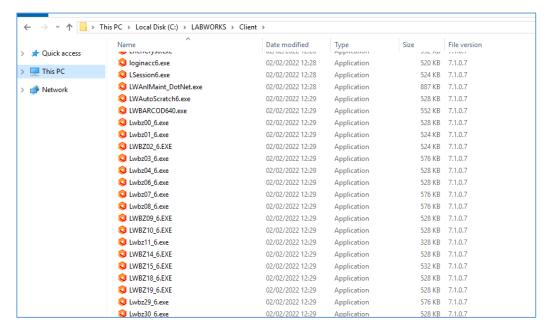








c. Click on "Finish" button to close the LABWORKS Client upgrade installer.



d. After LABWORKS Client upgrade need to reconfigure "ApplicationSpec.xml" file.