LABWORKS LIMS v7.0

LABWORKS PostResults6

User Manual

Last Updated: November 2021

Document History

Version No.	Date	Change Description	Integrated In Build
1.0	18-Nov-2021	Added document history to include LABWORKS build number corrosponding to PR6 change.	Build 7.0.0.195

Table of Contents

Introduction to PostResults6

The PostResults6 is a command line application for posting results to LABWORKS database. This manual provides following information about ResultPopsting6 application.

Features of PostResults6

PostResults6 is a command line application used for posting results to LABWORKS database. The application supports privileges and ownership concept. It performs audit trailing and specific validations for results.

PostResults6 supports legacy POSTSCRO, POSTMCRO and EXCEL input results file (CSV) formats. It maintains the success and failure of operation and also has support for error handling and logging facility. Application supports long file naming convention.

Procedures

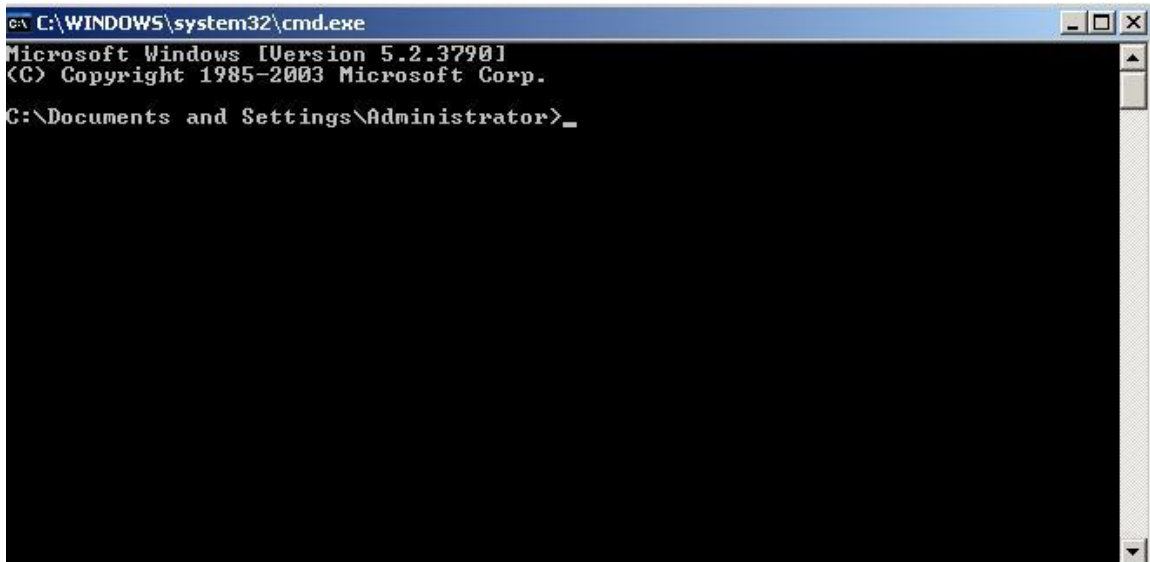This section describes how to use the application.

- From Start menu click RUN

- Type cmd in Open text field as shown in Figure 1

 Figure 1: Start > Run.
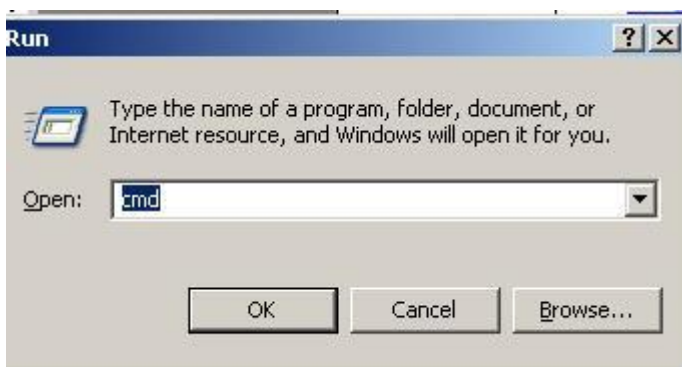
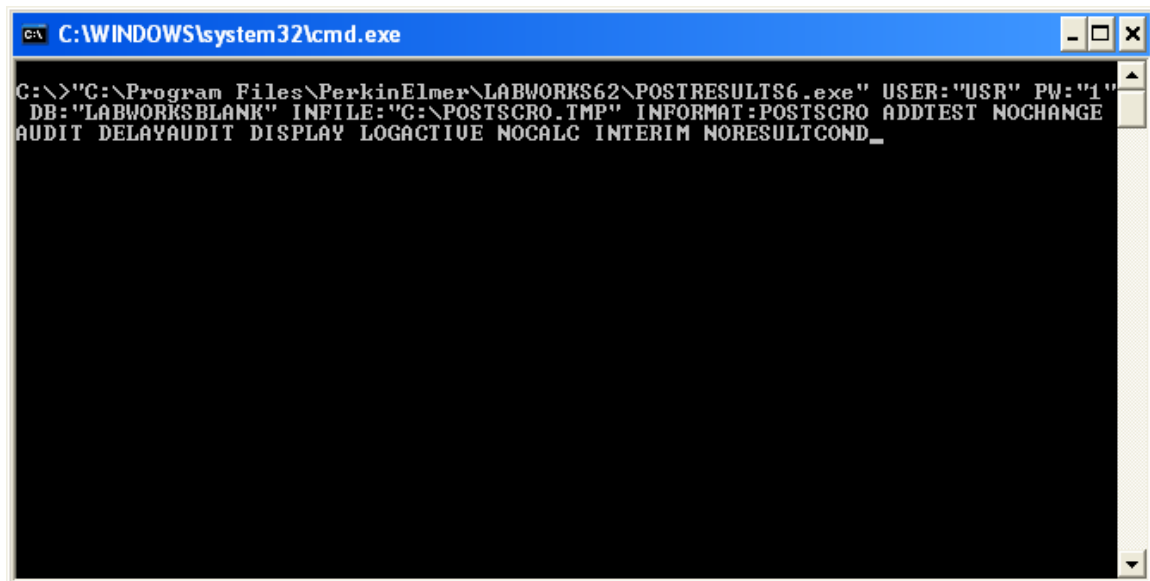The Command Line screen appears as shown in Figure 2.

Figure 2: Command line screen.

Enter the path for POSTRESULTS6.exe. in the Command screen.

For example: "C:\Program files\PerkinElmer\LABWORKS\POSTRESULTS6.exe".

Figure 3: Command line screen with all the parameters.

Enter the following parameters in the Command line as shown in Figure 3.

Parameter: USER

The USER parameter is used for specifying the LABWORKS User ID.

It is an optional parameter. If LABWORKS Session is not running and parameter USER is not specified in the Command line then the LABWORKS authentication window will appear and these credentials can be entered.

Format for the parameter USER: "LABWORKS User Id".

Parameter: PW

The PW parameter is used for specifying the LABWORKS Password.
It is an optional parameter. If LABWORKS Session is not running and parameter PW is not specified in the Command line then the LABWORKS authentication window will appear and these credentials can be entered.

Format for the parameter PW: "LABWORKS Password".

Parameter: DB

The DB parameter is used to specify the target Database name. It is an optional parameter. If the LABWORKS Session is not running and parameter DB is not specified in the Command line, error will be logged.

Format for the parameter DB: "Valid Target Database Name".

Parameter: ADDTEST

The ADDTEST parameter is used to specify that tests can be added later. It is an optional parameter. If parameter ADDTEST is not specified in the Command line then it will not allow adding new analysis in the database, else when ADDTEST is specified in the Command line it will allow add new analysis in the database.

Parameter: NOCHANGE

The NOCHANGE parameter is used to disallow overwriting previously entered results. If this parameter is not specified on command line then overwriting is allowed as default behavior. It is an optional parameter.

Parameter: AUDIT

The AUDIT parameter is used to specify audit reason. Audit reason is specified as the value of the parameter. It is an optional parameter. If parameter AUDIT is not specified in the Command line then it will perform silent audit with default reason.

Parameter: DELAYAUDIT

The DELAYAUDIT parameter is used for saving audit information in temporary file and posts all these information into the database once all result posting to database is completed. It is an optional parameter. If parameter DELAYAUDIT is not specified on the Command line then it will not save audit information in the temporary file.

Parameter: INFORMAT

The INFORMAT parameter is used to specify the input file mode in POSTSCRO, POSTMCRO and EXCEL format. It is an optional parameter. If input value of INFORMAT is POSTSCRO then it will post a single component result in database. If the input value of INFORMAT is POSTMCRO it will post a multiple component result in database. If input value of INFORMAT is not specified then it will use EXCEL format as default.

Format for the parameter INFORMAT: "POSTSCRO"

Parameter: DISPLAY

The DISPLAY parameter is used to enable displaying the status dialog, as shown in Figure 4. It is an optional parameter. If DISPLAY parameter is not specified on the Command line then it will not display the status dialog screen. When parameter DISPLAY is specified on the Command line it will display the status dialog screen.

Parameter: INTERIM

The INTERIM parameter if specified saves the output data to INTERIM.dat file. It is an optional parameter. If parameter INTERIM is not specified on the Command line, it will not save the output data.

Parameter: INFILE

The INFILE parameter is used to specify the input results file name with path. This parameter is mandatory.

Format for the parameter INFILE: "sample.tmp".

Parameter: LOGACTIVE

The LOGACTIVE parameter if specified creates the activity log file. It is an optional parameter. If parameter LOGACTIVE is not specified on the Command line then it will not generate the log file.

Parameter: NOCALC

The NOCALC parameter is used to disallow performing calculations on the results. It is an optional parameter. If parameter NOCALC is not specified on the Command line then it will perform the calculations by default. When NOCALC parameter is specified in the Command line then no calculations will be done on results.

Parameter: NORESULTCOND

The NORESULTCOND parameter if specify, it bypass result conditioning. It is an optional parameter. If parameter NORESULTCOND is not specified on the Command line then it applies result conditioning, by default.

Parameter: MAXSAMPLES

MAXSAMPLES parameter is used to specify number of samples to process at once. All samples will be processed by default or specified in System Manager. If value is specified in parameter then that value will be used.

Parameter: POSTPROGRAM

The POSTPROGRAM parameter is used to run post processing program after posting results into database.

Parameter: ISIMPORT

The ISIMPORT parameter is used to indicate if file is import from Reault entry for Replicate support.

Parameter: REPLICATEXML

The REPLICATEXML parameter is used to specify newly created replicate xml file path to support Replicate through Result Entry.

Parameter: NONREPLICATEFILEPATH

The NONREPLICATEFILEPATH parameter is used to specify newly created csv file path to support Replicate from Result Entry.

Parameter: OVERWRITECOMMENTS

   The OVERWRITECOMMENTS parameter is used to overwrite the earlier analysis, analyte and replicate comments. If unspecified, analysis, analyte and replicate comments will be appended.

Parameter: OVERWRITENARRATIVERESULT

   The OVERWRITENARRATIVERESULT parameter is used to overwrite the previous Narrative analysis result. If unspecified, Narrative analysis result will be appended.

After entering all the required parameters execute the command line. Following Result posting screen will appear only if "DISPLAY" parameters is included in Command line.

POSTRESULTS6 application supports three type of INFORMAT -
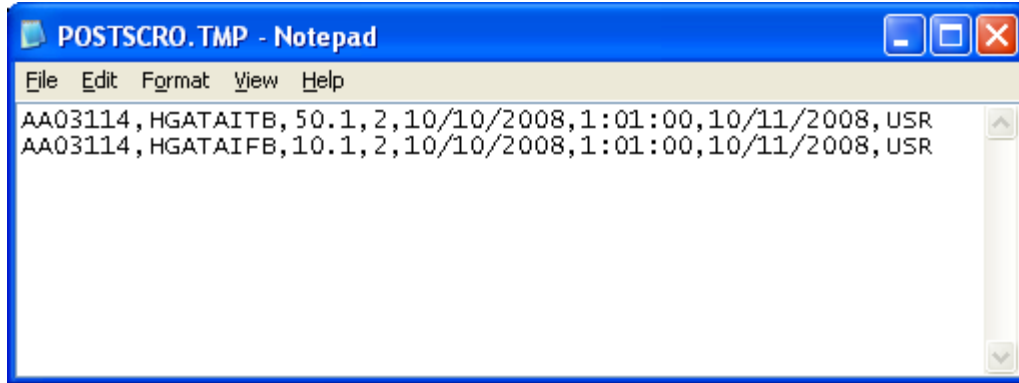   1. POSTSCRO
      POSTMCRO
   2. EXCEL

1. Input file format for POSTSCRO
   There are two types of input file format for POSTSCRO
   a) 8 field format
         1. Sample ID or Location code
         2. Analysis Code
         3. Result (primary)
         4. MDL
         5. Start date
         6. Start time
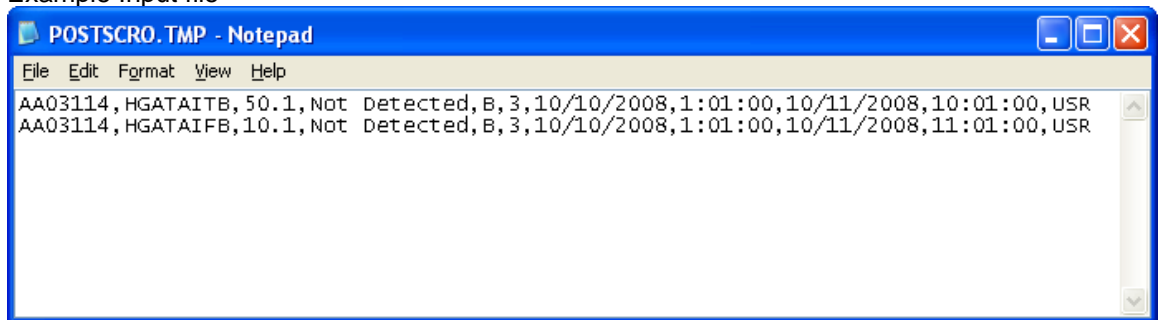   7. End date
         8. Analyst ID

      Example Input file

b) 11 field format
    1. Sample ID or location code
    2. Analysis Code
    3. Result (primary)
    4. Secondary Result
    5. Qualifier
    6. MDL
    7. Start date
    8. Start time
    9. End date
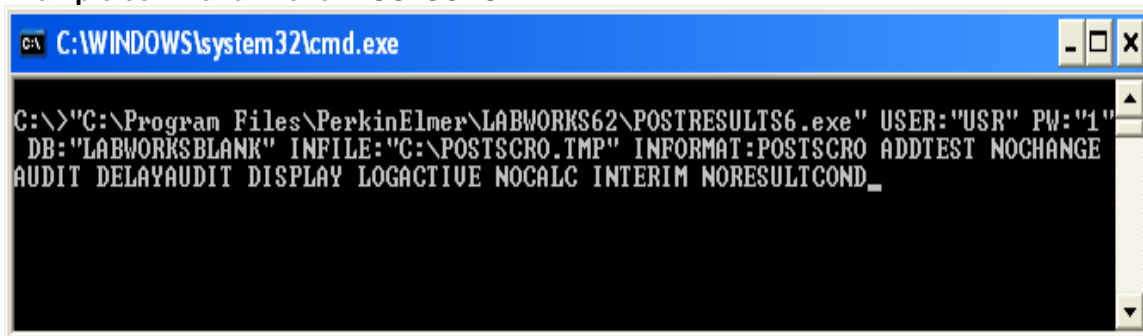   10. End time
    11. Analyst ID

Example Input file

Example command line for POSTSCRO

2. Input file format for POSTMCRO
    Line 1: Sample ID
    Line 2: Analysis code
    Line 3: Analysis start date (optional)

Line 4: Analysis start time (optional)
Line 5: Analysis end date (optional)
Line 6: Analysis end time (optional)
Line 7: Analyst initials (optional)
Line 8: Result source filespec (optional)
Line 9: Audit reason (optional)
Line 10: Number of analytes
Line 11: Analyte name
Line 12: Result
Line 13: MDL (optional)
Line 14: Secondary result (optional)
Line 15: Qualifier (optional)

Lines 11 - 15 repeat for each analyte indicated in Line 10.

All lines repeat for each multicomponent analysis in the input file.

Items marked **"optional"** may be left blank but the line must still be present as a place holder. All other items must have a valid value. No double quotes can be contained in any of the data items included in the file.

If the **Audit reason** (Line 9) is filled in for an analysis, that entry will supercede any audit reason that was passed on the command line (see Command Line Parameters above).

The **Result source** (Line 8) should be the complete file specification of the instrument result file that results were loaded from if applicable.
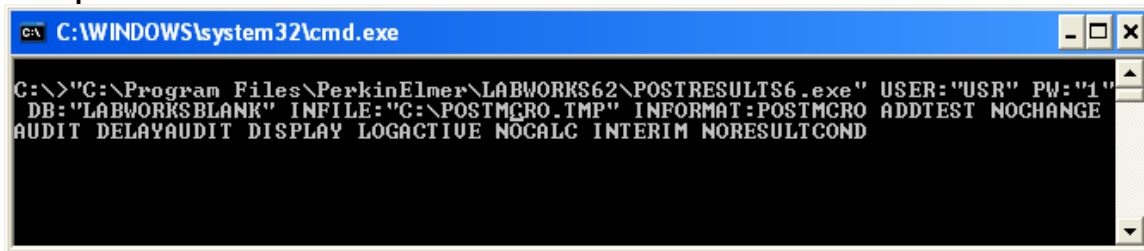
If **Analysis start date** and **Analysis start time** (Lines 3 - 4) are omitted, the date time stamp of the input file will be posted as the analysis start date and time.

If **Analysis end date** and **Analysis end time** (Lines 5 - 6) are omitted, they will be assigned the same values as the analysis start date and time.

Example Input file
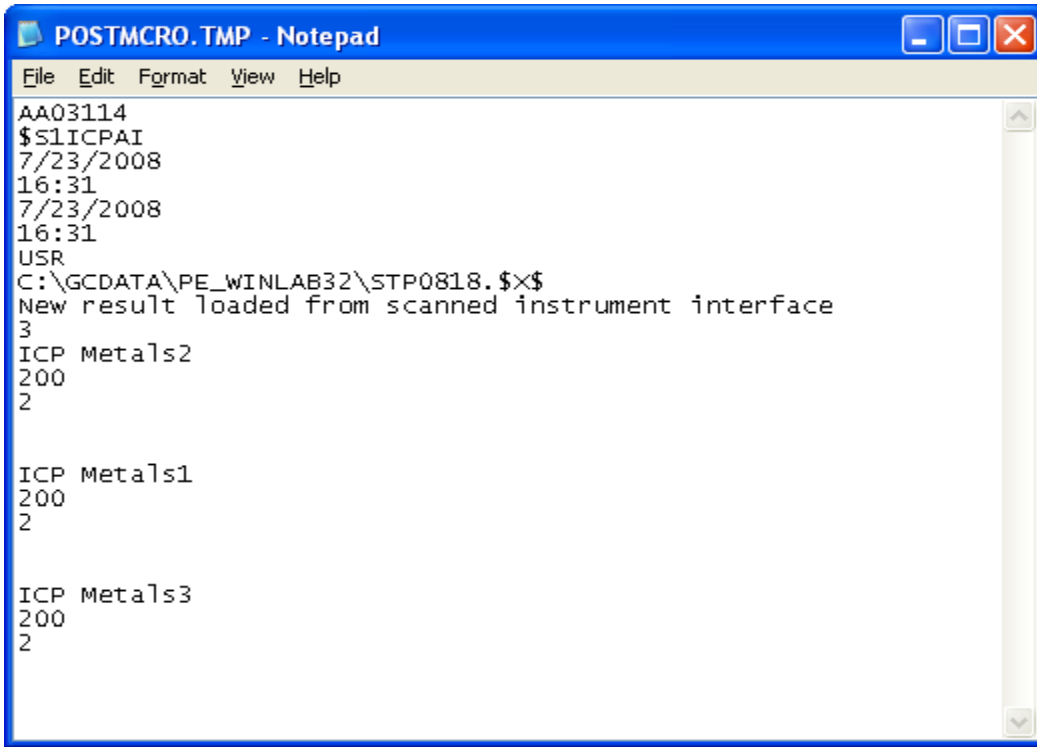
Example command line for POSTMCRO

3. Excel File Format
CSV format supports all header described below

CSV header	Property
SIDN	Sample ID
ACODE	Analysis code
ASTD	Analysis start date (optional)
ASTT	Analysis start time (start date must also be passed) (optional)
AEND	Analysis end date (optional)
AENT	Analysis end time (end date must also be passed) (optional)
AANALYST	Analysis analyst (do not default) (optional)

APRC	Analysis price (optional)
ACMT	Analysis comment (append, not replace) (optional)
ANUM	Analysis number (optional)
ANLNAME	Analyte name
REPNO	Replicate number (default to 1) (optional)
RLT	Analyte primary result
RLT2	Analyte secondary result (optional)
RQUAL	Analyte qualifier (optional)
RRAW	Raw result (optional)
RDLF	Analyte Dilution factor (default to 1) (optional)
RMDL	Analyte MDL (optional)
RPQL	Analyte PQL (optional)
RUNT	Analyte unit (optional)
RSTD	Analyte start date (optional)
RSTT	Analyte start time (start date must also be passed) (optional)
REND	Analyte end date (optional)
RENT	Analyte end time (end date must also be passed) (optional)
RANALYST	Analyte analyst (do not default) (optional)
RNUM	Analyte result number (optional)
RRLTSRC	Analyte result source (optional)
ANLABBR	Analyte abbreviation (optional)
INSTRUMENT	Instrument name (optional)
AREF	Analysis method reference (optional)
RREF	Result method (optional)
APRD	Analysis Preparation date (optional)
APRT	Analysis Preparation time (optional)
RCMT	Analyte comment (optional)
REPFINAL	Analyte Replicate result as Final Result (optional)

VIOLTYPE	Analyte Result Violation type (VIOLVALUE must also be passed) (optional)
VIOLVALUE	Analyte Violation Value (VIOLTYPE must also be passed) (optional)
CONTAINERID	Container Identifier (optional)
CONTAINERTYPE	Container Type (optional)

Notes: Analyst may be passed for the analysis and for the component result.

If analyst is specified for the analysis but not for the component result, the analysis analyst will be posted for both.

If analyst is specified for the component result but not for the analysis, the analysis analyst shall be left blank.

If analyst is not passed for analysis or component result, both shall be left blank. They shall not be defaulted from the current logged in user.

If dates are passed without the corresponding time, the time shall default to midnight (00:00:00).

If times are passed without the corresponding date, the time value shall be ignored and the date-time property shall be left empty.

If start or end date-time values are passed for the analysis but not for the component result, the analysis date-time values shall be posted for both.

If start or end date-time values are passed for component results but not for the analysis, the component date-time values shall be posted for both.

No matter whether analysis start date-time values are specified or implied from component start date-time values, the earliest of all start date-time values shall be posted as the analysis start date-time.

No matter whether analysis end date-time values are specified or implied from component end date-time values, the latest of all end date-time values shall be posted as the analysis end date-time.

If Replicate information is to be specified in input file then add one row with REPNO = 0 and RLT = CALCFROMREP so that replicate value will be calculated from all the replicate rows.

Example Input file with Replicate Numbers

Example Input file

Example command line for EXCEL

Figure 4: Result posting screen with the Progress bar.
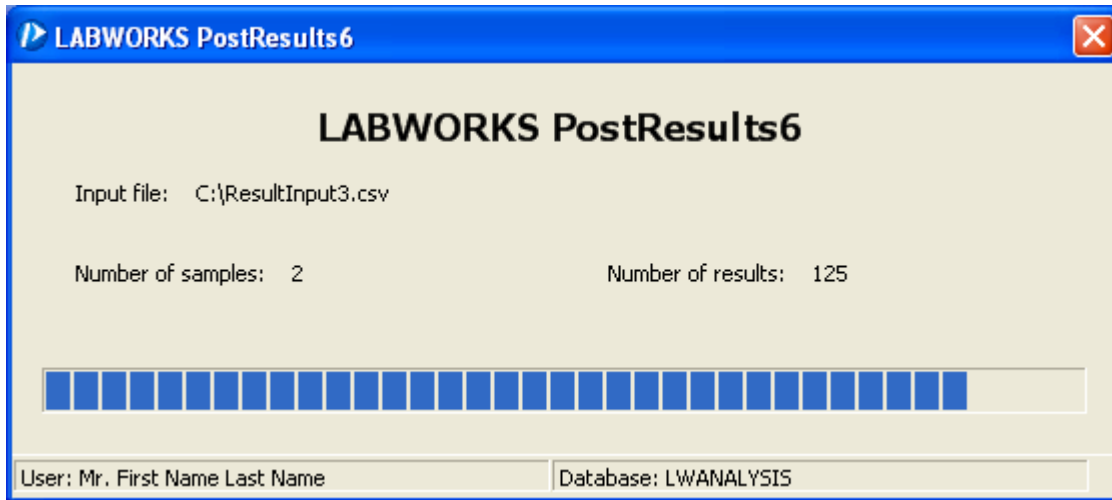
Given below are the various parameters of the status display dialog along with their description

Parameter	Description
User	It displays the name of logged in user
Input file	It displays the file name and path of the input results file
Number of results	It displays the number of results being posted
Number of samples	It displays the number of samples in file
Database	It display the target database name
Progress bar	It displays the status progress bar

Output

- After execution of the program, the data is posted into target database (ANALYSIS and RESULTS table)

- The Audit trail file generated on DELAYAUDIT parameter is saved as <<InputFileName>>_AuditTrail.xml to User Path.

- All errors are trapped in ERRORLOG table. Pre-authentication errors are saved in ERRORLOG.xml file

- The Log file generated on LOGACTIVE parameter is saved to User Path as POSTRESULTS6.log

- INTERIM.DAT generated on INTERIM parameter is saved at LWDATA\ RESULTS location

- The result of operation in terms of number of success and failure is saved in MESSAGEQUEUE table as DESKTOP type of message

Contents of the error log file

If the database name is not entered correctly at the Command line then following error message will occur.
Example: Contents of error log file is shown below.

<LWERROR>
 <ERROR>
  <ErrorDescription>The requested database LABWORKSB is not defined in configuration.</ErrorDescription>
  <ErrorDateTime>12/12/2008 12:40:31 PM</ErrorDateTime>
  <SecurityLevel>HIGH</SecurityLevel>
  <LogType>SECURITY</LogType>
  <UserID>0</UserID>
  <UserInitials>
  </UserInitials>
  <AssemblyName>Microsoft.Practices.EnterpriseLibrary.Data, Version=2.0.0.0, Culture=neutral, PublicKeyToken=null</AssemblyName>
  <AssemblyVersion>2.0.0.0</AssemblyVersion>
  <ApplicationName>Microsoft.Practices.EnterpriseLibrary.Data</ApplicationName>
  <ClassName>DatabaseConfigurationView</ClassName>
  <MethodName>
  </MethodName>
  <WorkStationID>SVR006</WorkStationID>
 </ERROR>
 <ERROR>
  <ErrorDescription>Authentication failed!</ErrorDescription>
  <ErrorDateTime>12/12/2008 12:40:31 PM</ErrorDateTime>
  <SecurityLevel>MEDIUM</SecurityLevel>
  <LogType>APPLICATION</LogType>
  <UserID>0</UserID>
  <UserInitials>
  </UserInitials>
  <AssemblyName>
  </AssemblyName>
  <AssemblyVersion>
  </AssemblyVersion>
  <ApplicationName>POSTRESULTS6</ApplicationName>
  <ClassName>Program</ClassName>
  <MethodName>Main</MethodName>
  <WorkStationID>SVR006</WorkStationID>

</ERROR>

Contents of Log file

The Log file displays the UserID, database name, Log datetime, result input file path, number of results posted, number of samples posted, number of analyses posted, number of results posted successfully and number of results posted failure.
Example: Contents of log file is shown below.

User: USR
Database name: LABWORKSBLANK
Log datetime: 3/12/2010 1:20:00 PM
Result input file path: C:\ResultInput3.csv
Total Number of samples: 1
Total Number of results: 3

Contents of INTERIM.dat file

Example: Contents of INTERIM.dat file is shown below.

"AA22336","GR1","","09/12/2008","14:43:10","09/12/2008","14:43:10","10/12/2008","03:48:34","TA1","TA 1","056660","1","SUNIL","NONE" .

Contents of Message Queue

It displays the number of results posted successfully and number of failures.

Example: Contents of message queue is shown below.

POSTRESULTS6: C:\SAMPLE.TMP.Number of results posted successfully: 1 and number of failures: 0