

Purging IMBM Records in DAT-MAIL

User Guide

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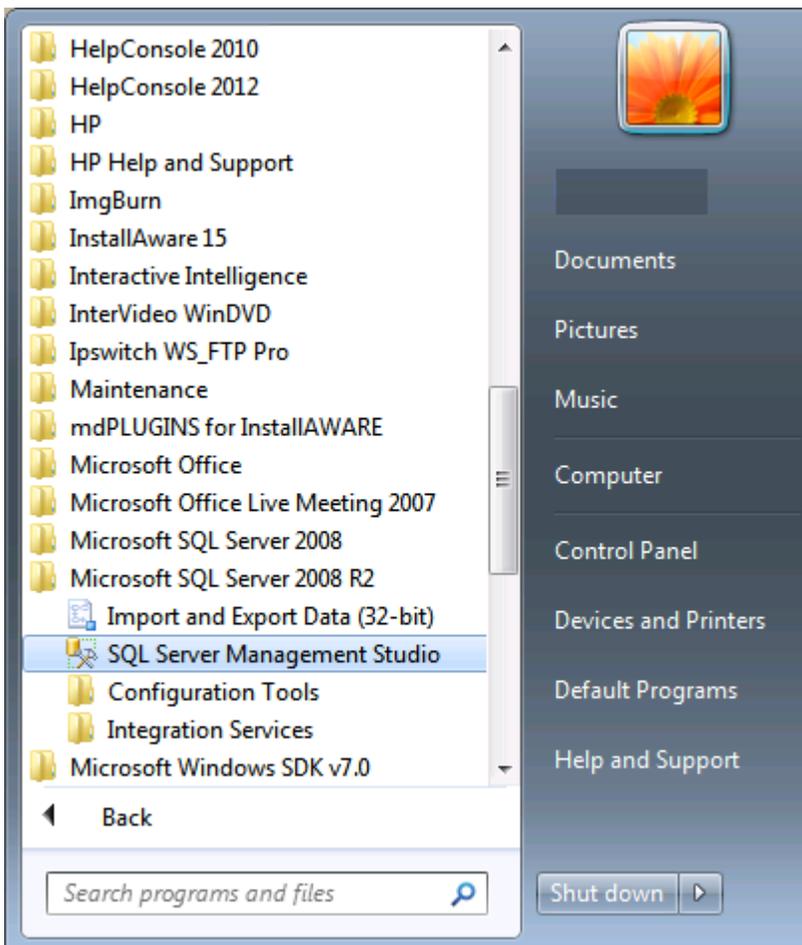
Manual Purge in MS SQL

Opening MSSQL Studio and entering a query

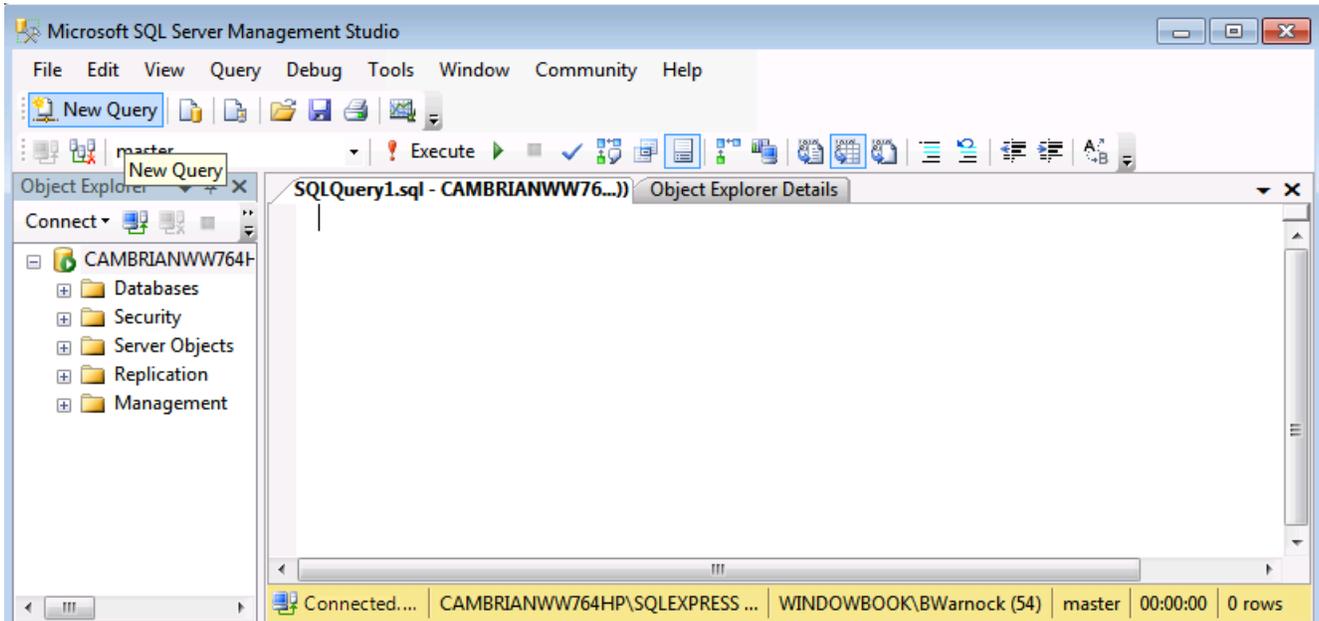
Purging IMBM Container Barcode SQL records using MSSQL Management Studio

- A. **This example shows a purge of records that are more than 90 days old.**
- B. **The first step is to find out how many IMBM (container barcode) records are older than 90 days.**

1. Open Microsoft SQL Server Management Studio and connect to the database:

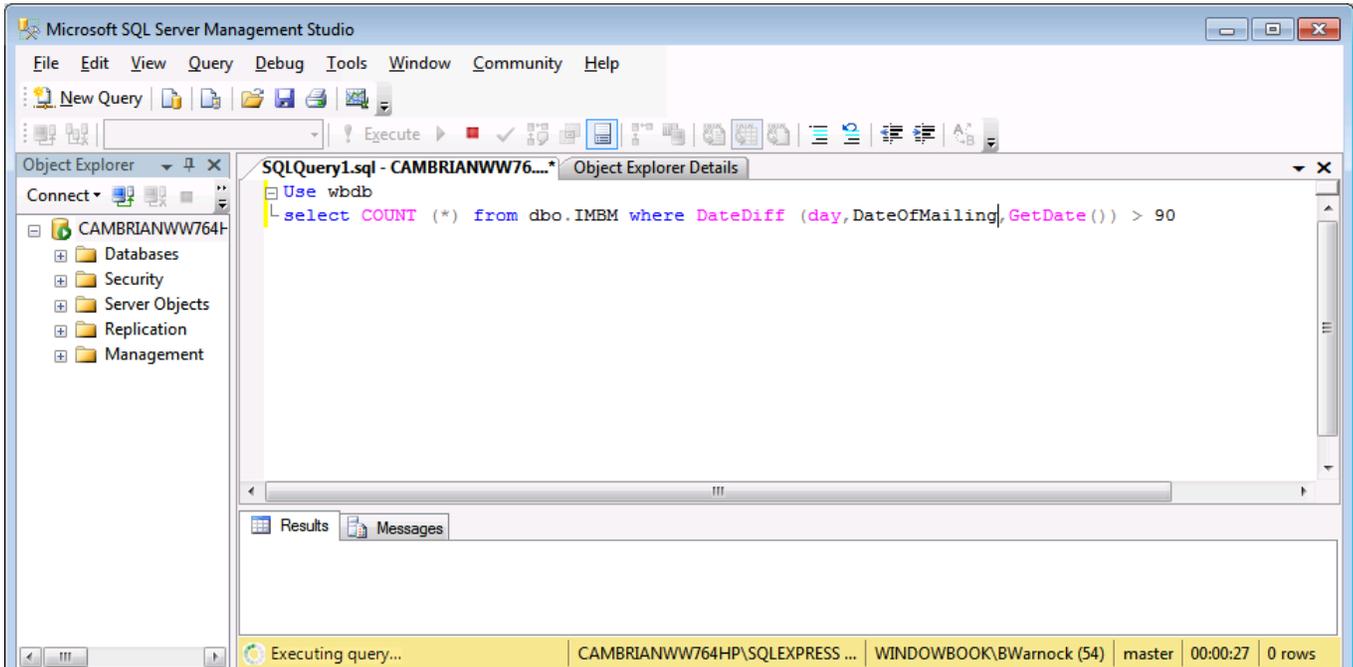


Once you are in the Management Studio Click "New Query" – see screen shot:

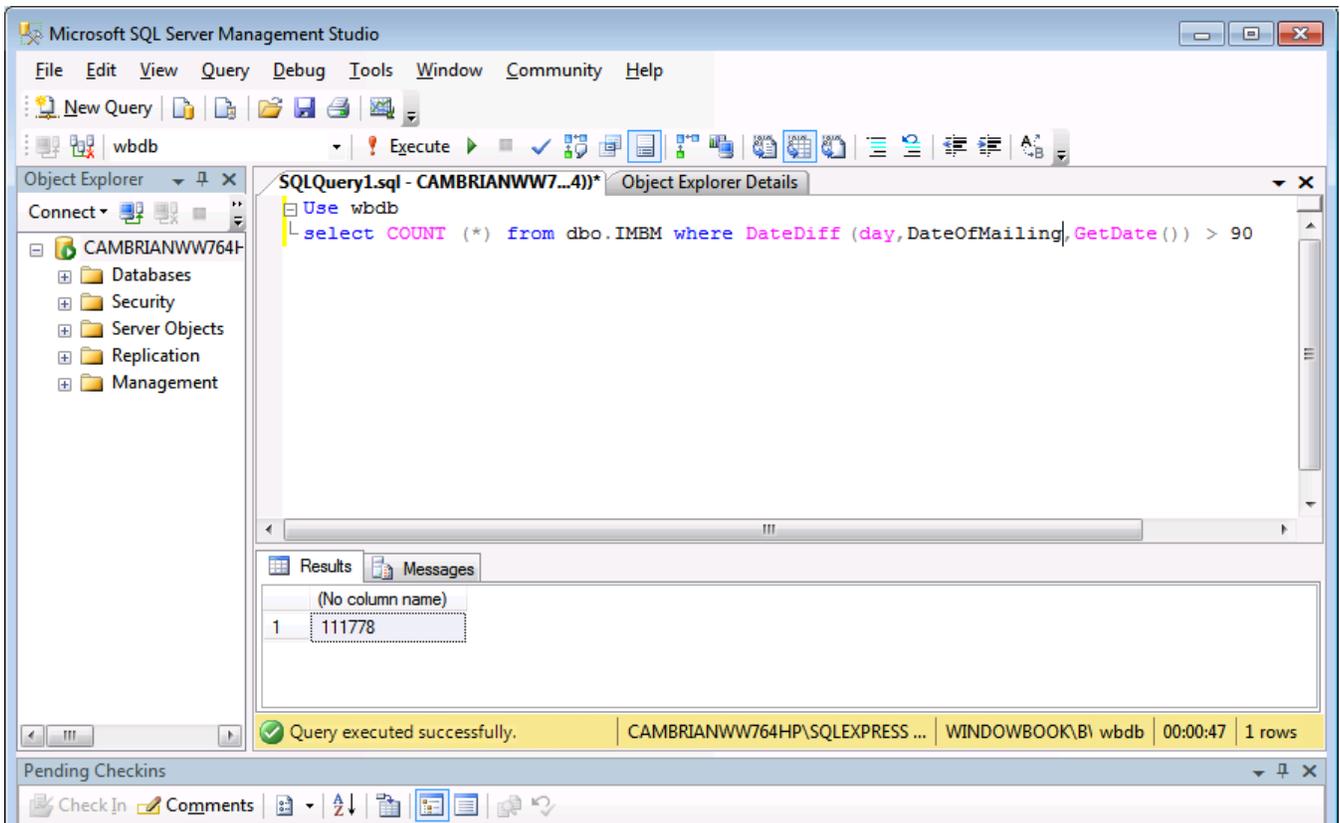


Then paste the following script into the window and click the **Execute** button:

```
Use WBDB
select count(*) from dbo.IMBM where DateDiff(day,DateOfMailing,GetDate()) > 90
```



The lower pane will show the number of records found once execution is complete – in this case 111,778:



Displaying Actual Records

C. Displaying actual records and their age in days

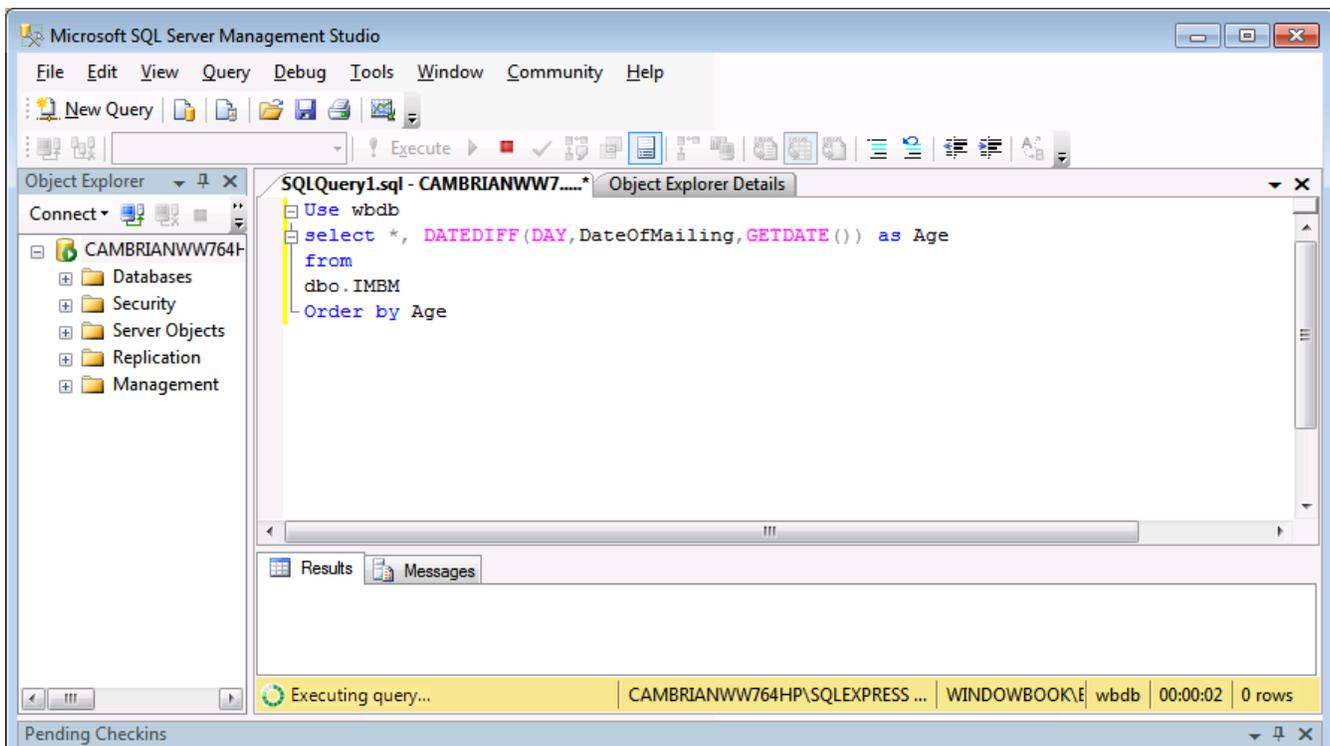
If necessary you can display the actual records by doing the following:

Click **New Query**.

Paste the following script into the window, then click the **Execute** button:

```
Use WBDB
select *, DateDiff(day,DateOfMailing,GetDate()) as Age
from
dbo.IMBM
order by age
```

Screen shot:



In this case you can see the actual records that are produced by the query – these are the records that you will be deleting using the delete function. The query can take awhile to complete if there are a very large number of records.

The query will produce output that looks something like this (see screen shot):

The screenshot displays the Microsoft SQL Server Management Studio interface. The central pane shows a SQL query: `Use wbdb; select *, DATEDIFF(DAY, DateOfMailing, GETDATE()) as Age from dbo.IMBM Order by Age`. The bottom pane shows the results of the query, which is a table with 12 columns: IMBMID, NamesID, USPSMailerID, IMBType, DateOfMailing, ClassOfMail, JobID, JobNumber, SequenceNumber, ClaSysID, and ContainerID. The results are sorted by IMBMID in ascending order, showing 20 rows of data. The status bar at the bottom indicates that the query is executing and that 0 rows are returned.

IMBMID	NamesID	USPSMailerID	IMBType	DateOfMailing	ClassOfMail	JobID	JobNumber	SequenceNumber	ClaSysID	ContainerID	
1853662	4272021	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240751	281	13414
1853663	4272022	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240752	281	13415
1853664	4272023	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240753	281	13416
1853665	4272024	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240754	281	13417
1853666	4272025	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240755	281	13418
1853667	4272026	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240756	281	13419
1853668	4272027	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240757	281	13420
1853669	4272028	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240758	281	13421
1853670	4272029	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240759	281	13422
1853671	4272030	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240760	281	13423
1853672	4272031	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240761	281	13424
1853673	4272032	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240762	281	13425
1853674	4272033	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240763	281	13426
1853675	4272034	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240764	281	13427
1853676	4272035	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240765	281	13428
1853677	4272036	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240766	281	13429
1853678	4272037	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240767	281	13430
1853679	4272038	0	264001	1	2014-01-27 00:00:00.000	3	0	00000281	4240768	281	13431

Purging old records

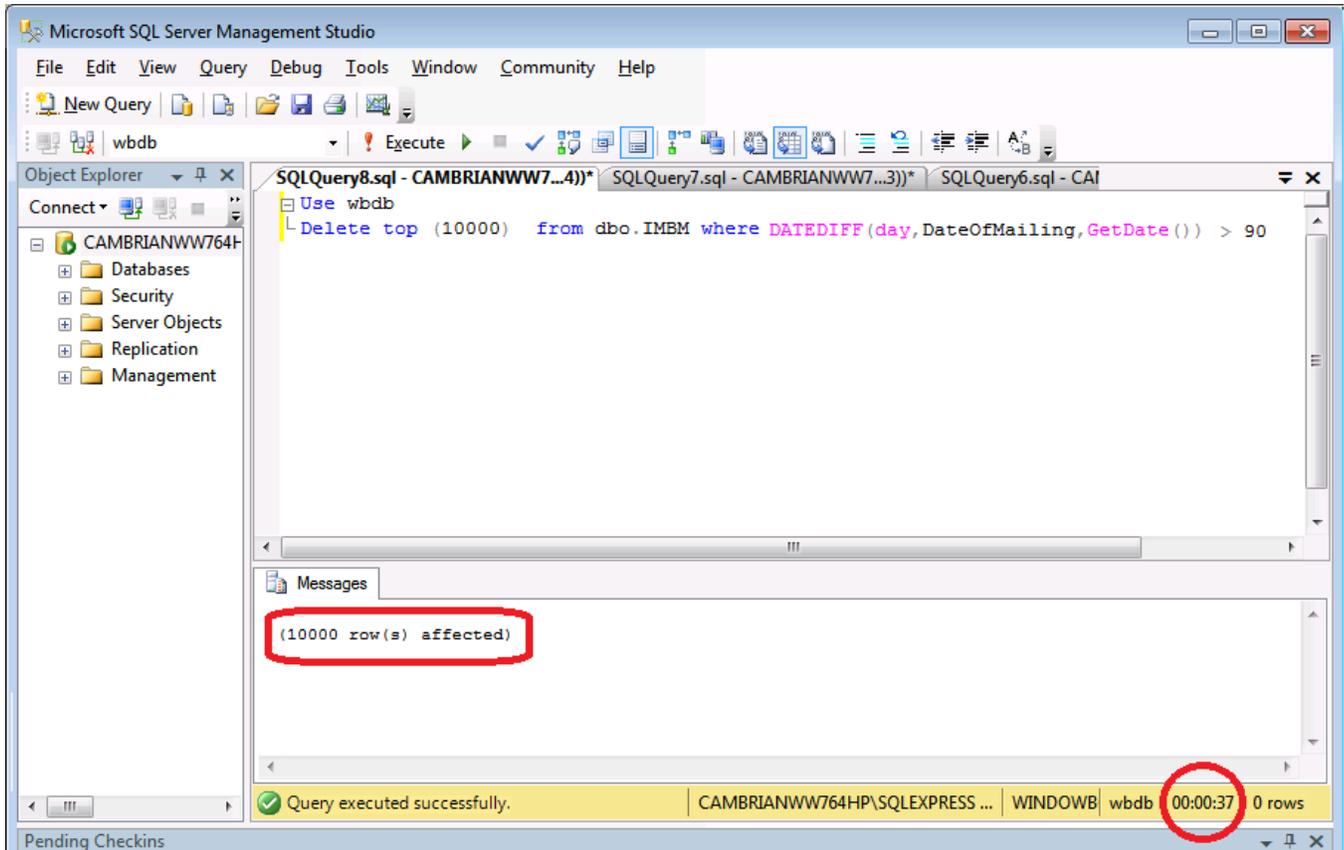
D. Deleting (purging) actual IMBM records older than 90 days

Click **New Query**.

Type or paste the following script into the query window, then click the **Execute** button:

Use *WBDB*

delete top(10000) from dbo.IMBM where DateDiff(day,DateOfMailing,GetDate()) > 90



This will delete 10,000 IMBM barcode records. Watch how long it takes by noting the timer at the bottom in the status bar of SQL Server Management Studio.

The amount of time this takes multiplied by how many times 10,000 divides into the number returned by the "find out how many IMBM records are older than 90 days" query tells you how long the entire process should take.

One strategy for deleting efficiently is to start by deleting smaller numbers, and then ramp up depending on how quickly it takes the query to complete. Based on how long it takes, you will know what impact you will have by upping the number in the *TOP(10000)* command.

NOTE: If the number you choose is too large, you may get a message saying that the "server has insufficient RAM" or a similar message. If this occurs, lower the number until the message goes away.

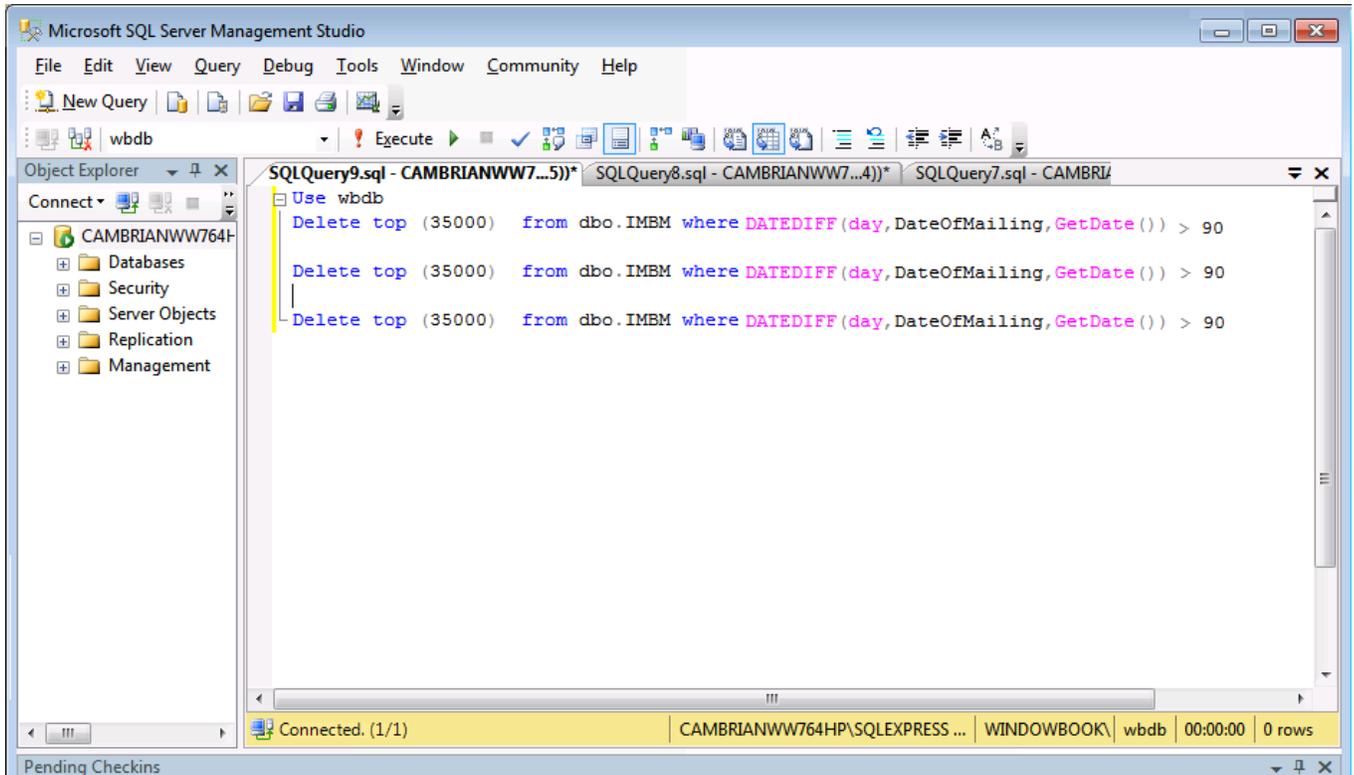
Once you've determined your optimal number, if you don't want to wait for each query to finish, you can paste them in consecutively, like this (in this example it has been determined that the optimal number for the query is 35,000 records – it's possible for the number to be much higher):

Use WBDB

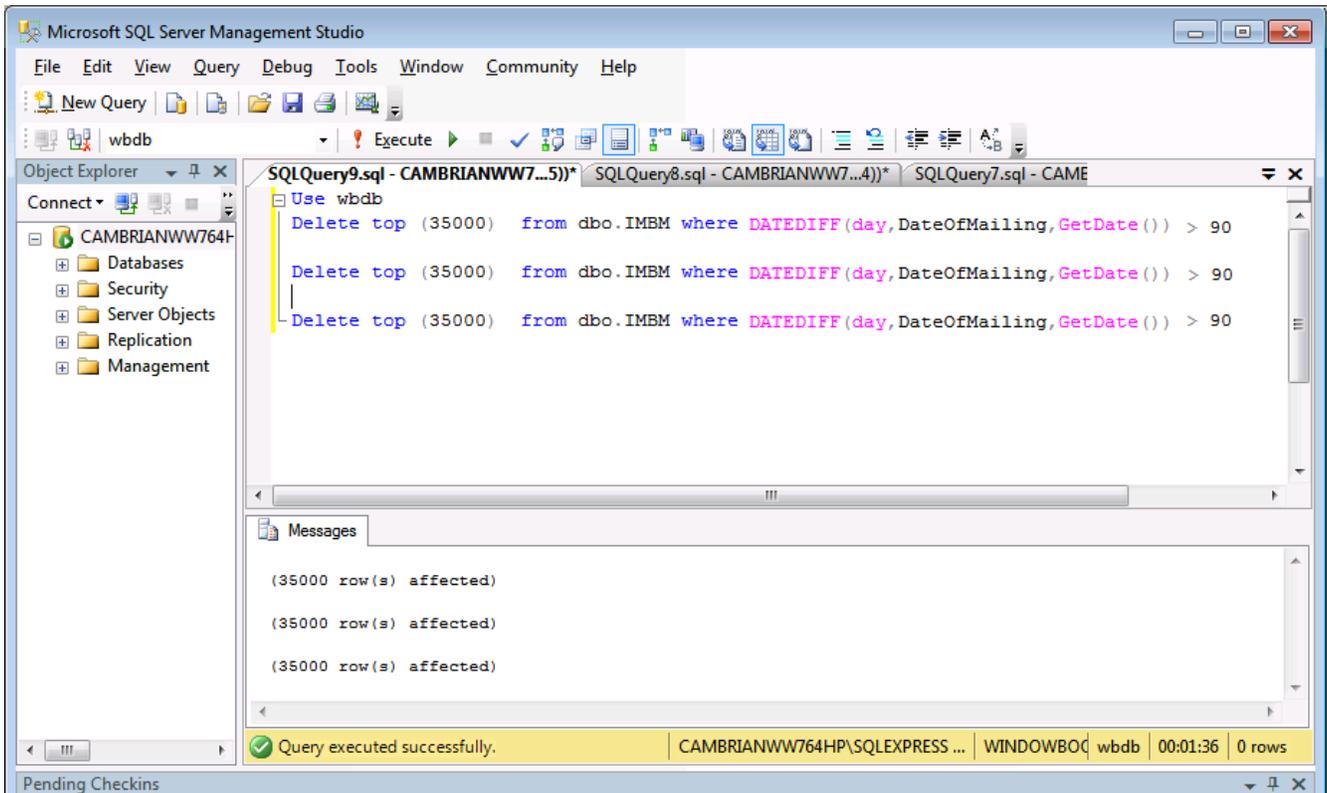
```
delete top(35000) from dbo.IMBM where DateDiff(day,DateOfMailing,GetDate()) > 90
```

```
delete top(35000) from dbo.IMBM where DateDiff(day,DateOfMailing,GetDate()) > 90
```

```
delete top(35000) from dbo.IMBM where DateDiff(day,DateOfMailing,GetDate()) > 90
```



When this query is executed it will show the following result:



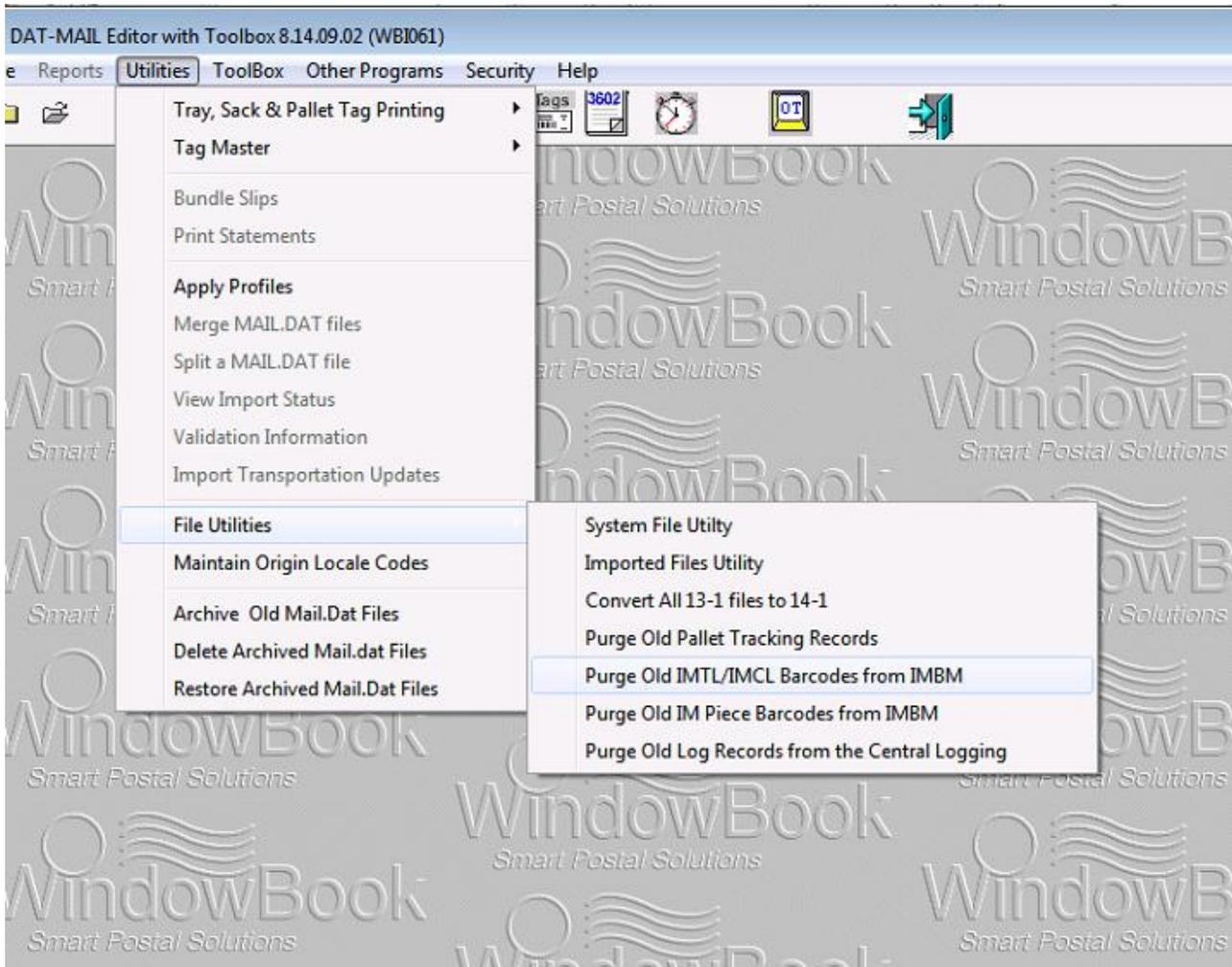
In the example we have purged 105,000 records which took 1 minute 36 seconds to complete. (Again the number of deletions can be much higher for high-volume, high-performance systems).

Manual Purge from DAT-MAIL

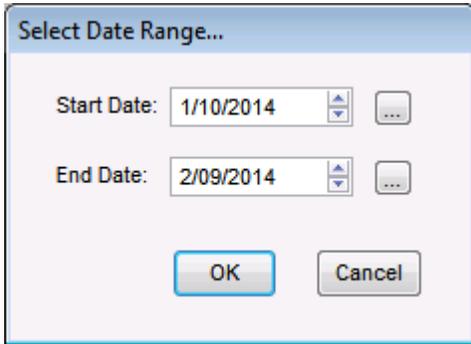
Purging IMBM data from MS SQL tables for IMTL/IMCL/IM Piece barcodes and Central Logging

There are two ways to purge IMB (and central logging) data in DAT-MAIL:

1) From DAT-MAIL *Main menu* => *Utilities* => *File Utilities* menu there is an option that allows the user to manually purge records:



All of these purge options (*Purge Old IMTL/IMCL Barcodes from IMBM, etc.*) require the use of a date range for purging old records:



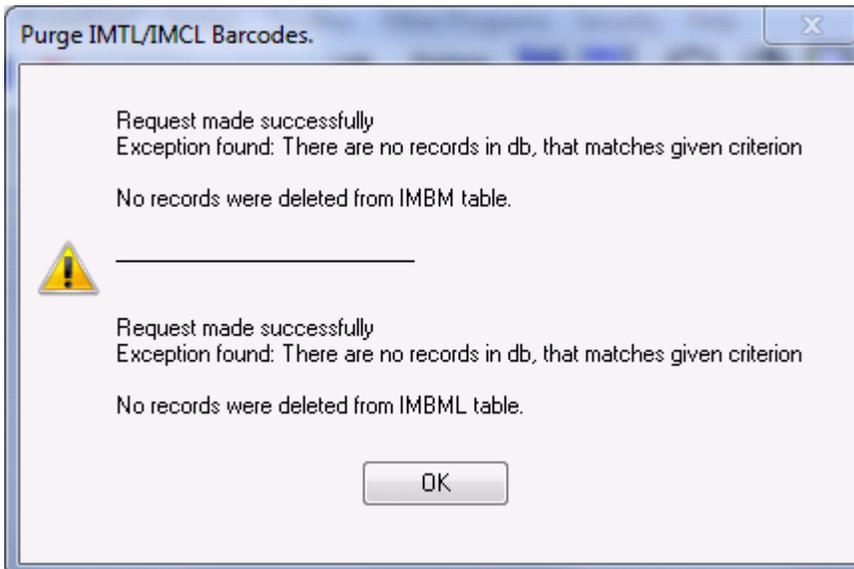
Pick the date range which is appropriate for your set of data, then click **OK** to run the purge.

After you run the program you should see a message indicating that the purge was completed (and number of records purged):

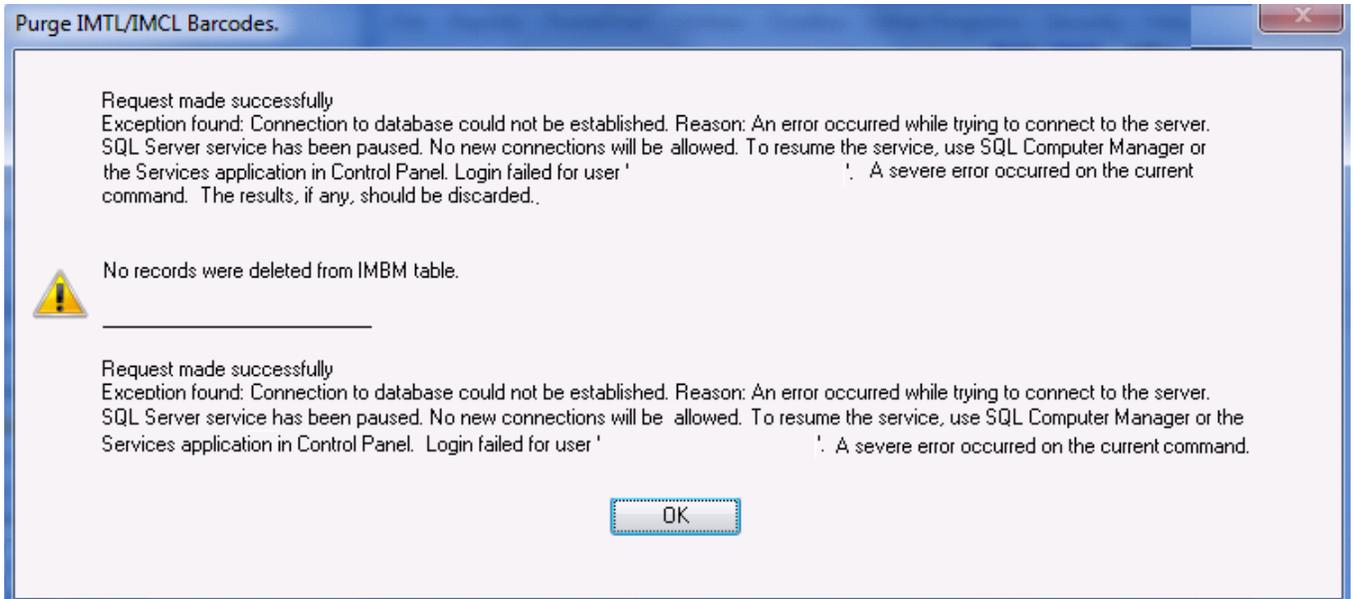


Note: Wait for the completion window to appear - it can take some time depending on the amount of data that is being purged. DAT-MAIL does not show a progress bar during the purge because the purge request is done directly in MSSQL.

Or if no existing records match the date range you gave, you will see a message like this:



Finally you may see a message like this if there is a problem with your connection to the SQL database or your permissions in the SQL database:



If you get this type of message you should contact your IT person / System Administrator and have them check that you have the proper rights and connections needed for access to the SQL database (wbdb).

Verification

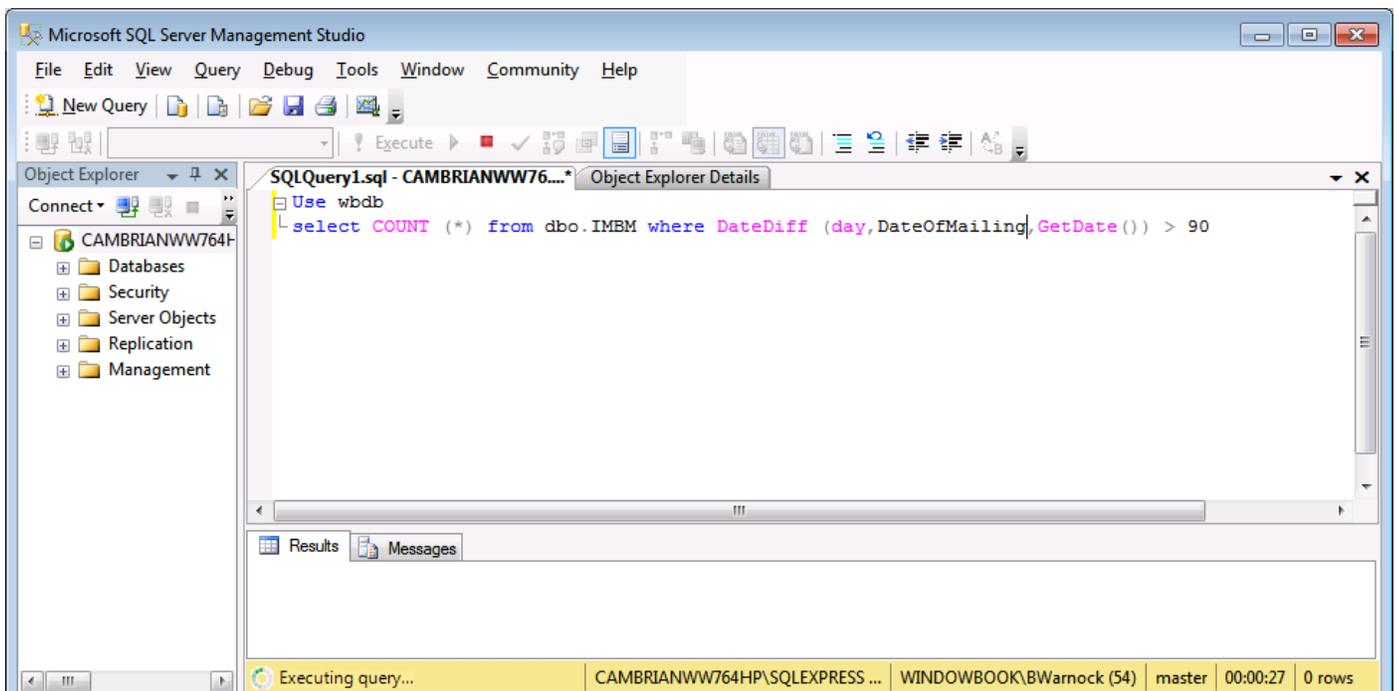
You can independently verify that the data is being purged by using MS SQL's Management Studio as shown in the first section of this document. Do a *Select Count(*)* query before and after the purge occurs, comparing the number of records found.

See the following for an example:

Once you are in SQL Management Studio (see instructions in the *Purging IBM records in MS SQL Management Studio* section of this document) type or paste the following script into the window and click the **Execute** button:

use WBDB

```
select count(*) from dbo.IMBM where DateDiff(day,DateOfMailing,GetDate()) > 90
```



Note: This query looks for records more than 90 days old - if you had just run a purge of > 90 day old records it should show a query result of 0 records. In this example, if the number were greater than 0 it might indicate an issue.

Automated purge using Process Manager

Installing and Configuring the Process Manager plug-in

PURGING IBM Records using the Window Book Automation Scheduler (Process Manager plug-in):

Using the Window Book Automation Scheduler's Process Manager plug-in, the user can configure the purge of IBM to happen automatically at specified intervals (The frequency with which it runs can be defined in the plug-in configuration). Using a command-line argument, the user can tell the purge utility plug-in the range of and type of records to purge.

See the following for configuration of the plug-in and the command-line parameters that are available.

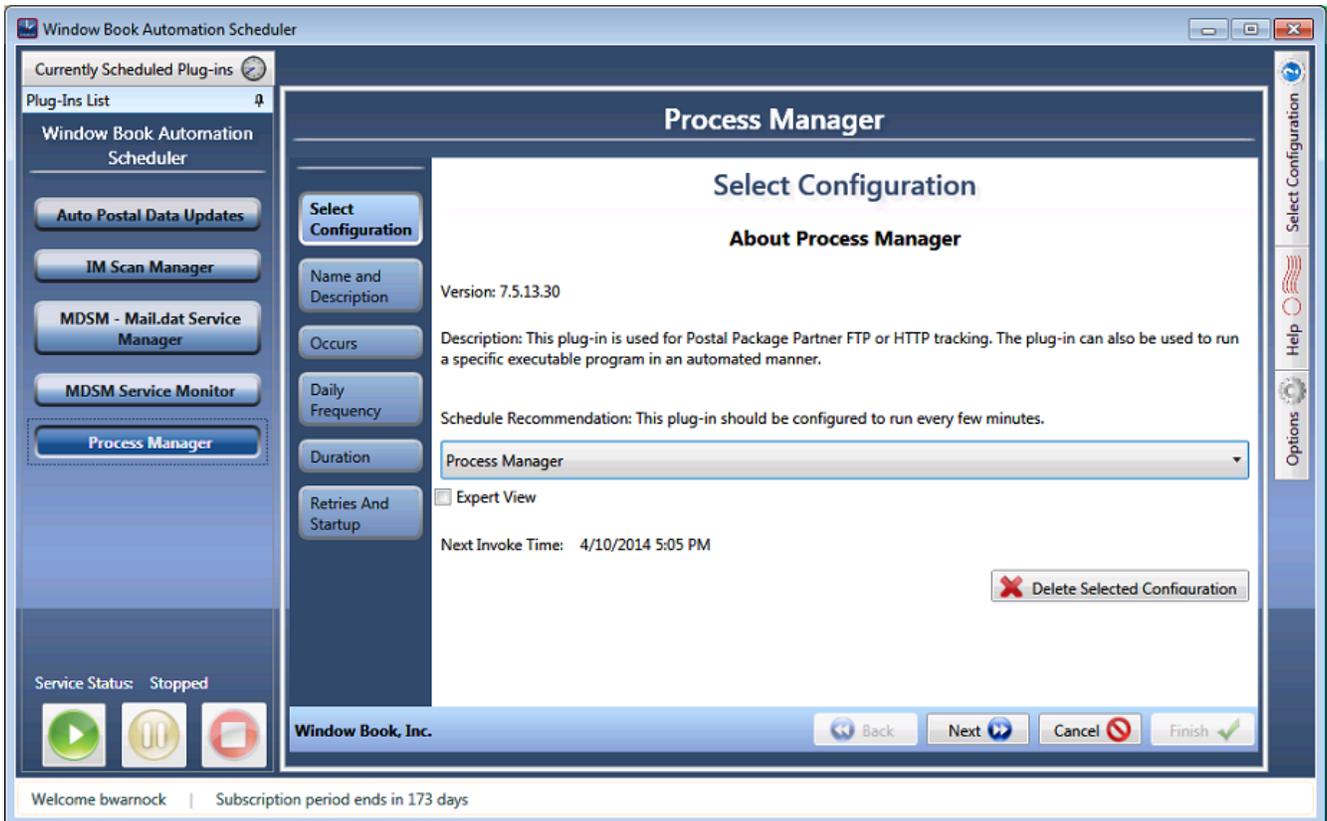
Setting up the Scheduler Process Manager plug-in to run automatic purges of IBM data.

Note: For this system to work it is necessary to have the Window Book Automation Scheduler installed on the same computer that DAT-MAIL is running on.

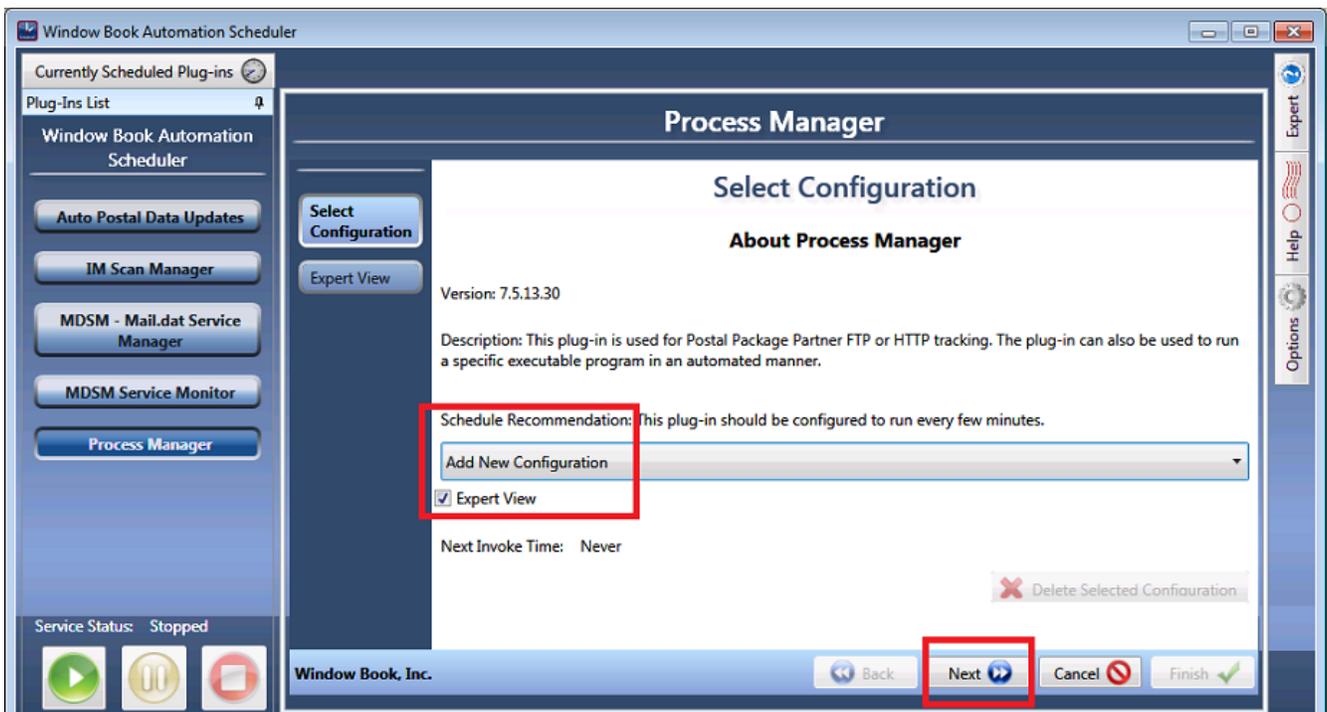
If you are installing the Window Book Automation Scheduler (after downloading it from the Window Book website) make sure that the Process Manager plug-in option is selected (it should be selected by default on a new installation). Once the Scheduler with Process Manager is installed and the Scheduler has been registered you can set up the Process Manager to run the purge utility automatically as shown below.

Configuring Process Manager in the Window Book Scheduler

Open the Scheduler and Click the **Process Manager** button:



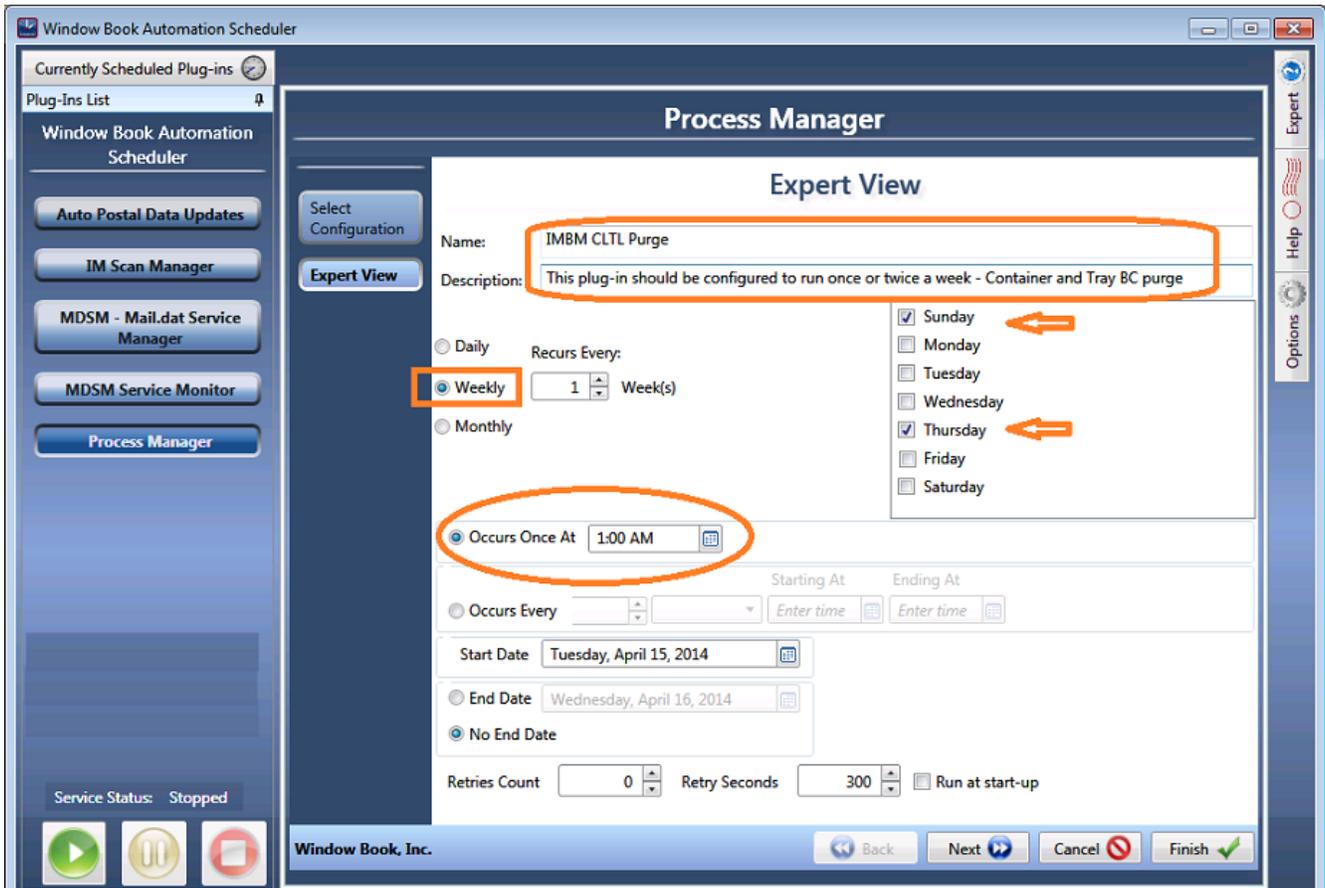
From the main Configuration Screen choose "Add New Configuration" with "Expert View" checked



Edit the "Name and Description" entry to something appropriate (see screenshot for an example).

The purge utility should run every few days, or once a week depending on volume. The period can be set appropriately depending on the volume of Mail.dat files you are processing, and the length of time you want to keep the data. Use the description to specify exactly what the utility is doing.

(This example shows the purge utility set up to run twice weekly for purging container (pallet) and tray tags):

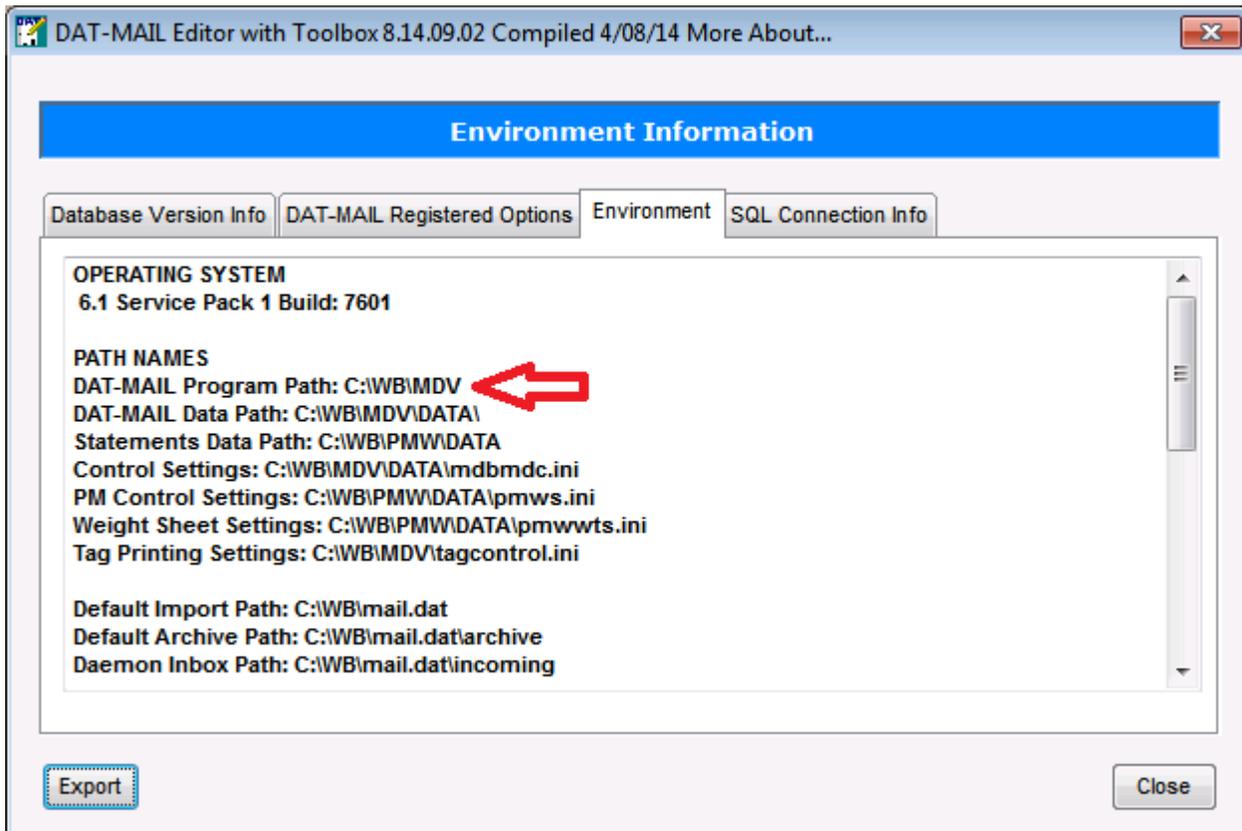


Set an appropriate time (it should generally be a time when the program is not being used, during off hours, or it could be a time during work hours that is set aside for this purpose, when Mail.dat processing is not taking place).

Then click **Next** to continue.

In the "General" screen choose "Custom Process" and browse for the purge utility which can be found in the DAT-MAIL program directory. The executable name is MDPurgeIMBC.exe. (Note: The default DAT-MAIL program directory is C:\WB\MDV, but your setup may be different).

Note: The DAT-MAIL program directory can be determined by clicking the *Help => About => More About => Environment* tab in DAT-MAIL. (see screenshot):



The MDPurgeIMBC.exe program works for all data purges - it uses different command line flags or arguments to specify the particular type of data to be purged, and the date range. The following command line flags are used to tell the program which type of data to purge:

- /PURGIMTCL** - purge IMTL and IMCL data (Tray and Container barcodes)
- /PURGIMPCB** - purge IM Piece barcodes
- /PURGCENTRALLog** - purge Central Logging data

One, two or all three of these flags can be specified on the same command line - At least one of them must be specified.

Note - if you purge more than one type of data using the command line, the date range of the purge will be controlled by one of the following options:

Date Range / Age of Records:

For date range (i.e. the age of the records to be purged) you can use one (only) of the following command line arguments - (Note that these cannot be modified - i.e. "/DROVER180" will not work):

/DR4560 - 45 to 60 days old
/DR6090 - 60 to 90 days old
/DR90120 - 90 to 120 days old
/DROVR120 - older than 120 days
/DROVR365 - older than 365 days (1 year)

There is also a command-line date range option that can be edited – the user can specify the number of days:

DROVRman=XXX

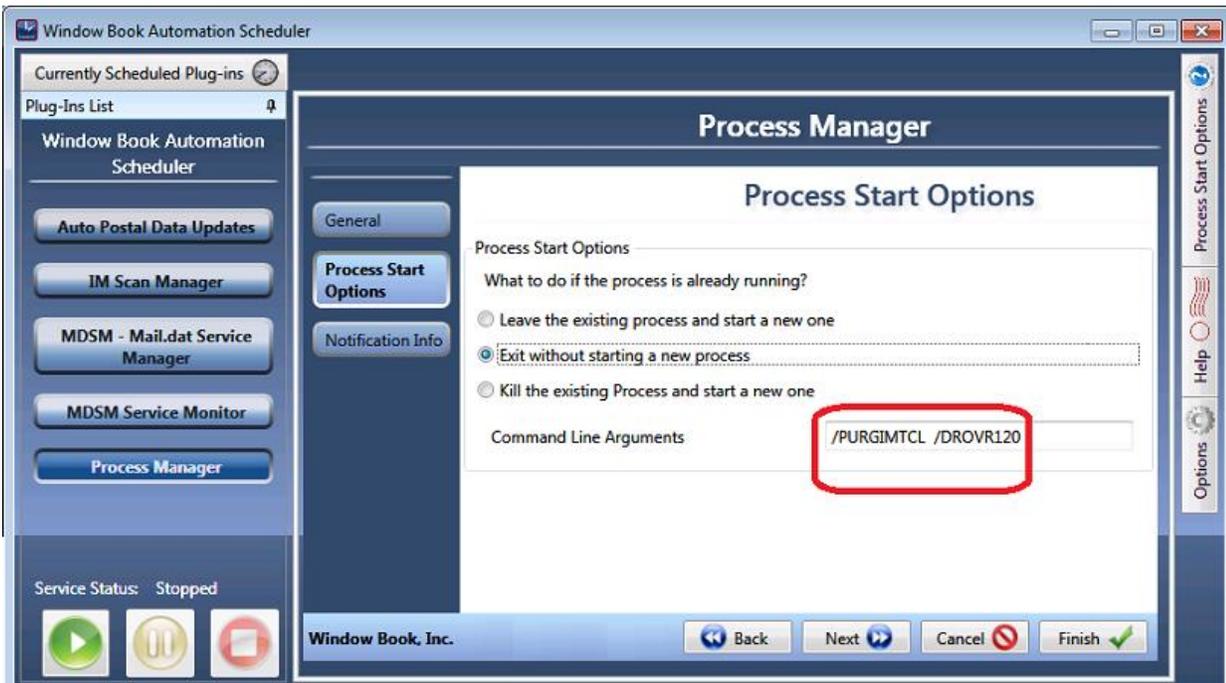
This option allows the user to specify the date range (beyond which) data is to be purged. This command does not have the initial "/". (Command parameters with "=" do not use the forward slash). For example the command line **DROVRman=75** would be used for purging records older than 75 days.

One (and only one) of the above date range options can be specified for each data purge. Again if you are using the utility to purge more than one type of data the date argument will control the date range for all the data you are purging with this instance of the plug-in. If you want to specify a different date range for different types of data you will need to set up multiple instances of the plug-in – one for each different date range.

Purging Central Logging records

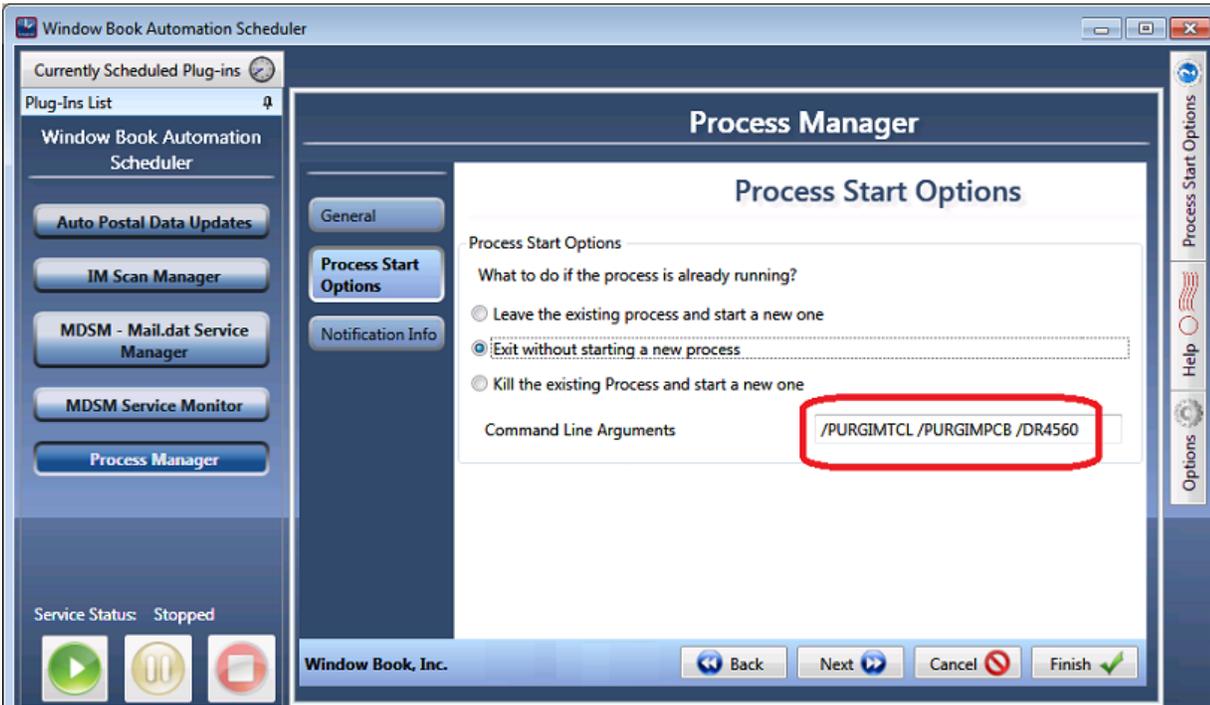
Central Logging is a feature recently added to DAT-MAIL which logs major transactions (in the wbdb SQL database) such as importing, generating statements, and Postal One! submissions. It is a good idea to purge these records from time to time although they do not take up as much space as the records. The same purging methodology as described for IM Piece barcode and IMCL/IMTL records can be used for Central Logging records, except that the argument required is "/PURGCENTRALLog".

From the 'General' tab click **Next** then enter the arguments needed:



In this example the purge utility will automatically purge Tray and Pallet IM barcodes that are more than 120 days old.

Or another possibility could be as follows:



In this example the automatic purge is set to purge both Container/Tray and IM Piece barcodes that are between 45 and 60 days old.

Finally mailers with very large mail.dat files that need to purge IM piece barcodes more frequently than Tray and Container barcodes can set up two separate instances of the plug-in with a different name for each. Separate instances should not be set to run at the same time (they could be, for instance, scheduled to run on different days).

Verification

Verifying that the purge has taken place

To verify that the data is getting purged, use MS SQL's Management Studio and do a Select Count(*) query before and after the purge occurs, comparing the number of records found. Examples of this query for the IMBM (tray and pallet) table can be found in the *MS SQL Manual Purge* section of this document.

NOTE - Do not run the "delete" query mentioned in that text, that information is for a manual purge, but it illustrates how select queries can be done. These queries can be run on either the IMBM table or IMPieceBarcode table (substitute the table name in the query as appropriate).

Troubleshooting:

If it does not appear that the data is getting purged, check first with the Scheduler's logs and event logs to verify that there are no issues there.

Scheduler logs can be found here:

C:\ProgramData\Window Book\Scheduler\Logs and

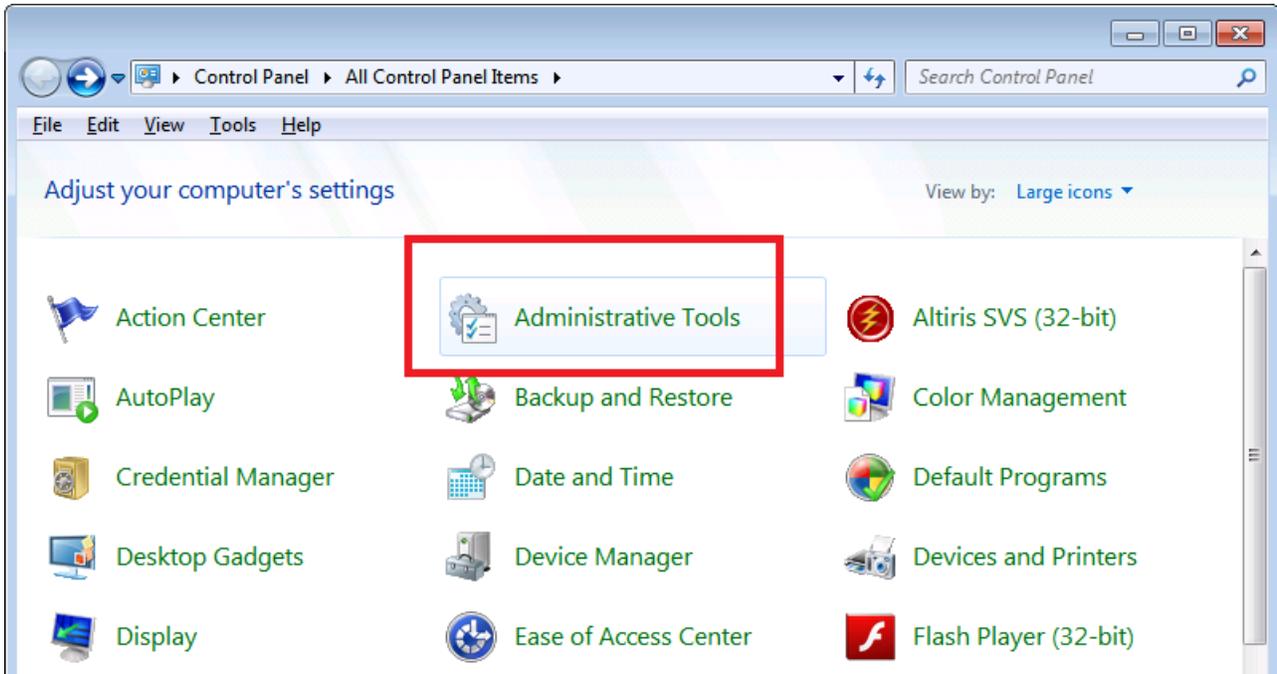
C:\ProgramData\Window Book\Scheduler\LogsArchive

Event logs can be found by going to Start => Control Panel, then when the window comes up click the back arrow:

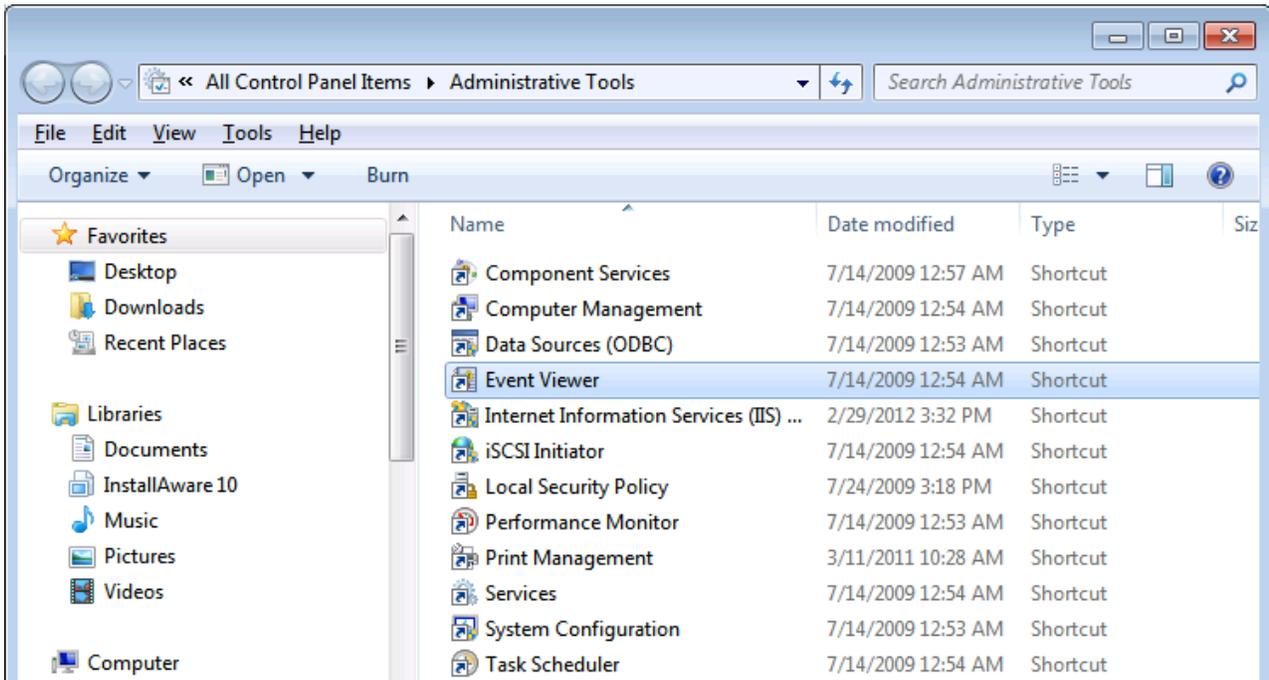


Click "Administrative tools" which brings you to the following screen – double click "Event

Viewer” to open the event viewer:



Then open up the “Applications and Services Logs” browse tree and choose “WBScheduler”:



Double clicking on any “Information” or “Error” line here will show information captured during execution of the Scheduler-related task. Since the Process Manager plug-in is doing the work in this instance you would look under Source - Process Manager 7.5.12.30 at the time of the purge to see information related to the purge attempt.

