

# POWERDB PRO v10

## RELEASE NOTES

Version 10 (V10) of PowerDB Pro Software incorporates the latest features added to the software. A description of the new features and the steps to install this version are described below.

**If you are updating from a version earlier than Version 9:**

- **Contact our office before you run the update**
- **Synchronize all field databases to the master before updating**

Make sure you run the installer with Windows administrative privileges. If you are running Windows 7 or Vista, right-click > 'Run as Administrator' on your machine.

You are recommended to backup all databases prior to installing any update.

PowerDB 10 will not affect an existing installation of version 9 or earlier. To avoid having multiple versions of PowerDB installed on your machine, version 9 or earlier should be uninstalled.

PowerDB 10 will automatically upgrade a previous installation of 10, for example 10.0 to 10.2, but with the identical installation options. So if 10.0 Advanced was first installed but not Pro, then running a newer 10 installer will not add the Pro shortcuts. If you want to change installation options, such as adding Lite or Pro, then PowerDB 10 must first be uninstalled.

To uninstall software click on the Windows 'Start' icon, select Control Panel, and browse as follows:

- Windows XP - Add or Remove Programs
- Windows Vista - Programs and Features
- Windows 7 - Programs > Programs and Features

Version 9 or earlier will be listed as 'PowerDB' in the program list and Version 10 will be listed as 'PowerDB 10'. Select the appropriate item and choose to uninstall.

If Version 9 fails to uninstall or if the uninstall option is not present, then download and run the PowerDB installation cleaner file from <http://www.powerdb.com/download/PdbInstallCleaner.exe>. Note that this installation cleaner only affects version 9 or earlier.

The uninstall process will not remove any custom shortcuts. Please modify shortcuts as necessary, noting that the default installation directory is now

```
"C:\Program Files\PowerDB Inc\PowerDB.v10\powerdb.exe"
```

When you install Version 10 on your master database machine all LAN users must be logged out of PowerDB and the synchronization server must be closed.

You will need to install Version 10 on all LAN machines before proceeding with data entry and on all field machines before synchronizing again.

NOTE: Do not forget to update any intermediary databases (i.e., databases on USB drives used for synchronization).

During the installation please follow the instructions on the screen.

NOTE: When connecting to an older version's database with a new major version of PowerDB (such as connecting to a v9 database with v10) PowerDB will prompt you to update the database schema. Respond Yes to this prompt. The software will prompt you to create a backup prior to update; we recommend you respond Yes to this prompt.

## **Overall Application Changes**

A quick load of instrument drivers on startup will get you into the software more quickly. A visual difference of note is V10 uses newer Windows common controls, giving a different appearance to windows, buttons, toolbars, etc. The Address Book dialog has a horizontal layout to better fit smaller screen resolutions. V10 can be installed alongside any earlier major version however this has limited applicability and is generally not recommended.

New View Settings options will change the appearance of the data input screen but will not affect the printed report. Choices can uniquely be set for each machine at *Tools > Options > View Settings* for any or all of the following:

- Indicate dropdown fields on forms
- Display forms with grey background
- Rectangular border on data entry fields

*Tools > Administration > Administrative Options* provides a Force Form Style checkbox which forces all three new View Settings to field databases.

Upload Settings button will push administrative settings from a Development or Field database to the Master database. All configuration settings get applied to field databases at the next synchronization.

# 1. Installation Edition Options

V10 installation will allow you to install one, two or three separate PowerDB Software editions on your machine. Note: the full database edition will now be described as PowerDB Pro.

COMPARISON GUIDE	PowerDB Edition			
	ONBOARD	LITE	ADVANCED	PRO
Runs in a hardened embedded environment	■			
Navigate with arrow and enter keys (no mouse)	■			
Manage data files with internal drive and USB drive	■			
Uses a subset of PowerDB Pro forms applicable to your instrument	■	■		
Files can import into PowerDB Pro	■	■	■	
Relay/Breaker/Recloser curve library	■	■	■	■
Completed forms are saved as files to your computer	■	■	■	■
Associates current test data with historical results	■	■	■	■
Control Megger instruments and download test data		■	■	■
Control non-Megger instruments			■	■
280+ industry standard test forms are provided			■	■
Advanced Relay Form			■	■
Trend historical results for asset for predictive failure analysis			■	■
Trend historical results for asset against other similar assets				■
Database functionality to manage data for all electrical equipment				■
One step report generation				■
Summarize noted comments and/or deficiencies				■
Trigger work order and maintenance schedules				■
Synchronize results from field to master database				■
Synchronize results with other testers				■
Form editor allows test sheets to be created or customized				■
Import data from other software packages				■
Maintain calibration data for test instruments				■

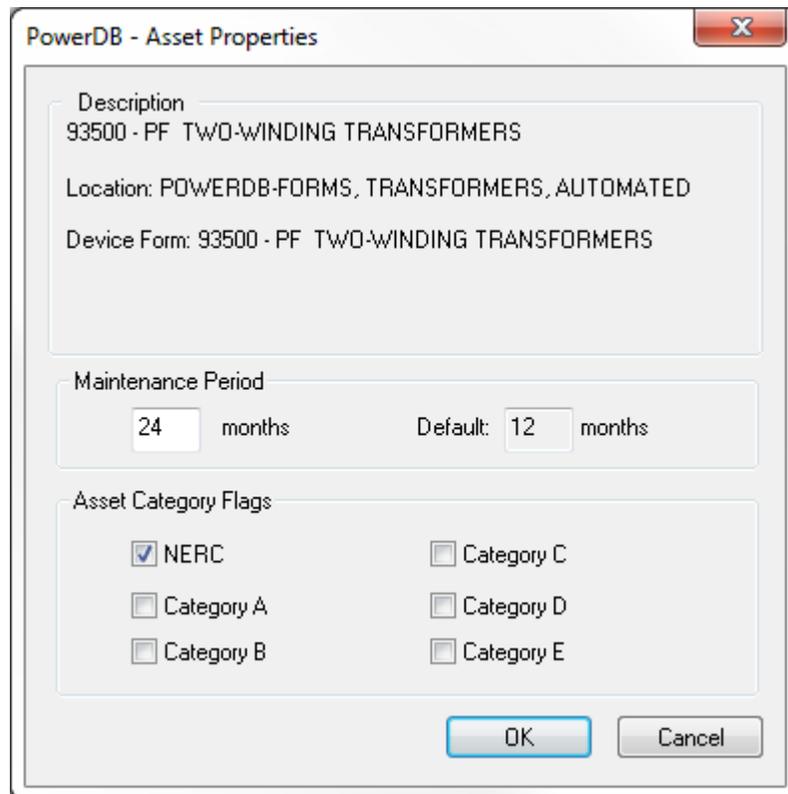
**PowerDB Onboard** only runs on specific Megger test instruments. Test results are transferred with a standard USB drive and can then be read into other PowerDB editions.

**PowerDB Lite** is free software allowing you to use a subset of PowerDB Pro test forms with Megger instruments. Lite results are saved to files and can be imported into Pro.

**PowerDB Advanced** allows you to use any PowerDB Pro test forms and instrument interfaces, including the STVI Relay Form, and has data trending capabilities. Advanced results are saved to files and can be imported into Pro.

## 2. New Asset Properties

You can now indicate any assets to have up to six Category Flags (NERC plus 5 generic) to facilitate regulatory or management reporting requirements. Right-click on an asset in the Job or Asset Tree to set these indicators in Asset Properties. To run reports based on these settings use the Compliance Report form found in the \_Reports and Administration folder.



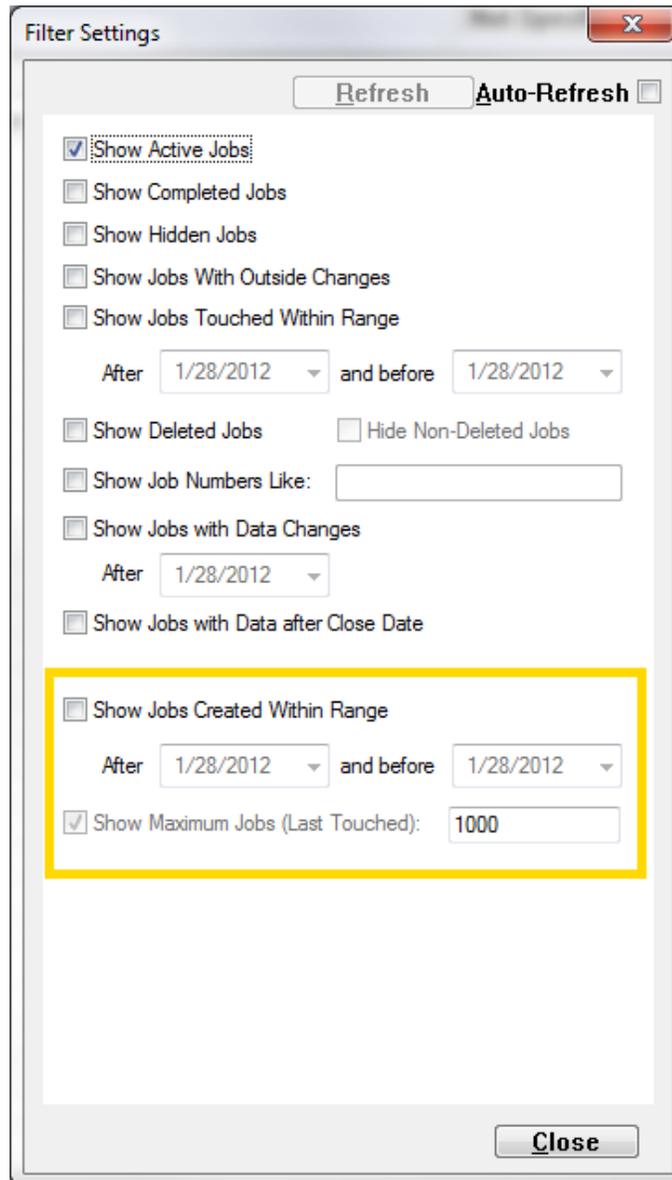
The screenshot shows a dialog box titled "PowerDB - Asset Properties". It contains the following fields and options:

- Description:** 93500 - PF TWO-WINDING TRANSFORMERS
- Location:** POWERDB-FORMS, TRANSFORMERS, AUTOMATED
- Device Form:** 93500 - PF TWO-WINDING TRANSFORMERS
- Maintenance Period:** A numeric input field containing "24" followed by "months". To its right, it says "Default: 12 months" with another numeric input field containing "12".
- Asset Category Flags:** A group of six checkboxes:
  - NERC
  - Category A
  - Category B
  - Category C
  - Category D
  - Category E
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

## 3. Changes to Job List Filtering

You may select to filter the Job List to only view jobs created within a specific date range. You may also set your filter to only view a set number of jobs.

A maximum of 1000 jobs are shown at one time in the Job List. The 'Show Maximum Jobs (Last Touched)' filter is always added after other filters are applied.



#### 4. User Account Properties Features

You can select to set any of the following features on any individual User Account. Restrictions will not apply to Level V Administrator accounts.

- Hide Jobs for Which User is Not 'Job Manager'
- Hide Asset Tree
- Hide Address Book
- Restrict Access to Job Properties
- Restrict to User's Region
- Viewer Account

## 5. Enhanced AVTS Data Import

The following are now part of the AVTS Import:

- **Asset Category Flags:** This specifies particular AVTS yes/no settings as asset category flags. These flags, such as one used to classify an asset for NERC audits, will be set for PowerDB assets but will not be cleared. To clear a flag it must be set to "no" in AVTS and then unchecked in the PowerDB asset properties screen.
- **Asset Attributes:** Import of AVTS string settings as attributes to be associated with the asset in PowerDB. The attribute names could be then queried for custom reporting.
- **Unique Asset Identifier:** This allows using the AVTS Barcode ID as the unique Asset ID in PowerDB. There is also an option for managing the tree location for these assets in PowerDB; i.e., if an asset is moved in AVTS then the move will be mirrored in PowerDB.
- **Evaluate All Settings:** Imports asset category flags and asset attributes regardless of test date. If unchecked only AVTS settings for assets that were tested in the specified date range are evaluated for import. Note this will still be limited to assets by 'Match Folders'.
- **Match Folders:** This filter limits the import to AVTS assets matching particular folder names. The highest AVTS folder value is specified in the leftmost box. Not all values need to be used. A second, third, or fourth level value can be specified while leaving higher levels empty.

The following values are administrative settings for the AVTS Import and can only be defined by an administrator in the master database:

- Unique Asset Identifier
- Asset Category Flags
- Asset Attribute Strings

When running an AVTS import in a field database or without administrator privileges these sections are read-only.

To set the administrative AVTS Import settings, access the window shown below by logging into a master database with an administrator level user account. Open a Job and select *File > Import > Import AVTS Data*. Select your AVTS database file and specify a date range (a future date is fine for the purpose of configuring these settings). Fill unique asset identifier, asset category flags, and asset attribute values that you will be using. Press OK. This will configure the AVTS import administrative settings.

PowerDB - AVTS File Selection

Import From Database  
 ...

Date Range  
 Data After:

Match Folders

Unique Asset Identifier  
 Use AVTS Barcode ID as unique Asset ID  
 Assets without a Barcode ID will be ignored.  
 Move assets if moved in AVTS (mirror AVTS folders)

Asset Category Flags

	Settings Group:	Setting Name:
NERC:	Classifications	NERC
Category A:	Classifications	Out of Service
Category B:	Classifications	Insurance Audit
Category C:		
Category D:		
Category E:		

Asset Attributes (Strings)

Attribute Name	Settings Group:	Setting Name:
manufacturer	Nameplate	Manufacturer
model	Nameplate	Model
description	Nameplate	Equipment
type	Nameplate	Class

Evaluate All Settings

OK Cancel

**AVTS Import Settings defined by Administrator in Master Database**

PowerDB - AVTS File Selection

Import From Database  
 ...

Date Range  
 Data After:

Match Folders

Unique Asset Identifier  
 Use AVTS Barcode ID as unique Asset ID  
 Assets without a Barcode ID will be ignored.  
 Move assets if moved in AVTS (mirror AVTS folders)

Asset Category Flags

	Settings Group:	Setting Name:
NERC:	Classifications	NERC
Category A:	Classifications	Out of Service
Category B:	Classifications	Insurance Audit
Category C:		
Category D:		
Category E:		

Asset Attributes (Strings)

Attribute Name	Settings Group:	Setting Name:
manufacturer	Nameplate	Manufacturer
model	Nameplate	Model
description	Nameplate	Equipment
type	Nameplate	Class

Evaluate All Settings

Disabled options can only be set by an administrator in the master database.

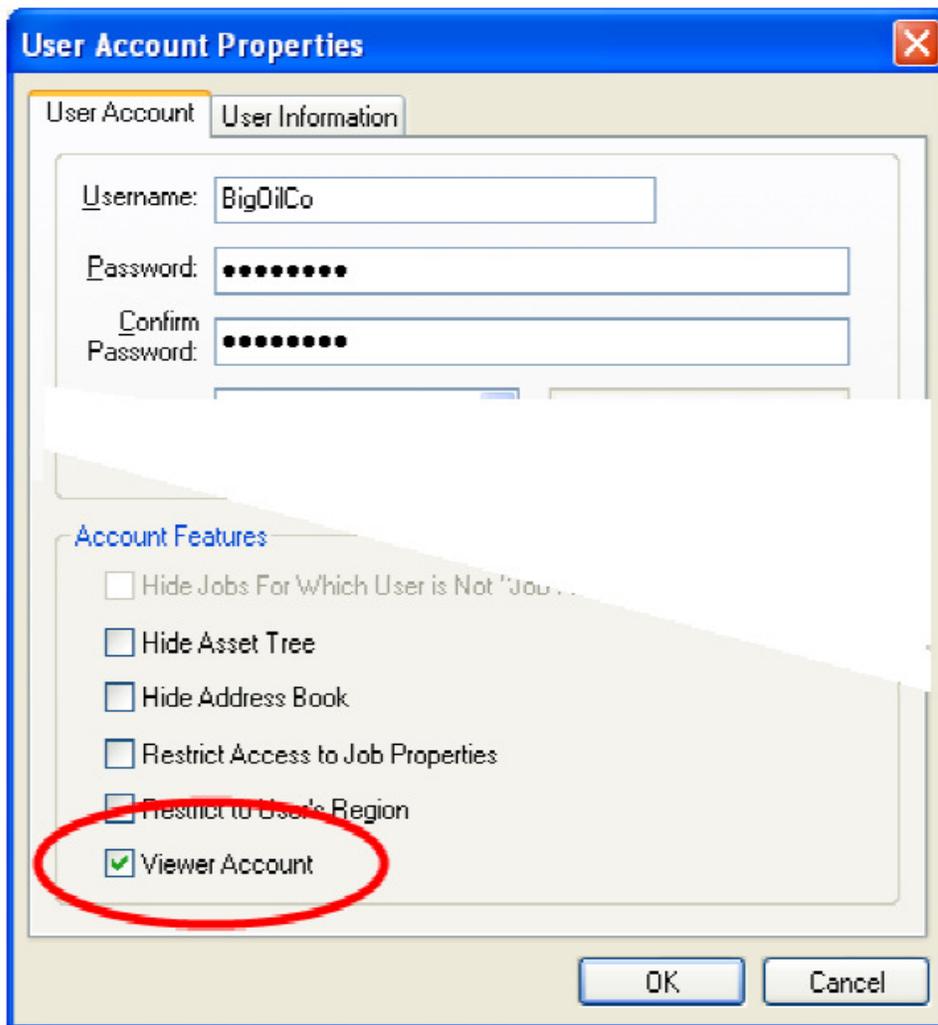
OK Cancel

**AVTS Import in a Field Database**

## 6. Viewer Database and Viewer Account

This feature allows you to create a Viewer Database for a specific Viewer Account, and then copy particular jobs to it. It can be used to prepare a database to deliver to a customer for their records. Or it can be used to allow your customer, with your instruction and permission, to retrieve specific jobs from your master database via a limited synchronization. When a user logs in to a Viewer database PowerDB will always run in Reader mode only. To utilize this feature follow the steps below.

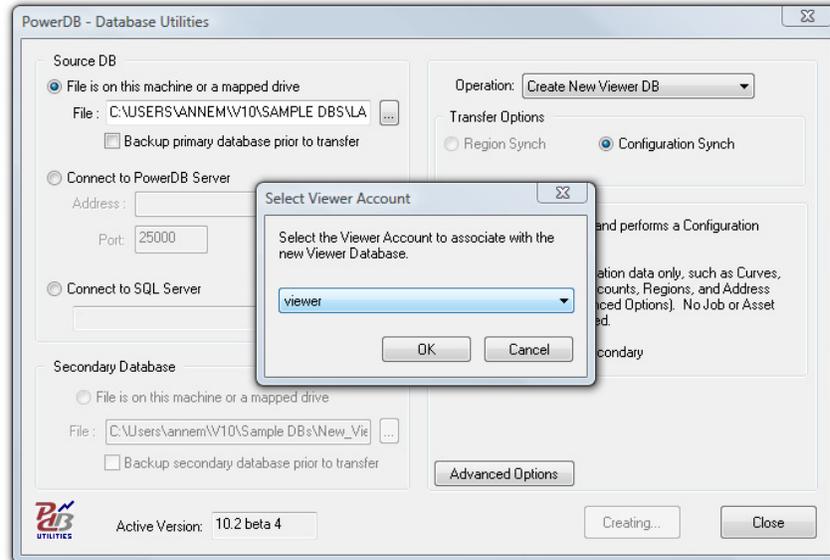
Login to PowerDB as an administrator level user. In *View > User Accounts* create a new user account. Set the username and password. Set the privilege level to Level III - Power User. Check the Viewer Account checkbox. Upload User Accounts if this step is done in a field or development database.



The screenshot shows the 'User Account Properties' dialog box with the 'User Information' tab selected. The 'Username' field contains 'BigOilCo', and both 'Password' and 'Confirm Password' fields are filled with dots. The 'Account Features' section contains several unchecked checkboxes: 'Hide Jobs For Which User is Not "Job"', 'Hide Asset Tree', 'Hide Address Book', 'Restrict Access to Job Properties', and 'Restrict to User's Region'. The 'Viewer Account' checkbox is checked and circled in red. The 'OK' and 'Cancel' buttons are at the bottom right.

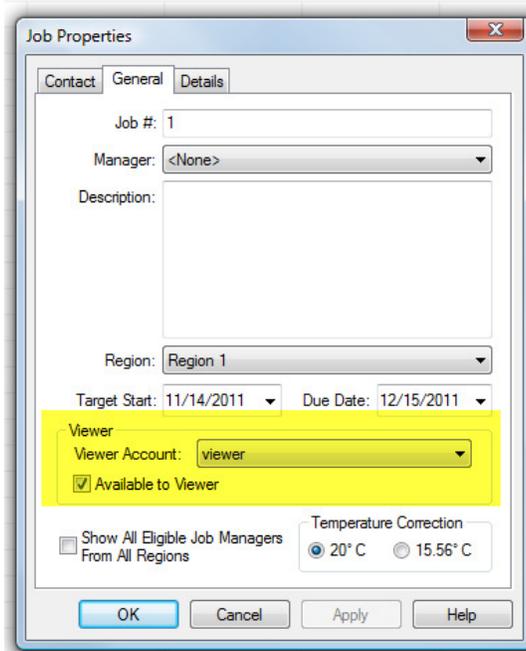
Create a Viewer Database at *File > New Database > New Viewer DB*. Press Create DB, you will be prompted for

- Database name to create
- Login credentials for synchronization
- Viewer User Account to put into the Viewer Database



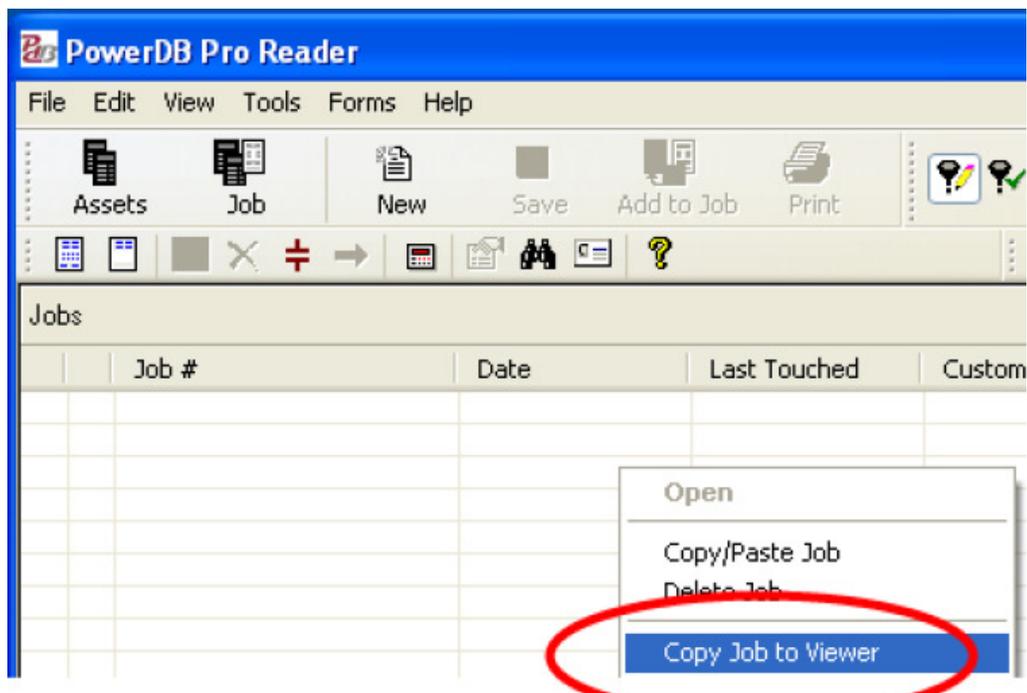
At this point the Viewer Database will only contain this single user account (no jobs, no assets, and no addresses).

To associate a job with a Viewer Account go to Job Properties for a particular job. A job may be associated with a single Viewer Account by selecting the account from the Viewer Account dropdown. The Available to Viewer checkbox enables or disables the ability for the Viewer Account to retrieve the job. For a Viewer Account to be able to retrieve a particular job, the account must be associated with the job **and** the job must be set as 'Available to Viewer'.

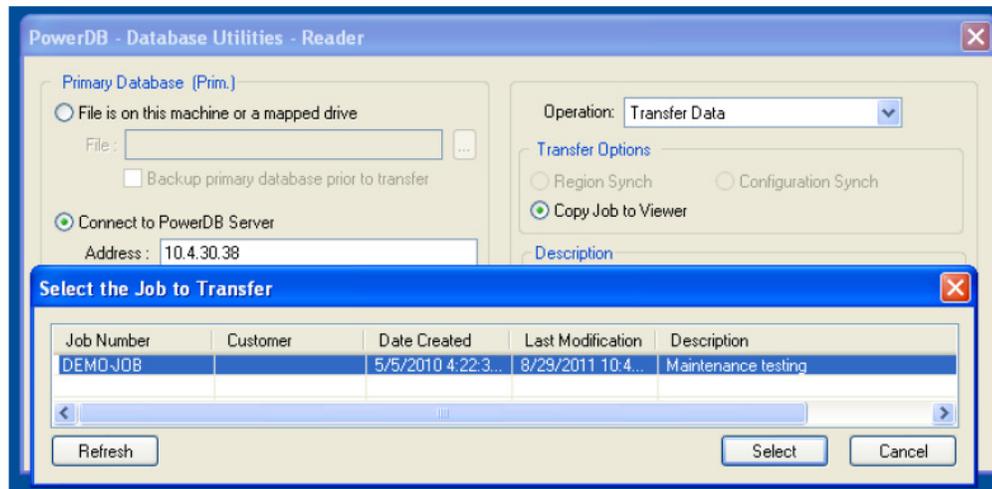


Job to Viewer Account associations can be reviewed at the *Tools > Show Viewer Accounts* menu.

To move a job to the Viewer database, right-click in the Job List and select *Copy Job to Viewer*. In the Database Utilities dialog press the *Start Transfer* button. The initial transfer to a Viewer database will be lengthy, and it is suggested this should be done before providing the database to the end user.

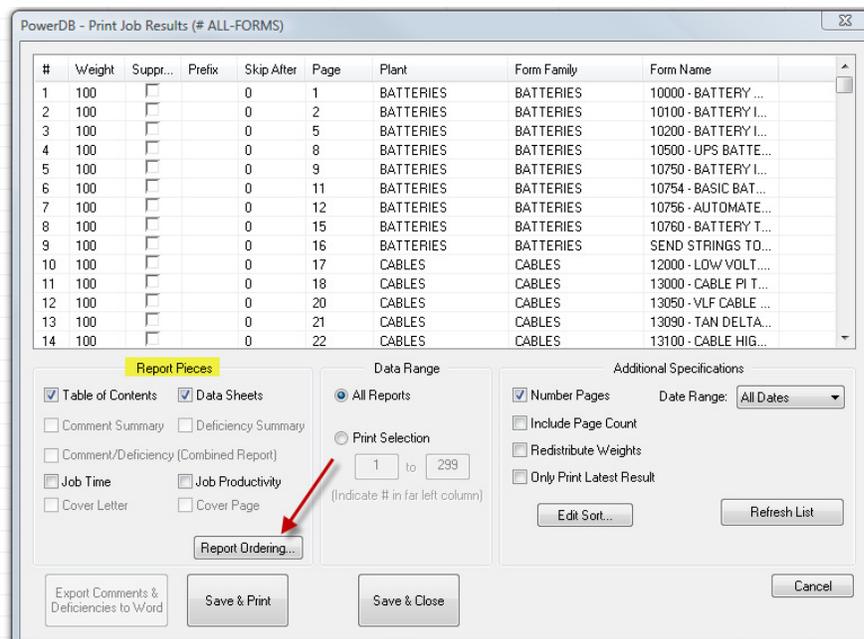


The user will be prompted with a list of jobs associated with the Viewer account. Click the job to transfer and press the Select button. This step will copy a single job from the master database into the Viewer database. Repeat this step for each job to be sent to the Viewer database.

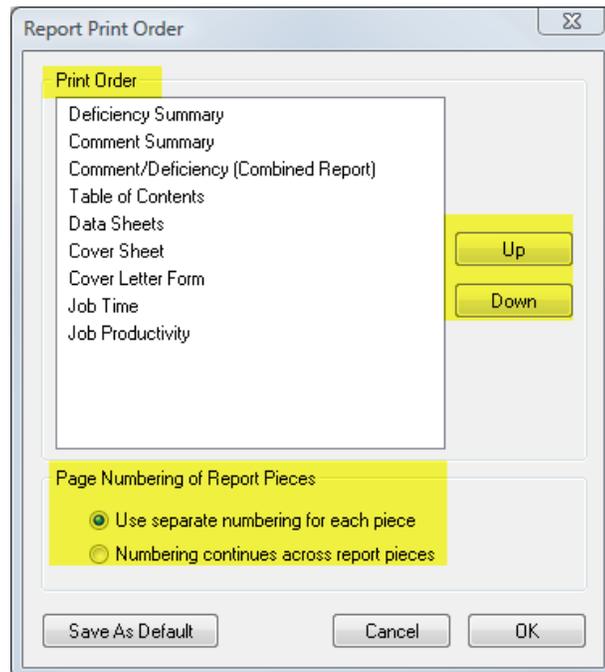


## 7. Print Report Ordering

This feature allows you to customize the order the Job Report pieces are printed in. Click the Report Ordering button to set your selections.



You may set the order of reports, and set page numbering to be continuous or restarted across Report Pieces.



## 8. Merging or Replacing Forms

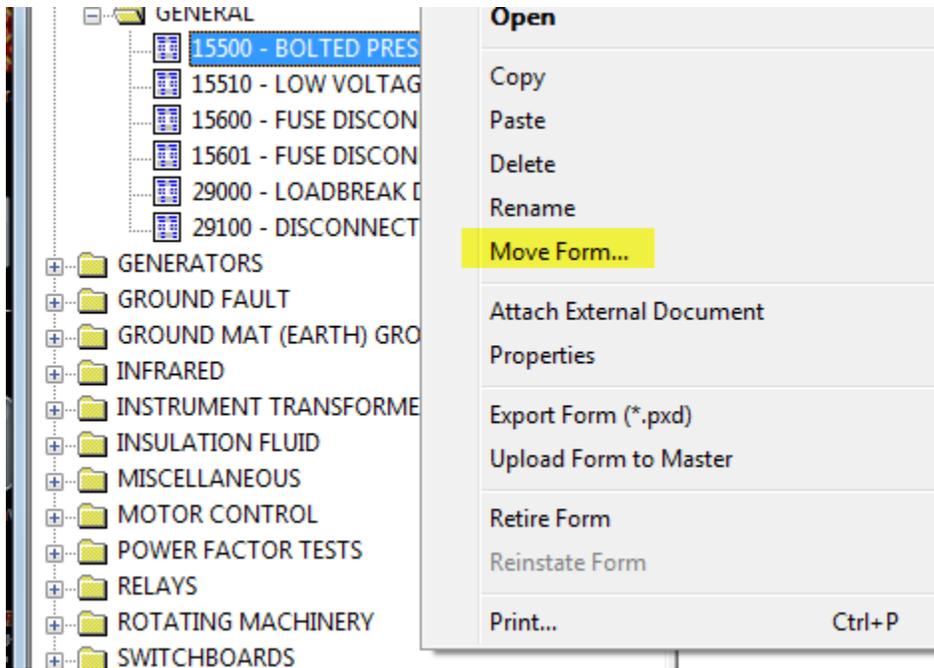
This feature is not new however it may have not been mentioned in previous release notes. A 'merge' procedure is suggested whenever a form is to be retired and replaced with a new form. The merge functionality is provided so that previous results in the database can continue to be viewed or printed with the original form version, but the original form is no longer available to be used for new data entry. New results will be entered on the new replacement form and will be associated in the tree with the old results to facilitate review and trending.

This merge functionality differs from simply retiring a form. When a form is only retired, any existing results can still be viewed or printed with the original test form version. The form is no longer available for entry of new results. But the merge feature goes an extra step and associates the new form with assets using the replaced form.

A key thing to remember in regard to merging two forms is that their design should be similar with respect to the tag names that are being used. If trending of particular data is important, the tag names for those fields to be trended should remain the same on both form versions.

The steps for merging forms are:

1. In the Form Editor tree locate the new replacement form
2. Right-click on this file in tree and select Move Form from the menu
3. Select the form to be replaced and retired
4. Press the Merge button in the dialog



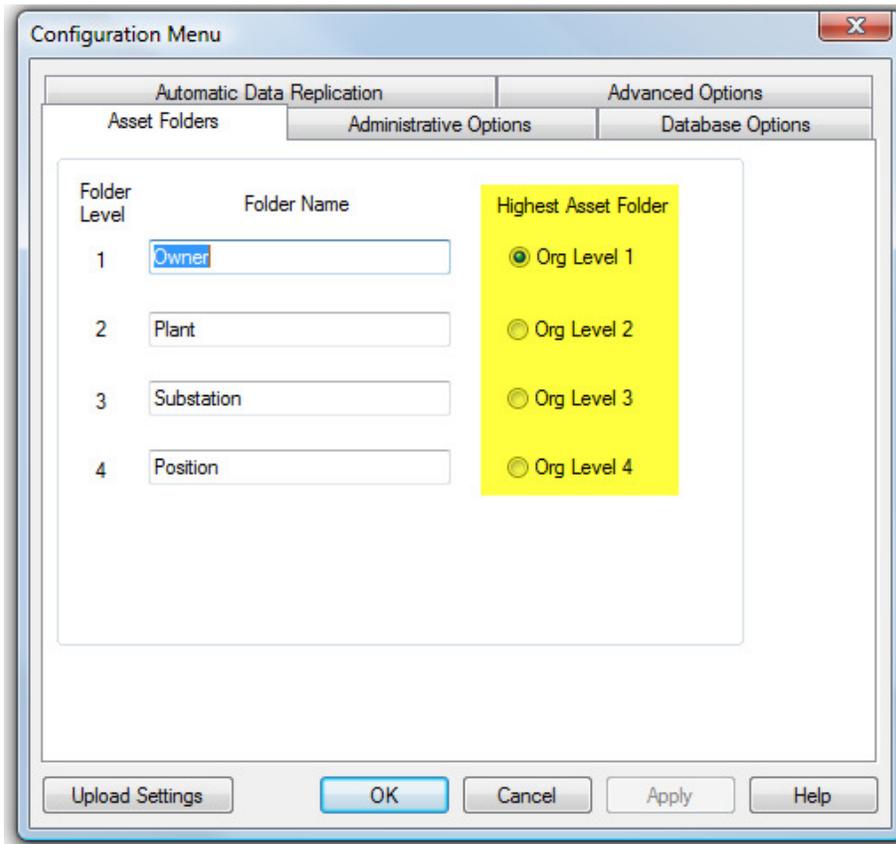
## 9. Enhanced Submit Files Tool

This feature is found at *Help > Submit Files* and allows you to submit files to the PowerDB office for support and assistance. This window has been expanded to include the All Log Files option and the Open Log Files Directory button.

## 10. Highest Asset Folder

In *Tools > Administration > Asset Folders* tab you can now define the highest folder level at which assets can be added. This allows forcing a minimum number of folder levels to be specified when adding an asset.

If you use the Testing Company application style this is further dependent on what folder levels are linked to the Address Book. For example, if the asset folder level 2 is tied to the address book, then the highest asset folder can be 2 but not 1.



## 11. Region Database Publishing Process

The following is the best practice for creating field region databases that can be copied and distributed for use in the field.

From a direct connection to Master database:

Step 1: Within PowerDB, select *File > New Database > New Field DB*

Step 2: Choose the location and file name for the new field database (i.e. C:\PdbDBs\new\_field.mdb)

Step 3: Create 1 copy of the new field database file for each region to be published from the Master Database, named for easy identification (i.e. C:\PdbDBs\RegionA.mdb, C:\PdbDBs\RegionB.mdb, etc.)

Step 4: While viewing the Jobs listing from within PowerDB (connected to the Master Database), select the region name to publish from the Region dropdown in the toolbar (Region A)

Step 5: Select Synchronize Region from the Tools menu to re-open the Database Utilities

Step 6: Select Publish Region from the Operation dropdown, then ensure that the copy of the clean field database created for the selected region is selected as the Secondary Database (C:\PdbDBs\RegionA.mdb)

Step 7: Click the Publish Region button

Step 8: Wait a MINIMUM of 5 minutes after the completion of the first Publish Region process, then repeat steps 5-7 to perform a second Publish Region to the same field database

Step 9: Repeat steps 4-8 for each additional region database to be published

Step 10: Copy and distribute the new region databases as needed

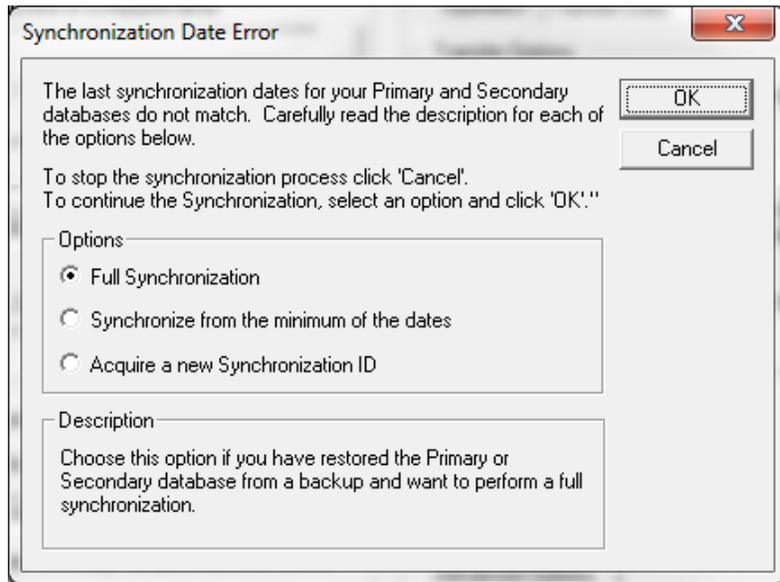
Step 11: As long as the published region database has not been opened with PowerDB it can be kept "fresh" from the master database by periodically repeating steps 8-11.

## 12. Database Management

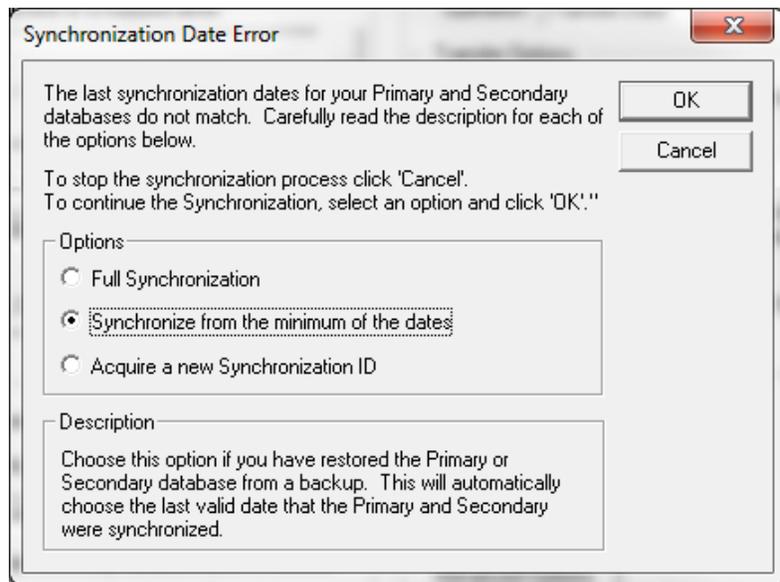
New or published databases, if PowerDB has not been used to connect/logon to them, may be copied and distributed to multiple users.

**Once you connect to a new or published database with PowerDB that database is "named" with a unique ID. This database should then not be copied except for purpose of backup.**

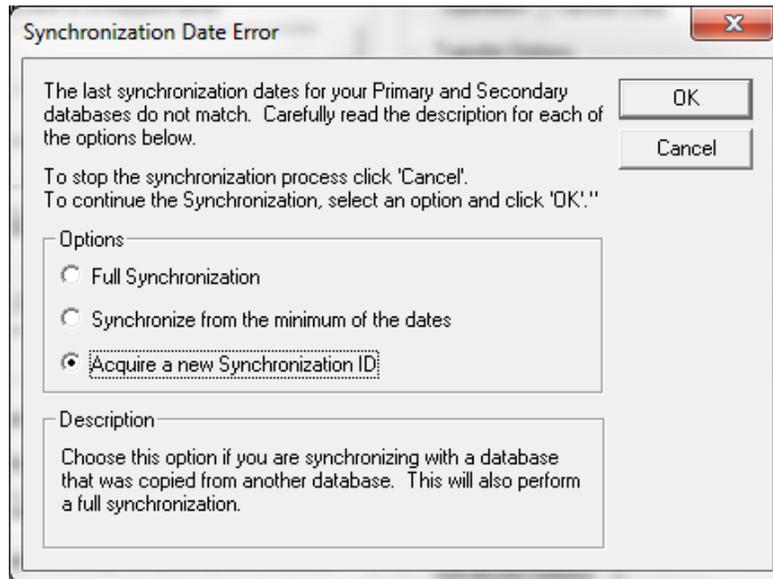
A "clone database" is one of any that has been used with PowerDB and distributed to one or more other users for data entry and/or synchronization. These databases all have the same ID. Synchronizing multiple databases containing the same ID will require the user to handle the *Synchronization Date Error* screen (options shown below). This situation is a result of the synchronization information recorded by the master from the first database to synchronize conflicting with the second database to synchronize.



**Full Synchronization** can be used when restoring a primary or secondary database from a backup. All data is synchronized. This option should not be used for cloned databases.



**Synchronize from the minimum of the dates** can be used when restoring a secondary database from a backup. It generally takes less time than a full synchronization. This option should not be used for cloned databases.



**Acquire a new Synchronization ID:** This option should be used when synchronizing a cloned database. It eliminates this problem from future synchronizations (acquires a new ID), and it guarantees that all new data entered in it will be sent to the master (full synchronization).

### 13. Megger SMRT Relay Test Instrument

Version 10 (Pro and Advanced) supports control of the Megger SMRT Relay Test Set as well as opening .PdbXml result files created by the instrument. Before utilizing this new feature the *Virtual Front Panel - SMRT AND MPRT STVI* form must be in your database. Once the form is opened, complete instructions for this application are provided by the F1 Key or the Form Help menu.

### 14. SD Myers Laboratory Data Import

Automated import of laboratory data provided by SD Myers is now available in PowerDB Pro. Form 57956 must be in your database before the first import of data. Open the appropriate Job and begin the process at the *File > Import > Import SDMyers* menu. Select the appropriate .xml data file in the *PowerDB - Import File Selection* window. Indicate if results are to be imported as all historical or specify a range for current results. Click the Open button, confirm your selections, then click the OK button. If folder values are not correctly aligned with the Job Tree you can relocate results to the appropriate folders by either renaming Job Tree folders or changing values inside the results. Subsequent imports will match serial number/equipment type combination with previously imported results.

## 15. Move Multiple Jobs to a Different Region

A menu item has been added to the Edit menu which allows you to move multiple jobs at one time to a different region. The Region dropdown selection sets focus to the Job List for the selected region. Hold the Ctrl button to select individual multiple rows or the Shift key to select a block of rows. Select the target region in the To Region dropdown. Click the Move button to start the move process. Remember to refresh (F5) the Job List after the process completes.

## 16. Compact Database at Backup

A prompt has been added to optionally compact your database after the backup at close of the application. This will help reduce your file size which can increase unnecessarily due to standard Access behavior.

## 17. New External Communications Features

A complete list of new communication capability with instruments or data files is provided below. The related form(s) for each test set or import are also indicated.

- Megger SMRT - SMRT and MPRT STVI, RTS Command Terminal
- Megger BVM - 10756
- Megger DLRO-H200 - 90513
- Sverker - all automated relay test forms
- Alber Cellcorder - 10760
- Vanguard TTR (various models)- 56502
- Vanguard EZCT - 27650 Note: must update your existing form
- SD Myers Data Import - 57956

## 18. New Test Forms

The following new forms have been added to the PowerDB forms library. The .pxd file for these forms may be downloaded from the PowerDB website and imported into the master database or a development database. In the Form Editor or Subform Editor tree, select *File > Import > Import Form PXD*. Browse to the file(s) downloaded from the website. Select the Intelligent Import option for form imports and answer other prompts as required.

- VIRTUAL FRONT PANEL - SMRT AND MPRT STVI \*\*
- VIRTUAL FRONT PANEL - RTS COMMAND TERMINAL
- 00001 COVER PAGE
- 00002 COVER LETTER
- Compliance Report (refer to Section 3 above)
- 10050 - BATTERY INSPECTION

- 10756 - Automated battery discharge (Note: Form 10755 has been retired)\*
- 10760 - BATTERY TEST - CELLCORDER
- 49900 - GENERIC MULTIFUNCTION RELAY
- 465109 -IAC-66B
- 57956 - SD MYERS FLUID TESTING
- 52005 - INFRARED INSPECTION SUMMARY
- 56006 - TTR IEC 61378-1
- 56354 - MTO TRANSFORMER HEAT RUN TEST
- 56357 - TRANSFORMER WINDING RESISTANCE
- 65150 - CAPACITOR BANK TEST
- 76000 - MICROHMMETER COOLING CURVE
- 76000 - MICROHMMETER COOLING CURVE
- 90510 - Note: Form has been retired \*
- 90511 - MICROHMMETER MEASUREMENTS - DLRO10X
- 90512 - MICROHMMETER MEASUREMENTS - DLRO 200/600
- 90513 - MICROHMMETER MEASUREMENTS - DLRO H200
- 98006 - PF STATOR COIL TIP UP

\* please refer to Section 9 above to associate retired form results with newer form

**\*\* contact PowerDB technical support (email support@powerdb.com) for instructions on importing the SMRT AND MPRT STVI virtual front panel form.**

An alternate process to bring in changes or additions to forms and sub-forms is to export them from the installation database latest\_forms.mdb and then import them into your master database. To do this, follow steps 1-9 below to update from the latest\_forms.mdb

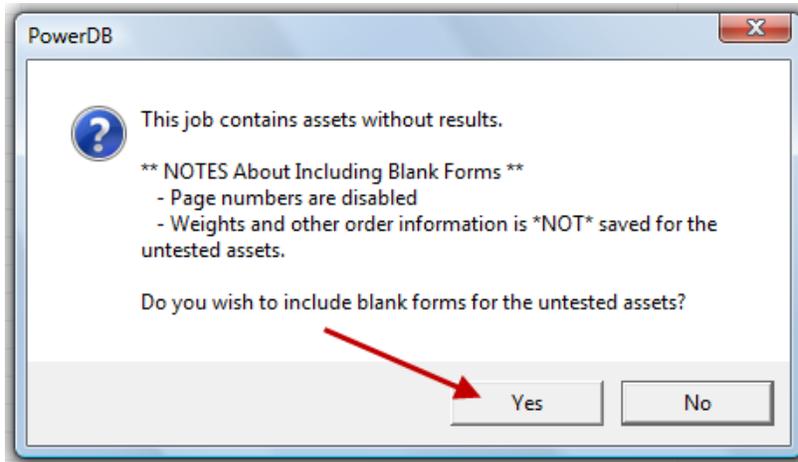
These steps must be repeated for each file.

1. Select *File > Change Database*. Make note of the location of the currently active database.
2. Browse to locate the directory where you have installed Version 10 (probably C:\Program Files\PowerDB Inc\PowerDB).
3. Locate and select Latest\_Forms.mdb , click OK.
4. The software will prompt you that PowerDB must restart, click OK.
5. PowerDB will restart in Latest\_Forms.mdb. Logon to PowerDB with the User Name 'administrator'. You can view and print the new test forms to determine if you wish to import these to your existing database or view and print them from the .pdf file on the installation CD. For the new forms you wish to add to your forms library, right-click on a form name in the Form Definitions tree and select "Export Form (\*.pxd)". Make note of the directory where you save the file. You may repeat this step for each test form you wish to export.

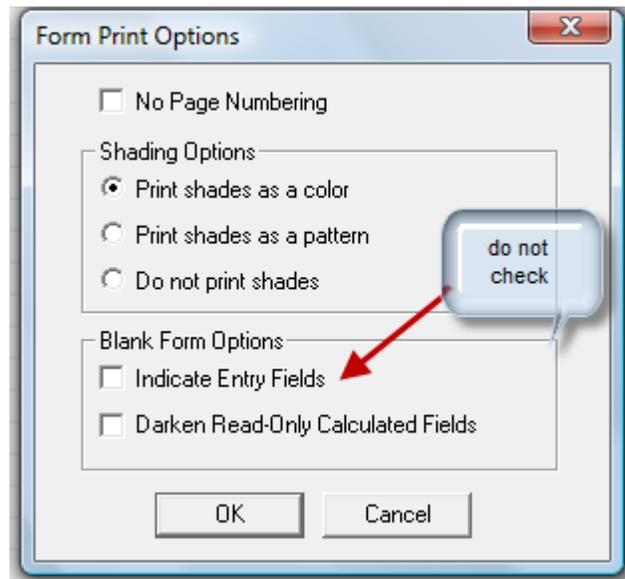
6. Select File, and then select Change Database. Browse to the original database location noted in Step 1 above. Click OK.
7. The software will prompt you that PowerDB must restart, click OK.
8. Logon to PowerDB.
9. In the Form Editor or Subform Editor tree, select *File > Import > Import Form PXD*. Browse to the file(s) saved in Step 5 or downloaded from the website. Select the Intelligent Import option for form imports and answer other prompts as required.

## 19. PowerDB User Tools and Tips

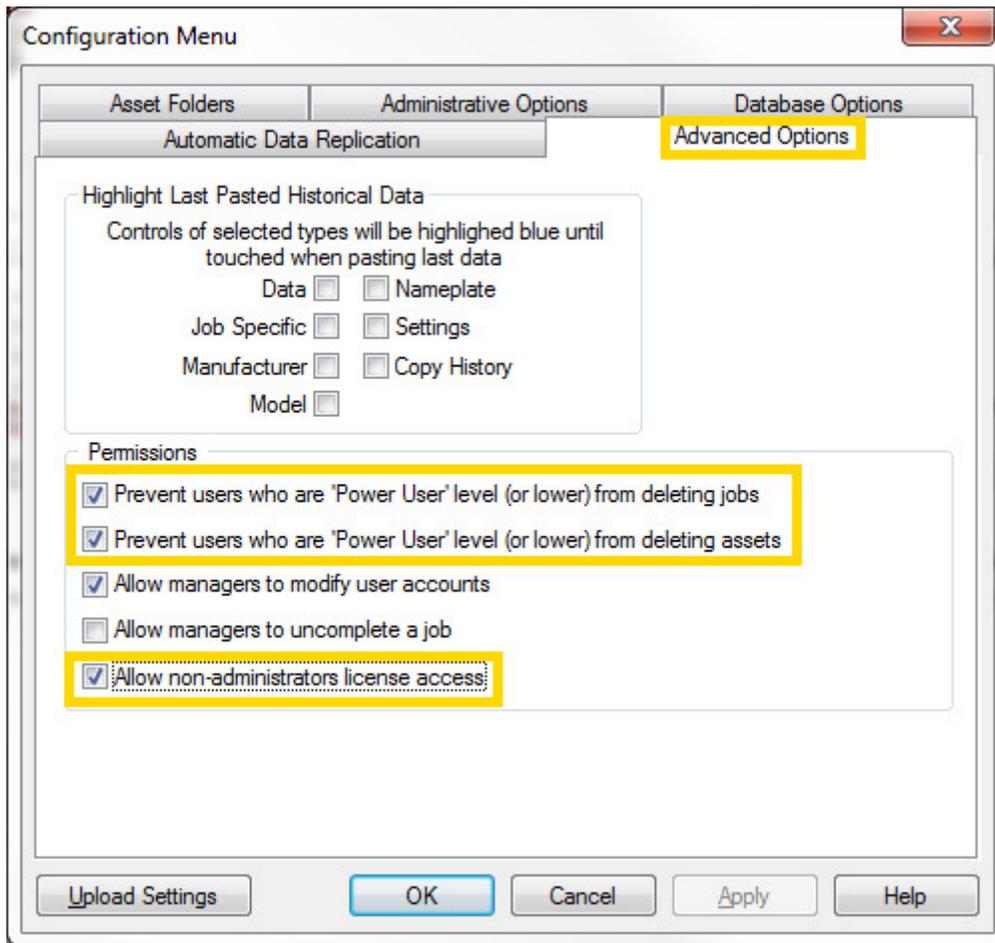
- To print a blank job with header and nameplate information complete the following steps:
  - In the Job List, copy/paste the previous job
  - In the Print Job Results dialog, respond 'Yes' to including blank forms. Note: pages will not be numbered.



- In the dialog below be sure NOT to select 'Indicate Entry Fields'



- Restrictions can be tightened to prevent users who are 'Power Users' (or lower) from deleting jobs and assets.
- Restrictions can be relaxed to allow user levels other than Administrator to be able to register or remove a softkey license. To set this item go to *Tools > Administration > Advanced Options* tab.



- If you lose the tools palette while working in the forms editor go to the View menu and select Restore Windows Positions.
- If you notice a long delay when opening test forms in very large Jobs, go to *Tools > Options* and check the box "Optimize Asset Tree for Large Jobs".
- You may call Megger's Technical Support Group at  
  
(800)723-2861 ext. 3519 for PowerDB Support.
- PowerDB softkey licenses are machine specific. Before you replace a computer or upgrade the hard drive, be certain to un-license PowerDB from that machine. Failing to do so could result in the loss of that license.
- If you get a warning that there is no data found when you attempt to print a job, then run the "Validate Database" option under the Tools menu.
- Visit our website at [www.powerdb.com](http://www.powerdb.com) for more product information or to download the latest version of PowerDB.