Calibration Control Manual

Calibration Management Software
Contents

Getting Started ................................................................................................................................. 9

Sample Calibration Database ............................................................................................................. 9
  Evaluate Calibration Control with Sample Data .............................................................................. 9

Move Application Database ............................................................................................................... 12
  Move application database to a new location ................................................................................. 12

Creating a Multi-User Environment .................................................................................................. 14
  Setting up Multiple Users ................................................................................................................ 14
  Move Your Database (MS Access Database Only) ......................................................................... 14
  Setup a Common Files Folder (Access & SQL) ............................................................................... 14
  Add Additional Users ..................................................................................................................... 15

Data Imported To MS Access ............................................................................................................. 16
  How to Deploy Your Imported Data ............................................................................................... 16

Add Ape Database to SQL Server .................................................................................................... 19
  Install Calibration Control on Your SQL Server .......................................................................... 19

Connect to SQL Server Database .................................................................................................... 26
  Configure Calibration Control to connect to a SQL Server ......................................................... 26
  Sign-In to SQL Server ..................................................................................................................... 29

Remove Sample Data ...................................................................................................................... 30
  Remove sample data to begin entering your own records ............................................................ 30

Equipment / Tool Grid ...................................................................................................................... 32
  Grid Features ................................................................................................................................ 32
    Features Common to All Data Grids ......................................................................................... 32
  Highlight Colors of the Equipment Data Grid ............................................................................ 38
    Understanding the colors in the browse grid ............................................................................ 38
  Filtering Records Using the Filter Row .......................................................................................... 42
    How to use the filter row in the data grids ............................................................................... 42
  Grouping Records in Grids .............................................................................................................. 44
    Group and ungroup records in data grids ............................................................................... 44
  Hiding Equipment Records by Status .......................................................................................... 45
    Use equipment status to manage visibility ............................................................................. 45
Manage Out-Of-Tolerance (OOT) Equipment ................................................................. 46
   Manage & Investigate OOT Equipment ................................................................. 46

Calibration History Grid............................................................................................... 48
   Calibration Event Quick Reference and Filter ....................................................... 48

Equipment & Calibration Dialogs ............................................................................... 50
   Equipment Dialog ................................................................................................. 50
      Edit equipment records .................................................................................. 50

Calibration Events ....................................................................................................... 57
   Understanding the structure and the fields ......................................................... 57

Calibration Frequencies ............................................................................................. 65
   How do the different calibration frequencies work? ............................................. 65
      Calibration Fields ......................................................................................... 65
      Calibration Frequencies ............................................................................. 65
      “Month of” and “Week of” Frequencies ...................................................... 67
         * “Month of” and “Week of” Date Masks .................................................. 68

Referencing Calibration Standards ........................................................................... 70
   How to link masters to calibrated equipment ..................................................... 70

Measurement Templates .......................................................................................... 73
   Learn how to use Measurement Templates ...................................................... 73

Attachments and Pictures ....................................................................................... 76
   Add attachments and pictures to equipment and calibration records ................. 76

Recording and Researching Jobs ............................................................................. 79
   Record equipment used on jobs for traceability ................................................. 79

Special Features ......................................................................................................... 81
   Asset Transfer Dialog ....................................................................................... 81

Auto Notify Utility ..................................................................................................... 82
   Send emails and desktop notifications automatically ........................................ 82

Equipment Check Out and Use Count ..................................................................... 85
   Activating the Check-out Dialog ...................................................................... 85

Custom Barcodes ........................................................................................................ 92
   Use unique barcodes already on equipment .................................................... 92
Limit Equipment Visibility by Site ................................................................. 93
  Make Site Equipment visible only to specific Users .................................. 93

Feature Visibility Options ............................................................................. 94
  Make Features Invisible ............................................................................. 94

Print Future Calibration Labels ................................................................. 97
  Print a range of Calibration labels to apply at a future date ..................... 97

Labels & Reports Overrides .......................................................................... 99
  Override global defaults for reports and labels ....................................... 99

Masks in Calibration Control ...................................................................... 102
  Date Masks ........................................................................................... 102
  Leading Zeros Mask (LZ Mask) .............................................................. 103
  Upper Case ......................................................................................... 103
  Other Characters ................................................................................. 103
  Label Date Masks ............................................................................... 103
  Number Masks .................................................................................... 104
  Calibration Measurement Mask .......................................................... 104

Measurement Uncertainty Budget ............................................................... 105
  Perform uncertainty analysis of a measurement .................................... 105

Procedural Steps ......................................................................................... 110
  Step-by-Step Procedures for Worksheets .............................................. 110
  Concept ............................................................................................... 110
  Procedural Groups .............................................................................. 110
  Procedural Steps ............................................................................... 112
  Linking Procedural Groups to Equipment ........................................... 112

Publish a Custom Website .......................................................................... 115
  Publish website of equipment grouped by departments ....................... 115

Startup INI .................................................................................................. 119
  Single connection configuration for all users ....................................... 119

Status Change Dialog ............................................................................... 121
  Change Status of Multiple Equipment Quickly .................................... 121

Ape Software Terminal Mode ..................................................................... 123
Minor tasks in Ape terminal mode ................................................................. 123

Support Tables .................................................................................................. 125

Companies Dialog ........................................................................................... 125
  Edit Dialog for All Companies................................................................. 125

Departments Dialog ........................................................................................ 129
  Open Departments Grid ........................................................................... 129
  Department Dialog .................................................................................. 129

Equipment Systems .......................................................................................... 130
  Groups of Equipment Records ............................................................... 130
  View Systems ......................................................................................... 130
  Equipment System Dialog ..................................................................... 130
  Link Equipment ..................................................................................... 132
  Asset Label ............................................................................................. 133

Equipment Types Dialog .................................................................................. 135
  Classify equipment and link to measure templates .......................... 135

Locations Dialog ............................................................................................ 137
  Edit dialog for all locations in Calibration Control ............................ 137

People Dialog .................................................................................................. 138
  Phone & Email Tab Fields .................................................................... 139
  Custom Field Tab .................................................................................. 139

Procedures Dialog ......................................................................................... 140
  Procedure Links in Calibration Control ........................................... 140

Code Tables ...................................................................................................... 144

Company Types .............................................................................................. 144
  Edit Company Type Codes .................................................................. 144

Size, Range, & Accuracy .................................................................................. 146
  Edit Size, Range, or Accuracy Combo Values .................................. 146

Measurement Units .......................................................................................... 148
  Understanding and using measurement units .................................. 148

Module Codes ................................................................................................... 149
  Module Codes Grid ............................................................................... 149
Best Label Printers for Ape Software ................................................................. 151
Which label printers will work with Ape’s Software? .............................................. 151
Free Label Editing Software and Drivers ............................................................. 153
Free Brother Printer drivers and label editing software ........................................ 153
Labels Quick Start Video & Instructions ............................................................... 154
Getting started quickly with printing labels in Calibration Control ......................... 154
Sample Due Cal Labels .......................................................................................... 155
Sample Asset Labels ............................................................................................ 160
Sample CNR Labels ............................................................................................. 164
Access All the Label Fields ................................................................................... 168
Understanding labels fields in Calibration Control ............................................... 168
Chain Printing Labels .......................................................................................... 171
How to chain print labels to save label tape ......................................................... 171
Displaying Charts ............................................................................................... 173
Use Pie, Column, and Bar charts to visualize your data ........................................... 173
Saving and Printing Charts .................................................................................. 174
3D Charts ............................................................................................................ 174
‘Min Others Pie Slice’ (for pie charts only) ......................................................... 174
Due Cal Calendars ............................................................................................... 175
Visualize equipment due cal in calendars ............................................................ 175
Reports ............................................................................................................... 177
Print Reports ....................................................................................................... 177
Printing the standard reports is easy .............................................................. 177
Calibration Due Report ....................................................................................... 178
Quick access to the due cal report ..................................................................... 178
Calibration Worksheets ....................................................................................... 180
Record calibration data while away from the computer ......................................... 180
Modify Calibration Certificate ............................................................................ 182
Add your company logo to your calibration certificate ....................................... 182
Create a Custom Report ...................................................................................... 183
Utilities .......................................................................................................................................... 231
Backup and Restore Database ........................................................................................................ 231
  Keep your data safe by regularly backing up ................................................................................ 231
Locating Database File (MS Access) .............................................................................................. 234
  Find the database and configuration files ................................................................................... 234
Inspector Initials Conversion Utility ................................................................................................ 236
  Convert Old Inspector Initials to Person Record .......................................................................... 236
Troubleshooting ............................................................................................................................ 237
Simple Troubleshooting ................................................................................................................. 237
  Fix most setup or configuration problems ................................................................................... 237
Cannot Save ................................................................................................................................... 239
  Fixing the 'Record cannot be saved' error ...................................................................................... 239
Find Lost Records in Equipment Browse ...................................................................................... 241
  Missing records that should be there? .......................................................................................... 241
Key Value Submitted Already Exists .............................................................................................. 243
  Cannot create a new record because it will create a duplicate key value .................................. 243
Lost or Invalid Product Key / Lost All Records ........................................................................... 246
  Lost your product key or all equipment records? ....................................................................... 246
No Label File Error .......................................................................................................................... 247
  The label file could not be loaded ............................................................................................... 247
Troubleshoot SQL Server Connection ............................................................................................ 248
  for Use with Ape Software Databases ....................................................................................... 248
Upgrade / Install Miscellaneous ...................................................................................................... 252
Update Access Database to Current Version .................................................................................... 252
  Fixing access database if update has frozen ............................................................................... 252
Update a SQL Server Database ....................................................................................................... 254
  Update an Ape Software SQL Server Database ..................................................................... 254
Installing Version 4 ......................................................................................................................... 258
  Installing Version 4.3.7 on Modern Operating Systems ............................................................. 258
Downgrading a Database ................................................................................................................ 259
  Return database to the previous version ..................................................................................... 259
Import Data from Version 4............................................................................................................ 260
  Unhide the V4 import button ........................................................................................................... 260

Upgrading from 5.4 to Current Version ........................................................................................... 262
  Instructions for upgrading from a previous Calibration Control .................................................... 262

Not Original Key Owner ................................................................................................................. 264
  Need to upgrade a key you didn't originally purchase? ................................................................. 264
Getting Started

Sample Calibration Database

Evaluate Calibration Control with Sample Data

The Sample Database is most useful during the trial period but can be accessed at any time.

Selecting the Sample Database on First Start

When Calibration Control starts for the first time there are two database formats to choose from, MS Access or SQL Server. The Sample Database is only available for MS Access so click the [MS Access] button to continue.

In the next dialog (Choose Database Type), check the "CREATE New SAMPLE Database" checkbox and click the [Continue] button.
The Trial Period Notification dialog pops up each time Calibration Control starts without a current Product Key. If a Product Key has been purchased click the [Yes] button to use it in the Sample Database. Otherwise, click the [No] button to continue.

When Calibration Control starts, about 300 sample records will be visible.

**Selecting Sample Database after Program Start**

Open the Options dialog from either the File or Utilities tab of the ribbon menu and navigate to the Admin tab. Click the [Switch to Sample Database] button.
Then click the [Yes] button in the following Show Sample Database dialog.

**Last Updated:** 18 Jan 2017
Move Application Database

Move application database to a new location

Users will often need to move their application database file (apecal.mdb) from the initial location, to a new location to make the database easier to backup or to place it in a more central location to share with additional users.

Close Application

Before moving the database file, ensure the application is closed.

Find Database File

Before moving the ‘apecal.mdb’ file, find its location. If you need help, see the help page on finding your database file before moving to the next step.

Move Database File

Choose the new location either on a shared network or the same computer and move the ‘apecal.mdb’ file from its original location to the new location.

**Note 1:** If moving the database file to a network location, grant appropriate user permissions to that new location depending on who needs access.

**Note 2:** When moving a database, rename or backup to a different location the database from the first location. The goal is to ensure that the program does not mistakenly connect to the old database sometime in the future thereby making the users assume that data is lost (old D.B. has fewer records).

Point Application to New Location

Point the Ape Application to the new location by starting the application. When the application discovers the ‘apecal.mdb’ file is missing from its known location, it will show the following ‘Choose Database Type’ dialog:

From within this dialog, select ‘BROWSE to Existing Database’ and click the [Continue] button.
Browse to and select the new database location and click the [Open] button.

The Ape Database Software should start as normal and will remember this new location.

**Last Updated:** 28 Nov 2016
Creating a Multi-User Environment

Setting up Multiple Users

Setting up multiple users to access our database software is as easy as deleting or renaming a file, starting the application, and linking to the new file. Therefore, if you are using an Access database file, you should be familiar with the help topics for finding your database and moving your database and you will have all the skills you need to add multiple users to your Ape database software system. If you are using a SQL Server, then read the help topics on Installing a SQL Server and Connecting to a SQL Server Database.

Move Your Database (MS Access Database Only)

Find your database and move your database to a network location where all of your users have read-write access. Most of the difficulties users experience with implementing a multi-user environment have something to do with network folder permissions. So if you experience any difficulties, you should first seek assistance from your network administrator.

Note: The only file you need to move to your shared network location is the 'apecal.mdb' database file.

Setup a Common Files Folder (Access & SQL)

Ape database software uses a Common Files Folder that contains four sub folders (i.e., Attachments, Emails, Labels, and Reports). Ensure each networked user of the Ape database software is using the Common Files Folder so its sub folders are equally accessible to all users. Do this by:

1. **Common Mapping:** Ensure each user has the same network mapping for the Files Folder. For instance, if a mapped drive (e.g., "M:\Server2\Common Files") is used for one user, the same path will be used for all users.
2. **Point Ape Database Software:** Open the Folders tab of the Options dialog and change the 'Location of Files' (i.e., Common Files Folder) to the common network location (step 1).
3. **Move Folders**: If custom files already exist in the old location(s) of the Files Folder, move those files to their new Common Files Folder locations (step 1). Specifically, move all attachments and custom templates (e.g., reports, labels, & emails).

**Add Additional Users**

When running the software on a client for the first time, it presents the option to create a database (blank or with sample records) or to navigate to an existing database. Therefore, after starting the software on a new computer and seeing the dialog below, check the 'BROWSE to Existing Database' option and [Continue] if a database already exists in a network location.

Otherwise, if a database has already been created on a client that needs to be networked (i.e., linked to a database on the network), delete or rename (safer/suggested) the local 'apecal.mdb' file. If already running the Ape database software, find the folder for this database file by selecting Open Data Folder from the Files dropdown menu. Otherwise, refer to the [finding your database](#) help topic.

**Last updated**: 7 Nov 2016
Data Imported To MS Access

How to Deploy Your Imported Data

This help topic only applies to the [MS Access] database format. If using SQL Server, refer to the Add Ape Database to SQL Server help topic. If a data import was arranged with Ape Database Software, you will receive your imported database in a zip file through either a download link or an email attachment. To deploy the database yourself, follow the instructions below. Otherwise, contact us and we'll take care of everything through a screen share.

Install Software

Before proceeding, download and install the most current version of Ape Database Software. Ensure the Minimum Requirements are present before installation.

Deploy Database (Scenario A)

Proceed to Scenario B (below) if the Application has already been used on this computer to access a database. Otherwise, continue with this section.

1. Download & Unzip: Download, unzip, and place the imported database in the desired folder. This may either be on the local computer or a network location, if the database will be accessed by multiple users.

2. Choose Database Format: Start the Application and select the [MS Access] button. If the Application starts in a different screen (i.e., the Choose Database Format dialog doesn't appear), proceed to the next section (below) titled Deploy Database - Replace Temp.

![Choose Database Format](image)
3. **Choose Database**

   **Type:** Select [BROWSE to Existing Database] from the Choose Database Type window.

4. **Select Database:** Navigate to the database you downloaded and unzipped (step 1), select, and click the [Open] button and the software should open with the imported data visible.

5. **Common Files Folder:** If the database was placed in a network location and/or multiple users will access the software, refer to the Common Files Folder section of Creating a Multi-User Environment to setup the Files Folder.

**Remove Old Database (Scenario B)**

If the Application was previously used with a blank or sample database, the files already present should be removed or renamed before proceeding.

1. **Open Data Folder:** After the Application is running, open the Data Folder by clicking [File] in the top-left of the screen and selecting "Open Data Folder". Confirm the existence of the database file (apecal.mdb or apecal_sample.mdb). This is the quickest and most accurate way of finding the current database. Leave this window open and proceed to the next step.
2. **Open Settings Folder:** Using the same menu as the previous step, open the Settings Folder. If the Settings Folder is the same location (file path) as in the previous step (i.e., Data Folder), close one of the windows. Note that by default, the Data Folder (previous step) and the Settings Folder are the same location but this will not always be true if the temporary database is moved.

3. **Close Program:** Close the Application so the database files can be moved, renamed, and/or replaced.

4. **Rename or Move Files:** Although the data files can be renamed, it’s easier to move ALL the files in the Settings and Data folders to a backup location (e.g., "Data Backup - Current Date"). Cleaning out these folders will create the conditions required for a clean first-run of the imported data.

5. **Scenario A:** Proceed with Scenario A (above).

**Additional Help**

Refer to the Database Import Process article for general questions about the process itself.

Other useful help topics:

- **Creating a Multi-User Environment**
- **Move Calibration Management Database**

**Last updated:** 23 Nov 2016
Add Ape Database to SQL Server

Install Calibration Control on Your SQL Server

Before beginning, ensure you are signed into your SQL Server with enough permissions to create and update databases and their objects (e.g., system admin).
Installing the apecal database on your on your existing SQL Server (2008 R2, 2012, or 2014) is a simple database restore from a provided backed up file. All SQL files needed to perform the install reside in the SQL Tools folder under the CC program folder located at Program Files (x86)\Ape Software\Calibration Control.

Restore Backed-Up Database

From within SQL Server Management Studio with your SQL Server connected right-click on the Database node and select Restore Database.
From within the Restore Database dialog, type the name apecal in the 'To database' field, select 'From device', and then click on the [...] button to the right of the 'From device' field.

From within the Specify Backup dialog, click the [Add] button.
Locate the backup file by navigating to or pasting in the 'Selected path'. Paste or type the File name of the file to restore from (e.g., apecal_s51_r52.bak). Then click [OK] to save and close the backup file and [OK] again to close the Specify Backup dialog.

When the Restore Database dialog is on the top again, click the checkbox in the Restore column of the backup set (file) you just designated and then click the [OK] button to begin the restore.
If successful, you should see the following confirmation dialog.

![Confirmation Dialog](image)

After closing the confirmation dialog, refresh the list of databases to see the new apecal database.

**Restore Failed**

If the restore failed, you may need to repeat the above steps and specify different file names or path statements. Use the Options Page of the Restore Database dialog to modify the Database (e.g., Rows Data) or Log file names or the Path statement (i.e., Restore As).
User Security

Users can connect to the apecal SQL Server database using either Windows or SQL Server authentication. Each user will either need Database Roles or Explicit Permissions. When using Database Roles, ensure each user has db_datareader and db_datawriter roles.
When using Explicit SQL Server Permissions, ensure each user is granted at least the Connect, Delete, Execute, Insert, Select, and Update permissions.
If you need help, contact Ape and we can setup a screen share and do this together.

Last updated: 4 Jul 2016
Connect to SQL Server Database

Configure Calibration Control to connect to a SQL Server

After creating the Ape database on your SQL Server, follow these instructions to connect your Ape software to that SQL database.

Start Configuration Wizard

Start the Network Configuration Wizard when running Ape software for the first time and selecting [MS SQL Server] as the default database type.

... then click [Yes]...

... then click [Yes]...
... or, if already connected to an MS Access database, select the 'SQL Connect' option from the Utilities group in the App Utilities tab.

Either method (above) displays the following dialog. Click the [Next] button...

Enter the fully qualified name into the Server Name field, confirm the database name, and click the [Test Connection] button to confirm that you have entered the correct connection information. When successful, the [Next] button will enable.
Then click the [Launch] button . . .
Sign-In to SQL Server

After entering the correct connection settings, Calibration Control will restart and you will be required to provide SQL Server sign-in credentials.

Contact Ape if you need help.

Restarting the Process

This entire process (above) creates a config file in the Settings folder on the computer where the Ape software application is running. Therefore, if a mistake is made during the process the best way to restart from scratch is to delete the config file and begin again. Do this by . . .

1. Close the Ape Software application
2. Opening the Settings folder, which is usually found at: C:\Users\Public\Documents\Ape Software\Calibration Control
3. Delete the general.config file (or, for advanced users, whatever config file required)
4. Re-start at the top of this page

Connection Troubleshooting

If needed, refer to the help topic on Troubleshooting a SQL Server Connection.

Last updated: 3 Jan 2017
Remove Sample Data

Remove sample data to begin entering your own records

If, during the trial period, the sample database is used to evaluate the software, the sample data should be removed before entering live equipment records.

Double Click (Automatic Method)

The easiest way to remove the sample data is to double-click on the graphic in the bottom-right of the Equipment Browse grid . . .

. . . and then click the [Yes] button.

After the application restarts, select the "CREATE New Blank Database" or "BROWSE to Existing Database" checkbox, then click the [Continue] button.
**Note:** If the CREATE option is selected, the new database will be created on the C drive of the computer being used. Therefore, if the database needs to be moved to a network location, follow the instructions in the move database help topic. If you need any help, contact Ape Software and we can do a remote support screen share to do this together.

**Last updated:** 16 Nov 2016
Equipment / Tool Grid

Grid Features

Features Common to All Data Grids

Each grid shares the same easy interface and basic features. Navigate data with sorting options, filters, grouping, and more.

Context Menu: Find more options by right-clicking anywhere in a grid for the context menu. Selections may vary by grid.
**Column Change:** Drag any column header to change its placement on the grid. There is also a Context Change button on the right side of the column header.

![Contacts Grid]

**Context Sort:** Click directly on a column header to sort records in ascending or descending order for that column. Hold the shift key while clicking on additional column headers to create sorts with multiple columns.

**Refresh:** Refresh your data by pressing [F5] or by right-clicking the grid and selecting Refresh Grid from the context menu.

**Add New:** Create a record by pressing [Ctrl+N] or by right-clicking the grid and selecting New Record from the context menu.

**Open and Edit:** Open a record by double-clicking, pressing [Ctrl+O], or by right-clicking a record and selecting Open Record from the context menu.

**Delete:** Delete a record by first selecting the record and pressing [Ctrl+D] or by right-clicking the selected record and selecting Delete Record from the context menu.

**Display Count:** How many records are listed? Don't count it yourself.

- **Records:** The number of records contained within the grid is indicated in the Grid Header.
- **Filtered**: The number of filtered records is also indicated within the Grid Header.

- **Filter Row**: The Filter Row is a helpful tool for searching and reorganizing your data.
  - When the Filter Row is enabled from the context menu, a blank row will appear at the top of each column.
  - Filters can be added to multiple columns at the same time
  - Create custom (i.e., combination) filters within a single column by selecting Custom from the dropdown menu.
Clear Filters: Clear a single column filter by placing the cursor in the filter field for that column and pressing the clear filter button (looks like a crossed out filter). Clear all filters by select the clear filter button at the far left of the filter row.

Pinned Sort Column: Columns can be sorted by multiple columns. Click the Pinned Sort button located in the top right corner of the column header and they will be sorted in the order that column headers are pinned.

Pin a column to freeze it in view and always visible, even while scrolling left or right. Unpin it the same way.
Grid Splitter: Use the Grid Splitter to view multiple sections of the grid at the same time by dragging the Grid Splitter to the desired height of the grid. And the grid can be split as many times as needed. Remove a Grid Splitter by dragging it all the way to the top or bottom of the grid.

Show Fields: Add and remove columns (i.e., fields) by selecting Show Fields from the context menu.

- Check the desired field columns to [Add] from available fields or [Remove] from visible fields.
- Also, change the column order by selecting a visible field and clicking the [Move Up] or [Move Down] buttons.
**Grouping Data:** The GroupBy Box view is great for on-the-fly organization with “mini-data sets”, giving you the creative ability to arrange records by their columns.

- When the GroupBy Box mode is enabled from the context menu, a gray 'Drag To' section (the GroupBy Box area) appears at the top of the grid.
- Select and drag column headers (fields) into the gray area to create custom groupings.
- Remove any fields from the header by simply dragging them up and out of the gray boxed area and releasing.
- And if desired, the Group By mode can be disabled with records still organized in custom groupings.

**Last updated:** 26 Oct 2016
Highlight Colors of the Equipment Data Grid

Understanding the colors in the browse grid

The Equipment Browse Screen currently uses four colors to identify ‘past due’ (pink), ‘calibration due soon’ (yellow), ‘calibration standard’ (green), and ‘calibration failed on receipt’ (red).

Showing/Hiding Colors

Show or hide highlights by right-clicking in the Browse Grid and toggling any of the three options in the Highlight section.

Highlight Past Due

Equipment records with a Next Cal date less than the current date are highlighted Pink. Records marked as Calibration / Test Standards (usually Green) are also marked as Pink when they are Past Due.
Equipment records not past due but “due soon” are highlighted Yellow. Due soon is defined by the Reminder Lead Days field in the Calibrations tab for the Options dialog.

Highlight Standards

Equipment marked as Calibration / Test Standard are highlighted Green unless they are also Past Due or soon to be Due Cal. Mark Equipment as a Standard by checking the 'Is Calibration / Test Standard' check box in the Calibrations tab of the Equipment dialog.
Highlight Received Out of Tolerance

If any of the past Calibrations of a given Equipment have an As Found status of Out of Tolerance (OOT), the Equipment will be highlighted red in the main Tool Browse grid.
Remove the Red highlight of an Equipment record by marking all of the Calibration Events with an 'As Found OOT' status as 'OOT Investigated'.

Last updated: 30 Dec 2016
Filtering Records Using the Filter Row

How to use the filter row in the data grids

The Filter Row is a helpful tool for searching and reorganizing your data.

Display Filter Row

By default, the filter row is already displayed at the top of the grid; it looks a bit like a blank row. If the filter row is not displaying, right-click the grid and select Filter row from the context menu.

- When the Filter Row is enabled from the context menu, a blank row will appear at the top of each column.
- Filters can be added to multiple columns at the same time.

Create New Filter

Choose which column you want to add a filter to and either use the drop down menu to search for the filter, or type it into the blank field. Results will immediately appear as you type.
Clear Filter(s)

**Single Filter:** Clear a filter within a single column by placing your cursor within that column's filter field (in the filter row) and clicking on the [clear filter] button on the right side of the field. The [clear filter] button is an icon of a filter with a line through it.

**All Filters:** Clear all filters by clicking the [clear filter] button on the far left side of the filter row.

Filter Methods

Additional filter operators (i.e., filter method) are available by clicking on the blue square to the left of each filter field.

Custom Filters

Create combination filters within single columns by click the drop down button (downward arrow) within the filter field of that column and selecting (Custom).

Last updated: 31 Oct 2016
Grouping Records in Grids

Group and ungroup records in data grids

Right-click anywhere on the grid for the Context Menu. Select the [GroupBy Box] option and a gray box will appear at the top of the grid. Drag a field header into the gray area to group by that field (i.e., column).

Drag another field header into the gray area to make a sub-grouping.

Expand or minimize the selections by clicking on the [+] and [-] buttons.

Remove a grouping by dragging a field header up and out of the gray area and let go.

Last updated: 31 Oct 2016
Hiding Equipment Records by Status

Use equipment status to manage visibility

It's a good practice to not delete equipment records even after equipment is no longer in use. But not removing out-of-use equipment can clutter up your Main Tool Browse screen and Due Cal reports making them more difficult to use.

To make this problem a little less daunting, choose which status codes should be visible and which should be hidden.

Status Codes Visibility

Select the Status Codes menu option under the Common tab and open a record that needs to have its visibility status changed. Double-click outside the grid to add a new Status Code.

Check the 'Hide these records . . .' checkbox and the equipment records with this status code will no longer be visible in the Equipment Browse screen or the default Due Cal reports. Uncheck the checkbox to make the records visible again.

Show/Hide All Hidden Records

From the Main Tool Browse screen, you can right-click in the grid and a popup menu will appear. From this menu, you can toggle the Show Hidden Records option to show or hide all records with a hidden Equipment Status.

Last updated: 5 Dec 2016
Manage Out-Of-Tolerance (OOT) Equipment

Manage & Investigate OOT Equipment

When performing calibrations on measuring equipment, it is proper to check the condition of the equipment (aka unit-under-test or UUT) before calibration (As Found) and after calibration (As Left). If measurement equipment is found out-of-tolerance (OOT) before performing calibration, an assessment of the effect of the OOT condition on processes must be performed. If it has been 12 months since the last calibration of the UUT, all the product and processes the UUT measured in the last 12 months are suspect. For instance, were products or processes falsely judged good when they were bad?

Calibration Event

In a Calibration record, if the As Found field is OOT, the 'OOT Investigated' checkbox and the [Print OOT Form] button become visible. Upon finding OOT equipment, conduct an investigation in accordance with your organization's corrective and preventive action (CAPA) or nonconforming material (NCM) processes. After the investigation is complete, check the 'OOT Investigated' checkbox. If useful to your organization's CAPA or NCM processes, print the OOT Form from the Calibration record for use as an investigative tool.
Main Browse

Calibration Events with pending OOT investigations are highlighted red in the Equipment (Tool)
Browse when the 'Highlight - Received Out of Tolerance' option is enabled from the context
menu. Clear the red highlighting by checking the 'OOT Investigated' checkbox for all Calibration
Events (see above) that have OOT conditions for a given Equipment record.

Last updated: 21 Dec 2016
Calibration History Grid

Calibration Event Quick Reference and Filter

Use the Calibration History Grid to quickly find Calibration Events without having to go through their Equipment record.

Top N Records

Ape Software limits the default display of Calibration records to the top 100 in descending Calibration Date order.

Change the number of records displayed by right-clicking on the grid and then selecting the "Show Top N Records" menu item . . .

. . . enter the number of records to display and click [OK].
Filtering and Sorting

Enter Filters and Sorts just like any other data grid. Refer to the Features Common to All Data Grid for additional instructions. The difference here is to remember that the Calibration Grid is only displaying the Top N records (see above). This means that the Filters and Sorts only apply to the collection of records currently displayed.

To apply a Filter or Sort to the entire list of records and then display the Top N Records, enter the desired Filter/Short in the grid and then refresh the grid by clicking the [F5] button or right-clicking and selecting the "Refresh Grid" menu option.
Equipment & Calibration Dialogs

Equipment Dialog

Edit equipment records

Use the Equipment dialog to edit all data related to the tool / test equipment. Change the name of any field to continue using words that make sense to your organization. If the field name* looks like a hyperlink, click on it to add new values in the drop-down list of available values (combos).

Equipment Dialog Fields

- **Equipment ID**: The unique identification given to your own tools / test equipment and is often referred to as an Asset Number. This is the only required field for a new record.
- **Serial Num**: The unique identification the manufacturer gives their tools / test equipment. (You may periodically find that some manufacturers do not assign serial numbers or that a serial number label has fallen off.)
- **Model**: The model number of the tool / test equipment usually assigned by the manufacturer.
- **Description**: Description of the tool model number, which automatically changes to reflect the description of the model field (above). After a Model number is selected, the Description field can be edited.
- **Manufacturer**: The company that made the equipment/tool. This field is also automatically set if an existing Model Number from the Model combo box is chosen.
- **Equip Type**: Classification system developed by you, the user of Calibration Control. (Examples of Equipment Types include Caliper, 6" Caliper, Thermatron, Oven, etc.) This field will automatically populate if an existing Model Number is chosen and has a Type field assigned.
- **Site**: Company field for geographic Site or Company.
- **Department**: The department in your organization where the tool is currently located.
• **Location**: The location within the department where the tool is currently located. (This could be a specific work area or even an engineer’s desk.)

• **Custodian**: The individual who has custody or possession of the Equipment/Tool.

• **Personal Property**: Does this equipment belong to someone other than the company? There is also an Owner combo field in the Other tab.

• **Status**: The status of the tool / test equipment (e.g., accepted, removed from service, failed calibration, or any other status needed).

• **Alternate ID**: This is a second ID field, the Equipment ID being the first. Use this field to record a company Asset number, if it is not the same as the Equipment ID, or a customer's Equipment ID.

• **Procedures**: Relate calibration procedures to equipment by clicking on the Procedures link button and selecting the desired procedure.

• **Notes**: Like the user fields, use the notes field for whatever purpose needed.
**Link Procedures to Tools**

In the Equipment dialog, click on the Procedures hyperlink button to bring up the dialog shown below and link procedures to the current tool / test equipment. Visit the Procedures help topic.

**Calibrations Tab of Equipment Record**

- **Calibration Event:** Click on the [New] button at the bottom of the dialog to create a new Calibration Event.
- **[Calibration] Last:** The date of the last calibration is set automatically when entering a new Calibration Event with a Status of Pass. The Calibration Last date can be set manually, which automatically updates the Calibration Next field based on the value of the Frequency field.
- **[Calibration] Next:** The date of the next calibration is calculated automatically when entering a new passing calibration event or when manually updating the Calibration Last field. In either situation, the next calibration date is calculated based on the chosen Frequency and Units.
- **Override Calibration Next:** Manually extend or otherwise override the Calibration Next date by checking the box to the right of the Calibration Next field.
- **Received:** The date when equipment is received for Calibration.
- **Template:** Measurement Template used when creating new calibration events.
- **Frequency / Units**: The frequency between calibrations, like yearly or semi-annual. If choosing a frequency that requires a unit multiplier (e.g., weeks, days, or months), the Units field will enable to adjust the number of units (weeks, days, or months, etc.). The 'Month of' and 'Week of' frequencies set a general due date of an entire month or week.

- **[Calibration] Company**: The organization (Calibration Company) that regularly calibrates this instrument. This is a useful field when wanting to create a report of all the equipment due in a given period for a specific calibration resource.

- **Technician**: The person who normally calibrates this instrument.

- **Is Calibration/Test Standard**: Check this box if the current equipment is used as a calibration standard for other equipment.

- **Certificate**: Number of the certificate issued by the organization responsible for the last calibration event. Used primarily to aid in traceability back to a national measurement standard, especially if this equipment is a Calibration/Test Standard.
Custom Tab Fields

Here are extra fields available in text, date, number, and checkbox format to easily rename and use for whatever needed.

Notes Tab

Use the Notes tab to record any notes to maintain over time. The date/time is automatically entered. If User Sign-In Mode is on, the name of the individual who created the note is automatically entered as well.
Attachments and Pictures

Visit the Attachments and Pictures help topic.

Something about the Other Tab

- **Label & Report Overrides:** While default labels and reports are defined at a global (application) level in the Options dialog, Overrides for the Labels and Reports listed here can be entered for this specific Equipment.
- **Check Out Group:** Using the Check In/Out dialog automatically populates the following fields:
  - **By:** The Checked Out By field shows the person who has checked out the Equipment.
  - **Date:** The Checked Out Date field shows the most recent date this Equipment was checked out, and only populates if it is checked out. When not checked out, this field is blank.
  - **Use Count:** Number of times this Equipment was checked out since its last Calibration.
- **Miscellaneous Group**
- **Owner**: The Equipment Owner (Person field), if not the organization.
- **[Equipment] System**: System that this Equipment belongs to.
- **Barcodes**: Use this field to add additional barcodes to the record that may already be on the equipment. This field is useful when no additional bar-coded labels are needed and Calibration Control will recognize the barcode labels already affixed to the equipment.
- **Equip Cost**: The purchase price or calibration cost of the Equipment.
- **Acquired**: Acquisition date of the equipment.
- **In Service**: In-Service date of the equipment.
- **Cal Cost**: The standard (normal) cost of calibrating this Equipment.
- **Time**: The standard amount of time required to calibrate this Equipment.

![Image of Calibration Control software interface]

**Last updated**: 27 Feb 2017
Calibration Events

Understanding the structure and the fields

- Each Calibration Event can have several Measurement Groups or none at all.
- Each Measurement Group can have any number of measurements to it.
- Each Measurement Group has its own tolerance, unit of measure, and calibration standards.
- To illustrate, the diagram below is a single Calibration Event with three Measurement Groups and a different number of Measurements for each Group.

A Simple Calibration Event

The following image shows a Calibration Event without Measurements, as is often the case when recording Calibrations handled by an external calibration laboratory. The Technician, Temperature, and Humidity fields are usually not required in the outside lab scenario because this data would be included on the calibration certificate.
Calibration Event Fields

- **Date**: Date the Calibration Event took place. This field defaults to today's date.
- **Company**: The organization that calibrated the equipment, like your own company (Internal) or a calibration laboratory (External).
- **Technician**: The individual who performed the calibration. This field is auto populated from the Technician field on the parent Equipment record.
- **Procedures**: Read-only list of procedures, which can be edited in the Equipment dialog.
- **Temp (Temperature)**: Enter the ambient temperature of the room where the calibration is performed. If a THUM device (USB hygrometer) is plugged and configured, this field will auto populate.
- **Humidity**: Enter the Relative Humidity of the room where the calibration is performed. This field is also auto populated with a configured THUM device.
• **As Found:** Record the condition the equipment was received for calibration (e.g., Out of Tolerance or In Tolerance). This field gets auto populated when the results are tied to the results of the Measurement Groups.

• **As Left:** Record the condition of the equipment at the end of the Calibration Event. This field is auto populated when using Measurement Groups because the results of the groups are tied to the overall result of the Calibration Event.

• **Remarks:** Use this field for any remarks related to the Calibration Event.

**Measurement Group Fields**

• **Tolerance Type:** Set as None, Percent (%), Tolerance (+/-), and Limit Values. The following is the result of each type:
  
a) **None:** The Upper and Lower Limits are the same as the Nominal.
b) **Percent (%):** [Upper Limit = Nominal + (Nominal x Plus Tolerance)] and [Lower Limit = Nominal - (Nominal x Minus Tolerance)]

c) **Tolerance (+/-):** [Upper Limit = Nominal + Plus Tolerance] and [Lower Limit = Nominal = Minus Tolerance]

d) **Limit Values:** Both the Upper and Lower Limit values are edited for each measurement.

- **Mask:** Number mask used to set the Integers spaces (number places to left of decimal) and significant digits (number places to right of the decimal). The Number Mask field formats all numeric fields in the given Measurement Group.

- **AsFound:** Automatically In Tolerance (green) or Out of Tolerance (pink) dependent on the value of the As Found Result column in the Measurement Grid below (yellow area). If any record has a failing result (red X), the Measurement Group As Found value will be Out of Tolerance.

- **AsLeft:** Automatically Pass (green) or Fail (pink) dependent on the value of the As Left Result field in the Measurement Grid below (blue area). If any record has a failing result (red x), the Measurement Group As Left value will be Fail.

- **Units:** Select the Unit of Measurement for all number fields (e.g., measurements and tolerances) in the current Measurement Group. If a different Measurement Unit is required for the same Calibration Event, then create an additional Measurement Group in the Event. Edit the selections available in the Units combo box from the Measure Units screen accessible from the main screen.

- **Standards:** Select the Calibration Standards used for the measurements in the current Measurement Group. Add additional items to the Standard combo box by checking the 'Is Calibration / Test Standard' checkbox in the Equipment Edit dialog, Calibrations tab. If the Equipment identified as Calibration Standards have a Calibration Due date of greater than the current day AND with their most recent (if any) Calibration Event as Passing, then it will be selectable when clicking on the Standards link button. (Standards that need calibration are still shown but cannot be selected.)

- **Measurement Notes:** Add any notes specific to the current Measurement Group.
Quick Menu (Right-Click Popup Dialog): Initiate any of the following Group Actions by selecting the desired action from the right-click popup menu.

a) **Rename Group**: Change the default name of Measurement Group. Also accessible by double-clicking on the Measurement Group name.

b) **Delete Group**: Deletes the current group.

c) **Auto Fill After**: Toggles the feature for automatically filling the As Left field with the same value as the As Found field. This feature is useful for equipment that can only be checked that is in tolerance but cannot be adjusted or otherwise calibrated.

d) **Show (Hide) Description**: Toggles the visibility of the Desc. (Description) field in the Measurements Grid.

e) **Make Measurement Template**: Instantly creates a Measurement Template from the current collection of Measurement Groups. Edit all existing templates through the Measurement Template button on the main screen ribbon. Assign Measurement Templates to Equipment Types, Model Numbers, and individual Equipment.

f) **Add Sequences to New Measurements**: Automatically add a sequential number to the Seq (sequence) measurement column, thereby keeping the measurements in the same order as entered.
Custom Fields

Each calibration event has several additional fields, which can be renamed. Included are several texts, date, numeric, and Boolean. Edit these and other field names by clicking the Edit Form Labels button in the Options dialog.

Within the Custom Fields tab there are three additional fields that are not custom.

- **Certificate**: A sequential number is assigned to each Calibration Event. This number is automatically used as the Certificate number unless another value is entered in this field. To set a manual value automatically for this field, see the Date and Number Masks topic for instructions.
- **Cal Cost**: The actual cost of this Calibration Event.
- **Cal Time**: The actual time required to perform this Calibration Event.
Approval / Equipment Used

Checking the check box in this tab will approve and Lock the current Calibration Event record. If the current user is signed-in at the time the box is checked, that user's name will be tied to the approval of the Event.

This tab also has the second purpose of displaying the details of the Calibration Standards used during the Calibration Event. These details are a snapshot of the Calibration Standards at the time they were added to the Calibration Event. Jump to Standards topic.
Calibration Measurements Scatter Plot

The Scatter Plot tab displays a Scatter Plot of the measurements entered for a given Measurement Group. In-Tolerance As Found measurements are displayed Green while Out-of-Tolerance measurements are Red.

![Sample Measurement Group (Test)](image)

**Last updated:** 27 Feb 2017
Calibration Frequencies

How do the different calibration frequencies work?

Calibration Frequency is the interval of time between required calibrations of any given piece of test equipment. Set the Calibration Frequency of Equipment in the Calibrations tab of the Equipment dialog (below).

Calibration Fields

There are four fields involved in the Calibration Frequency function. They are:

- **Last [Calibration]**: Date of the last calibration.
- **[Calibration] Frequency**: How often the Equipment is calibrated.
- **Units**: Calculates the frequency automatically based on the unit selected. The Unit field is disabled with Frequencies like Yearly or Monthly because they have an inherent Unit value.
- **Next [Calibration]**: Due date of the next required Calibration.
The following are all the Calibration Frequencies in Calibration Control where 'n' is the number value in the Units field.

<table>
<thead>
<tr>
<th>Frequency Name</th>
<th>Frequency Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biennial</td>
<td>Every 2 years</td>
</tr>
<tr>
<td>Bi-Monthly</td>
<td>Every 2 Months</td>
</tr>
<tr>
<td>Bi-Weekly</td>
<td>Every 2 Weeks</td>
</tr>
<tr>
<td>Cal Not Required</td>
<td>No Due Date . . . Not Calibrated</td>
</tr>
<tr>
<td>Daily</td>
<td>Every Day</td>
</tr>
<tr>
<td>Days</td>
<td>Every n Days</td>
</tr>
<tr>
<td>Manual</td>
<td>Set the Next Calibration (Due Date) manually</td>
</tr>
<tr>
<td>Month End</td>
<td>Every n Months due on the last day of the month</td>
</tr>
<tr>
<td></td>
<td>Every n Months due at any day within the calculated month</td>
</tr>
<tr>
<td>Month of</td>
<td>month</td>
</tr>
<tr>
<td>Month Start</td>
<td>Every n Months due on the first day of the month</td>
</tr>
<tr>
<td>Monthly</td>
<td>Every Month</td>
</tr>
<tr>
<td>Months</td>
<td>Every n Months</td>
</tr>
<tr>
<td>Next Use</td>
<td>No Due Date . . . Next Use</td>
</tr>
<tr>
<td>Not Calibrated</td>
<td>No Due Date . . . Not Calibrated</td>
</tr>
<tr>
<td>Quarterly</td>
<td>Every 3 Months</td>
</tr>
<tr>
<td>Reference Only</td>
<td>No Due Date . . . Reference Only</td>
</tr>
<tr>
<td>Semi-Annual</td>
<td>Every 6 Months</td>
</tr>
<tr>
<td>Undefined</td>
<td>No Frequency Defined</td>
</tr>
</tbody>
</table>

Calibrate every n uses where n = Units. Use the Check In/Out dialog to automatically increment uses.

Calibrate every n days where n = Units. Use the Check In/Out dialog to automatically increment uses.

Every n Weeks due at any day within the calculated week
Weekly  Every Week
Weeks   Every n Weeks
Yearly Every Year
Years  Every n Years

“Month of” and “Week of” Frequencies
Unlike the other Frequencies that calculate due dates on specific days, the "Month of" and "Week of" are special Frequencies that calculate the month or week a calibration is due. These Frequencies are also affected by two settings in the Options dialog for "First Day of Week" and "Due Date 'Week/Month of' Offset". By default, the "First Day of Week" is set to whatever is standard on your operating system. The default for the Offset is the Next Month or Week after the calculated due date.
"Month of" Example

Frequency:  Month of
Last Calibration:  5/16/2013
Units:  12
Offset:  Next
Calibration Due:  6/1/2014
Label Display:  Due Month of Jun-2014

How the math works . . .

Calculate 12 Months after Last Calibration, which yields 5/16/2014
The Offset is set to Next [Month] so the Due Month jumps to the next Month, which yields 6/1/2014

"Week of" Example

Frequency:  Week of
Last Calibration:  6/5/2013
Units:  30
Offset:  Next
First Day of Week:  Monday
Calibration Due:  7/1/2013
Label Display:  Due Week of 7/1/13 *

How the math works . . .

Calculate 4 Weeks after the Last Calibration, which results in 7/3/2013.
Since the Offset is set to Current [Week] and the First Day of Week is set to Monday, the Monday of the current week results in a due week starting on 7/1/2013.

* “Month of” and “Week of” Date Masks

Use the Date Masks tab of the Options dialog to modify how Due Dates display on Due Cal labels. For instance, the default “Month of” mask is MMM-yyyy, which results in "Month of Jun 2014". The default "Week of" mask is MM/dd/yy, which yields "Week of 07/01/13". Use the combo boxes to select other pre-defined date masks or create your own.

Note that placing the letter 'u' at the end of any date mask will cause all letters in the mask to display in upper case.
Last updated: 4 Jan 2017
Referencing Calibration Standards

How to link masters to calibrated equipment

Linking Standards (Masters) to Calibration Events is simple. They create a data trail (traceability) between national measurement standards and the Equipment Under Calibration.

ID a Calibration Standard (Master)

Before referencing in a Calibration Event, the Standard must exist as an Equipment record with the "Is Calibration / Test Standard" checkbox checked. Find this checkbox in the Calibrations tab of the Equipment dialog.

Standards are Green in Grid

By default, Calibration Standards display with a green highlight in the Tool Browse Grid (Equipment Grid). Refer to the color coding help topic for more on color.
Link Calibration Masters

After Equipment records for Calibration Masters are created and identified as Masters (Standards), they can be linked to individual Calibration Events. Refer to the Calibration help topic for more information on creating a Calibration Event.

Available Standards

Clicking the [Standards] button in the Measurement Group of 'Calibration Details' displays a list of available Standards. Unavailable Standards are those (a) standards currently out of calibration, (b) standards with their last calibration event with an As Left result of "Failed" or "Unknown", or (c) is the current equipment under calibration.
Results

The process of linking a Standard to a Calibration Event makes a copy of the calibration information of the Standard and stores it in the Calibration Event record. This means that when the calibration information for the Standard changes (after the Calibration Event), a snapshot of the Standard at the time of Calibration is preserved, which helps maintain accurate traceability.

Note: If the Due Cal date has passed the present Calibration date, then the Standard is red and unavailable because it is past due for Calibration.

Last updated: 4 Jan 2017
Measurement Templates

Learn how to use Measurement Templates

A Measurement Template is a collection of Measurement Groups without final measurement data. Therefore, a Template can have multiple Groups. A Measurement Group is a collection of information and standard measurements required each time the template is used. For more information on each of the fields in the Template, see the Calibration Event help topic.

Default Template

By default, the 'Use Last Calibration as Template if No Template Linked' option is checked. When this option is checked AND if there are no user-defined Measurement Templates linked to an Equipment record, Calibration Control will use the most recent Calibration Event record as a Measurement Template when creating new Calibration Events.

User-Defined Measurement Templates

Measurement Templates can be created, edited, and managed by clicking on the Measure Template icon in the Calibration tab of the menu ribbon. Templates can also be created from existing Calibration Events by selecting the Create Measurement Template option from the Group Actions combo box.
A Measurement Template needs to be linked to an Equipment record to be useful. When linked, new Calibration Events will automatically contain the structure of the linked Measurement Template so that only measurement data (As Found / Left) needs to be entered and a Calibration Standard recorded. Also, Calibration Worksheets will replicate the linked Template structure for consistent data collection.

Referring to the diagram below, a Measurement Template can be linked to an Equipment record in four ways. It is even possible to link four different Templates to an Equipment record although only one template will be used and in the following priority.

1. **Direct (blue line):** Link a Template directly to an Equipment record by selecting the Template in the Calibration tab of the Equipment record. A Template directly connected to an Equipment record in this way supersedes all other methods. Therefore, this direct link overrides all other indirect links.

2. **Equipment Type (red line):** Link a Template to an Equipment Type record and then link the Type to an Equipment record in the Equipment dialog. This link overrides the two that follow.

3. **Model Number (green line):** Link a Template to a Model Number record and then link the Model Number record to the Equipment record in the Equipment dialog.
4. **Equipment Type – Model Number (yellow line):** Link a Template to an Equipment Type, which is linked to a Model Number, and then is finally linked to an Equipment record. This is the lowest priority.

Multiple methods for links exist to provide the choice of how an organization chooses to manage its measurement data. Therefore, choose the method that works best for your team.

**Last updated:** 18 Jan 2017
Attachments and Pictures

Add attachments and pictures to equipment and calibration records

Add attachments to an Equipment record by double-clicking on a record and navigating to the 'Attachments' tab. Drag or drop a file into the Attachments tab or click the [New File] button.

After a file is selected, additional notes can be added. The file can be related to an existing Calibration record or marked as the Default Equipment Image, if the file is an image. Checking the 'Link Only' check box means the file being 'Attached' will stay at its current location and a link to that location will be saved in the database. If the 'Link Only' check box is not checked, a copy will be made and saved in the application Attachments folder.
Add URL

The 'Add URL' button allows a user to attach a link to a website or to a specific folder (directory). Adding a link to a specific folder is helpful if more than 1 file is being attached.
Picture Tab

The Picture tab provides a quick reference to the single image attachment marked as the Default Image.

![Picture Tab Image]

Relationships

The one picture displayed in the Picture tab is simply an Attachment designated as the Default Image for the Equipment. Of course, in order for an attachment to be designated as the default picture, it must be a picture. This also means the Picture will be listed as an attachment.

![Equipment Attachment Diagram]

Last updated: 21 Dec 2016
Recording and Researching Jobs

Record equipment used on jobs for traceability

It is important to know all the processes that measurement equipment touches because if the equipment is ever found out-of-tolerance (OOT) an organization must be able to determine the effect of the OOT condition on its processes.

The following dialog ('Record Job' in Common tab) is available for quick recording of equipment used on Jobs or Work Orders and can be used with barcode scanners for increased data accuracy. Any string can be entered in the Job field while the Equipment field will recognize the label barcodes printed by Ape Software or the Equipment ID.

In the Job Browse screen, past Job entries can be filtered by Equipment ID, Job, Dates, and several other fields. The results of a search / filter can then be printed or exported to Excel or PDF.
Last updated: 8 Feb 2017
Special Features

Asset Transfer Dialog

Quickly change Department, Location, or Custodian

Transfer Assets quickly to new Sites, Departments, Locations, Custodians, or change the Status. Administrators can control which fields are users are allowed to use by adjusting permissions in the Options dialog.

Transactions made using the Asset Transfer dialog are automatically logged in the Equipment dialog History tab.

Under the 'Common' tab, click 'Asset Transfer'. Begin using the dialog by identifying the Equipment record to be changed; do this by entering an Equipment ID, Master ID, or Serial Number. Then select the new Site, Department, Location, or Custodian and press the [Submit] button.

The Asset Transfer dialog can also be activated directly from the Equipment grid by right-clicking on the Equipment record to be changed and selecting 'Asset Transfer'.

When using a barcode scanner, checkmark the [Use Scanner] button first.

Last updated: 5 Dec 2016
Auto Notify Utility

Send emails and desktop notifications automatically

Configure one or several Notification Events for scheduled reminders through email, desktop, or website publishing. Send email notifications to specific groups of people such as Equipment Custodians, Technicians, Owners, Department Managers, etc. Receive a desktop notification of Equipment due for calibration.

Email

Before sending Emails Automatically, you will need to add your email settings in the Options dialog. The database will need additional related data discussed at the bottom of this page.

Auto Notify Menu

Start the Auto Notify utility from the Calibration tab in the ribbon menu.

Auto Notify Grid

Currently, 9 Auto Notify events are defined.

- **DueCal_[Person]**: Auto email notifications for the Person identified after the "DueCal_" string.
- **DueCal_Desktop**: Auto desktop notifications on the current computer.
- **Website_General**: Auto publication of a simple website listing all equipment in Department groups. Set the publish location in the Folders tab of the Options dialog.
Auto Notification Files

These four fields are only used for Email Notifications . . .

- **Email Template**: Defines which HTML file is used as the template for the email.
- **Signature File**: Defines which HTML file is used as the email signature.
- **Email Subject**: The text that appears in the Subject line of the Auto Email Notifications.
- **BCC**: Whenever an Auto Email is sent, a copy of the email can be sent to an additional email or list of emails. If more than one email is added to the BCC field, separate those emails with a comma, semicolon, or a hard return.

- There is one live fire button and one test button . . .
- **Send Message(s)**: Pressing sends all the email notifications to the defined Person group (e.g., Custodian, Technician, Manager), displays the desktop notification, or creates the default website.
- **Send Test Message(s) to BCC**: Sends the email notifications to the email(s) listed in the BCC field only as a test run.

**Setting a Schedule**

Set the repeat frequency (How Often), time of day (Date & Time), and if the Event is Active.

**Related Data for Email Notifications**

The Email Notifications require related data in the following tables:

- **People Fields in Equipment Record**: Identify the Custodian, Technician, Owner, or Checked out By fields so Calibration Control knows which equipment is related to whom.

- **Department Field in Equipment Record**: Identify the Department in the Equipment dialog and then, in the Department record, identify the Manager and Contact people.

- **Site in Equipment Record**: Identify the Site (e.g., Customer or Company Site) in the Equipment record and then, in the People records, connect them to Companies.

- **Emails in People Records**: Ensure the People identified in other locations (e.g., Equipment or Department records) have valid email addresses and that their Send Email Notifications option is checked.

**Last updated**: 8 Feb 2017
Equipment Check Out and Use Count

Use the Equipment Check Out feature to quickly issue out items while automatically creating an audit trail, tracking Use Count or Days, linking the Person, and connecting to a work order.

Activating the Check-out Dialog

Select the Check Out feature icon from under the Common tab of the menu ribbon.

Or right-click on the Equipment record from the Tool Browse grid and select 'Check Out' from the quick menu. This way the Equipment ID will be automatically generated in the Check Out dialog.

Check Out (Basics)

To issue out Equipment, select the 'Out' checkbox, enter a valid Equipment ID, and click the [Submit] button.

Enable the checkboxes next to optional fields to track the Person, Work Order, or Status Change related to the current Equipment Check Out.
Confirmation of Check Out will appear in the Response Area of the dialog:

![Image of Check Out dialog](image1)

**Check In (Basics)**

To return the Equipment, select the 'In' checkbox, enter a valid Equipment ID, and click [Submit]. Confirmation of Check In will appear in the Response Area of the dialog:

![Image of Check In dialog](image2)
Check Out by Equipment System Name

Equipment System Names can be used in place of an Equipment ID only if the Equipment System Name is NOT all numeric, making it appear like an Equipment Master ID, and it does NOT have the same name of an Equipment ID.

Check Out with Barcode Scanner

Enable the checkbox for "Use Scanner" to enable barcode label scanning. Using scanner for field input will disable manual entry.

Using Scanner for Barcoded Equipment ID

The default barcode used in Calibration Control is the Equipment Master ID (a unique sequential number for each Equipment).

However, the Equipment Master ID can be overridden in barcode labels for an Equipment ID or Equipment System Name using the following format:

- Upper Case A-Z (Capital Letters)
- Integers 0-9 (Numbers)
- Special Characters: Plus (+), Minus/Dash (-), Period (.), Forward Slash (/), Space ( )
- Note: Barcodes must begin and end in alpha-numeric form, surrounding special characters.

Barcode Recognition Order

Sometimes scanning barcodes in Check Out can reveal data conflicts, so it is helpful to know the barcode recognition order in Calibration Control. When a barcode is scanned, Calibration Control performs database tests to determine what information (string) the barcode contains. The string is searched for in the following order:
1. Is it an Equipment Master ID? (Default in Calibration Control)
2. Is it an Equipment ID?
3. Does the string appear in the Barcodes field of an Equipment record?
4. Is it an Equipment System Name?
5. Is it the ID of a Person? (if a Person entry is required)
6. If none of the above, the string will be placed in the Work Order field.

**Equipment Use Count or Use Days**

Some equipment or tools require calibration after a certain number of uses or days used, as opposed to a time interval (e.g., by units of months or years). We refer to tools with this kind of Calibration Frequency as Equipment Use Count or Equipment Use Days.

**Tracking Uses:** The Increment field in the Check Out dialog only affects Equipment Use Count and Equipment Use Days, and only if its Next Calibration date is not overridden.

**Increment Value:** By default, the Use Count Increment during Check Out equals zero (0), and Check In equals one (1).

**Manual Override:** Increasing the Increment that automatically appears in the Check Out dialog will override the default values to apply the new value to that Equipment Use Count.

![Check Out dialog](image)

**Default Increments in Check-Out**

The Response Area of the Check Out dialog will recognize Equipment Use Count / Days.
Equipment Use Count (+1 per Use)
The default Increment during Check Out is zero, increasing the Use Count by nothing. Equipment Use Count updates during Check In to increase by one (1), the default value. In other words, return the tool or check it out again (if applicable) to add one count of usage in the Equipment record.

Equipment Use Days (+1 per Day)
Check In increases the Use Count (Days) by one (1) Increment for each day the Equipment was checked out. The nature of this calibration frequency is time-sensitive so tracking days of usage also occurs during Check Out and may update the Use Count (Days):

- If the tool is checked out multiple times (before Check In), then Calibration Control will apply its automated algorithm to count the number of days this tool has been out and used.
- If the previous Check Out occurred on another date, then the Use Count (Days) adds one Increment for each day, just like Check In would.
- If the previous Check Out occurred on the same date, then there is nothing to change.
- Note that if Check In occurs on the same day as Check Out, by default, it counts as one day of usage.

Options: Admin settings to prevent (multiple) Check Out before Check In is located in Options.
Verify Check-Out Status

**Current Status:** In the Equipment dialog, select the Other tab to verify the current Check Out status with the Person (if applicable) and date. The Use Count is also visible, which resets to 0 after calibration.

**Override Count:** This area can also be used to manually alter the Use Count or Check Out Status.

**Check-Out Activity:** All Equipment Check Out activity is automatically logged in the Notes tab of the Equipment dialog. Double-click any note to view or edit.
<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Created By</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/11/2014</td>
<td>Check Out</td>
<td></td>
<td>Checked Out to Joanne S. for Work Order 10101</td>
</tr>
<tr>
<td>06/11/2014</td>
<td>Check In</td>
<td></td>
<td>Checked In</td>
</tr>
</tbody>
</table>

**Last updated:** 22 Dec 2015
Custom Barcodes

Use unique barcodes already on equipment

If Equipment already has a unique barcode (e.g., asset or serial number), that number can be entered into its equipment record and used to locate and open its record. Make sure that this barcode is only used once per equipment record because there is no way for Calibration Control to differentiate two equipment records with the same barcode number.

Custom Barcode Field

Open an Equipment record and select the Other tab (far right). Enter the unique custom barcode in the custom Barcode field. The most accurate way of entering the custom barcode is to place the cursor in the custom Barcode field and scan the barcode into the field.

Barcode Scan Dialog

Close the Equipment dialog, returning to the Main Browse grid. Press the [F3] button to bring up the following small dialog. When this dialog (below) is visible and a barcode is scanned, Calibration Control will know to look in the custom barcode field in addition to the default field.

Last updated: 4 Jan 2017
**Limit Equipment Visibility by Site**

**Make Site Equipment visible only to specific Users**

There are several scenarios where this feature may be useful. Remember that the Site field name can be changed to names like Customer, Group, Type, etc.

- A central database is used by multiple sites where Users should only view Equipment from their own Site.
- Each Site represents a different customer and different Users should only have access to the Equipment of specific Customers. In this scenario, rename the Site field to Customer.
- Sites represent different Groups (e.g., Calibration, Maintenance, etc.) and Users in each Group should only have access to their own Equipment. Rename the Site field to Group, or whatever is most appropriate.

**General Process**

Use the following checklist to ensure all steps are completed to setup Limited Equipment Visibility by Site:

1. **Create Company records** designated as a Site, Customer/Client, or any Company Type designated as a Site.
2. Update the Site field for all Equipment that will be included
3. **Enable User Authentication** being sure to create the Users who will be granted.
4. Link Users to Site using the User Sites feature found in the Security group of the App Utilities tab.
5. In the Admin tab of the Options dialog, check the "Display Equipment Only From Assigned Sites When Signed In" checkbox

**Last updated:** 27 Apr 2014
Feature Visibility Options

Simplify the menu ribbon by hiding unneeded features.

Make Features Invisible

Feature Visibility is found under the Admin tab in the program Options (accessible from Utilities).

Click on Feature Visibility for the table of features to appear. Select a feature (or group of features) to become invisible on the menu ribbon.

Note: Restart the program to apply these changes.
In the above image, notice how the feature group 'Utilities' is marked to be invisible. The ribbon with the 'Utilities' feature group looks like:

The ribbon with the 'Utilities' feature group hidden looks like:
When it is made hidden or invisible, a feature or a feature group is simply removed from view. To make a hidden feature visible again, return to Feature Visibility in Program Options and remove the feature's checkmark.

**Minimize Ribbon**

For a better view of the open windows, right-click on the ribbon and select the 'minimize the ribbon' option. Bring it back the same way, by right-clicking where the ribbon would normally appear.

**Last updated:** 16 Nov 2016
Print Future Calibration Labels

Print a range of Calibration labels to apply at a future date

This feature is useful in a scenario where a Technician must calibrate Equipment at a remote site but does not have the ability to print labels while at that site. With this feature, a Technician can print a range of labels with a future Calibration date and apply those labels on site assuming the Unit Under Test (UUT) passes. Printing labels with this feature does not update the Calibration dates of the Equipment.

Printing Future Labels

Print Future Calibration Labels by selecting a group of records, right-clicking to get the pop-up menu, and selecting Print -> Future Calibration Labels. Use the Filter Row to filter only the rows required.
Set the future calibration date and the appropriate technician for the labels.

Depending on the type of label selected, different information will be displayed in different styles. This label shows the Technician name, the Future Calibration Date, and the date it will be Due for Calibration. The customizable fields are shown in red for reference.

**Last updated:** 17 Dec 2016
Labels & Reports Overrides

Override global defaults for reports and labels

By default, the Global (application-wide) settings for file templates that are used for Labels and Reports are defined in the 'Labels/Reports' tab of the Options dialog (below). For most users, this is the only place where Labels and Reports templates are defined.

In situations where the Global template is not acceptable, Ape can override the template in the Equipment, Site (Client), Model Number, or Equipment Type. For example, if a 12 mm label is set at the Global level and a different size (larger or smaller) is required for a specific Model Number or Equipment, a different label template can be selected at the Model or Equipment level.

Override Settings

Just like the 'Labels/Reports' tab of the Options dialog (above), the Other tab of the Equipment dialog (below) has all the same Labels as most of the same Reports. In the other dialogs that have Label and Report Override ability have similar fields. The only difference at the Override level, compared to the Global level, is that at the Override level the templates values can be cleared by clicking on the [Red X] buttons.
Label Fields

- **Calibration Due:** Prints when the calibration frequency generates a due date and uses labels with the "Due Cal" string in their file name.

- **Asset:** File templates are identified as Asset labels by the "Asset" string in the file name.

- **Cal Not Required:** Prints in place of the Calibration Due label when the Calibration Frequency is "Cal Not Required" and is identified as CNR label by the CNR string in the file name.

- **Next Use:** Print in place of the Calibration Due label when the Calibration Frequency is "Next Use" and the labels are identified by a "NextUse" string in their file name.

Report Fields

- **Calibration Cert:** Template used when printing a Calibration Certificate.

- **Due Cal Report:** Report template used when printing the Calibration Due Report.

- **Cal Worksheet:** Calibration Worksheet that prints when the Equipment record has a Measurement Template or a previous Calibration Event.

- **Cal History:** Calibration History of an Equipment record.

- **OOT Investigation:** Designates the Out-Of-Tolerance (OOT) Investigation worksheet used when Equipment received for calibration is found OOT.

Referring to the diagram below, overrides apply to Labels and Reports via four paths of priority.
1. Direct: Override directly through an Equipment Record on the 'Other' Tab. An override through an Equipment Record supersedes all other methods.

2. Company (blue line): Override labels or reports through a Company record connected to an Equipment Record. This override holds priority over those below.

3. Model Number (red line): Override labels or reports through a Model Number record connected to an Equipment Record. This override holds priority over those below.

4. Equipment Type (green line): Override labels or reports through an Equipment Type record connected to an Equipment Record. This override holds priority over those below.

5. Equipment Type — Model Number (yellow line): Override labels or reports by linking an Equipment Type to a Model Number, then linking the Model Number to the Equipment Record.

6. (Not Shown) Options Dialog: Override labels or reports through the Options Dialog.

Last Updated: 6 Feb 2017
**Masks in Calibration Control**

A mask is a way to format a field to make the data in that field look a specific way. Calibration Control gives you the ability to format some of the more important date, string, and number fields.

**Date Masks**

The date formatting methods used in CC are software industry standards used by MS. For example, a date mask like MM/dd/yyyy, would format January 5, 2022 into 01/05/2022. Here are some sample date mask results for the date of August 26, 2018 . . .

<table>
<thead>
<tr>
<th>Mask</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>MMMM</td>
<td>August</td>
</tr>
<tr>
<td>MMM</td>
<td>Aug</td>
</tr>
<tr>
<td>MM</td>
<td>08</td>
</tr>
<tr>
<td>M</td>
<td>August 26</td>
</tr>
<tr>
<td>dddd</td>
<td>Monday</td>
</tr>
<tr>
<td>ddd</td>
<td>Mon</td>
</tr>
<tr>
<td>dd</td>
<td>26</td>
</tr>
<tr>
<td>d</td>
<td>8/26/2018</td>
</tr>
<tr>
<td>yyyy</td>
<td>2018</td>
</tr>
<tr>
<td>yy</td>
<td>18</td>
</tr>
<tr>
<td>y</td>
<td>August, 2018</td>
</tr>
<tr>
<td>[M]</td>
<td>M</td>
</tr>
<tr>
<td>[Anything in Brackets]</td>
<td>Anything in Brackets</td>
</tr>
</tbody>
</table>
**Leading Zeros Mask (LZ Mask)**

Leading zeros can be important in number formats if all numbers require the same minimum number of characters. Instead of a counting number sequence of 1, 2, 3, etc. an LZ Mask of ‘000’ results in 001, 002, 003, etc.

In the case where a counting number has more characters than the mask, the counting number wins. For instance, with a mask of 000 and a number of 5348, the result will be 5348 even though the mask has only 3 characters.

**Upper Case**

Calibration Control uses one special character to change the results of any mask to all upper case. Do this by placing a lower case "u" at the end of any mask and the result will be all upper case and the "u" will be removed.

**Other Characters**

All the non-functional characters in masks [not date mask strings (e.g., MM, dd, or yy), LZ Masks, or the ending "u"] will display just as entered in the mask. For example, the "DT" characters at the beginning of a mask will still be there in the formatted results.

If displaying a reserved character in a mask without it changing to a date, enclose it in [brackets]. While an M changes to August 26, an [M] in brackets displays just as an M.

**Label Date Masks**

There are three types of dates printed on labels that can be formatted. The Standard Date Mask is the default date mask for all label dates unless the Equipment uses a Calibration Frequency of "Month of" or "Week of", which have their own date masks.
Number Masks

The Equipment ID Auto Increment Mask gives users the ability to define a standard mask for all the new Equipment records. The Equipment ID masks include all the mask features described above except for date. The Current Increment is the next number CC will use in the mask when the next new Equipment record is created. Activate or deactivate this feature by checking or unchecking the "Auto Increment New Equipment IDs" checkbox.

The Calibration Certificate Number Auto Increment provides the same masking features as the Equipment ID Auto Increment in addition to the date masking features. The Current Increment is the next Certificate Number and this feature is active when the Auto Increment New Certificate Numbers checkbox is checked.

Calibration Measurement Mask

The Mask field in the Measurement Group of the Calibration dialog sets the leading and trailing zeros of all the numbers in the given group. Unlike the Leading Zeros Mask, the number of leading and trailing places of these fields are strictly limited by the mask. For instance, a mask of 00.000 will only allow two places to the left and 3 places (rounded) to the right. Therefore, if a number of 100 or higher is required, the mask must be modified to include three zeros to the left 000.000.
Measurement Uncertainty Budget

Perform uncertainty analysis of a measurement

The Measurement Uncertainty Budget in Calibration Control is a simplified budget where Ape Software assumes no responsibility or liability for any unintentional errors. It is the User’s responsibility to ensure calculations and data entry are accurate and to confirm the suitability for any particular purpose.

This budget is useful in situations where (a) each Component of Uncertainty is independent of the others, (b) the major Components are estimated with a high degree of accuracy, and (c) measurement results are measured directly or calculated with a linear formula using only multiplication or division (e.g., \( W = V \times I \)).

Note that each Measurement Uncertainty Budget is conducted for a single Nominal measurement for a unique piece of Equipment.

Uncertainty Budget Dialog

- **Date**: Date the Uncertainty Budget calculations were performed.
- **Equipment ID**: The unique designation of Equipment a given study focuses on.
- **Nominal**: Target value for the overall Uncertainty Budget analysis.
- **Unit of Measure**: Measurement unit (e.g., inches, degrees, etc.) of the Nominal value for the Uncertainty Budget analysis.
- **Significant Digits**: Number places to the right of the decimal.
- **Description**: Description or title of the Uncertainty Budget analysis.
- **Notes**: Any notes relevant to the Uncertainty Budget analysis.
- **Standards**: Calibration standards/masters used in the study.
- **Combined [Standard] Uncertainty (\( u_c \))**: Summation in quadrature (i.e., root sum of the squares) of all the Sources of Uncertainty in the grid.
  \[
  u_c = \sqrt{ \sum_{k=1}^{n} u_k^2 }
  \]
- **Coverage Factor (e.g., \( k=2 \))**: Used in the calculation of the Expanded Uncertainty and has a default value of \( k=2 \). The Coverage Factor is a confidence level of the interval
accounts for the variation in the estimate of the residual standard deviation, and is based on the assumption that the random errors have a normal distribution.

- **Expanded Uncertainty (UU):** The Expanded Uncertainty (UU) assures a high level of confidence by re-scaling the Combined Uncertainty (uc) expressed with a different confidence level, e.g., 95 percent. The re-scaling is accomplished by multiplying by the coverage factor (i.e., \( U = k \times uc \)). In many cases, the coverage factor may be 2, which is typically used to approximate a 95% level of confidence.

- **Expanded Uncertainty Rounded (Uce):** The expanded uncertainty (Uc) rounded to two significant digits.

### Uncertainty Detail Dialog

Use the Detail dialog to describe each source of uncertainty (i.e., Component of Uncertainty) to be included in the overall Measurement Uncertainty Budget.

- **Source Name:** Descriptive name for the Source of the Component of Uncertainty, which will be combined with other Components to create a single Uncertainty Budget.
• **Value (aa):** Numeric value related to the Unit of Measure.

• **Unit of Measure:** Units measured in such as inches, Fahrenheit, mph, etc.

• **Type A/B:** Method used to estimate uncertainty either Type A, if estimated statistically, or Type B, if inferred through non statistical methods such as historical measurements, manufacturer specifications, calibration certificates, published data, mathematical formulas, or general experience.

• **[Probability] Distribution:** The Probability Distribution selected dictates the Divisor (next field). For example, a Normal 1s distribution has a Divisor of 1 where a Normal 2s distribution has a divisor of 2. The following values for each Probably Distribution are defaulted into the Divisor field, which can be overridden.

  - No Divisor
  - Normal 1s = 1
  - Normal 2s = 2
  - Normal 3s = 3
  - Normal @ 99% = 2.58
  - Rectangle = $\sqrt{3} = 1.7321$
  - Triangle = $\sqrt{6} = 2.4495$
  - U-Shaped = $\sqrt{2} = 1.4142$
  - Rectangle = $\sqrt{12} = 3.4641$

• **Divisor (dd):** The numeric value related to the Probability Distribution chosen. This value is automatically set when choosing the Probability Distribution (previous field) but can be edited independently after choosing the Distribution.

• **Degrees of Freedom (vv):** For Type A uncertainties, use the d.f. for the corresponding standard deviations. For Type B sources refer to calibration certificates or published reports. In some instances, where the standard deviation must be estimated from scientific judgment or partial data, an infinite d.f. is normally assumed.

• **Sensitivity Coefficient (cc):** Used to describe how the Component of Uncertainty contributes to the Combined Uncertainty when a simple functional relationship does not exist between the input quantities and the measurement result. For example, the unit of measure for the study may be in length units where an Uncertainty Component may be expressed in temperature or angular units. Use this field to change the weighting of the Component from the default of 1 (one).
• **Standard Uncertainty** \((u)\): Calculated by dividing the Value \((v)\) by the Divisor \((d)\) and then multiplying by the Sensitivity Coefficient \((c)\):

\[ u = ad \times c \]

• **Assumptions Explanation**: Use this field to Explain any Assumptions made for the current Uncertainty Component.

---

**Learning about Measurement Uncertainty**

Here are a few online resources to get started with learning about Measurement Uncertainty.

- **How to Calculate Uncertainty** - *Dr. Jody Muelaner*
- **Uncertainty Budgets and Sensitivity Coefficients** - *NIST, Information Technology Laboratory*
- **Calculating an Uncertainty Budget for a Measurement** - *wikiHow*
- **Example of Uncertainty Budget** - *NIST*
- **Policy on Estimating Measurement Uncertainty for Construction Materials & Geotechnical Testing (P103d)** - *The American Association for Laboratory Accreditation*
• A Beginner’s Guide to Uncertainty of Measurement - Stephanie Bell, National Physical Laboratory

• An Introduction to Expressing Uncertainty in Measurement - Mr. Ouellette, National Research Council Canada

• Here are a few spreadsheet examples of Measurement Uncertainty Budgets:
  • Uncertainty Budget Template - NIST, Laboratory Metrology Program
  • Simplified Uncertainty Budget Template (xls) - National Research Council Canada
  • Measurement Uncertainty Budget Template - American Society of Crime Laboratory Directors / Laboratory Accreditation Board

References

• Degrees of Freedom - Wikipedia

Last updated: 6 Feb 2017
Procedural Steps

Step-by-Step Procedures for Worksheets

The Procedural Steps feature allows users to define step-by-step procedures that appear on Calibration Worksheets or within custom reports.

Concept

Each Step in a Procedure is a Procedural Step while each Procedural Group (i.e., step-by-step procedure) is a collection of Procedural Steps in a specific order. To eliminate the need for duplication, each Procedural Step can be linked to multiple Procedural Groups. Procedural Groups can be linked to Equipment Type, Model Number, and Equipment records and, when linked, the Steps for a given Group will appear on the default Calibration Worksheet for Procedural Steps.

Procedural Groups

Create a new Procedural Group record to represent a new Procedure.
- **Group Name**: Name that represents a collection of Procedural Steps
- **Code**: Procedure Group Code, if needed
- **Group Type**: Used to classify the group
- **Notes**: Record additional details about the group.
- **Active**: Currently in use (active record)

The Procedural Steps tab of the Group contains the steps linked to the Group. Use the buttons at the bottom of the grid to:

- **[Add +]** a new Step
- **[Link]** an existing Step
- **[Edit]** the selected Step
- **[Unlink]** the selected Step from the current Group while leaving it for other Groups
- **[Delete]** the selected Step from ALL Groups
**Procedural Steps**

Create a Procedural Step record from its main grid or from within the Procedural Steps tab of the Procedural Group dialog.

- **Description:** Short description of the actual step (action)
- **Code:** Procedural Step Code, if needed
- **Step Type:** Assigning a Step Type is a good way to categorize Steps
- **Response Type:** While currently not in use, this field will designate what kind of response (in the software) will be required from the user.
- **Active:** Procedural Step is still in use when checked
- **Notes:** Add any additional notes required for a Step

**Linking Procedural Groups to Equipment**

Procedural Groups can be link to the Equipment Type, Model Number, or directly to the Equipment record. Therefore, any Equipment record linked to an Equipment Type or Model Number will also be linked to that Type or Model Number’s Procedural Group. In the instance that a different Procedural Group is linked to all three records (i.e., Type, Model, & Equipment), only the highest priority link will be displayed on the Calibration Worksheet. The priority is (1) Equipment record, (2) Model Number, and finally (3) Equipment Type.
Equipment Type

Model Number
Equipment Record

Calibration Worksheet

Last Updated: 18 Jan 2016
Publish a Custom Website

Publish website of equipment grouped by departments

Instantly publish a static Website of all equipment in your Calibration Control database to your company network so everyone has access to online lists of equipment by Department. Schedule the website to be refreshed regularly using the Auto Notify utility. Use the Customize Website help topic to modify the fields and the format of the pages.

One-Click Website Publishing (Create)

Select the 'Publish Website' menu item in the Utilities group of the Calibration tab.

Website will be automatically published from the available Equipment Records. A dialog box will pop up with an option to go to the Home Page, which has links to all Department pages. Here is an example of the type of information available with the 'Publish Website' feature.

<table>
<thead>
<tr>
<th>ID</th>
<th>Model</th>
<th>Description</th>
<th>Serial</th>
<th>Status</th>
<th>Frequency</th>
<th>Last Cal</th>
<th>Due Cal</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMPLE-061</td>
<td>CRG-101</td>
<td>Cylindrical Ring Gage</td>
<td>2140</td>
<td>Active</td>
<td>Yearly</td>
<td>3/20/2017</td>
<td>3/20/2017</td>
</tr>
<tr>
<td>SAMPLE-121</td>
<td>OCM-9900S85</td>
<td>OD Micrometer</td>
<td>2100</td>
<td>Active</td>
<td>Yearly</td>
<td>7/14/2017</td>
<td>7/14/2017</td>
</tr>
<tr>
<td>SAMPLE-180</td>
<td>DOMA-64</td>
<td>Digital OD Micrometer</td>
<td>2181</td>
<td>Active</td>
<td>Yearly</td>
<td>6/20/2017</td>
<td>6/20/2017</td>
</tr>
<tr>
<td>SAMPLE-186</td>
<td>OCM-92811</td>
<td>OD Micrometer</td>
<td>320</td>
<td>Active</td>
<td>Yearly</td>
<td>3/20/2017</td>
<td>3/20/2017</td>
</tr>
<tr>
<td>SAMPLE-145</td>
<td>PETN-1121</td>
<td>Point Micrometer</td>
<td>1112</td>
<td>Active</td>
<td>Yearly</td>
<td>3/20/2017</td>
<td>3/20/2017</td>
</tr>
<tr>
<td>SAMPLE-150</td>
<td>ODM-7000</td>
<td>Indicator</td>
<td>1112</td>
<td>Active</td>
<td>Yearly</td>
<td>3/20/2017</td>
<td>3/20/2017</td>
</tr>
<tr>
<td>SAMPLE-182</td>
<td>CMB-55</td>
<td>Caliper</td>
<td>115</td>
<td>Active</td>
<td>Yearly</td>
<td>1/1/2017</td>
<td>1/1/2017</td>
</tr>
<tr>
<td>SAMPLE-185</td>
<td>DMP-57</td>
<td>Drop Indicatoer</td>
<td>2137</td>
<td>Active</td>
<td>Yearly</td>
<td>3/15/2017</td>
<td>3/15/2017</td>
</tr>
<tr>
<td>SAMPLE-195</td>
<td>OCM-90080</td>
<td>OD Micrometer</td>
<td>55703</td>
<td>Active</td>
<td>Yearly</td>
<td>8/5/2017</td>
<td>8/5/2017</td>
</tr>
<tr>
<td>SAMPLE-212</td>
<td>DM-11</td>
<td>Depth Micrometer</td>
<td>712777</td>
<td>Active</td>
<td>Yearly</td>
<td>6/6/2017</td>
<td>6/6/2017</td>
</tr>
<tr>
<td>SAMPLE-239</td>
<td>UM111</td>
<td>Uni-Mic</td>
<td>1617810-003</td>
<td>Active</td>
<td>Yearly</td>
<td>2/11/2017</td>
<td>2/11/2017</td>
</tr>
<tr>
<td>SAMPLE-262</td>
<td>OCM/UM-57</td>
<td>Uni-Mic OD</td>
<td>302654</td>
<td>Active</td>
<td>Yearly</td>
<td>12/2/2017</td>
<td>12/2/2017</td>
</tr>
<tr>
<td>SAMPLE-287</td>
<td>PETN-1121</td>
<td>Point Micrometer</td>
<td>8272042</td>
<td>Active</td>
<td>Yearly</td>
<td>2/2/2017</td>
<td>2/2/2017</td>
</tr>
</tbody>
</table>
Auto Publication with Auto Notify Utility

Publish (refresh) the website automatically at a set schedule using the Auto Notify utility. Begin by selecting 'Auto Notify' from the Utilities group of the Calibration tab.

From the Auto Notify grid, open the WebSite_General record (e.g., double click to open).
Within the Schedule tab, (a) change the Frequency (i.e., 'How Often'), (b) the start date and time of day (i.e., 'Date & Time'), (c) ensure the Active checkbox is checked, and (d) submit by selecting the [OK] button.

**Note:** None of the fields in the 'Files and Names' tab affect the WebSite_General Event and therefore, can be ignored.
Change Location Where Site is Published

The default location where the site is published is the Settings Folder. Change the Website publication directory to a network folder so other network users have access by selecting 'Options' in the Utilities tab of the menu ribbon and navigating to the 'Folders' tab. Click 'Edit' in the 'Location of Auto Generated Website' group, and select the desired network location.

Last Updated: 6 Feb 2017
**Startup INI**

**Single connection configuration for all users**

In network environments where the Ape Software program files are installed on a single file server and executed from multiple clients, the Startup INI (startup.ini) gives Network Administrators the ability to configure database connection properties in a single location. Each time Ape starts it looks for the “startup.ini” file in the same folder as the executable. If found, the connection settings in the “startup.ini” file take precedence over connection settings, or absence of settings, at the Client level.

Additionally, all data stored in the INI file (e.g., database name, location, server, password, etc.) is 128 bit encrypted.

**Before Using the INI Utility**

Before creating the “startup.ini”, install the Ape Software on the computer/server and Create a Multi-User Environment. Note that the Minimum System and Configuration Requirements is a highly relevant and useful document that will help prevent deployment issues and should be followed.

**Start the INI Utility**

Select the Startup INI menu option of the Security group in the App Utilities tab.
**Startup INI Editor**

Work with your internal IT group to assist with setup if further help is needed. All enabled fields (fields that can be typed in) are required except for the Password fields when the Database Type is set to [MS] Access.

![Startup INI Editor dialog box](image)

**Last updated:** 8 Feb 2017
Status Change Dialog

Change Status of Multiple Equipment Quickly

Change the status of multiple pieces of equipment quickly and accurately. For instance, when receiving several pieces of equipment for calibration (or any other status), change the status of each tool with a single barcode scan after setting the "Change to What Status?" field.

Fields Changed by Status Dialog

The Status dialog (a) updates the status in the Equipment record and (b) saves a note in the Equipment record describing the status change. Additionally, if the status changed to is "Received for Calibration Status" (defined in the Calibrations tab of the Options dialog), the Received (for Calibration) date in the Equipment record is also set to the current date. If the status changed from is "Received for Calibration Status", the Received date is cleared.

Status Change in Ribbon

Open the Status dialog from the Status Change option.

Using the Status Change Dialog

Select the status the Equipment will be changed to using the “Change to What Status?” field. If entering the Equipment ID manually, uncheck the "Use Barcode Scanner for Data Entry" box and enter the Equipment ID and click [Submit]. When done, click [Finished]. If using a barcode scanner, ensure the "Use Barcode Scanner for Data Entry" box is checked and scan the barcode on the product label previously printed from Calibration Control. There is
no need to click the [Submit] button when using a barcode scanner. Repeat the equipment scan (or data entry) with as many pieces of equipment that require the new status.

Repeat the equipment scan (or data entry) with as many pieces of equipment that require the new status.

**Last updated:** 11 Nov 2016
Ape Software Terminal Mode

Minor tasks in Ape terminal mode

Ape Software in Terminal Mode is useful for those who require limited access. The simplified Terminal allows your Production employees or Shop personnel to make minor changes via feature shortcuts.

Both the main Ape program and Ape Terminal install together. The Terminal is the same application executable (apecal.exe), except it is started with the switch -t1 (i.e., apecal.exe -t1). Terminal users do not count as licensed users (no additional seats are needed).

Limited Use

Currently featured in the Ape Terminal dialog:

- Check Out/In
- Status Change
- Asset Transfer
- Equipment Grid (also known as the Tool Browse)
- Systems Grid
- Calibration History
- Print Menu
Further Limitations

Disable any Terminal features from the Security tab in program Options.

Last updated: 8 Feb 2017
Support Tables

Companies Dialog

Edit Dialog for All Companies

Find the Companies selection in the Common Data tab of the menu ribbon.

Main Tab

- **Name**: Name of the Company. This is the only required field for a new Company record.
- **ID Number**: Unique identification given to companies.
- **Web**: Company website.
- **Type**: Select the Company Type (Calibration Service Provider, Manufacturer, Site, etc.).
- **Status**: Select the status of the company (Active, Approved, Inactive, etc.).
- **Next Onsite**: Select the date that the technician will be on site next.
- **Primary and Secondary Address**: Enter the Company's address(es).
- **Notes**: Use the notes field for whatever purpose your team needs.
Phone & Email Tab

- **Phones:** Enter the Company Phone and Fax numbers.
- **Email:** Enter Email addresses related to the Company. Designate each email by Primary, Opt out, or Invalid Boolean fields. Select the Boolean Field to 'Send Email Notifications'.
**Custom Fields Tab**

Use these extra fields to suit your needs.

![Custom Fields Tab](image)

**People Tab**

Use this tab to associate People with Companies and designate them 'Due Cal Contact'.

![People Tab](image)
Overrides Tab

While default labels and reports are defined at a global (application) level in the Options dialog, Overrides for the Labels and Reports listed here can be entered for this specific Company.

Last updated: 30 Dec 2016
**Departments Dialog**

Use the Departments dialog to edit data related to Departments that appears in Calibration Control Equipment Records.

**Open Departments Grid**

Display the Departments data grid by clicking Departments in the Common tab of the ribbon menu.

**Department Dialog**

Double click on any of the rows to open a record in the Department dialog.

- **Code:** A short identifier for the Department. This is a required field.
- **Name:** Name of the Department. This is a required field.
- **Manager:** The Department Manager; Person to whom Calibration Control can send emails.
- **Contact:** The Department Contact; Person to whom Calibration Control can send emails.

**Last Updated:** 18 Jan 2017
**Equipment Systems**

**Groups of Equipment Records**

Combine separate equipment records into a group (system) for any purpose, such as creating a single test system.

**View Systems**

Select the Equipment Systems feature from the Calibration tab of the menu ribbon.

![Equipment System Dialog](image)

**Equipment System Dialog**

From the Systems grid, double-click to open a record or right-click to use the quick menu. Use the Equipment System dialog to enter or edit information related to Equipment Systems.
- **Name:** Name of the System. This is the only required field for a new Systems record.
- **Site:** Company field for geographic Site or Company.
- **Department:** The department in your organization where the System is currently located.
- **Location:** The location within the department where the System can be found. This could be a specific area or work place, even an engineer's desk.
- **Custodian:** The System is kept in the custody or possession of this individual.
- **Certificate:** Certificate number that was issued by the organization responsible for its last Calibration event. Primarily used as an aid for traceability back to a national measurement standard, especially if this System is a Calibration/Test Standard.
- **Personal Property checkbox:** Does this System actually belong to someone other than the company? There is also an Owner field in this tab to identify who.
- **Technician:** The person who normally calibrates this System.
- **Owner:** The System Owner (Person field), if not the company.
- **Status:** Select the current Status from the combo box.
- **Notes:** Like the user fields, use the notes field for whatever purpose your team needs.

**Custom Fields Tab**

For any other information you need to keep with this Equipment System, there are extra fields in text, date, number, and check box format that can be renamed.
**Link Equipment**

To link an existing Equipment record to an Equipment System, select the Other tab in the Equipment dialog. Use the drop-down arrow to select which System this Equipment belongs to. All Equipment Systems will be listed in the combo box.

**Mass Update Function**

When editing fields in the System dialog, select the [Update All...] button to apply changes to the Equipment tied to the System.

From the pop-up dialog, confirm which fields to update for all linked Equipment.
**Asset Label**

An Equipment System label can be printed from the main tab of the System dialog.

Barcode labels of Systems may also be scanned for **Check Out**.

Default System labels are configured in program **Options**.
Last updated: 18 Jan 2017
Equipment Types Dialog

Classify equipment and link to measure templates

Although the Equipment Type can be used for any classification, its intent is specifically related to ease of equipment selection and the management of Measurement Templates. For instance, even though generic 6 inch calipers are made by several manufacturers, their use and calibration is usually the same. Therefore, creating an Equipment Type of "6 Inch Caliper" can be a useful grouping.

Additionally, a single Measurement Template (calibration method) for 6 inch calipers can be linked to one Equipment Type record, which in turn is linked to all the Equipment records of the same type. Using Equipment Types and Measurement Templates together like this provides calibration management with the ability to define and apply more consistent calibration controls.

Open Equipment Types Grid

Display the Equipment Types screen by clicking 'Equipment Types' in the Common Data tab of the menu ribbon.

Equipment Types Dialog

Double click any of the rows to open a record in the Equipment Types dialog.
- **Type Code:** The unique code for the Equipment Type or group of equipment. This is a required field.

- **Type Name:** The name of the Equipment Type or group of equipment. This is a required field.

- **Measure Template:** Though not required, Equipment Types can be linked to a corresponding Measurement Template. This may influence the naming convention for the Equipment Type.

- **Procedural Group:** Allows users to define step-by-step procedures that appear on Calibration Worksheets or within custom reports.

**Last Updated:** 18 Jan 2017
Locations Dialog

Edit dialog for all locations in Calibration Control

Use the Locations dialog to edit all information related to Locations that appear in Calibration Control Equipment Records.

Open Locations Grid

Display the Locations screen by clicking Locations in the Common tab of the ribbon menu.

Locations Dialog

Double click any of the rows to open a record in the Locations dialog.

- **Code**: A short identifier for the Location. This is a required field.
- **Name**: Name of the Location, typically a location within a department where a tool would be located. This could be a specific work area or even an engineer's desk. This is a required field.

**Last Updated**: 27 Feb 2017
People Dialog

Use the Edit Person Record dialog to edit all information related to People fields in Calibration Control Equipment Records. Change the name of any field to continue using words that make sense to your organization.

- **First Name/Last Name**: First and Last Name of the Person. These are the only required fields for a new Person record.
- **Display Name**: Auto filled by First and Last Name fields.
- **Employee Number**: The Person's unique company ID.
- **Is Active**: Select whether or not the Person 'Is Active'.
- **Title**: Enter the Person's Title.
- **Company**: The Company the Person is currently working for or representing.
- **Department**: The Department the Person is currently assigned to in a Company.
- **Location**: The Location within the Department where the Person is currently located.
- **Primary and Secondary Address**: Enter the Person’s address(es).
- **Notes**: Like the user fields, use the notes field for whatever purpose your team needs.
Phone & Email Tab Fields

- **Phones:** Enter the Person's Phone and Fax numbers.
- **Email:** Enter Email addresses related to the Person. Designate each email by Primary, Opt out, or Invalid Boolean fields. Select the Boolean Field to 'Send Email Notifications' and to designate this Person the 'Company Due Cal Contact'.

Custom Field Tab

Here's a lot of extra fields in text, date, number, and check format that you can rename and use for whatever you need. Visit the Change Field Names help topic to learn how to edit these fields.

**Last updated:** 27 Feb 2017
Procedures Dialog

Procedure Links in Calibration Control

Easily link recognized company calibration procedures and related equipment.

View All Procedures

Display the Procedures data grid by clicking its menu button found under the Common tab of the ribbon, in the Codes group.

The Procedures grid can be filtered just like other Calibration Control screens. For more command options, right-click anywhere in the Procedures grid to view the pop-up quick menu.
**Edit Procedures Dialog**

Double-click on a Procedure record to open and edit, or select to 'Open Record' from the quick menu. The Edit Procedure dialog contains three fields:

- **Document No:** A numerical or name identifier for the Procedure document.
- **Title:** The title of the Procedure.
- **Location:** Use the [Browse] button to navigate to the Procedure file stored on your server or local computer.

**Linking Procedures to Equipment Records**

Select, add, or remove procedures linked to equipment by using the 'Procedures' hyperlink in an **Equipment dialog**, as shown below.
Link existing Procedures to Equipment records by checking its box and clicking [OK].

Return to the top for viewing and editing all Procedures.
Procedures vs. Attachments

Procedures could be attached to individual Equipment records through the Attachments tab. In this case, the Procedure document is incorporated in that Equipment record rather than simply accessed on the server with a quick link.

Last Updated: 5 Nov 2015
Code Tables

Company Types

Edit Company Type Codes

Although any number of Company Type codes can be created, there are five Types important to Calibration Control. These five Types identify which of the categories created will show up as choices in the Site, Manufacturer, and Calibration Service Provider, Client, or Supplier combo boxes (drop downs).

Display

Display the Company Types screen by clicking Company Types in the Common Data tab of the menu ribbon.

Grid

The Company Type screen can be filtered just like the other Calibration Control grids. Change the name of any field to continue using words that make sense to your organization. The Default settings are shown below.
Edit

Double-click on Type Name to change the Name and to choose whether that Type is a Site, Manufacturer, Calibration Service Provider, Client, or Supplier.

Last updated: 17 Dec 2016
Size, Range, & Accuracy

Edit Size, Range, or Accuracy Combo Values

Add, edit, or delete the selectable values for the "Size / Range" field for Equipment. Using these standardized values for size, range, and accuracy provide for more consistent data entry and Equipment searches.

Menu

Display the Size & Range screen by clicking Sizes / Ranges in the Common Data tab of the menu ribbon.

Grid

The Size & Range screen can be filtered by right-clicking in the Size & Range grid to view the Record options popup menu.
Dialog

Use the Size / Range dialog to edit all information related to Size, Range, or Accuracy that will appear under the Size / Range combo box in Calibration Control Equipment Records. This dialog includes custom fields.

**Last updated:** 17 Dec 2016
Measurement Units

Understanding and using measurement units

Several Measurement Units are already part of Calibration Control, but only those units not marked as hidden are shown in the combo box while creating or editing a Calibration Event. Any of the existing Measurement Units can be edited or new Units can be added.

Find the Measurement Unit grid under the 'Common' Menu Tab. Double-click on any of the existing Measurement Unit records or create a new record. Hide or show Measurement Units by checking or unchecking the 'Hide Measurement in Combo Box' field.

Last updated: 17 Dec 2016
Module Codes

Tabs such as 'Calibration', 'CRM', and 'Samples' each have their own Module Codes grid that keeps all of the module codes for that specific tab in one place.

Module Codes Grid

Add or edit any drop down menu option by finding the corresponding category in the 'Group' column.

![Module Codes Grid Example]

Adding a New Code

Right click in the Module Codes grid to bring up a new Add Code dialog. Within the Edit Code dialog are Code and Custom tabs.

- The Code refers to the specific item in the drop down menu.
- The Group refers to the drop down menu name.
- The Sequence number refers to the order they appear in the drop down menu.
**Custom Tab**

The Custom Tab includes blank fields that are available to suit your needs.

After entering new Module Codes, navigate to the Utilities tab and click on the [Reload Data Tables] button to make them visible.

**Last updated:** 4 Jan 2017
Best Label Printers for Ape Software

Which label printers will work with Ape’s Software?

Calibration and Maintenance Control (CMC) is compatible with the **PC-connectable Brother P-touch label printers**.

**Brother P-touch Label Printers**

The printer we recommend most is the PT-P900W (replacement to the PT-9700PT), which is a high volume desktop unit intended for industrial environments. The PT-P900W will print up to 32mm (1.26 inch) width tape. If the PT-P900W is too expensive, maybe the portable PT-P700 would be a better starting choice. The PT-P700 uses label tape up to 24mm (1 inch) in width. Otherwise, either printer will work with Ape Software applications.

You can find the PT-P900W and the PT-P700 at Amazon.com and many other online retailers.

**TZe Label Tape**

Fortunately, all of the P-touch label printers use the same label tape (model number starts with TZe). This tape is resistant to temperature, UV, scratching, and spills.

Here are some of the common sizes along with their Amazon links:

- 6 mm (1/4 inch) Black on White (TZe211)
- 9 mm (3/8 inch) Black on White (TZe221)
- 12 mm (1/2 inch) Black on White (2 pack - TZe2312PK)
- 18 mm (3/4 inch) Black on White (TZe241)
- 24 mm (1 inch) Black on White (TZe251)
- 36 mm (1 1/2 inch) Black on White (TZe261)

**Extra Adhesive Label Tape**

Brother also sells label tape with extra adhesive for high-use environments or extra smooth surfaces. Before choosing the extra adhesive, we suggest trying the normal adhesive formula
first (above labels) because the additional adhesive can gum up label printers faster than the normal level of adhesive.

- 6 mm (1/4 inch) Black on White (TZeS211)
- 9 mm (3/8 inch) Black on White (TZeS221)
- 12 mm (1/2 inch) Black on White (TZeS231)
- 18 mm (3/4 inch) Black on White (TZeS241)

  Speaking of gumming up your label printer, here are a couple of links to B&H Photo for Cleaning Tape:

  - 36 mm (1 1/2 inch) Good for PT-P900W
  - 18 mm (3/4 inch) Good for PT-P700

**Last updated:** 28 Nov 2016
Free Label Editing Software and Drivers

Free Brother Printer drivers and label editing software

Ape Software uses Brother P-touch label printers for the highest quality laminated thermal transfer label printing.

Use the following quick links to find the drivers and software you need from the Brother support site.

Printer Drivers

- Download the PT-9800PCN Printer Drivers
- Download the PT-9700PC Printer Drivers
- Download PT-2430PC Printer Drivers
- Download PT-P700 Printer Drivers
- Download PT-P900W Printer Drivers

P-touch Editor - Label Editing Software

Download the Brother P-touch Editor for editing the labels that come with Calibration Control or creating your own.

Last updated: 27 Feb 2017
Labels Quick Start Video & Instructions

Getting started quickly with printing labels in Calibration Control

Sample Labels

Check out the sample labels for Calibration, Asset, and CNR (Calibration Not Required). They are a good resource for choosing which labels you want to use.

Important Points

Make sure you are aware of these important points for printing labels with Calibration Control.

1. **Brother Label Printers**: Calibration Control uses the Brother P-touch (PT) label printers. You must have one of these label printers to print labels with our calibration management software.

2. **Printer Drivers**: No matter what the printer box says, you must install the printer drivers included on the CD (or downloaded from Brother) following the instructions and not plugging in and turning on the printer until the installation routine instructs you to do so.

3. **Label Files**: Calibration Control makes use of label layout files (*.lbx) stored in the Labels folder under the Files folder. Your label files must reside in the Labels folder for Calibration Control to find them. Watch the video on Calibration Control folders to understand the folder layout.

4. **Label File Number Prefixes**: The 120+ label files that come with Calibration Control begin with the millimeter prefixes of 12 (1/2 inch), 18 (3/4 inch), or 24 (1 inch) to identify the width of label tape required.

5. **Set Default Labels**: Use the Options dialog to set the default labels for Calibration Due, Asset, and Cal Not Required. Be sure to select labels with the same width as the tape in your P-touch printer.

6. **Print a Label**: Open an equipment record and click the [Print Asset Label] in the bottom-right corner of the dialog.

Last updated: 24 Aug 2015
Sample Due Cal Labels

Below are the sample Calibration Due (Due Cal) Label templates included in Calibration Control. These labels can be edited and additional labels can be created as needed.

12mm Calibration Due Labels

Not to Scale

![12-DueCal-01.png]

![12-DueCal-02.png]

![12-DueCal-03.png]

![12-DueCal-04.png]

![12-DueCal-05.png]
ID: Gsd1-fr604-983  COMPANY NAME  Date: 10/10/2012
By: George Richards  CALIBRATED  Due: 10/10/2022

ID: Gsd1-fr604-983  Gsd1-fr604-983  By: George Richards  Date: 10/10/2012
Due: 10/10/2022

COMPANY NAME  Date: 10/10/2012
Id: Gsd1-fr604-983  By: George Richards  Due: 10/10/2022

COMPANY NAME  Date: 10/10/2012
Id: Gsd1-fr604-983  By: George Richards  Due: 10/10/2022

COMPANY NAME  Date: 10/10/2012
Id: Gsd1-fr604-983  By: George Richards  Due: 10/10/2022

COMPANY NAME  George Richards  Date: 10/10/2012
Due: 10/10/2022

LAST 10/10/2011  DUE 10/10/2022
Gsd1-fr604-983

DUE CAL
10/10/2022
Gsd1-fr604-983
18mm Calibration Due Labels

Not to Scale

18-DueCal-01.png  18-DueCal-02.png  18-DueCal-03.png

18-DueCal-04.png  18-DueCal-05.png  18-DueCal-06.png

18-DueCal-07.png  18-DueCal-08.png  18-DueCal-09.png

18-DueCal-10.png  18-DueCal-11.png  18-DueCal-12.png

18-DueCal-13.png  18-DueCal-14.png  18-DueCal-15.png
24mm Calibration Due Labels
Not to Scale
Last updated: 17 Jul 2015
Sample Asset Labels

Below are the sample Asset Label templates included in Calibration Control. Any of these labels can be edited and program users can create additional labels as required.
18mm Asset Labels

Not to Scale

12-Asset-11.png

12-Asset-12.png

12-Asset-13.png

18-Asset-01.png

18-Asset-02.png

18-Asset-03.png

18-Asset-04.png

18-Asset-05.png

18-Asset-06.png

18-Asset-07.png

18-Asset-08.png

18-Asset-09.png
24mm Asset Labels
Not to Scale
Last updated: 17 Jul 2015
Sample CNR Labels

Below are the sample Calibration Not Required (CNR) Label templates included in Calibration Control. These labels can be edited and additional labels can be created as needed.
18mm CNR Labels
Not to Scale

12-CNR-12.png
12-CNR-13.png
12-CNR-14.png
12-CNR-15.png

18-CNR-01.png
18-CNR-02.png
18-CNR-03.png
18-CNR-04.png
18-CNR-05.png
18-CNR-06.png
18-CNR-07.png
18-CNR-08.png
18-CNR-09.png
24mm CNR Labels
Not to Scale
Last updated: 17 Jul 2015
Access All the Label Fields

Understanding labels fields in Calibration Control

Understand and follow these guidelines to get the most out of printing labels with our calibration management software (Calibration Control).

1. **Label Basics:** If you haven't done so already, be sure to cover the basics of label printing by watching the label quick start video and reading the notes below it.

2. **Folder Basics:** Since you'll be working in the file system, be sure to watch the video on understanding the Calibration Control folders.

3. **Label Naming Rules:** All asset labels must have the word **asset** in the label name, calibration labels must have **duecal** and calibration not required labels must have **CNR**. These words (asset, duecal, & CNR) allow Calibration Control to identify the type of label.

4. **P-touch Editor:** The P-touch editor software that comes with P-touch printers (or download from Brother) is required to edit the 120+ labels that come with Calibration Control or to create your own labels.

5. **Label Fields Available:** All of the label fields below are available for custom **calibration labels** and **asset labels**.

6. **Using Label Fields:** Access the label fields below by using the P-touch Editor to change the **Object Name** of text or barcode objects of a given label.

7. **Sample Labels:** Check out the sample labels for **Calibration**, **Asset**, and **CNR (Calibration Not Required)**. They are a good resource for choosing which labels you want to use.
**Equipment Label Fields**

<table>
<thead>
<tr>
<th>Equipment Fields</th>
<th>Due Cal Fields Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>AlternateID</td>
<td>FrequencyUnits</td>
</tr>
<tr>
<td>CalibrationDue</td>
<td>IsStandard</td>
</tr>
<tr>
<td>CalibrationLast</td>
<td>LCode (location code)</td>
</tr>
<tr>
<td>CertificateNumber</td>
<td>Location</td>
</tr>
<tr>
<td>CheckedOutBy</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>CheckOutDate</td>
<td>MasterID</td>
</tr>
<tr>
<td>CurrentUserFirstName</td>
<td>MasterIDBarcode</td>
</tr>
<tr>
<td>CurrentUserLastName</td>
<td>ModelDesc</td>
</tr>
<tr>
<td>CurrentUserFullName</td>
<td>ModelNum</td>
</tr>
<tr>
<td>CurrentUserName</td>
<td>MyCompany</td>
</tr>
<tr>
<td>Custodian</td>
<td>Notes (equipment)</td>
</tr>
<tr>
<td>Department</td>
<td>Owner</td>
</tr>
<tr>
<td>DepartmentCode</td>
<td>SerialNumber</td>
</tr>
<tr>
<td>EquipmentCalCo</td>
<td>SizeRange</td>
</tr>
<tr>
<td>EquipmentCost</td>
<td>StatusCode</td>
</tr>
<tr>
<td>EquipmentID</td>
<td>StatusCodeDescription</td>
</tr>
<tr>
<td>EquipmentTypeCode **</td>
<td>TechnicianEquipment</td>
</tr>
<tr>
<td>EquipmentStatus</td>
<td>TypeName (equipment)</td>
</tr>
<tr>
<td>EquipmentStatusCode</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td></td>
</tr>
<tr>
<td>AsFoundName</td>
<td></td>
</tr>
<tr>
<td>CalibrationCalCompany</td>
<td></td>
</tr>
<tr>
<td>CalibrationCost</td>
<td></td>
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<td>CalibrationStatus</td>
<td></td>
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<td>CalibrationStatusCode</td>
<td></td>
</tr>
<tr>
<td>CertificateEvent</td>
<td></td>
</tr>
<tr>
<td>Humidity</td>
<td></td>
</tr>
<tr>
<td>Remarks (calibration)</td>
<td></td>
</tr>
<tr>
<td>TechnicianCalibration</td>
<td></td>
</tr>
<tr>
<td>Temperature</td>
<td></td>
</tr>
</tbody>
</table>

** The EquipmentTypeCode field is a combination of the Equipment Type Code and the Equipment ID. Therefore, if the Type Code is VF and the Equipment ID is 0143, the EquipmentTypeCode would be VF-0143.
## Sample Label Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspected</td>
<td>PopulationUnit</td>
<td>TypeDescription</td>
</tr>
<tr>
<td>InspectedBy</td>
<td>SampleDate</td>
<td>Character0-4</td>
</tr>
<tr>
<td>LotID</td>
<td>SampleBy</td>
<td>Number0-4</td>
</tr>
<tr>
<td>LotNumber</td>
<td>SampleDescription</td>
<td>Date0-4</td>
</tr>
<tr>
<td>LotReceived</td>
<td>SampleID</td>
<td>Boolean0-4</td>
</tr>
<tr>
<td>LotReceivedBy</td>
<td>SampleName</td>
<td>RecordCreated</td>
</tr>
<tr>
<td>LotSupplier</td>
<td>SampleSize</td>
<td>CreatedBy</td>
</tr>
<tr>
<td>PartDescription</td>
<td>SampleUnit</td>
<td>RecordUpdated</td>
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<tr>
<td>PartName</td>
<td>TrackingNumber0</td>
<td>UpdatedBy</td>
</tr>
<tr>
<td>PartNumber</td>
<td>TrackingNumber1</td>
<td></td>
</tr>
<tr>
<td>PopulationSize</td>
<td>TypeCode</td>
<td></td>
</tr>
</tbody>
</table>

## Lot Label Fields

<table>
<thead>
<tr>
<th>Field</th>
<th>Data Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LotID</td>
<td>Boolean0-9</td>
<td>PartCatCode</td>
</tr>
<tr>
<td>Received</td>
<td>RecordCreated</td>
<td>PartCatDescription</td>
</tr>
<tr>
<td>ReceivedBy</td>
<td>CreatedBy</td>
<td>PartStandardCost</td>
</tr>
<tr>
<td>Supplier</td>
<td>RecordUpdated</td>
<td>PartListPrice</td>
</tr>
<tr>
<td>IsActive</td>
<td>UpdatedBy</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>Character0-9</td>
<td>PartNumber</td>
<td>ReceiptInspectionRequired</td>
</tr>
<tr>
<td>Number0-9</td>
<td>PartName</td>
<td>ReceiptInspectionQuarantine</td>
</tr>
<tr>
<td>Date0-9</td>
<td>PartDescription</td>
<td></td>
</tr>
</tbody>
</table>

**Last updated:** 24 Aug 2015
Chain Printing Labels

How to chain print labels to save label tape

There are two ways to print labels using the Brother label printers. The first way is to print them one at a time and have them cut individually with a small tab of blank label on the front of each piece. The second is to print them all at the same time leaving each piece scored and ready to use, with only one piece of blank label at the beginning of the strip.

Printing Style #1 (individually):

By default, labels are printed individually with the small tab of blank label tape at the front:

![Image of individually printed labels]

Printing Style #2 (chain printed):

From the File tab in the top left corner, choose the 'Options' button and navigate to the 'Labels' tab of the Program Options dialog. At the bottom of the dialog there is the 'Chain Printing (not for all models)' checkbox. Check this box to enable chain printing. Uncheck the box in order to go back to printing them individually.
The chain printed labels will look like this:

![Label Example]

**Last updated:** 22 Dec 2016
Displaying Charts

Use Pie, Column, and Bar charts to visualize your data

Display Charts from Calibration Control data by clicking Charts in the Calibration tab of the menu ribbon.

Use the Data Table combo box to select what information is shown in the Chart.

Chart Data Tables

Customize the Chart by editing the default Title and by changing the settings for Chart Type, Color Model, and Legend position. Use the Data Table combo box to choose which department information is used.
Saving and Printing Charts

Right-click the Chart screen to Save (several formats) or Print the Chart. ‘Save as PNG – Transparent Background’ is recommended for use in reports and presentations with backgrounds other than white.

3D Charts

Change the viewing angle on 3D Chart Types by holding down [Alt] and then clicking and dragging the mouse to the best angle. Zoom in and out of the Chart by rolling the mouse roller back and forth while keeping the [Alt] button pressed.

‘Min Others Pie Slice’ (for pie charts only)

Use ‘Min Others Pie Slice’ to group very small percentages into an ‘Other’ category. This helps to declutter the pie chart when there are too many slices.

Last updated: 30 Dec 2016
Due Cal Calendars

Visualize equipment due cal in calendars

Display a Calendar of Equipment Calibration Due dates by clicking Calendar in the Calibration tab of the menu ribbon.

Toggle between Month, Week, or Day views using the tabs at the top of the Calendar screen. Click on specific dates in the Calendar to view which tools are due to be calibrated on that date. The 'Equipment Due Cal' label automatically displays how many tools are due for calibration on that date. Click in the default label to customize.

Quickly view Equipment Due for Calibration dates in different months by clicking through the months in the upper left-hand Calendar screen and clicking the desired month, week, or day. The current day is highlighted in a red box while the day selected is shown in orange. The bold dates are ones with at least 1 equipment that will be due for calibration. Adjust the number of weeks visible in the Calendar screen by clicking up or down in the 'Visible Weeks' box (Month view only).
Printing Calendars

Print a 5-Week, 1-Week, or 1-Day Calendar by viewing dates you want to be printed in the Calendar screen and clicking [Print].

Customize printing Paper Size and Source, Orientation, and Margins using the File, Page Setup menu.

Last updated: 4 Jan 2017
Reports

Print Reports

Printing the standard reports is easy

Click on the [Print] icon found in the tabs of the ribbon menu, then select which report to print. If the report requires additional information (i.e., parameters, due date, or other filter) to print, enter the required parameter and then click the [Submit] button to generate your report.

Ape software also offers a Report Designer to modify any of the existing reports or to create custom reports.

Last updated: 27 Feb 2017
Calibration Due Report

Quick access to the due cal report

Print the Calibration Due Report by selecting the Due Cal Report option from the Calibration tab or from the Context Menu within the Tool Browse grid (Print Calibration Due Report).

The following Due By dialog will appear.

If a date range is required, click on the [PRINT] button in the Reports Menu to find the Calibration Due Date Range report. The Date Range report (file name CalibrationDueDateRange.rpx) can also be set as the default report. The range dates are set by default to the first date of the current month and the last date of the current month. See the Program Options help topic instructions on how to change the default report.
**Note:** The default versions of these Due Cal reports do not include equipment with non-calibration Frequency codes, like 'Cal Not Required'. Also, equipment with Status Codes marked as Hidden will not be displayed.

**Due Cal: Print Preview**

Here is a sample Calibration Due Report ready to print.

<table>
<thead>
<tr>
<th>Equipment ID</th>
<th>Model</th>
<th>Description</th>
<th>Serial</th>
<th>Status</th>
<th>Last Cal</th>
<th>Next Cal</th>
<th>Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMPLE-001</td>
<td>FS-3038G</td>
<td>Pin Set</td>
<td>1003</td>
<td>Active</td>
<td>9/2/2016</td>
<td>9/2/2016</td>
<td>Quality Assurance</td>
</tr>
<tr>
<td>SAMPLE-012</td>
<td>FS-3038G</td>
<td>Pin Set</td>
<td>1004</td>
<td>Active</td>
<td>9/2/2016</td>
<td>9/2/2016</td>
<td>Quality Assurance</td>
</tr>
<tr>
<td>SAMPLE-005</td>
<td>PIN</td>
<td>Frequency Setting</td>
<td>2148</td>
<td>Active</td>
<td>10/2/2016</td>
<td>10/2/2016</td>
<td>Shipping</td>
</tr>
<tr>
<td>SAMPLE-013</td>
<td>CR-042A</td>
<td>CAM</td>
<td>105</td>
<td>Active</td>
<td>10/2/2016</td>
<td>10/2/2016</td>
<td>Inspection</td>
</tr>
<tr>
<td>SAMPLE-015</td>
<td>M35C-17</td>
<td></td>
<td>1015</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Inspection</td>
</tr>
<tr>
<td>SAMPLE-023</td>
<td>BUMST</td>
<td>Strip Indicator</td>
<td>1110</td>
<td>Active</td>
<td>11/10/2016</td>
<td>11/10/2016</td>
<td>Shipping</td>
</tr>
<tr>
<td>SAMPLE-023</td>
<td>WH-050-020</td>
<td>Master Scale/Level Set</td>
<td>2168</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Production</td>
</tr>
<tr>
<td>SAMPLE-023</td>
<td>WH-050-020</td>
<td>Master Scale/Level Set</td>
<td>2200</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Production</td>
</tr>
<tr>
<td>SAMPLE-003</td>
<td>OB-75-N</td>
<td>External Gauge</td>
<td>1006</td>
<td>Active</td>
<td>12/15/2016</td>
<td>12/16/2016</td>
<td>Stockroom</td>
</tr>
<tr>
<td>SAMPLE-015</td>
<td>OB-53-N</td>
<td>External Gauge</td>
<td>1005</td>
<td>Active</td>
<td>12/12/2016</td>
<td>12/12/2016</td>
<td>Machine Shop</td>
</tr>
<tr>
<td>SAMPLE-015</td>
<td>OB-57-N</td>
<td>External Gauge</td>
<td>1003</td>
<td>Active</td>
<td>12/12/2016</td>
<td>12/12/2016</td>
<td>Machine Shop</td>
</tr>
<tr>
<td>SAMPLE-002</td>
<td>TC-045</td>
<td></td>
<td>102</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Stockroom</td>
</tr>
<tr>
<td>SAMPLE-015</td>
<td>HL-WVG-8</td>
<td></td>
<td>107</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Stockroom</td>
</tr>
<tr>
<td>SAMPLE-003</td>
<td>CLM-002</td>
<td>Calibrator</td>
<td>101</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Stockroom</td>
</tr>
<tr>
<td>SAMPLE-015</td>
<td>DB-001-1</td>
<td>Digital Micrometer</td>
<td>1049</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Production</td>
</tr>
<tr>
<td>SAMPLE-015</td>
<td>CLM-020</td>
<td>Calibrator</td>
<td>1051</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Production</td>
</tr>
<tr>
<td>SAMPLE-019</td>
<td>CR-M005</td>
<td>Indicator</td>
<td>2190</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Quality Assurance</td>
</tr>
<tr>
<td>SAMPLE-019</td>
<td>CR-768</td>
<td>Indicator</td>
<td>307</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Quality Assurance</td>
</tr>
<tr>
<td>SAMPLE-019</td>
<td>CR-086</td>
<td>CHIME/PAIR/PACT</td>
<td>197</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Manufacturing</td>
</tr>
<tr>
<td>SAMPLE-019</td>
<td>32-KPH</td>
<td>Microscope</td>
<td>301</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Stockroom</td>
</tr>
<tr>
<td>SAMPLE-019</td>
<td>32-KPH</td>
<td>Microscope</td>
<td>319</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Stockroom</td>
</tr>
<tr>
<td>SAMPLE-019</td>
<td>32-KPH</td>
<td>Microscope</td>
<td>324</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Quality Assurance</td>
</tr>
<tr>
<td>SAMPLE-019</td>
<td>32-KPH</td>
<td>Microscope</td>
<td>351</td>
<td>Active</td>
<td>11/7/2016</td>
<td>11/7/2016</td>
<td>Quality Assurance</td>
</tr>
</tbody>
</table>

**Last updated:** 30 Dec 2016
Calibration Worksheets

Record calibration data while away from the computer

Calibration Worksheets are a convenient way to record Calibration Event data without being near a computer. The Worksheets in Calibration Control have the proper measurements predetermined to make calibration data easier to record. The Worksheets are easily configured for the needs of the organization.

When printing a Calibration Worksheet:

- If the Equipment has a Measurement Template attached to it, the Worksheet will replicate the Template structure on the Worksheet so all the technician needs to do is fill in the blanks.
- If no Measurement Template is attached to the Equipment, Calibration Control will use the measurement structure from the most recent calibration of the Equipment.
- If neither a Template nor past calibration exists, Calibration Control will print a blank Worksheet with several lines for recording measurement data.

Use the Context Menu within the Tool Browse Grid to find the print option for a Calibration Worksheet.
The Calibration Worksheet will look like this in the print preview. Notice that some of the fields are already filled-in with information from the record:

The blank Worksheet looks like this when neither a Template nor past calibration exists. All of the fields are blank to accommodate necessary information.

Last updated: 18 Jan 2017
Modify Calibration Certificate

Add your company logo to your calibration certificate

Watch the following video to learn how to add your company logo to the default calibration certificate and to modify the text of existing labels. Consider watching the video the four folders of Calibration Control before watching this video.


Last updated: 25 Sep 2011
Create a Custom Report

Create a custom 'due cal' report

To create a custom report from scratch we use a database language called SQL (pronounced 'sequel'). We use SQL SELECT statements to tell the database what fields and records from what tables and in what order we want our data. Therefore, as a prerequisite to this help topic, read the SQL SELECT statement help topic first.

Create a Custom Report

To begin, let's assume we want to create a new calibration due report for all of the equipment due before the end of next month. Select the ‘Report Designer’ item from the Utilities tab of the Menu Ribbon. This is a blank slate to drag fields into whatever location desired in the report ‘Detail’.

![Image of Report Designer interface]

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Calibration Control Manual Page 183
Define Report Data Source

If you click on the Edit Data Source link in the bottom-right corner of the Report Designer, a blank Report Data Source dialog will appear (below). The Connection String field defines the connection to the database being used. The Query field defines the fields and records we need from a specific table and in a defined order.

![Report Data Source Dialog](image)

Connection String - Choosing the Provider

The easiest way to change the connection string is to select the Show Connection String menu option from the Utilities Tab. This will show the same connection string the Ape application is using to connect to the database. Click the [Copy to Clipboard & Close] button and paste the result into the Connection String field of the Report Data Source dialog.
Otherwise, build the connection string by clicking the [Build] button to the right of the Connection String text box and the Data Link Properties will be shown. Click on the Provider table if is not already displayed. Assuming you want to connect to an Access database (i.e., apecal.mdb), select the 'Microsoft Office 12.0 . . .' provider and click the [Next] button. If connecting to an instance of SQL Server select the SQL Server OLE DB Provider.

If this does not work, ask your database administrator (DBA) for assistance in choosing the correct provider.
Connection String - Setting the Connection

Continuing the assumption that you need to connect to the apecal.mdb file, paste the path to the apecal.mdb file in the Data Source field. With help on finding your database, read the locate your calibration management database help topic. The entire path will look something like this:

C:\Users\Public\Documents\Ape Software\Calibration Control\apecal.mdb

After entering the path to the database, click the [Test Connection] button and a ‘Test connection succeeded’ response should show. If the connection is unsuccessful, repeat the above steps until it is.
Writing a SQL Select Statement

When the SQL SELECT statement has been created, it will look something like the following picture. Note that the Calibration Due field is set to a specific filter of less than 5/1/2011. This date is called a parameter (report variable), which can be changed with every printing. See the help topic on Report Parameters to learn how to add Parameters to SQL statements.
Adding Fields, Labels, and Report Info

In the image at the top of this page, I performed the following actions to create the Calibration Due report:

1. Dragged the bound fields (e.g., Equipment ID, Model & Description) from the right side of the page (Fields - Bound tree) to their current location in the Detail band and resized them to fit their contents.

2. Selected the Date fields and edited their properties (bottom-right corner of screen) so that the OutputFormat = 'M/d/yyyy'.

3. Dragged Label objects from the left side of the screen to locations above each field in the page header, resized them to fit their corresponding fields, bolded, and underlined them. The page title (Calibration Due Report) was created the same way.

4. Report Info objects were dragged from the left side of the screen to the left and right side of the footers. I clicked on each object and changed their properties (bottom-right) to . . .

   - Set the Format String property of the datetime field to '{RunDateTime:M/d/yyyy}'
   - Set the Format String property of the page number field to 'Page {PageNumber} of {PageCount}'
   - Clicked the right-align button (top of page) for the page number field.

1. Other minor tasks involving bolding, underlining, aligning, and positioning were made to make the report look the way I wanted it to look.
**Menu Settings**

Assuming the custom report is stored in the Ape application Reports folder, the default file name of the new report in the report menu will be the file name. Override the file name displayed by entering a preferred name in the User Data field of the report properties. Also, to place the new report under the first or second node of the report tree, place a 1 or 2 before the other text in the User Data field. For example, entering ‘1 My New Report’ in the User Data field will place the name ‘My New Report’ under the first node.

**Save and Preview Report Layout**

Save the report layout by selecting ‘Save Layout’ from the Report Designer dropdown menu. Choose a file location and name your report ‘my due cal report’. The file location defaults to the Report folder under the Files Folder (select Open Files Folder from the File dropdown menu) for the Ape application to find it.

Select the Preview tab at the bottom of the Report Designer.

![Report Designer](image)

**Last updated:** 18 Jan 2017
Report Parameters

Pass data to SQL statements at run time

Use Report Parameters to pass information to the report's SQL string at run time. A Parameter dialog will prompt the user for input when generating reports.

The syntax for a report parameter is:

\(<%\text{ParameterName}|\text{PromptString}|\text{DefaultValue}|\text{Type}%\>

Where:

- **ParameterName**: Must be a unique Parameter name and is often the same or similar to the field name the parameter relates to.
- **PromptString**: The text displayed in the Parameter dialog asking for input.
- **DefaultValue**: The default value of the Parameter.
- **Type**: The Parameter type code of the parameter.

Parameter Type Codes

- **AS**: String
- **AD**: Date
- **AB**: Boolean
- **AI**: Integer
- **ADB**: Double
- **AC**: Combobox (i.e., drop down list)
The following is an SQL statement that uses a 'hard coded' date, which means the SQL statement must be edited each time the default date needs to change.

```sql
SELECT *
FROM   qryEquipmentMaster
WHERE  CalibrationDue < #10/15/2012#
```

Conversely, the following sample shows the same SQL statement using a Parameter, which allows users to enter a date value at run time.

```sql
SELECT *
FROM   qryEquipmentMaster
WHERE  CalibrationDue < #<%CalibrationDue|Due Date:||AD%>#
```

**Date Default Values**

When using the AD (Date) Parameter Type code, several options are available for the Default Value:

- **Specific Date**: Exact date with the syntax of #MM/DD/YYYY#
- **Number of Days**: Positive or negative integer (counting number) indicating the number of days added (or subtracted) from the current date
- **BOM**: Beginning of current month
- **EOM**: End of current month
- **BONM**: Beginning of next month
- **EONM**: End of next month
- **BOPM**: Beginning of previous month
- **EOPM**: End of previous month
The following example uses the EOM Default Value code for the End of the Current Month:

```sql
SELECT *
FROM   qryEquipmentMaster
WHERE  CalibrationDue < #<%CalibrationDue|Due Date:|EOM|AD%>#
```

**Combobox Parameter Type**

Using the AC (Combobox) data type requires the use of the DefaultValue Parameter field to configure the Combobox. Within DefaultValue exactly six sub-fields, each separated by a slash ("/"), are required. This also means that exactly 5 slashes must be present in the DefaultValue field.

The six sub-fields are:

1. **Table or SQL**: Table or SQL for the records used in the combobox
2. **Value Member**: Field name for the value, usually an ID field
3. **Display Member**: Field name for the text displayed in the combobox
4. **Filter**: SQL filter phrase that limits the records displayed (e.g., "Active = -1")
5. **Sort**: SQL sort phrase that places the list of choices in a specific order (e.g., "Name"). When left blank, the Display Member is the default sort field.
6. **Default Value**: One of the values within the list created by the Value Members field (e.g., "55ec4215-7f9b-4e9f-b583-56be9871b895")

Although not all fields are REQUIRED (*), their places must be defined with slashes like in the following DefaultValue example. Note that there are still five slashes ("/") even when only three sub-fields are used.

```
tblPeople/PersonId/DisplayName///
```

**Last updated**: 11 Feb 2014
Report Settings

Find and change settings of custom reports

Within the 'Report Designer' grid (found in the Utilities tab of the ribbon menu), find and modify the settings of the custom reports. Adjust paper size, orientation, gutters, styles, fonts, and more.

Open Settings

Find most of the settings for the custom reports by double-clicking the Settings node in the top-right corner of the Report Designer.

Page Setup

Adjust the Margins and Gutter settings.
**Printer Settings**

Set paper size, orientation, and other page settings.

![Image of Printer Settings dialog box]

**Styles**

Define new or edit existing font styles.

![Image of Styles dialog box]
Global

Modify the Report Designer settings for layout, units, maximum number of preview pages, and word-wrap in the Script Editor page.

Last updated: 27 Feb 2017
SQL SELECT Statement

Useful with Calibration Management Software Reports

SQL (pronounced sequel) stands for Structured Query Language. SQL is the basic language of most common databases, including MS Access and MS SQL Server, the two databases we use with Calibration Control. The part of the SQL language we need to focus on is the SELECT statement, which we use to retrieve information from our calibration management software (Calibration Control). Although SELECT statements are used by reports, web pages, on screen displays, and even moving data between applications, we will need SQL primarily for reports.

A Primer on Tables

Before we get started, let's make sure we understand the source of our data when we use a SELECT statement. Within a database, information is stored in tables that look something like a spreadsheet with columns and rows. Unlike a spreadsheet, a table uses records (horizontal rows) and fields (vertical columns).

Think of each record as if it were a photocopied standard form that you use for keeping track of your test equipment and that you keep all these forms in a file. The file may have a hundred forms, each with information describing a specific piece of test equipment. Just like a table, you can sort your forms in a different order and you can find records by scanning a single field on each form; it just takes a bit longer with paper compared to a database table.

The Equipment Master View

Within Calibration Control, you will probably derive most of your reports from the qryEquipmentMaster view (also called a query) because it has most of the fields you need for your test equipment records. The fields in the view will also be easier to read than their corresponding codes in the root table. Think of a view as a way to pre-package part of the SQL complexity that makes your data easier to work with.

As an example, if you look at the contents of the tblEquipmentMaster table (where your data is actually stored) you’ll see fields like ModelNumberID with meaningless numbers in the fields...
(see image below). On the other hand, if you look at the qryEquipmentMaster, you'll see the actual model numbers and descriptions that you're familiar with. This is because the view has SQL code in it that looks up and displays the meaning of the ModelID code so you don't need to.

### The SQL SELECT Statement

There are four main parts of the SELECT statement that we need to cover.

- **SELECT** – *(IDs fields from a table that will be included.)*
- **FROM** – *(IDs the table where the fields come from.)*
- **WHERE** – *(Defines the filter that includes only the records you want to include.)*
- **ORDER BY** – *(Defines the sort order of the records.)*

While the SELECT and FROM clauses are always required, you will only need to include the WHERE and ORDER BY clauses when you want to filter and sort. Otherwise, your results will
include all records and in no particular order other than the physical order of the underlying table.

Here is an example of a common SQL statement you would use to return all the fields from the qryEquipmentMaster view:

```sql
SELECT *
FROM qryEquipmentMaster;
```

Notice the asterisk (*)? The asterisk is a wildcard that includes all fields. With the relatively easy SELECT statements that we need in our calibration management software, using the wildcard is usually your best bet because you don’t need to worry about whether you forgot a field or not when you’re designing your report.

Now let’s assume that we want to filter and sort our results in the following example:

```sql
SELECT *
FROM qryEquipmentMaster
WHERE DepartmentCode = 'QA'
ORDER BY Location;
```

You can even add multiple filters and multiple sorts with the following MS Access:

```sql
SELECT *
FROM qryEquipmentMaster
WHERE (DepartmentCode = 'QA') AND (CalibrationDue < #5/1/2011#)
ORDER BY Location DESC, SerialNumber;
```

Note that the date value has number signs (#) around it rather than the single quotes of the text values? You need to use the # sign when you are using MS Access and the single quote (‘) when using SQL Server. Although both databases use SQL Server, there are still slight differences.
Here’s the same code for **MS SQL Server**:

```
SELECT *
FROM qryEquipmentMaster
WHERE (DepartmentCode = 'QA') AND (CalibrationDue < '5/1/2011')
ORDER BY Location DESC, SerialNumber;
```

The final example deals with filtering for numeric values and is compliant with both **MS Access** and **MS SQL Server**. Note that the value (1) uses neither the single quote (’ or the number sign (#)?

```
SELECT *
FROM qryEquipmentMaster
WHERE FrequencyUnits = 1;
```

You can learn more about the SQL SELECT statement through an Internet search. If you can think of any good beginner SQL sites, let me know and I can post a link on this page.

**Last updated:** 13 Jun 2011
Changing the Work Environment

Program Options

Modify application settings

You can modify the Ape software program options by selecting Options from the Utilities tab of the ribbon menu or in the Files folder drop-down menu.

General Tab

- **First Day of Week**: Setting determines the due date when calibrations are using the 'Week of' Frequency. For instance, if a tool has a calibration frequency of 'Week of' and a unit multiplier of three (i.e., every three weeks), Ape software will calculate the next calibration date by adding three weeks to the last calibration and then choosing the first day of that week (as determined by this setting).

- **Current or Next for 'Week/Month of' Due Dates**: Setting is used while calculating the calibration due date for the 'Week of' and 'Month of' frequencies. For example, if a tool has a 'Month of' frequency, a 12 unit multiplier (i.e., every 12 months), and the offset for the
program is 'Next' (this setting), the Calibration Due Date is calculated by adding 12 months to the Last Calibration and then choosing the first day of the Next month.

- **Check for Program Updates:** Ape software can notify available updates on a Daily, Weekly, or Monthly cycle when the application is first opened. The default is daily.

- **Measurement System:** Use the drop-down to switch the default measurement system between U.S. and Metric. The default is U.S.

- **Company Name and Licensed To (User):** Fields here are the same ones presented in the dialog where the product key was entered.

- **Equipment ID of Default Template:** New Equipment records can be created from a default template identified by the Equipment ID of that template. Therefore, this field identifies an existing Equipment record to be used as a template for new Equipment records.

- **Unique Alternate Equipment ID:** The Equipment ID field must always be unique but the Alternate Equipment ID can repeat or be unique, or be unique within a given Site.

- **Language:** Select the language displayed. Changing the language requires a program restart.

- **Label Printer:** When multiple label printers are installed on a single computer, the printer used to print labels for Ape software may need to be specifically identified in this field.
Label Date Masks and Number Mask Tabs

Refer to the Masks in Calibration Control help topic for an explanation of masks.

Default Labels Tab

- **Default Labels:** These settings determine which label templates are used by default when using the 'Print Label' button from the Equipment dialog. (Default label settings can be overridden for a specific Equipment, Type, or Model record.)

- **Calibration Due:** Prints when the calibration frequency generates a due date and uses labels with the 'Due Cal' string in their file name.

- **Asset:** File templates are identified as Asset labels by the 'Asset' string in the file name.

- **Cal Not Required:** Prints in place of the Calibration Due label when the Calibration Frequency is 'Cal Not Required' and is identified as CNR label by the CNR string in the file name.

- **Next Use:** Print in place of the Calibration Due label when the Calibration Frequency is 'Next Use’ and the labels are identified by a 'Next Use’ string in their file name.

**Note:** The number at the beginning of the file name indicates the width of the label tape in millimeters. The number at the end of the file name indicates the sequence. Any custom labels should be given a unique sequence. All labels can be edited using the Brother P-touch Editor software that comes free with your Brother P-touch label printer. For a preview of all default label templates included in Ape Software, visit our Label Fields topic.
Default Reports Tab

- **Default Reports**: These settings determine which reports are used by default. While most reports can be previewed using the Reports Print Menu, the Cal Certificate includes specific data so that it can be previewed only through an Equipment record, (making this tab important to know).

- **Calibration Cert**: Template used when printing a Calibration Certificate.

- **Due Cal Report**: Report template used when printing the Calibration Due Report.

- **Cal Worksheet**: Calibration Worksheet that prints when the Equipment record has a Measurement Template or a previous Calibration Event.

- **Blank Worksheet**: Calibration Worksheet that prints when the Equipment record has neither a Measurement Template nor a previous Calibration Event.

- **Uncertainty**: Default report for the Measurement Uncertainty Budget.

- **OOT Investigation**: Designates the Out-Of-Tolerance (OOT) Investigation worksheet used when Equipment received for calibration is found OOT.

- **Custom Report**: Custom report for a single Equipment record, which can print from the popup menu on the Tool Browse dialog.
**Note:** All reports can be edited using Ape software’s built-in Report Designer. Custom changes made to default templates should be renamed, *(e.g. "CalibrationCertificate - COMPANY")*. 

**Default Folders Tab**

- **Files Folder:** The Files Folder is a folder with the three important sub folders of Attachments, Labels, and Reports. While the Attachments folder is the location where Ape software stores the actual folders, the Labels and Reports folders store templates (how the labels and reports are printed).

- It is important to move the Files Folder to a location where it will be backed up regularly and can be accessed by other users of the Ape software database. Jump to **Folders** help topic for more information.

- **Auto Generated Website:** This is the location where the auto-generated Due Calibration website is created either by using the 'Publish Website' menu button from the main ribbon or via the **Auto Notify** utility.

- **THUM Database:** The THUM (Temperature and Humidity USB Monitor) database is the location where the **THUM device** stores its data. If the device is used and the database exists, then Ape needs to know where this database is so temperature and humidity data can be added automatically to Calibration Event records.
Calibrations Tab

- **Status on Calibration**
  - **Pass:** Set the Equipment record to [THIS Status] when saving a new Calibration Event that is Passed.

- **Status on Calibration**
  - **Fail:** Set the Equipment record to [THIS Status] when saving a new Calibration Event that is Failed.

- **Received for Calibration Status:** When using the Status Change dialog, if [THIS Status] is set, three changes are made to the related Equipment dialog: (a) the Status is changed to [THIS Status], (b) the Received field is set to TODAY, and (c) a note is added describing the event.

- **Reminder Lead Days:** The number of days to include in the Due Cal report and when Browsing Due Cal.

- **Manually Set Due Dates in Equipment Dialog:** Normally, the Calibration Due (Next Cal) is automatically calculated based on the Last Calibration and the Calibration Frequency. Therefore, checking this option for manual set will disable the automatic calculation.

- **Ask to Print OOT Worksheet When Received OOT:** With this option checked, the User who saves a Calibration Event with the Received Out-Of-Tolerance (OOT) condition will be asked if the OOT Worksheet should be printed. (Works with the next option below)
- **Null Cal Received Date on Successful Cal:** (Usually used in conjunction with the above Received for Calibration Status feature) With this option checked, when a new Calibration is saved with a 'Passed' Status then the Received [for Calibration] field in the Equipment record is automatically nulled.

- **Use Last Calibration as Template if No Template Linked:** With this option checked, creating a new Calibration Event uses the most recent Calibration Event as the Measurement Template if no Template is otherwise linked for that Equipment.

Admin Options

- **Edit Form Labels:** Change the field names and other text related to dialogs. For example, you can change the Equipment ID field to be named Asset, and the Location can be changed to Work Center or whatever works best.

- **Add Missing/New Records:** Adds any missing standard records in the reference tables that Ape software uses. If one or more records is accidently deleted from tables like Language (used for field names), Roles (defines Admin, Supervisor, etc.), or Permissions (which Roles are required for each Permission), then pressing this button will re-add all missing records.
• **Refresh All Records:** Similar in function to the [Add Missing/New Records] button except it completely deletes and refreshes the contents of all reference tables.

• **Feature Visibility:** Hide the features you do not use by changing the visibility settings for your ribbon menu.

• **Switch to Sample Database:** Switches to a sample database with sample populated fields. Useful when exploring new features.

• **Do Not Copy Default Labels, Reports, & Emails on Start:** By default, each time the Ape software starts it confirms that all the default Labels, Report, and Email templates are in the Files folder. If any file is missing, Ape replaces it. Checking THIS option prevents this feature.

**Security Tab**

• **Edit Permissions:** Change the Roles (e.g., Administrator, Supervisor, Technician, etc.) required for any Permission (e.g., adding an attachment, editing a Person record, adding a Calibration, etc.).

• **Activate/Deactivate Sign-In Mode:** Enable or disable the User Authentication Mode (Sign-In Mode). At least one User must have Administrator privileges to Enable User Authentication and, by default, only an Administrator can disable Authentication.

• **Password Security:** Edit User
password strength rules and expiration times.

- **Only Current Users Can Check Out Equipment**: Prevents anyone but the current user from checking out Equipment.

- **Prevent Users From Saving Passwords on Client PCs**: When the Authentication mode (sign-in) is enabled and a User signs in, they are given the option of saving their User Name and Password for future automatic sign-ins. Checking THIS option prevents the ability to save their User Name and Password.

- **Display Equipment Only From Assigned Sites When Signed In**: When User Authentication mode is enabled, checking this box will **Limit Equipment Visibility by Site**.

- **Disable Terminal Equipment Grid**: Prevents any user from seeing the main list of Equipment from the Terminal dialog.

- **Disable Check In/Out Dialog**: Checking THIS option prevents the use of the Check In/Out dialog from the Terminal mode.

- **Disable Status Change Dialog**: Checking THIS option prevents the use of the Status Change dialog from the Terminal mode.

- **Disable Asset Transfer Dialog**: Either disable the Asset Transfer dialog completely or disable one or more of the fields that can be edited.
Email Tab

Use the fields in the Email tab to setup a connection to your company or personal email server. Ape software makes use of these settings in the Auto Notify feature that automatically sends Email notifications or messages to People identified in the application.

- **SMTP Server:** Your SMTP server address usually looks something like `SMTP.YOURDOMAIN.COM`
- **Email/Password:** This is the email address (or user name) and password of the email account Ape will be sending mail from.
- **Port:** Leave this at zero (0) unless you know it should be a different number.
- **Use Secure Connection:** If your SMTP server requires a secure connection, check this box.
- **Disable CSS in Emails:** The default Email templates use embedded cascading style sheets (CSS) to format text with colors, backgrounds, decorations, etc., especially in the table of Equipment. If the email services you send emails to blocks some CSS, like Gmail, check this box to get a list of some minimal coloring back into the Equipment grid.
- **Send Test Email to:** Solely for the purpose of setting your email settings, enter an email address to send a test message to.

*Last updated:* 27 Feb 2017
Folders Used by Ape

The Four Folders of Ape Software Applications

Each of the folders (Data, Files, Settings, & Web) is accessible from the File drop-down menu.

What They Do

The **DATA** Folder is the location where the access database (when using MS Access) resides. Visit the [Move Database Folder](#) help topic for steps on how to move the Data Folder to a new location.

The **FILES** Folder stores the Attachments folder and the Labels, Reports, and Emails template folders.

The **SETTINGS** Folder stores the program settings that Ape Software requires to function normally. This is the only File Folder that cannot be moved from its original location and every user must have read/write access.

The **WEB** Folder is the target location for publishing the reporting web pages.
Settings Folder

The Settings folder is the only folder that cannot be moved. The locations for the Settings Folder is:

**Windows 7 & Higher:** C:\Users\Public\Documents\Ape Software\Calibration Control

Although all Folders share the same default location as the Settings folder when the software is first installed, the other three Folders can be moved to different locations on the computer or local network for sharing and backup purposes. The location of the Files folder can be configured in your program Options.

**Last Updated:** 18 Jan 2017
Change Field Names

Change the text of field labels

Rename any field of Calibration Control dialogs or forms for better usability.

Edit Form Labels

From Options (located in the Utilities or File tabs) navigate to Admin and select the [Edit Form Labels] button.

From the Edit Forms Labels dialog (shown above), use the dropdown to select which dialog screen to modify. In the example below, selecting EquipmentEdit will display all fields within the Equipment dialog.
Edit Fields and Labels

After finding the label to modify, manually edit the **Control Text** (what the field says), **Updated By** (who modified it), and **Record Updated** (when it was modified).
Change the 'Help Tip' field to edit the text shown while the cursor hovers over the control. (Note: Not all controls have the ability to display 'Help Tip' text, like column headers in data grids.)

**Reset Changes**

Modifications of Form Labels are highlighted green to show the custom changes.

If a mistake is made, set all the values back to default by clicking the [Reset THIS Dialog to Default] for the single dialog displayed, or by clicking [Reset ALL Dialogs to Default] for all dialogs. Additionally, double-click on any single record and right-click to select the [Reset THIS Record] option.

**Custom Fields**

The Custom Tabs in dialogs are very useful. Rename these available fields with the same steps.

For example, here is the default Custom Fields tab in the PersonEdit dialog:
And after renaming the Custom fields, it could display as shown below:

Last updated: 18 Jan 2017
THUM Temperature Humidity Device

Setup THUM device to automatically record temperature and humidity

Ape software is compatible with the Temperature and Humidity USB Monitor (THUM) sold by Practical Design Group. With a THUM device plugged in and setup on your computer, Ape can automatically retrieve temperature and humidity data for calibration events.

Setup

Follow these instructions to integrate the THUM with Ape:

1. **Setup THUM:** Follow the setup instructions that arrive with THUM.

2. **Move THUM Database:** The default location of the THUM database (thum.mdb) is in the Program Files folders. This will only work if the signed in user has read/write access to the Program Files folders. Therefore, always move the database out of the Program Files folder to a location where everyone has read/write access, like the CC Settings folder.
   a) Move the THUM database by opening the THUM application and selecting 'Show Options' from the Options dropdown menu.
   b) Update the ‘Database location’ field to reflect the new location, like the CC Settings folder.

1. **Tell Ape Where THUM Is:** Open the Folders tab of the Options dialog in the Ape database and click the Edit link in the ‘Location of THUM . . .’ field. Navigate to the same location as above.
2. **Test Setup:** Test the setup by creating a new Calibration Event record (Calibrations tab of the Equipment Edit dialog) and confirming that the Temp and Humidity fields are automatically populated.

![THUM Options Dialog](image)

**Troubleshooting**

- **Insufficient Permissions:** Attempt to start the THUM Monitor software and it reports that the current user has insufficient permissions to make changes. Resolve this by running the THUM monitor as an Administrator. Do this by right-clicking on the THUM icon and selecting "Run as Administrator".
• **THUM Service Will Not Start:** If the THUM service cannot be started from the THUM Monitor, one or more of the following steps should fix the problem. For a complete reset, follow each step:

1. **Close THUM Monitor:** Resets the software.

2. **Delete THUM Database:** Delete the "thum.mdb" file that the THUM Monitor is pointed to. Ensure this is not the database in the Program Files folders, which should not be used for live data. Deleting the database resets the database file to ensure no corruption and that (thum.mdb) is in the proper version format for the THUM service. Therefore, when opening the "thum.mdb" file with MS Access, do not allow Access to convert the "thum.mdb" file to a newer version of MS Access.

3. **Reset THUM Device:** Ensure the electronic THUM device itself is reset by unplugging it from the computer for at least 5 seconds and plugging it back in.

4. **Restart THUM Monitor:** Remember to start the THUM Monitor with Administrator Privileges, if necessary.

• **Still Need Help?** Contact us if the above steps did not work and we will get you up and running.

**Last updated:** 27 Feb 2017
**Temperature in Metric or U.S.**

**Choose Metric or US Default in Calibration Control**

Use the options dialog to change the default measurement system to either metric or U.S. Begin by selecting 'Options' from the Ribbon Menu at the top of the screen.

After the Options dialog box is open, select either 'US' or 'Metric' for your default measurement system.

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**Last updated:** 30 Oct 2013
Security

Security Methods - How They Work

Database Security

If you use MS SQL Server as your database, then the built-in SQL Server and Windows authentication will keep your database protected. Otherwise, if you use MS Access the database file (apecal.mdb) must use a database password. The default MS Access database files that come with Ape Software version 7.2.5 and later have password encryption by default. If you are upgrading from a previous version and use MS Access, you must manually set the password for your database.

Activating User-Authentication (sign-in mode)

Any user can activate User-Authentication mode after ensuring at least one Active User has Administrative privileges. Only a User with Administrative privileges can deactivate User-Authentication.

What Can an Administrator Do?

Administrator has full access to all parts of the application that require any level of security. An Admin can create Users and change the privileges of any other, including other Admins.

What Can't an Administrator Do?

Admin cannot remove him/herself from being an Admin while User-Authentication mode is activated; one Admin must remove the Admin privileges of another. This is a safety feature to ensure there is at least one Admin while the application is in UA mode.
Admins and Passwords

When an Admin creates or changes the password for any user, other than him/herself, that user will be required to change their password the next time they sign in. Use the Password Security Dialog page for help in implementing and adjusting Password Security methods.

Pre-Defined Roles

There are seven pre-defined security roles, which are: Administrator, Super User, Supervisor, Technician, Production, and Layout. Although these Roles cannot be changed, Admins and Super Users can change which Role has access to which Permission.

Hierarchy of Roles

A user with no Roles assigned can see, print, or export any information. Each of the other Roles has the privileges of a user with no Role in addition to:

- **Administrator**: Can do anything that requires security.
- **Super User**: Can do anything an Administrator can do except add or edit Users.
- **Supervisor**: Same authority as Technician and Production except that by default can edit Technician Name and Status of calibration records and can remove relationships between Equipment and Jobs.
• **Technician:** Can create and edit most equipment records. By default cannot edit the Technician Name (added automatically) or the Status of calibration records.

• **Production:** Can add Job records that record which jobs equipment is used on. By default cannot remove Job records.

• **Layout:** Has the authority to make most application layout changes relating to look and feel.

**Permissions**

There are 63 pre-defined Permissions for 63 areas of the applications that require a given level of security. Although each Permission has a default minimum Role, Administrators can change the Role of any of the Permissions.

**Change Management (Audit Log)**

All field and label changes are tracked in the 'Activity Data' tab. It records time/date, user (if UA mode is activated), screen where the changes were made, machine (computer) name, and the detail of the change. The change detail includes field names and before/after data.

**Last updated:** 8 Feb 2017
Sign-In Mode (Enabling Authentication)

Setup and Turn on User Authentication

The process requires two general steps, which are (a) adding an Admin User and (b) clicking a button to turn on user authentication (signing in).

Creating an Admin

Select the Users option under the Utilities tab and create a new User record.

General Tab

The only required fields are the User Name and Password. When creating a password using this dialog, if the user is not signed in or is not editing his/her own user information, the password entered becomes temporary and the user (represented by the User record) must choose a different password the next time signing in.

If a Person record already exists for this User, select that record in the Person field. By default, the Status is set to Active and must remain so for the user to have the ability to sign in.

The Language option has a drop down menu where a user can specify which language they want their software to be in when they sign in. The language selection is unique to each user.

A Windows User name can be used instead of an Ape Software specific username and password in order to streamline the user experience and to
cut down on password clutter. To use this feature, enable the Windows User option by checking the 'Sign In with Windows User Name' box in the Security tab of the Options dialog.

Roles/Security Tab

In the Roles/Security tab (see below), click the Administrator checkbox to assign Admin privileges for this User.

Activity Data Tab

None of the fields are editable in the Activity Data tab. This tab shows past modifications for better user accountability.

Turning On User Authentication

After creating at least one user with an Administrator role, open the Options dialog by selecting Options in the Utilities menu and selecting the Securities tab (see below).
Click the [Activate Sign-In Mode] button to enable authentication. Note: at least one active Admin must exist for this function to work.

**Last updated:** 22 Dec 2016
Password Security

Using the password security dialog


Use the Password Security dialog to set expiration times, password strength, and naming rules.

The default values of zero (0) mean that a setting is not active.

Maximum Settings

When a User is Locked Out, Administrators can reset the User sign-in from the User dialog.

- **Days Before Expiration:** Number of days before a User's Password expires and must be changed.
- **Unused Days Before Expiration:** Number of days a User can go without signing in before their Password expires and must be changed.
- **Invalid Password Attempts:** Number of times an incorrect Password can be entered for a given User before that User is locked out. Entering a correct Password for the same User sets the number of incorrect password attempts for that user back to zero.
Minimum Characters

Minimum Character password rules are enforced when the User creates a new dialog after signing in. The Password assigned by the Administrator in the User dialog is Temporary and is not subject to these rules.

- **Upper Case**: Minimum number of Upper Case characters required in Passwords.
- **Lower Case**: Minimum number of Lower Case characters required in Passwords.
- **Special**: Minimum number of Special Characters required in Passwords.
- **Length**: Minimum overall length required for all Passwords.

Check Settings

- **Cannot Contain User Names**: When checked, Passwords cannot contain the First, Last, or User name of the User signing in.
- **Different From Temp**: When checked, Passwords cannot be the same as the Temporary Passwords set by the Administrators.

**Last updated**: 27 Feb 2017
Database Password Encryption

Encrypting your Calibration Control database with a password

Part of your data security with Calibration Control includes the password encryption of your MS Access database. If you need to meet the requirements of the FDA's 21 CFR Part 11 requirements, then you know the importance of data security.

So how do you do it? The instructions for setting a password on your MS Access database are different depending on what version of MS Access you are using. Here's a search that should help you find those instructions: setting password MS access database

If you do not have MS Access installed on your computer, send me a copy of your apecal.mdb database and the password you want. I will encrypt the database for and send it back.

**Last updated:** 11 Aug 2012
Change Permissions or Reset Roles

Change the Roles required for any Permission

Find the Permissions dialog in the Security tab of the Program Options menu.

Currently there are 111 different Permissions and more added with each new feature that requires access control. All Permissions can be viewed with the Name combo box in the Permissions dialog (below). For example, the first Permission on the list is 'AttachmentAdd', which translates to Permission to Add Attachments. In the image below, anyone with a Technician role or higher has Permission to Add Attachments.

Permissions Edit Dialog

There are also two reset options, one for the current Permission and one for all Permissions.

Last updated: 27 Feb 2017
Use Audit Log to Monitor Changes (Change Control)

Keep track of changes with the Audit Log

The Audit Log automatically records all data changes within the application so you can always find out What, When, How, and from Which computer a Change was made. If you use Calibration Control in User Authentication mode (sign-in mode), the Audit Log will also keep track of WHO made the change.

The Change Log

When you select 'Change Log' from the Utilities menu, you will see the Top 100 most recent changes over the last two weeks. If you like you can see more records and filter a different time period. You can also print and export from the Change Log.

Last updated: 6 May 2012
Utilities

Backup and Restore Database

Keep your data safe by regularly backing up.

Backing up the Ape database on a weekly or even daily basis is a foolproof way to keep from losing data by accidental deletion or network/computer malfunction. There are several solutions to keeping data safe while using MS Access or MS SQL Server, or even if the database is kept on the same computer. Here are a few suggestions . . .

Multiple Physical Locations Rule

Always ensure that the backup location is a different physical hard [disk] drive (HDD) location from the original file(s). The farther apart those locations are geographically, the better.

Backup Options

When installing Ape software the default location for the MS Access database file is on the same computer where the software is installed. See the help topic on finding your database to find the specific location. In this situation, if the HDD crashes then all data will be lost. Therefore, a good plan is to store the backup data on a data storage device separate from the computer (e.g., external HDD and/or cloud service).

If using the SQL Server version of Ape software, the location of the database (an MDF file) is controlled by the SQL Server and is incrementally backed up to an LDF file. Depending on the selected choices during installation or migration (from MS Access to MS SQL Server), the database could be on the same computer or it could be somewhere on one of the servers in the network.

Whether using Access or SQL Server, there are two primary backup options:

1. Use your own backup routine to back up the database and other important files to a remote location. The remote location is an external storage device (e.g., HDD or key) or a network location other than the current computer.

2. Use the following backup routine to safeguard data.
**MS Access Backup Utility**

Use the Ape software database backup utility to create backup copies of the database.

To use, select a file name for the backup; something like a date code and 'calibration_backup' work well. Next, select the location or file path to back up to and then click the [Backup] button. Remember to choose an HDD location other than the HDD where the live database is stored.

A success message is displayed if the backup operation was successful.
Restoring a Database

**Warning:** Restoring a database completely overwrites the current data. Make a dated backup of the current database contents before restoring a previous version of the database.

1. First, close all open screens.
2. From within Ape software, click the Restore Database option (directly below the Backup Database) option in the Utilities menu.
3. Click [Browse] from within the Restore Database dialog to navigate and select the backed up database ready to be restored.
4. Click the [Restore] button. Pay attention to the warning dialogs.
5. When finished, click the [Close] button on the Restore Database dialog.

If any data screens have been left open, refresh or close and reopen to see the restored data.

**Last updated:** 30 Dec 2016
Locating Database File (MS Access)

Find the database and configuration files

By default, the apecal.mdb database is stored in the Settings Folder unless the database was moved to another location, like a network folder. The default Data & Settings Folders is different for different versions of Ape Database Software and different operation systems. Refer to the Folders Help Topic for an overview of the ones used by Ape Database Software.

Method 1 - Version 5.5 and Higher

This is the best method to find the database if the application can be opened. The easiest way to find the Data Folder in versions 5.5 and higher is to select the Open Data Folder Option from the File dropdown menu.

Otherwise, the default Data Folder is located at:

C:\Users\Public\Documents\Ape Software\Calibration Control

Method 2 - Version 8.0 and Higher

This is the best method to find the database if the application cannot be opened. Versions 8.0.4 and higher automatically create a Connection Log file (connectionlog____.csv) found in the Settings Folder (see section above). The Connection Log can be read with a spreadsheet program, like MS Excel. This file logs each of the
connections to the database (e.g., path). A blank path statement in the connection log means that the database was located in the default location (i.e., Settings Folder).

**Method 3 - General Config File**

If the apecal.mdb file is not located in the folders described above, the path to the database can be found inside the general.config file located in the Settings folder. After finding the general.config file, open it either by double-clicking or using a common text editor like Notepad.

```xml
<?xml version="1.0" encoding="utf-8"?>
<configuration>
  <global>
    <tb1Global key="ConfigName" value="Access_Sample_Tester" />
    <tb1Global key="ConfigColor" value="414178" />
    <tb1Global key="ConnectionType" value="OleDb" />
    <tb1Global key="Server" value="" />
    <tb1Global key="CustomPathName" value="apecal-sample_db_2016-06-29.mdb" />
    <tb1Global key="ConnectionString" value="" />
    <tb1Global key="Ace" value="true" />
    <tb1Global key="OleDbServices" value="False" />
    <tb1Global key="AutoSqlLogin" value="False" />
    <tb1Global key="WindowsAuth" value="False" />
    <tb1Global key="SqlUserName" value="" />
    <tb1Global key="SqlPassword" value="" />
    <tb1Global key="ApeUserName" value="" />
    <tb1Global key="ApePassword" value="" />
    <tb1Global key="FilesPath" value="" />
    <tb1Global key="LCID" value="en-US" />
    <tb1Global key="Email" value="" />
    <tb1Global key="CrashNotiifyApe" value="False" />
    <tb1Global key="DatabasePath" value="C:\\Users\\public\\documents\\ape software\\calibration control\\" />
    <tb1Global key="AccessPassword" value="" />
    <tb1Global key="DefaultLabelPrinter" value="" />
    <tb1Global key="CalibrationOrderBy" value="" />
    <tb1Global key="CalibrationWhere" value="" />
    <tb1Global key="TopCellRecordCount" value="" />
    <tb1Global key="ViewStatusBar" value="true" />
  </global>
</configuration>
```

**Last updated:** 28 Nov 2016
Inspector Initials Conversion Utility

Convert Old Inspector Initials to Person Record

In the Calibrations dialog the 'Inspector Initials' text field was replaced by 'Technician' combo box, which is now a People field. You can convert old Inspector Initials records to fit the Technician field using the Inspector Initials utility.

Menu

Display the Inspector Initials screen by clicking Inspector Initials in the App Utilities tab of the menu ribbon.

Grid

The Inspector Initials screen can be filtered just like the other Calibration Control screens. Right-click in the Inspector Initials screen to view the Record options popup menu.

Convert

Use the Update Inspector Initials dialog to convert all the old names (Inspector Initials) to an existing Person record. Once converted, the people identified by the old Inspector Initials will be visible again in the historical Calibration records.

Last updated: 9 Nov 2013
Troubleshooting

Simple Troubleshooting

Fix most setup or configuration problems

Most configuration or setup problems you may encounter while using the Ape Software database can be resolved or isolated using the following steps.

1. **Version:** Confirm you have the most current version installed: [Download Ape Software]

2. **Reset 1:** Try a level-one reset by clicking the [Restore Defaults] button in the Options dialog.

3. **Reset 2:** Try a level-two reset by closing Ape Software and deleting these files in the Settings folder: general.config file and layout folder. Your Settings Folder is at:
   - In Win Vista/7 = C:\Users\Public\Documents\Ape Software\Calibration Control
   - In Win XP = C:\Documents and Settings\All Users\Documents\Ape Software\Calibration Control

**Note:** The database location is defined in the general.config file. Therefore, if you delete the general.config and you have an 'apecal.mdb' file in the Settings Folder, which is the default location for the Data Folder, the application will automatically collect to that database (i.e., apecal.mdb). If the apecal.mdb file does not exist in the Settings folder, you will see the following dialog. Follow the prompts of the dialog to re-connect to your database.
1. **Isolate Access Database:** Assuming none of the above measures resolve your problem, this step will help you identify if there is a problem with your database.
   a) Ensure Ape Software is closed and open the Data folder. Unless you changed its location, the Data folder is the same location as the Settings folder (above).
   b) Rename the apecal.mdb file to something else, like _apecal.mdb. This will make Ape recreate a new default database in your Data folder.
   c) Restart Ape and select the [Yes] button to 'Create a new calibration database' when you see the dialog above.
   d) If your problem is resolved in the sample database, then zip your _apecal.mdb file (your database) and the errorlog.html and email these files to service@apesoftware.com. Be sure to describe what you are experiencing.
   e) If your problem continues to occur with the sample database, contact Ape Software for assistance.

**Problem Steps Recorder**

If you are using an edition of Windows 7 or higher, you can use the built-in Problem Steps Recorder to record the steps you are taking to reproduce the error. Contact Ape Software at service@apesoftware.com with the following information, or as much of it as possible:
   a) Description of what you are doing that leads to the issue you are trying to communicate. Be as basic/literal/simple as possible.
   b) Problem Steps Record File (see above), if possible (file has an *.mht extension)
   c) errorlog.html file from the Settings folder
   d) general.config file from the Settings folder
   e) apecal.mdb file from the Data folder
   f) Zip above files into a single file/folder if you know how

**Last updated:** 8 Feb 2017
Cannot Save

Fixing the 'Record cannot be saved' error

Although no user has yet reported this issue, I wanted to share what I found in case someone out there needs it.

The Problem

By default, Calibration Control uses an MS Access database file (apecal.mdb) and within that file is a table of all your equipment (tblEquipmentMaster). In this table, there is an AutoNumber field (MasterID) that automatically increments one UNIQUE number for every equipment record you add. Therefore, if you already have 10 records in your database numbered 1 through 10 and you add one more, the MasterID field assigns itself the number 11. Anyway, that's the way it's supposed to work.

I came across a situation where the AutoNumber loses count. When you try to add a new record the AutoNumber field tries to assign a number (like 10) to itself when there is already a record using that number. When this happens, you see the above message.

Allen's Solution

Fortunately, Allen Browne has published a solution for fixing AutoNumbers when Access assigns duplicates. Allen's instructions are so easy to follow that you don't need to be an Access guru to follow along.
**My Solution**

Just in case you wanted it, I took Allen's code (above), placed it in a small MS Access database, and placed it on this website for you to download (sign-in required). If you are more comfortable with importing objects into Access (like tables of data), you can import the AutoNumberFix module directly to your apecal.mdb database, make one small modification, run it, and you're done.

**Step-by-Step**

1. After you download and unzip the AutoNumberFix.mdb, open your apecal.mdb with MS Access.
2. Using MS Access 2007/2010 as an example, click on the 'External Data' tab and select the Access icon.
3. Select the AutoNumberFix.mdb file.
4. When you get to the Import Objects dialog, select the Modules tab, and import the AutoNumberFix module.
5. Double-click on the AutoNumberFix module, which should now be imported into your apecal.mdb database, and you should see the Microsoft Visual Basic for Applications window.
6. From the Tools dropdown menu, select References, find 'Microsoft ADO Ext. x.x for DDL and Security', click its checkbox, and then the [OK] button.
7. Now, place your cursor insider the code and click the Play button in the toolbar or just hit the [F5] button on your keyboard.
8. If it shows you a dialog like the one below, click the [Yes] button and you're done!

**Last updated:** 1 Jan 2013
Find Lost Records in Equipment Browse

Missing records that should be there?

The two most common things that make it look like some or all of your records are missing are (a) un-cleared filters in the filter row or (b) records with hidden status codes.

Clearing the Filter Row

The row at the top of the grid that looks blank is actually a filter row. Learn more about the filter row by checking out the filter row help topic. A single column can be cleared by clicking on the clear filter button (funnel with a line through it) within that column. Clear all of the filters in the row by clicking on the far left clear filter button. If the phrase 'FILTERED Records' is displayed in the Header, then not all of the fields have been cleared.
Showing Hidden Records

Some of the records may be hidden because they are assigned a status code with a ‘Hide these records in the Browse Table’ attribute set to true. Learn more about hiding and showing records with certain Status Codes by reading the Hiding Equipment Records by Status Code help topic. Just right-click in the Browse Grid and toggle the Show Hidden Records option.

Last updated: 17 Dec 2016
Key Value Submitted Already Exists

Cannot create a new record because it will create a duplicate key value

In MS Access or Calibration Control (when using MS Access), sometimes attempting to create a new record results in the following message stating that the, "Record cannot be saved because a key value already exists."

There are three possible causes for this error. In order of likelihood, the possibilities are:

**Possibility 1: Record Exists and is Hidden**

This possibility applies to Equipment records only. Another record with the Equipment ID you are attempting to use in your new record already exists and is hidden. To ensure you are displaying all Equipment records, right-click on the Equipment grid and ensure the 'Show Hidden Records' option is selected. Then try to find the Equipment ID you are trying to add.

**Possibility 2: Record Exists and is Filtered Out**

All data grids in Calibration Control, including Equipment, have a filter row at the top that looks something like a blank row with some additional buttons. It is possible that a filter exists and is hiding a record with the same key value that you are trying to use. Since it is possible to accidently hit the space bar, thereby creating an invisible filter, it is a good habit to always use the "clear all filters" button at the far left of the data grid, circled in the following image.
Possibility 3: MS Access Auto Number Error

The third possibility relates to the Autonumber field in an MS Access table losing count of which number is next. For example, the Autonumber field value for each row in a table with 100 records (none ever deleted) will be 1 through 100. So, when the 101 record is added, the Autonumber field should add the number 101. The bug occurs when the Autonumber field chooses a number that already exists (e.g., 95) thereby throwing the "key value already exists" error. Autonumber fields always have a "No Duplicate" setting. Additionally, this bug only seems to occur when the Autonumber field is not the Primary Key, as demonstrated in the following image.

Although Calibration Control users have only ever reported this bug when creating new Equipment records (one table), there are five tables in 7.x versions and earlier of Calibration Control that are susceptible to this bug. These tables are:

- tblEquipmentMaster (Equipment Records)
- tblDepartmentCodes (Departments)
- tblJobEquipment (Jobs Related to Equipment)
- tblLocationCodes (Locations)
- tblStatusCodes (Status Codes)

To solve this problem, contact Ape Software and we will fix it for you at no charge. Otherwise, close Calibration Control and use MS Access to open the suspect table in Design Mode and move the Primary Key to the Autonumber table.

If you cannot move the primary key, you may need to delete associated relationships first. Do this closing the table in question and opening the Relationships tool in the MS Access Database Tools menu (2007 and higher). After the relationships are displayed, ensure all relationships are visible by clicking the All Relationships button in the menu. Delete all relationships that link to the Autonumber field of the table in question and then retry the previous step.

Again, if you need help with this problem, please contact Ape Software.

For additional reading on this MS Bug, the best source I found so far is Garry Robinson's post for "The AutoNumber 'goes crazy' fix". Give it a read.

Last updated: 30 Oct 2013
Lost or Invalid Product Key / Lost All Records

Lost your product key or all equipment records?

If it looks like you have lost some records or the product key is either absent or is no longer valid, the most common scenario is that there are multiple databases and you are currently connected to a new blank database. Therefore, the solution is to redirect Ape software back to the master database.

How It Happens

**Network Database:** The database has been moved to a common network location for multiple users, safety, security, and/or ease of backup.

**Database Not Available:** When launching Ape, it attempts to connect to the network database and the network is down, paths are remapped, or permissions are changed. Ape displays the following dialog and you hit the [Enter] key to get past it, thereby creating a new database in the default location on your C drive.

How to Fix

Follow the instructions under the Add Additional Users topic on the Creating a Multi-User Environment help page.

Related Help Topics

- Locating Database File (MS Access)
- Creating a Multi-User Environment

Last updated: 27 Feb 2017
No Label File Error

The label file could not be loaded

When attempting to print a label, the following dialog will display when (a) there is a problem with the label drivers, (b) printer, or (c) the label file is missing.

This situation most often occurs after users become accustom to their label printer functioning properly followed by a drastic computer change. The suspect changes include (a) new computers, (b) wiping hard drives and reinstalling the OS, (c) cleaning after a virus, and (d) installing or uninstalling other software.

The single problem in each of these scenarios is that the printer drivers are not reinstalled or not installed properly, as was previously accomplished.

Label Printer Drivers

Download and install the Brother label printer driver for your model. If you are using a label printer connected to the network (rather than your computer) or the label printer is connected to another computer, you will need to manually add the label printer to the Windows Devices and Printers.

P-touch Editor Software

If you can see your label printer enabled in the Windows Devices and Printers but you are still unable to print your labels, try installing the free Brother P-touch Editor Software.

If this still does not resolve your problem, contact Ape Software for assistance.

Last updated: 27 Feb 2017
Troubleshoot SQL Server Connection  
for Use with Ape Software Databases

**WARNING:** Ape Software applications can only connect to databases created by and specifically for the given Ape Software application. Blank databases, databases created by non-Ape professionals, and modified Ape Software databases will not connect or not connect properly. Also, SQL Server databases created by migrating an existing MS Access database will also not work and often have severe functional issues sometimes not immediately visible.

**Universal Data Link (UDL) File**

Use a UDL file to create a direct connection to a SQL Server database with as few other variables as possible, like connecting through other software. This helps to simplify and focus the troubleshooting process on the most likely failure points (e.g., SQL Server configuration or network permissions).

A UDL file is simply a text file with a .udl extension. Therefore, creating a UDL file is as simple as creating a new text file and changing its extension to UDL.

**Create a UDL File**

Create a UDL file by (1) right-clicking in a folder or desktop, (2) selecting 'New', (3) selecting 'Text Document', and then (4) creating a text file with a .udl extension (e.g., MyTestFile.udl).
**Note:** If a warning appears related to making the file unusable by changing its extensions, ignore the warning.

**Data Link Properties**

Double-click on the new UDL file and the following Data Link Properties dialog appears.
**Provider Tab**

Select the appropriate SQL Server Provider.

**Connection**

In the Connection tab:

1. Enter the fully qualified SQL Server name.
2. Select the authentication method (i.e., Windows or (1st choice) or SQL Server (2nd choice) and enter the appropriate user name and password, if SQL authentication is used.
3. Select the database. By default, this is apecal but must match whatever name is actually used on the SQL Server.
4. Click the [Test Connection] button.

If the above test fails, then work with your organization's Database Administrator (DBA) to resolve the connection before attempting to use the Ape Software application. If using SQL Server authentication, the **User Security** section of the Add Ape Database to SQL Server help topic is often useful.
Otherwise, if the above process leads to a 'Test connection succeeded' dialog and the Ape Software application cannot connect to the SQL Server, contact Ape Software to continue troubleshooting the connection.

**Last updated:**  3 Jan 2017
Upgrade / Install Miscellaneous

Update Access Database to Current Version

Fixing access database if update has frozen

This help topic pertains only to installations of Ape Software that use MS Access as their database (vs. MS SQL Server). This topic is also especially applicable to large database updates like version 7.3 and 8.0.

After installing a new version of the MS Access Database (apecal.mdb), it may require an update. Ape Software will usually update the database automatically when running a new version of the software for the first time.

In some situations (e.g., database on remote server of slow network, slow client computer, and/or very large database), the update process will proceed slowly and may appear to have frozen. In situations where it appears to have frozen, the best action is to leave it alone (do not cancel) because it is most likely that only the update dialog has frozen although the update process continues.
If an update is stopped before finishing completely, do the following:

1. Ensure you are familiar with the folders used by MS Access.
2. Open the Data folder and rename the apecal.mdb database (e.g., old-apecal.mdb).
3. In the Data folder (same folder) find the **most recent** file that looks similar to 'apecal-auto-backup-634863253638932672.dbk'. This is an auto backup of the database, which was the first step in the attempted backup process.
4. If the database is not already on the local computer (your PC), copy the .dbk file to the Settings folder (on your computer) and rename it to apecal.mdb.
5. Restart Ape and allow it to begin the update process again. This time, even if the progress dialog freezes, do not cancel.
6. Assuming all previous steps complete successfully, move the database back to its network location (if applicable).

If the steps above do not work, place the .dbk file (non-upgraded database) in a zip file and email it to Ape so we can convert the database for you. For large zip files, and if you know how, place the zip file on a file server and send the link to Ape instead of the file.

**Last updated:** 8 Feb 2017
**Update a SQL Server Database**

**Update an Ape Software SQL Server Database**

Use these instructions to update the database structure of your apecal database installed on your SQL Server 2008 R2, 2012, or 2014.

Before beginning, ensure you are using **SQL Server Management Studio** and you are signed in to your SQL Server with enough permissions to create and update databases and their objects (e.g., system admin). Your IT Group may need to perform the update.

All of the SQL files you will need to update your database reside in the **SQL Tools** folder under the CC program folder located at `Program Files\Ape Software\Calibration Control`.

Before attempting to update your apecal database **protect your database with a back-up** by right-clicking on the database, selecting Tasks, and then selecting Back Up and following the dialog instructions.
Determine the current database structure version by selecting records from the `dbo.tblDBVersion_DO_NOT_EDIT` table. There should only be a single record.

If you do not have a `StructureVersion` field in the file name, use the following table as a guide to interpret the `dbo.tblDBVersion` table and how to choose the appropriate `sql_update` SQL file to begin with:
<table>
<thead>
<tr>
<th><strong>Indication</strong></th>
<th><strong>Database Version</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>dbo.tblDBVersion_DO_NOT_EDIT table does not exist 1</td>
<td>1</td>
</tr>
<tr>
<td>Rev = 1.1, 7.0, 7.0.1, etc.</td>
<td>Rev = Version</td>
</tr>
<tr>
<td>Rev = DoNotEdit</td>
<td>Use StructureVersion field</td>
</tr>
<tr>
<td>StructureVersion = 15</td>
<td>15</td>
</tr>
</tbody>
</table>

Apply the sql_update SQL files in their sort order beginning with the version indicated by the DbVersion table (above). For example, if the Rev field of your database equals 7.0.1, then begin with file sql_update_04 (pgm ver 7.0.1 to 7.2.0).sql (update from 7.0.1 to 7.2.0). If the DatabaseVersion equals 24, then begin with sql_update_10 (db ver 24 to 30).sql (file 10).

1. sql_update_01 (pgm ver 1 to 1.1).sql (read as version 1.0 to 1.1)
2. sql_update_02 (pgm ver 1.1 to 7.0).sql (same as above)
3. sql_update_03 (pgm ver 7.0 to 7.0.1).sql
4. sql_update_04 (pgm ver 7.0.1 to 7.2.0).sql
5. sql_update_05 (pgm ver 7.2.0 to 7.2.2).sql
6. sql_update_06 (pgm ver 7.2.2 to 7.2.5).sql
7. sql_update_07 (pgm ver 7.2.5 to 7.2.5.8).sql
8. sql_update_08 (pgm ver 7.2.5.8 to db ver 15).sql (read as program version 7.2.5.8 to database version 15 - new system)
9. sql_update_09 (db ver 15 to 24).sql (read as database version 15 to 24)
10. sql_update_10 (db ver 24 to 30).sql
11. sql_update_11 (db ver 30 to 31).sql
12. sql_update_12 (db ver 31 to 38).sql
13. sql_update_13 (db ver 38 to 39).sql
14. sql_update_14 (db ver 39 to 40).sql
15. sql_update_15 (db ver 40 to 41).sql
16. sql_update_16 (db ver 41 to 42).sql
17. sql_update_17 (db ver 42 to 43).sql
18. sql_update_18 (db ver 43 to 46).sql
19. sql_update_19 (db ver 46 to 51).sql
Open each file with SQL Server Management Studio and click the [! Execute] button to apply the changes until you finish with the final SQL file. Ensure that none of the text in the SQL file is highlighted when the [! Execute] button is pressed because this will run only the highlighted text. If you need help, contact Ape and we can setup a screen share and do this together.

Last Updated: 8 Feb 2017
Installing Version 4

Installing Version 4.3.7 on Modern Operating Systems

Although 4.3.7 is long gone and is no longer supported by Ape Software, some of our long-time users have experienced difficulty installing this older software on modern operating systems, like Windows Vista or 7. If we can't convince you to download the most current version of Calibration Control (sign-in required), the following information should help.

Download

If you lost your copy, you can download a copy Calibration Control, version 4.3.7 here.

Product Key

Use your existing product key; it begins with VB01 or another number (VB02, VB03, VB04, etc.). If you need us to look up your key, let us know what you need and give us a day or two to look up your info in our achieve files.

.NET 1.1

Download and install .NET 1.1, even if you already have a higher version installed. Having .NET 3.5 or 4.0 does not mean that version 1.1 is installed. Learn how to check your .NET versions with this article. If you experience difficulty with installation on Windows Vista or 7, read this article on installing .NET 1.1 on the Windows 7 OS.

MS Jet 4.0 (database connectivity)

If CC 4.3.7 does not run properly, you may need the old Microsoft database connectivity drivers. You can find the MS Jet 4.0 database drivers here.

Data Access Components

Finally, you may also need the MS Data Access Components.

Last updated: 12 Nov 2011
Downgrading a Database

Return database to the previous version

Sometimes after a new version of Ape Software is deployed a decision is made to return to a previous version. Unfortunately, many Ape updates include changes to the database, which cannot be uninstalled as easily as the software. This is why a manual database backup is strongly encouraged before database and an automatic backup is made before updating the MS Access database.

Restore Access Database

1. Understand the Folders used by Ape
2. Open the Data folder and rename the apecal.mdb (e.g., higher-version-apecal.mdb)
3. In the same folder, rename the most recent database backup file from apecal-auto-backup-[long number].dbk to apecal.mdb.
4. Install the previous version of Ape or download and install one of the older Ape versions that your product key works with.
5. Restart the previous version of Ape to confirm the database works.

Restore SQL Server Database

Use the same instructions in Installing SQL Server – Restore (1st Method) except choose the file you backed up as part of the update process.

Last updated: 8 Feb 2017
Import Data from Version 4

Unhide the V4 import button

Navigate to the Options dialog either from the File or Utilities tab in the ribbon menu. Within the Admin tab, click on the [Feature Visibility] button. In the 'Hide Checked Features' dialog click on the [App Utilities] tab and uncheck the 'Import Group' box; the 'Version 4 Data' should be unchecked automatically.

Restart Calibration Control to make the 'Version 4 Import' button visible.

Import Data

Begin the import process by selecting 'Version 4 Data' from the Utilities tab of the ribbon menu.

Source Directory

Click the [Browse] button and navigate to the Access file you need to import and then click [Next].
Transfer Data

Note that if you try to import records from the source database to the current database and the record already exists, the import process will ignore those records. For instance, if one of the equipment records has an ID of ‘121’ and your current database has a MasterID of ‘121’, then record 121 will be ignored. Therefore, correct ID discrepancies before transferring data.

Last updated: 6 Feb 2017
Upgrading from 5.4 to Current Version

Instructions for upgrading from a previous Calibration Control

Follow these instructions to ensure a clean migration from a previous version of Calibration Control 5.x to the most current version. Unlike 5.4 and earlier, 5.5 and later store program, data, and settings files using a method compliant with Windows Vista and 7 in addition to XP.

Step 1: Backup Your Data

Be safe and backup your data just in case something goes wrong. See the help page on backing up a database file in the help section.

Step 2: Uninstall Previous Version

Although the current version should automatically uninstall previous versions, uninstalling the current version first will ensure this is true. The data file (apecal.mdb) or data stored on SQL Server will not be affected.

Step 3: New Product Key

You will need a new product key but the current version will be fully functional for the 30-day trial period.

Step 4: Download and Install

Whether you have a new product key or not, you can still download the newest version of Calibration Control (sign-in required) and it will remain fully functional for 30 days. Be sure to follow the instructions on the download page relating to the Microsoft prerequisites. The current version will not erase any of your data but it should uninstall the previous version automatically.

Step 5: Using Your Existing Database

The current version can import the 4.x data and upgrade the 5.x database to the current structure. Move the current database to a new location or tell Calibration Control where the current data resides (e.g., network server).
If maintaining the database file in a central location, like a network server, or when using a SQL Server, start Calibration Control and follow the prompts for connecting to the existing database. Otherwise, Calibration Control should be able to find the previous databases. If it cannot, it will ask for help.

If Calibration Control needs help finding the database, find the current database file (apecal.mdb) and move it to the new default data folder in one of these two locations, depending on your operating system:

- **Windows XP**  
  C:\Documents and Settings\All Users\Documents\Ape Software\Calibration Control\  
- **Windows Vista and 7**  
  C:\Users\Public\Documents\Ape Software\Calibration Control\  

Start Calibration Control and it should find the database.

**Final Step: Removing Extra Files**

After the new copy of Calibration Control is up and running, you may want to clean up your hard drive by removing any remaining settings files left behind by the previous versions. Find these files in one or both of the following folders:

- In Windows XP systems, Calibration Control stored the program, settings, and data files all in the same folder located at: C:\Program Files\Ape Software\CCV5. You can delete this folder and everything in it after moving your apecal.mdb database file.
- In Windows Vista and 7 systems, Calibration Control stored the program files in the same folder as the XP systems (above) but stored the settings and data files in the folder identified in our Locate Your Database help topic. You can delete this folder and everything in it after moving your apecal.mdb database file.

**Last updated:** 27 Feb 2017
Not Original Key Owner

Need to upgrade a key you didn't originally purchase?

One of the situations we bump into often is that an existing must create an update product key but that existing user is not the original user and sometimes does not have an account. The original user is often no longer with the company. This is a simple situation to solve.

1. Sign in with your own account. Create one (register) if required.
2. Navigate to the Check Product Key page. Your email will show up in the email field (leave it there).
3. Enter your existing product key (begins with AS09, AS10, or VB) in the Product Key field and click the [Check User Key] button. The buttons at the bottom of the page will change to FREE or the appropriate upgrade price depending on your key qualification.
4. Enter/confirm your Name, Email, & Company. You can also enter a Reference and Note if desired, although not required.
5. Click the Access or SQL button to create a new product key, if a purchase is required, or to generate a new key.

Contact us if you need help.

Last updated: 27 Jun 2011
<table>
<thead>
<tr>
<th>Asset Labels, 160</th>
<th>Filter Row, 42</th>
<th>Product Key, 10, 246</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Transfer, 81</td>
<td>Folders, 210</td>
<td>P-touch, 151, 153</td>
</tr>
<tr>
<td>Audit Log, 230</td>
<td>Future Calibration Labels, 97</td>
<td>Range, 146</td>
</tr>
<tr>
<td>Authentication, 223</td>
<td>Grid, 32</td>
<td>Report, 183, 193</td>
</tr>
<tr>
<td>Auto Notify, 82</td>
<td>Grouping, 44</td>
<td>Report Parameters, 190</td>
</tr>
<tr>
<td>Backup, 231</td>
<td>Hiding, 45</td>
<td>Reports, 99, 177</td>
</tr>
<tr>
<td>Brother, 151, 153</td>
<td>Highlight, 38</td>
<td>Restore, 231</td>
</tr>
<tr>
<td>Calendars, 175</td>
<td>Imported, 16</td>
<td>Sample, 9</td>
</tr>
<tr>
<td>Calibration, 9</td>
<td>Inspector Initials, 236</td>
<td>Sample Data, 30</td>
</tr>
<tr>
<td>Calibration Event, 46</td>
<td>Install, 252</td>
<td>Security, 220, 226</td>
</tr>
<tr>
<td>Calibration Events, 57</td>
<td>Jobs, 79</td>
<td>Sign-In Mode, 223</td>
</tr>
<tr>
<td>Calibration Frequencies, 65</td>
<td>Label, 151</td>
<td>Size, 146</td>
</tr>
<tr>
<td>Certificate, 182</td>
<td>Label Fields, 168</td>
<td>SQL, 196</td>
</tr>
<tr>
<td>Chain Printing, 171</td>
<td>Label Printers, 151</td>
<td>SQL Server, 19, 26, 248, 254</td>
</tr>
<tr>
<td>Charts, 173</td>
<td>Labels, 99</td>
<td>Startup INI, 119</td>
</tr>
<tr>
<td>Check Out, 85</td>
<td>Locations, 137</td>
<td>Status Change, 121</td>
</tr>
<tr>
<td>CNR Labels, 164</td>
<td>Masks, 102</td>
<td>Systems, 130</td>
</tr>
<tr>
<td>Companies, 125</td>
<td>Measurement Templates, 73</td>
<td>Temperature, 219</td>
</tr>
<tr>
<td>Company Types, 144</td>
<td>Measurement Units, 148</td>
<td>Terminal Mode, 123</td>
</tr>
<tr>
<td>Connection String, 184</td>
<td>Module Codes, 149</td>
<td>THUM, 216</td>
</tr>
<tr>
<td>Custom Barcodes, 92</td>
<td>Move, 12</td>
<td>Troubleshooting, 237</td>
</tr>
<tr>
<td>Database, 9</td>
<td>Multi-User, 14</td>
<td>Uncertainty Budget, 105</td>
</tr>
<tr>
<td>Departments, 129</td>
<td>Options, 200</td>
<td>Update, 254</td>
</tr>
<tr>
<td>Downgrading, 259</td>
<td>Out-Of-Tolerance, 46</td>
<td>Upgrade, 252</td>
</tr>
<tr>
<td>Due Cal Labels, 155</td>
<td>Password, 226</td>
<td>Version 4, 260</td>
</tr>
<tr>
<td>Due Report, 178</td>
<td>People, 138</td>
<td>Website, 115</td>
</tr>
<tr>
<td>Encryption, 228</td>
<td>Permissions, 229</td>
<td>Worksheets, 180</td>
</tr>
<tr>
<td>Equipment Types, 135</td>
<td>Procedural Steps, 110</td>
<td></td>
</tr>
<tr>
<td>Feature Visibility, 94</td>
<td>Procedures, 140</td>
<td></td>
</tr>
</tbody>
</table>