

ACD/Forms Manager

Version 11.0 for Microsoft Windows

User's Guide

***Building an ACD/Labs Database
the Easy Way***

Advanced Chemistry Development, Inc.

Copyright © 1998–2007 Advanced Chemistry Development, Inc. All rights reserved.

ACD/Labs is a trademark of Advanced Chemistry Development, Inc.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries Copyright © 2007 Microsoft Corporation. All rights reserved.

IBM is a registered trademark of International Business Machines Corporation Copyright © IBM Corporation 1994, 2007. All rights reserved.

Adobe, Acrobat, PDF, Portable Document Formats, and associated data structures and operators are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries Copyright © 2007 Adobe Systems Incorporated. All rights reserved.

Camtasia is a registered trademark of TechSmith Corporation, and Camtasia Studio is a trademark of TechSmith Corporation Copyright © 1999–2007 TechSmith Corporation. All rights reserved.

All the other trademarks mentioned within this Manual are the property of their respective owners. All trademarks are acknowledged.

Information in this document is subject to change without notice and is provided "as is" with no warranty. Advanced Chemistry Development, Inc., makes no warranty of any kind with regard to this material, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Advanced Chemistry Development, Inc., shall not be liable for errors contained herein or for any direct, indirect, special, incidental, or consequential damages in connection with the use of this material.

Table of Contents

Before You Begin	ii
About This Guide	ii
<i>Advanced Understanding</i>	<i>ii</i>
About the Forms Manager	iii
Mouse Conventions	iii
For More Information.....	iv
<i>How to Contact Us.....</i>	<i>iv</i>
<i>Online Updates</i>	<i>iv</i>
1. Creating a Database Form	1
1.1 Objectives	1
1.2 Creating a New Database Form.....	1
1.2.1 <i>Inserting Data Items into the Form.....</i>	<i>5</i>
1.2.2 <i>Moving and Resizing Using the Mouse.....</i>	<i>6</i>
1.2.3 <i>Form Item Properties.....</i>	<i>7</i>
1.2.3.1 Table of Available Form Elements.....	8
1.2.3.2 Creating a DropDownListBox Item.....	9
1.2.3.3 Required or Optional Item Status.....	10
1.2.3.4 Creating a Date Field	12
1.2.3.5 Creating a ListBox Item.....	12
1.2.3.6 Creating a RadioButtons Item.....	14
1.2.3.7 Creating a File Name Item	15
1.2.3.8 Creating a Multiline EditBox Item.....	15
1.2.4 <i>Adding Labels.....</i>	<i>16</i>
1.3 Aligning and Arranging Items	17
1.3.1 <i>Customizing the Toolbar</i>	<i>17</i>
1.3.2 <i>Aligning and Resizing Using the Toolbar.....</i>	<i>18</i>
1.3.3 <i>Aligning and Resizing Items.....</i>	<i>19</i>
1.3.4 <i>Adding Frames.....</i>	<i>21</i>
1.4 Setting Focus Order	23
1.5 Attaching a Database Form to a Database	24
1.5.1 <i>Attaching in SpecDB</i>	<i>24</i>
1.5.2 <i>Attaching in Other Programs.....</i>	<i>25</i>
1.6 Operations with Database Forms.....	26
2. Applying a Database Form	27
2.1 Objectives	27
2.2 ACD/SpecDB Example Database Form.....	27
2.3 ACD/C+H NMR Predictors Example Database Form	30
2.4 ACD/ChemFolder Example Database Form	31

Before You Begin

Thank you for purchasing an ACD/Labs product with the Database Forms Manager. We have endeavored to produce the easiest to use tool for standardized electronic data input in your user databases.

About This Guide

This guide contains a comprehensive description of all of the options available in ACD/Forms Manager, it is designed for either online use or to be printed and used as a “hard copy” version.

The screen shots shown throughout this reference manual have been taken with a relatively small window size.

The colors and other properties of the window elements described throughout this guide correspond with the default Windows Display Properties.

This user's guide is provided in electronic form, readable with Adobe Acrobat software. If you cannot locate an index topic you need please do a text string search for the relevant word or phrase, or related words.

Advanced Understanding

This manual is intended to be a part of the technical documentation for ACD/Labs software. To study ACD/Labs products gradually, we recommend the following order of working through the technical documentation:

1. Reference manual and tutorial for ACD/ChemSketch (CHEMSK_R.PDF and CHEMSK_T.PDF) to get basic familiarity with drawing structures in the ChemSketch window.
2. User's guide for ACD/Dictionary (DICT.PDF) to familiarize you with the features of looking up structures. If you don't know the exact structural formula of the compound that you want to attach to the spectrum, we recommend you to use ACD/Dictionary.

These documents you can find in the ACD/Labs documentation folder (\\DOCS).

About the Forms Manager

ACD/Forms Manager is a special feature of most database products from Advanced Chemistry Development. This guide is a *supplement* to the main documentation for that product.

ACD/Forms Manager was designed to help you make an electronic data input form for your user database so that as a new record for the database is created, you will be prompted to select values for data fields that are important for your record-keeping.

The available choices can appear as pop-up menus, check boxes, or list-selections for items where there are a limited number of choices, thereby eliminating tedium and typing errors. Alternatively, the input form can have editable text boxes for more "free-form" data. The choice is left up to you. It is extraordinarily simple to use the Forms Manager to design a Database Form exactly to your specifications.


ACD/Forms Manager is available in certain ACD/Labs products that permit the construction of a user database:

- ChemSketch (for ACD/ChemBasic programs)
- ChemFolder
- CHNMR Predictors
- SpecManager
- SpecDB
- Pphysicochemical databasing products (ACD/Log P DB, ACD/Solubility DB, ACD/pK_a DB, ACD/PhysChem Accuracy Extender)
- ACD/ChromGenius and ACD/ChromGenius Batch

In different programs ACD/Forms Manager can be accessed from different menus. For more information on how to run ACD/Forms Manager, refer to the technical documentation on the corresponding product.

Mouse Conventions

You may perform several actions during your work with this software; the following specific words are used to describe them:

- **Point to** means move the mouse pointer  to an item.
- **Click** means point to an item, and press the left mouse button.
- **Right-click** means point to an item, and press the right mouse button.
- **Double-click** means point to an item, and quickly press the left mouse button twice.
- **Drag** means point to an item, and press and hold down the left mouse button while you move the item.
- **Select** means highlight or make an interface element active by either clicking it or dragging over it (other actions are possible if specified in documentation). If used in "select the check box", it means that the check box should be marked with a tick (as opposed to "clear the check box" when the check box should be cleared, without a mark).

For More Information...

To see the latest in ACD/Labs software and services, please visit our Web site at

<http://www.acdlabs.com>

Our Web site is being accessed at the rate of tens of thousands of "hits" per day. There's a reason for this: much is offered through our Web site. As of Fall 2006, we offer free ACD/ChemSketch 10.0, an ACD/LogP Freeware Add-on for ChemSketch, a free ISIS 3D Add-in, free ChemDraw extensions, and a free 2-week demo key for "Interactive Laboratory" sessions where you can run test calculations using Java applets without purchasing software. There are TechSmith Camtasia-based movies which show the operation of many of our software packages (especially ChemSketch) available for download.

We are constantly updating the information on our Web site. The Web site will tell you at which scientific conferences you can visit the ACD/Labs booth. You can browse the Frequently Asked Questions page or drop in and "chat" on our newsgroup, which can also be reached via our web page.

If you would like to stay informed of the latest developments in chemical software at ACD/Labs, please be sure to sign up for e-mail broadcasts at our Web site page:

<http://www.acdlabs.com/feedback/mailing.html>

If you would like to participate in the ACD/Labs forums, please access:

<http://forum.acdlabs.com/>

How to Contact Us

We are accessible through our Web site, phone, fax, and regular mail, but by far the most popular way to contact us is via electronic mail. Questions on pricing, sales, availability, and general issues should be directed to:

info@acdlabs.com

Technical and scientific support issues should be addressed by visiting:

<http://support.acdlabs.com>

Please tell us the name of the software purchaser; the product name, version number, build number, and license ID of the product you are contacting us about (from the **Help** menu, choose **About** to find this information); as well as a description of the problem you are having. If applicable, please tell us the name of the distributor from whom you purchased the software.

Online Updates

All the PC-based software from ACD/Labs contains the capability to have software updates delivered online. You will need the registration numbers of the software and an Internet connection from the same computer on which the software is installed. The updates are small fixes, for example, bringing the actual version number of a program from 11.00 to 11.01. For more information on this, refer to the *ACD/Updater User's Guide* (UP_CLNT.PDF) located in the ACD/Labs documentation folder, \DOCS, or contact our Technical Support Department.

1. Creating a Database Form

1.1 Objectives


In this chapter you will learn how to:

- Create a database form and edit its items;
- Examine the created database form;
- Test the database form; and
- Save the database form to a separate file.



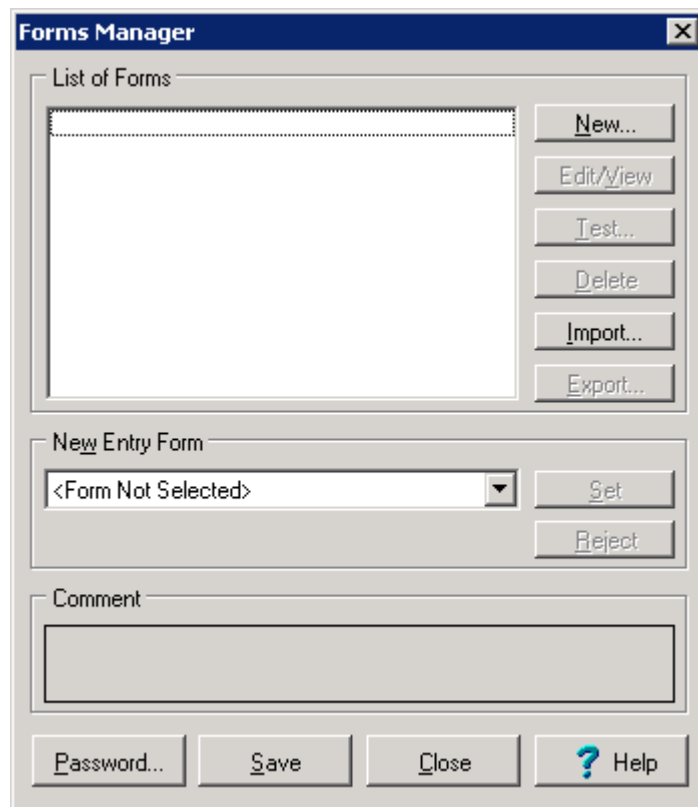
This chapter covers material that appears in the movie **frm_man.exe** which can be downloaded from our web site or found on the installation CD.

1.2 Creating a New Database Form

1. Create a new database or open an existing one in the Database window of any of the software applications mentioned in the Introduction. You can also open and use any of the example databases already created. These can be found in the corresponding EXAMPLE folder in the ACD/Labs installation directory.
2. On the General toolbar, click **Switch User Database to Update Mode** .

- From the **Options** menu, choose **Database Forms Manager** to display the **Forms Manager** dialog box:

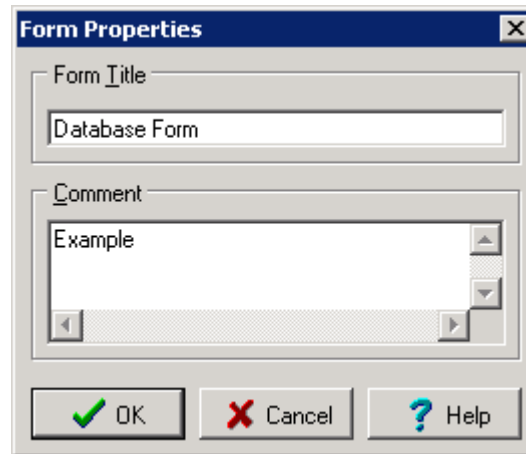
Important Note that the name and location of the command can be different. For example, to display this dialog box from ACD/ChemSketch, in the ChemSketch window, from the **File** menu, choose **Forms Manager**.



Note Depending on the program this dialog box is used in, some parts of it can be absent. The displayed view of the **Forms Manager** dialog box represents all of the possible options.

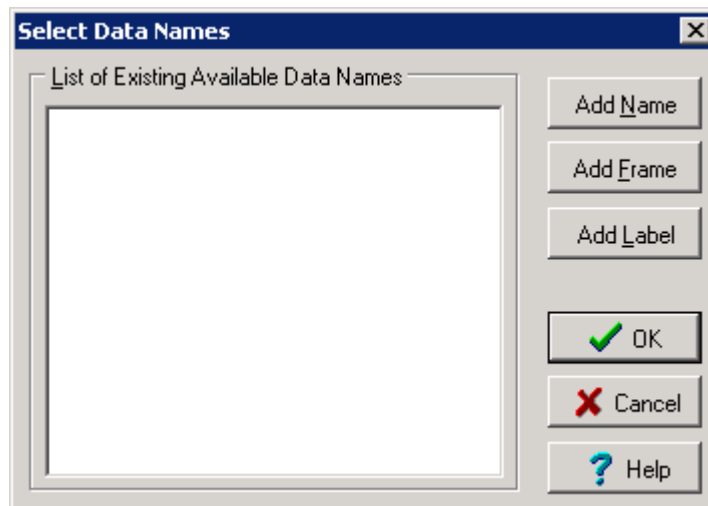
- In the **Forms Manager** dialog box, click **New**  to display the **Form Properties** dialog box.

5. In the **Form Title** box, type *Database Form* as the name of a new form. In the **Comment** box, type additional information (e.g., *Example*), in order to help you to distinguish between several forms (if required).



The 'Form Properties' dialog box has a title bar with a close button. It contains two main sections: 'Form Title' with a text box containing 'Database Form', and 'Comment' with a text area containing 'Example'. At the bottom are three buttons: 'OK' with a green checkmark, 'Cancel' with a red X, and 'Help' with a blue question mark.

6. Click **OK** to save the specified form information and close the dialog box. This will open an empty Edit Form window and display the **Select Data Names** dialog box, in which you can create a list of data field names to be included in the new form. Note that this dialog box can already contain a list of data names that are automatically added from the Record User Data subwindow.



The 'Select Data Names' dialog box has a title bar with a close button. It features a large empty list box on the left labeled 'List of Existing Available Data Names'. On the right side, there are four buttons: 'Add Name', 'Add Frame', 'Add Label', and 'OK' (with a green checkmark). Below these are 'Cancel' (with a red X) and 'Help' (with a blue question mark) buttons.

Note There is a difference between *data field* names and regular names. At this stage the names of the data fields are created. These are distinct from the names of people, instruments, projects, etc. which are considered as *data value*.

7. Click **Add Name**  to add a new field name to the list.

8. In the **Add New Data Name** dialog box that appears, type *Person*. Depending on the program for which this screen form is created, this dialog box contains different options (the **Type** box is available only for ACD/SpecDB):

Note For ACD/SpecDB, in the **Type** box, choose what user data subwindow (Record, Spectrum, or Structure) of the Database window is to be updated with a new user data field.

9. Click **OK** to add the data field name to the list.
10. Using the same procedure, type the names of other data fields you want to appear in Database Form. For this exercise, it is recommended that you enter all of the names from the following list:

Important Once you have entered the data field name into the list you cannot edit or replace it. You can, however, choose not to display it. For example, if you add a misprinted data field name such as *Cporate_No.* when you meant to add *Corporate_No.*, just type and add the second correct entry, and then do not use the incorrect name in the database form. Or you can drop the form with mistakes and create a new one from scratch very carefully.

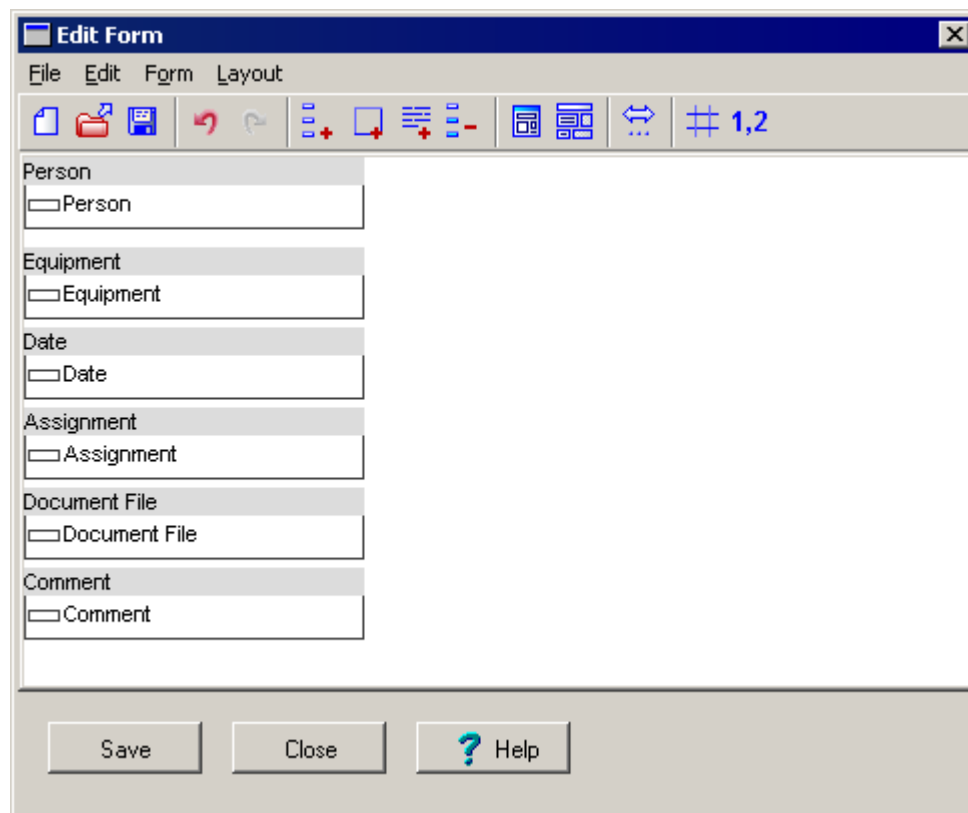
1.2.1 Inserting Data Items into the Form

Once the list of data field names is designated, the next stage is to insert the corresponding items in the database form.

1. Once you have entered all of the data field names in the **Select Data Names** dialog box, select the names you want to include in your form. For the current example, select all of them by clicking the first name (in our case, it is **Person**), and then drag to the last data name (in our case, it is **Comment**).


Tip Alternatively, to select the names in the list, click the entries one by one while holding down SHIFT (to select all of the items between the first and second clicks) or CTRL (to select each item individually).

2. Click **OK** to close the dialog box and insert the corresponding fields into the Edit Form window.



Data items can be arranged in a different fashion in the Edit Form window. Originally, the arrangement of data items depends on the order according to which they are inserted in the window (in our example this order coincides with the sequence of data names in the **Select Data Names** dialog box) and on the size of the window.





Note You can resize the Edit Form window by dragging its corners.

If you want to add more items to the form, click **Add Data Item** .

3. On the Top toolbar, click **Test Form**  to see a preview of the final form.
4. Click **OK** to return to the Edit Form window.

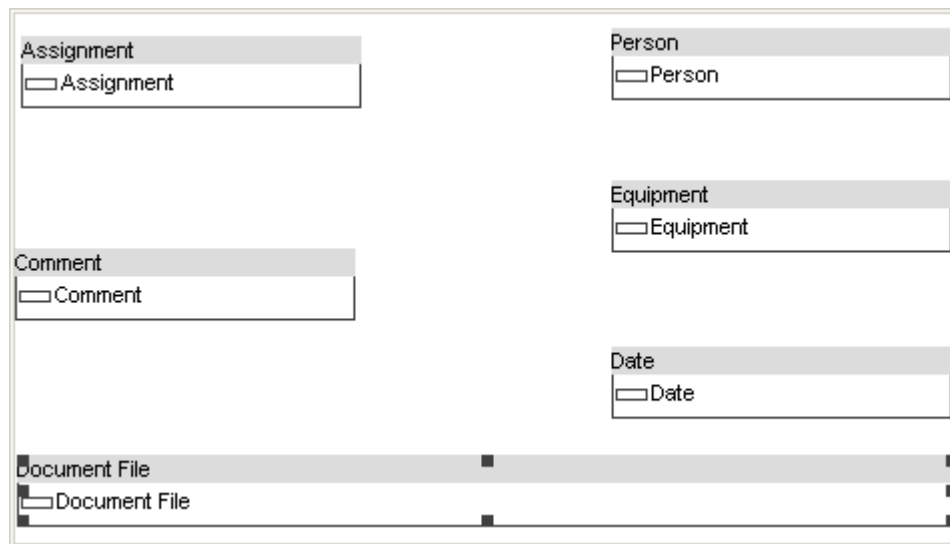
1.2.2 Moving and Resizing Using the Mouse

To be able to define the data items' properties you should resize the items and arrange them properly in the form. ACD/Forms Manager allows you to resize and arrange data items using either the mouse or buttons on the Top toolbar (for more information on the align/resize buttons, refer to Section 1.3.2)

1. In the Edit Form window, point to the **Person** item until the **Move** pointer  appears, and then drag it to the vacant space.
2. To increase the size of an item, move the mouse pointer to the item border or corner so that the **Vertical** , **Horizontal** , or **Diagonal Resize**  two-way arrow appears, and then drag.

Tip Currently you cannot resize data items vertically, since the data items of the **EditBox** type are not adjustable in this direction. Though in the following sections, you will be able to increase the height of some items so that the values fit in properly.

3. In this way, relocate the items named **Assignment** and **Comment** over the left-hand border of the Edit Form window, and the **Person**, **Spectrometer Type**, and **Date** items over the right-hand border and re-size them if required. The **Attached File** item should be long enough to display the entire path of a file. Relocate it so that it borders the lower edge of the form:

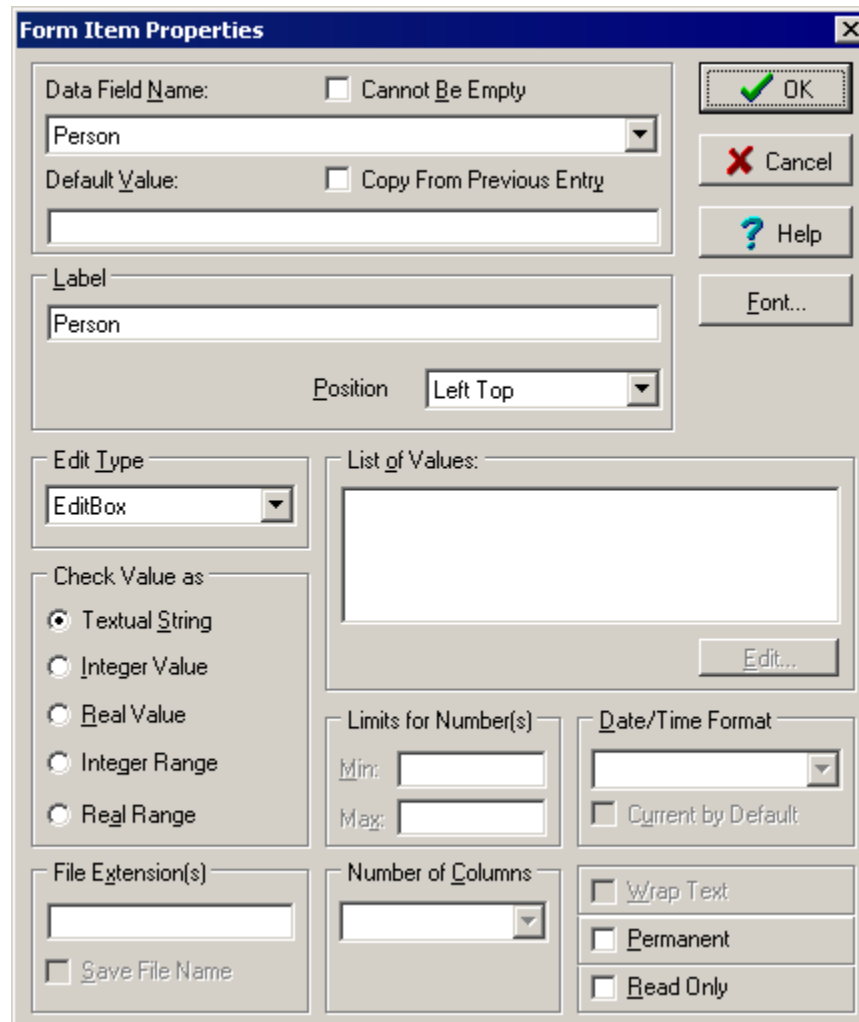


For more information on how to adjust the items' size and location, refer to Section 1.3.

1.2.3 Form Item Properties


Now, you may want to define certain characteristics for different data fields you have created. For example, you might want to ensure that a data field named **Person** (for the name of the person making the record) is always filled in. Or, you might want to speed up the data input by automatically filling in the previously specified value in a certain field (e.g., **Equipment**) for each next record. These characteristics are what we mean by *item properties*.

To specify or edit the properties of an item, double-click the item in the Edit Form window. This will display the **Form Item Properties** dialog box. For example, double-click the **Person** item to display the following dialog box:













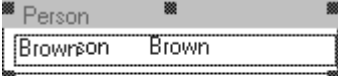

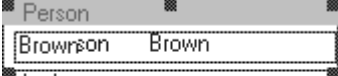
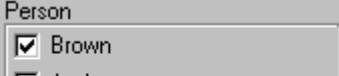








The **Form Item Properties** dialog box is shown with the following fields and controls:

- Data Field Name:** A text box containing "Person" and a dropdown arrow. To its right is a checkbox labeled "Cannot Be Empty".
- Default Value:** A text box (currently empty) and a checkbox labeled "Copy From Previous Entry".
- Label:** A text box containing "Person".
- Position:** A dropdown menu set to "Left Top".
- Edit Type:** A dropdown menu set to "EditBox".
- Check Value as:** A group box containing five radio buttons: "Textual String" (selected), "Integer Value", "Real Value", "Integer Range", and "Real Range".
- List of Values:** A large empty text area with an "Edit..." button at the bottom right.
- Limits for Number(s):** Two text boxes labeled "Min:" and "Max:".
- Date/Time Format:** A dropdown menu and a checkbox labeled "Current by Default".
- File Extension(s):** A text box and a checkbox labeled "Save File Name".
- Number of Columns:** A text box and a dropdown arrow.
- Other options:** Three checkboxes: "Wrap Text", "Permanent", and "Read Only".
- Buttons:** "OK" (with a green checkmark), "Cancel" (with a red X), "Help" (with a question mark), and "Font..." (with an underline).

Note The desired font for the data item's value and caption can be specified via the **Edit Item Fonts** dialog box. To display it, click **Font** .

1.2.3.1 Table of Available Form Elements





The **Edit Type** list allows you to choose the sort of display elements (list box, check box, radio buttons, etc.) that will be displayed in your database form. In this table we summarize the most important properties of these elements in the Data Form.

Edit Type	Item view in the Edit Form window	Vertical size can be modified	Item view in the resultant form
EditBox		No	
MultiLine EditBox		Yes	
ListBox		Yes	
DropDown ListBox		Yes	
ComboBox		Yes	
RadioButtons ¹		Yes	
CheckBoxes ²		Yes	
CheckListBox		Yes	
Date ³		No	
Time		No	
File Name		No	

¹ In a set of radio buttons, one and only one can be selected.

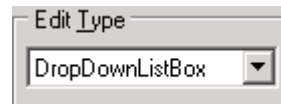
² In a set of check boxes, none, one, many, or all can be selected.

³ Date and time information depend on the settings of your individual PC.


Edit Type	Item view in the Edit Form window	Vertical size can be modified	Item view in the resultant form
Directory		No	
Label		No	

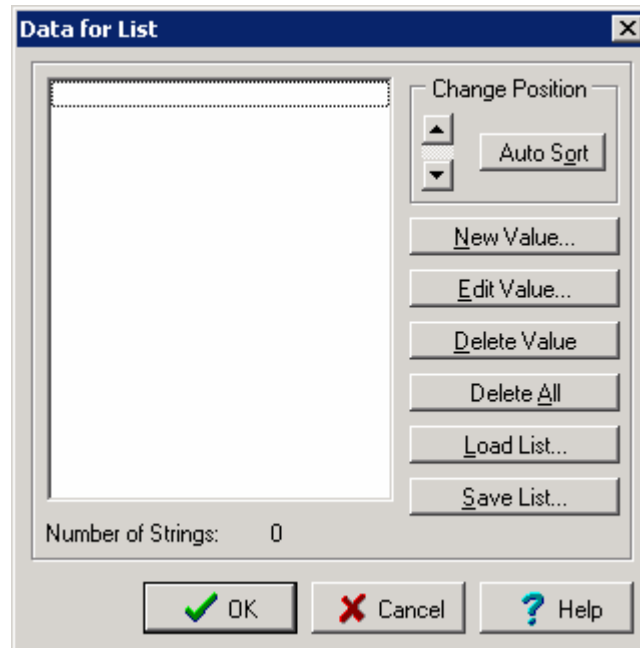
1.2.3.2 Creating a DropDownListBox Item

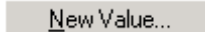
- For the **Person** data item, in the **Edit Type** list, select **DropDownListBox**:

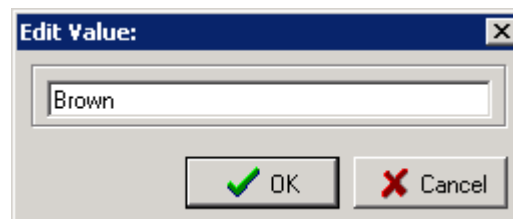


This will make the **List of Values** area available.

- In the **List of Values** area, click **Edit**  to specify the list of possible values for this item. The **Data for List** dialog box appears:

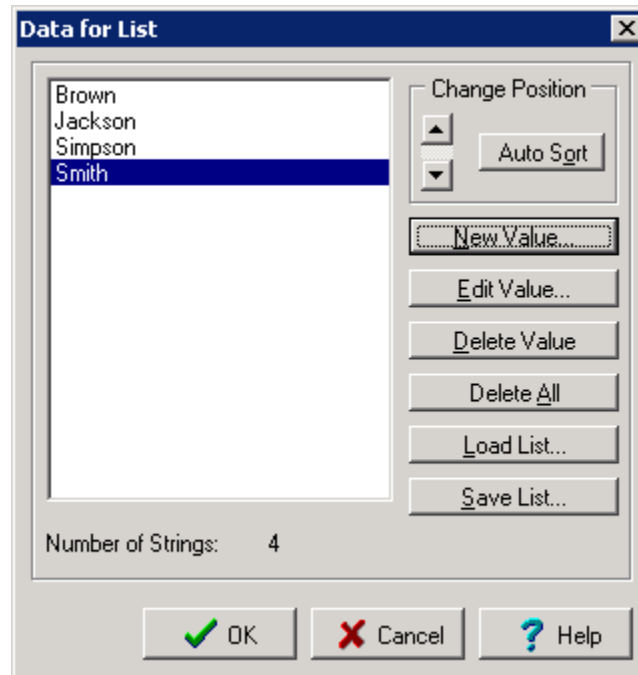


- Click **New Value**  to add a value (in this case, an operator's name) to the list. In the **Edit Value** dialog box that appears, type the appropriate value:



- Click **OK**. The name is added to the list.

5. Repeat steps 3 and 4 above to add as many names as you want. The list of data is now organized in the following way:



Tip To change the position of a data value in the list, select it, and then click the arrows in the **Change Position** area to move this item to the desired position. To sort the specified names in an alphabetical order, click **Auto Sort** [Auto Sort](#).

6. As soon as the list of values is formed and arranged in the appropriate order, click **OK** to insert it into the **List of Values** box, in the **Form Item Properties** dialog box.

1.2.3.3 Required or Optional Item Status

The upper part of the **Form Item Properties** dialog box contains a set of options allowing you to set some specific properties for each item.

Each display element can have either *required* or *optional* status. *Required* means that the data field should be filled in; otherwise when you click **OK** in the finished form, a message prompting you to fill it in will appear. *Optional* means that you can leave the data field either filled or empty. This is controlled by the **Cannot Be Empty** check box.

There are several ways to fill in a data field during the database update:

- ⇒ With the value specified during the previous database update (if the **Copy From Previous Entry** check box is selected);
- ⇒ With a default value (set in the **Default Value** box);
- ⇒ With a value specified manually while creating the database record.

Note The value from the **Default Value** box will be inserted in the current item field while updating a database if:
the **Copy From Previous Entry** check box has not been selected; or

the **Copy From Previous Entry** check box has been selected, but the current item field was empty (no values were selected) during previous database update (if any).

1. For the **Person** item, select the value preferred as default in the **Default Value** box. It will become highlighted in the **List of Values** field. (Alternatively, click the name in the **List of Values** area to insert it in the **Default Value** box.)
2. As a result, the **Form Item Properties** dialog box for the **Person** item should look like this:

Form Item Properties

Data Field Name: ☐ Cannot Be Empty
 Person

Default Value: ☐ Copy From Previous Entry
 Jackson

Label
 Person

Position: Left Top

Edit Type
 DropDownListBox

Check Value as:
☒ Textual String
☐ Integer Value
☐ Real Value
☐ Integer Range
☐ Real Range

List of Values:
 Brown
 Jackson
 Simpson
 Smith
 Edit...

Limits for Number(s)
 Min:
 Max:

Date/Time Format

☐ Current by Default

File Extension(s)

☐ Save File Name

Number of Columns

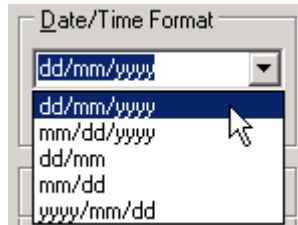
☐ Wrap Text
☐ Permanent
☐ Read Only


OK Cancel Help Font...

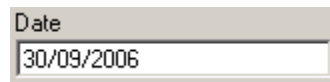
3. Click **OK** to apply the specified parameters and return to your edited form.

1.2.3.4 Creating a Date Field

1. In the Edit Form window, double-click **Date** to display the **Form Item Properties** dialog box.
2. In the **Edit Type** box, select **Date**. This will make the **Date/Time Format** area active.
3. In the **Date/Time Format** area, click the arrow to choose the desired date format:




4. Select the **Current by Default** check box. In the finished form, the current date will be set into the **Date** field by default.
5. Make sure that the **Default Value** box is empty. In this case, the **Date** field in the finished form will contain the current date by default.
6. Select the **Cannot Be Empty** check box (this will cause the program to deny database updating if the **Date** field is not filled in).
7. Click **OK** to close the dialog box by applying the specified parameters and return to the edited form.
8. On the Top toolbar, click **Test Form** . The **Date** box will display the current date:

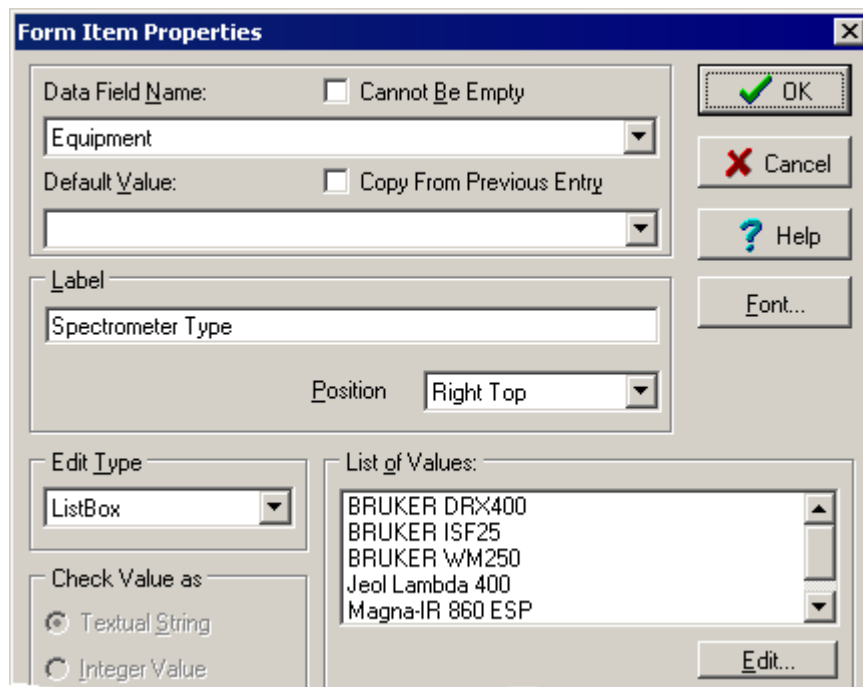


9. Click **OK** to close the test form.

1.2.3.5 Creating a ListBox Item

1. Double-click the **Equipment** data item to display the **Form Item Properties** dialog box.
 2. In the **Label** box, type *Spectrometer Type*. It will be displayed only in the finished form as a label.
- Note** By default, the **Label** box contains the same value as **Data Field Name**.
3. In the **Position** box, choose **Right Top** to display the Spectrometer Type label in the right corner just above the field.
 4. In the **Edit Type** box, select **ListBox**.

5. In the **List of Values** area, click **Edit**  to display the **Data for List** dialog box. In this dialog box, add new values to the list to fill in the **List of Values** box as it is shown in the picture below. On how to add new values, refer to Section 1.2.3.2, steps from 2 to 6.

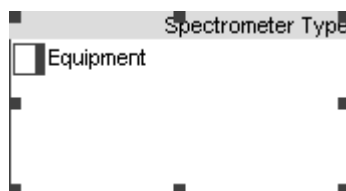


The **Form Item Properties** dialog box is shown. It has several sections:


- Data Field Name:** A text box containing "Equipment" and a checkbox labeled "Cannot Be Empty".
- Default Value:** A text box and a checkbox labeled "Copy From Previous Entry".
- Label:** A text box containing "Spectrometer Type".
- Position:** A dropdown menu set to "Right Top".
- Edit Type:** A dropdown menu set to "ListBox".
- Check Value as:** Two radio buttons: "Textual String" (selected) and "Integer Value".
- List of Values:** A list box containing the following items:
 - BRUKER DRX400
 - BRUKER ISF25
 - BRUKER WM250
 - Jeol Lambda 400
 - Magna-IR 860 ESP

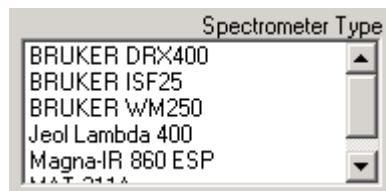
Buttons on the right include **OK**, **Cancel**, **Help**, and **Font...**. An **Edit...** button is at the bottom right of the List of Values section.

6. In the **Default Value** box, select **<By Default Value Not Selected>**.
7. Click **OK** to apply the settings.
8. Adjust the **Spectrometer Type** item size by dragging the field borders and/or corners to give enough space for the list. For more information, refer to Section 1.2.2.



A screenshot of the **Spectrometer Type** field in a form. It is a list box with a small icon of a list box in the top left corner. The word "Equipment" is visible at the top of the list.

9. On the Top toolbar, click **Test Form** . In the finished form it will look approximately like this:




A screenshot of the **Spectrometer Type** field in a form. It is a list box containing the following items:

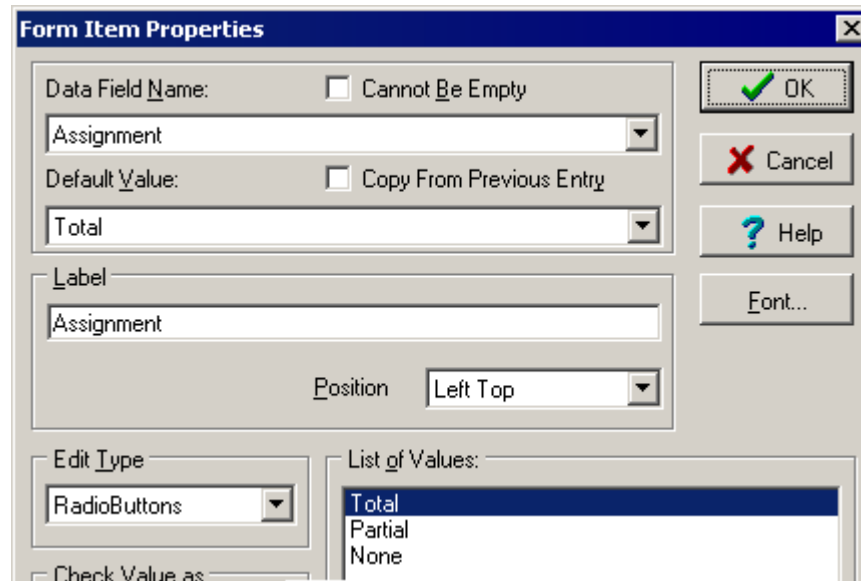
- BRUKER DRX400
- BRUKER ISF25
- BRUKER WM250
- Jeol Lambda 400
- Magna-IR 860 ESP

10. Click **OK** to close the test form.

1.2.3.6 Creating a RadioButtons Item

Radio buttons are a set of mutually exclusive options (only one can be chosen at a time).

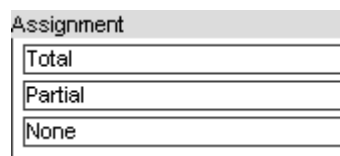
1. Double-click the **Assignment** item to display the **Form Item Properties** dialog box.
2. In the **Edit Type** box, select **RadioButtons**.
3. In the **List of Values** area, click **Edit**  to display the **Data for List** dialog box. In this dialog box, add new values to the list: *Total*, *Partial*, and *None*. For more information on how to add new values, refer to Section 1.2.3.2, steps from 2 to 6.




The **Form Item Properties** dialog box is shown. It has a title bar with a close button. The main area contains several fields and buttons. On the right side, there are four buttons: **OK** (with a green checkmark), **Cancel** (with a red X), **Help** (with a question mark), and **Font...**. The **Edit Type** dropdown menu is set to **RadioButtons**. The **List of Values** list contains three items: **Total** (highlighted), **Partial**, and **None**. Other fields include **Data Field Name** (Assignment), **Default Value** (Total), **Label** (Assignment), and **Position** (Left Top).

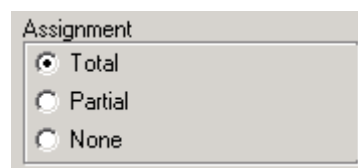
4. In the **List of Values** box, select **Total** as a value which will appear in the final form by default.
5. Click **OK** to close the dialog box and return back to the Edit Form window.

Note that the size of the item is automatically adjusted so that the value can fit in properly:



A preview of the form item. It is a rectangular box with a title bar labeled **Assignment**. Inside the box, there are three text input fields stacked vertically, containing the text **Total**, **Partial**, and **None** respectively.

6. Click **Test Form**  to see if the created form needs further adjustment. The resultant item should look as follows:

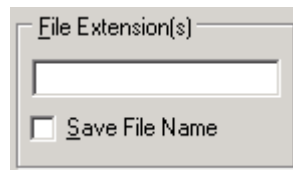


A preview of the form item after testing. It is a rectangular box with a title bar labeled **Assignment**. Inside the box, there are three radio button options stacked vertically: **Total** (selected with a black dot), **Partial**, and **None**.



7. Click **OK** to close the test form.

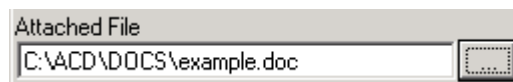
1.2.3.7 Creating a File Name Item

1. In the Edit Form window, double-click the **Document File** field to display the **Form Item Properties** dialog box, and then in the **Label** box, type *Attached File*. It will be displayed only in the finished form.
2. In the **Edit Type** box, select **File Name**.
3. Leave the **File Extensions** box empty to be able to enter a file of any extension. Make sure the **Save File Name** box is clear:



Note The **Save File Name** check box is available only if the **File Name** is selected in the **Edit Type** box. Select this check box to be able to type a new file name in this box and save it as a new file. In this case, if you enter or select the existing file name, a warning message appears asking whether to replace the selected file. Cancel the selection to enable the user to type or select only the existing file names.

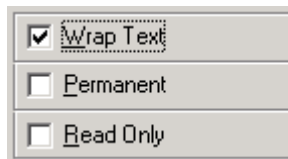
4. Click **OK** to apply the specified settings. Make sure that the resulting box is long enough so that the entire path to a selected file can be displayed.
5. Click **Test Form** , and see how easily you can attach a document using **Browse** :



6. Click **OK** to close the test form.

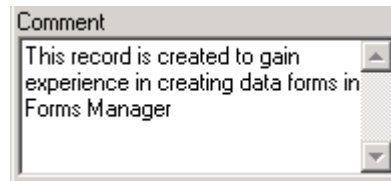
1.2.3.8 Creating a Multiline EditBox Item

1. In the Edit Form window, double-click the **Comment** item to display the **Form Item Properties** dialog box.
2. In the **Edit Type** box, select **Multiline EditBox**, and then select the **Wrap Text** check box. The latter ensures that the text will break when it reaches the edge of the field in the item form:



3. Click **OK** to apply the specified parameters.
4. Adjust the size of the item to make the resulting box spacious enough to display the value. For more information on how to arrange and resize items, refer to Section 1.2.2.


- On the Top toolbar, click **Test Form** , and in the **Comment** box, type some text:

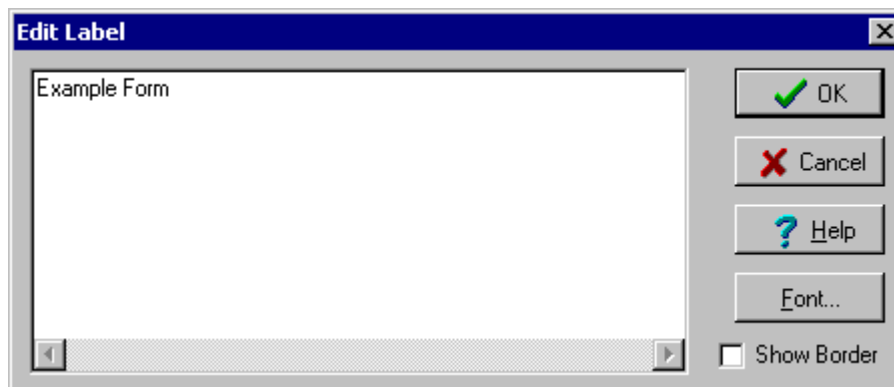


- Click **OK** to close the test form.


1.2.4 Adding Labels

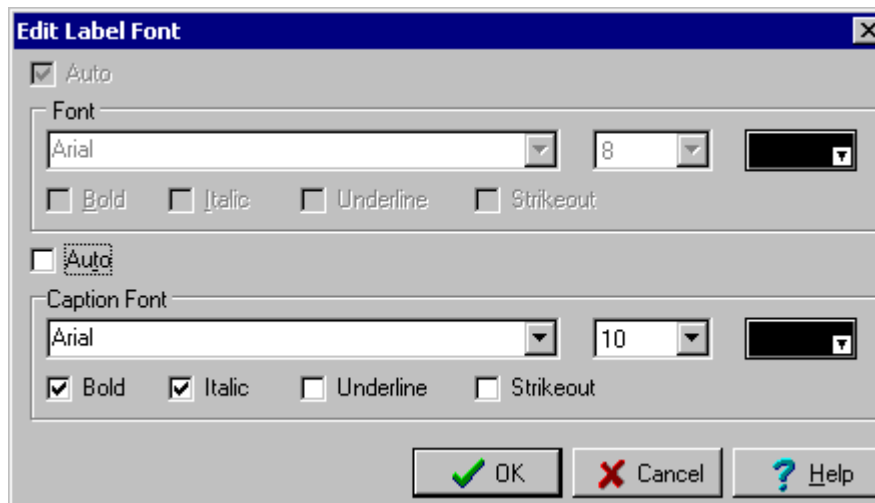
If required you can add a textual information to the form. This can be done by inserting labels:

- On the Forms Manager toolbar, click **Add Label** .
- In the **Edit Label** dialog that appears, type the text (e.g., *Example Form*) you want to be displayed as a label in the current screen form.



Tip To frame the label area in the final form, the **Show Border** check box should be selected. For the current example, leave this check box clear.

- Click **Font** . In the **Edit Label Font** dialog box that appears, specify the desired font style and size, and select the check boxes corresponding to the formatting options you want to be applied to the label text, and then click **OK**.



4. Click **OK** to close the **Edit Label** dialog box and add the label to the screen form.
5. In the Edit Form window, click the label to select it, and then drag to locate it on the left of the **Date** item.


Important Labels are not resizable but movable like other objects.

1.3 Aligning and Arranging Items

For convenience purposes, we recommend that you resize and arrange data items in the edited database form. The final form will have data fields of the same size and arranged in the same fashion as the edited Database Form. ACD/Forms Manager allows you to resize and arrange data items using both the mouse and resize and align buttons on the Forms Manager toolbar. Following the above instructions we have resized and arranged items using the mouse. Currently the form should look approximately like the following:

You can see that the items in the database form are not adjusted; it seems they could be arranged in a more orderly fashion. To achieve the best result, we will use the buttons on the Forms Manager toolbar.

1.3.1 Customizing the Toolbar

In the Edit Form window, the toolbar contains only one **Alignment** button  that is displayed by default. However, ACD/Forms Manager allows you to customize the toolbar according to you preferences. To display all of the existing **Align** and **Resize** buttons:

1. Right-click on the Forms Manager toolbar and from the shortcut menu that appears, choose **Reset Toolbar**.
2. In the message box that appears asking you of whether you want to reset the changes, click **Yes**.

Now the toolbar contains all of the available buttons for:

- aligning the objects (data items, frames, and labels) over the borders or center,
- spacing them equally,
- increasing or shrinking an item's width/height to the width/height of another object, and
- regulating an item's size to suit the value in the best possible way.











For more information on the **Align** and **Resize** buttons, refer to the section that follows.

Tip Alternatively, you can use the **Alignment/Size** dialog box to align and resize data items. For more information, refer to Section 1.3.3

1.3.2 Aligning and Resizing Using the Toolbar

The Forms Manager toolbar allows you to align and resize the selected data item(s) and can be customized according to your preferences. Many of the button functions are also available from the pull-down menus. To change the location or size of the selected item(s), just click the required button on the toolbar, or press the corresponding key on the keyboard:

Button	Function	Description	Shortcut
	Alignment	Aligns/resizes pre-selected items along the Horizontal or Vertical axis by selecting the appropriate option(s).	
	Align Left	Aligns the selected objects by their leftmost border.	L
	Align Center	Aligns the selected objects on their centers shifting them in the horizontal plane. (Builds up a column of the centered objects).	H
	Align Right	Aligns the selected items over their rightmost border.	R
	Make Horizontal Spacing Equal	Shifts the selected objects (three or more) horizontally until, in the horizontal plane, they are placed at equal distance with respect to each other.	E
	Center Horizontally in Form	Shifts the selected objects horizontally to the center of the workspace until they are centered along the vertical imaginary axis of the screen form.	D
	Shrink Items to Smallest Width	Reduces the width of the selected objects to the width of the narrowest in the selection.	S
	Grow Items to Largest Width	Increases the width of the selected objects to the width of the widest in the selection.	G
	Change Items to Best Width	Reduces/increases the width of the selected data item to bring it in correspondence with the width of the value contained in this item (available for value containing items only).	
	Grow Items to Width of Size Box	Increases the width of the selected objects to the width of the workspace.	
	Align Top	Aligns the selected objects over their rightmost border.	T


Button	Function	Description	Shortcut
	Align Middle	Aligns the selected objects on their centers shifting them in the vertical plane. (Builds up a row of the centered objects).	V
	Align Bottom	Aligns the selected objects over their bottommost border.	B
	Make Vertical Spacing Equal	Shifts the selected objects (three or more) vertically until, in the vertical plane, they are placed at equal distance with respect to each other.	Q
	Center Vertically in Form	Aligns the selected objects on their centers shifting them in the vertical plane (builds up a row of the centered objects).	C
	Shrink Items to Smallest Height	Reduces the height of the selected objects to the height of the smallest in the selection.	M
	Grow Items to Largest Height	Increases the height of the selected objects to the highest in the selection.	O
	Change Items to Best Height	Reduces/increases the height of the selected data item to bring it in correspondence with the height of the value contained in this item (available for value containing items only).	
	Grow Items to Height of Size Box	Increases the height of the selected object(s) to the height of the workspace.	

Tip The exact coordinates and dimensions for a selected item you can specify via the **Resize Data Item** dialog box. To display this dialog box, in the Edit Form window, click an item to select it, and then press CTRL+ENTER.


1.3.3 Aligning and Resizing Items


You can align and resize items using a set of commands on the **Layout** menu and/or the buttons on the toolbar, as well as the combination of keys.

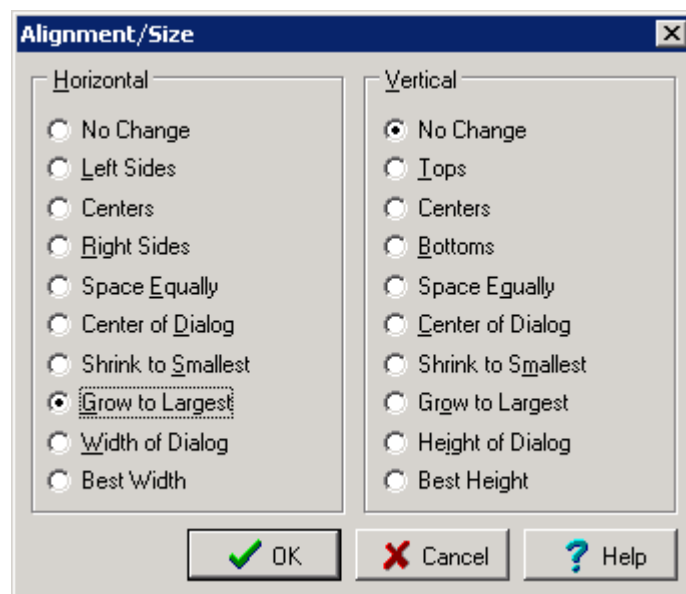
Important Before you start arranging data items in the database form, make sure that you are in the Full Screen mode. Otherwise, all the data items in the final form will be located toward the top right corner of the window. You can resize the Edit Form window by dragging its borders and/or corners.

1. On the toolbar, click **Grid**  to facilitate the alignment process by switching on the gridlines and snapping the objects on grid.

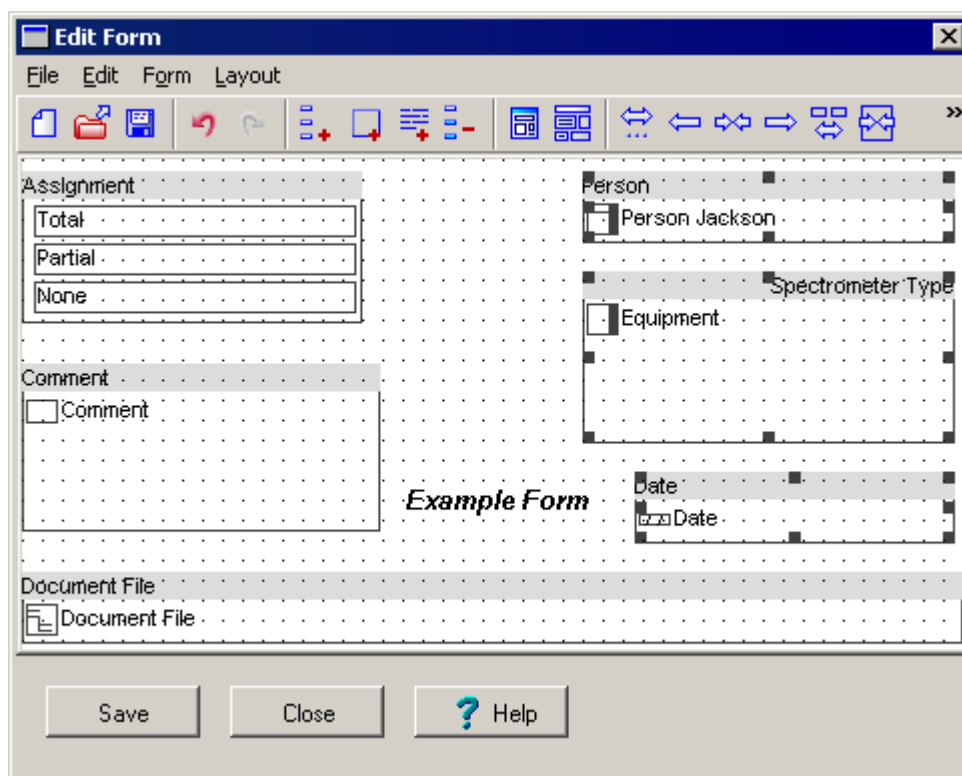
Starting from version 10.0, you can specify the required horizontal and vertical distances between the points of the grid, using the **Change Grid Step** command from the **Layout** menu.

2. Click the **Assignment** data item, and then while holding down SHIFT, click the **Comment** and **Document File** items. Note that these data items are selected now (the borders around them contain black nodes).
3. On the Top toolbar, click **Align Left**  to align the selected items over the left border of the leftmost item.
4. On the **Layout** menu, point to **Equal Spacing**, and then choose **Vertically** to shift the items in the vertical plane so that the spaces between each other are equal.
5. Now, click somewhere in the workspace, away from all of the items to cancel the selection.
6. Drag over the **Person** and **Spectrometer Type** items to select them.


7. On the Top toolbar, click **Alignment**  to display the **Alignment/Size** dialog box.
8. In the **Horizontal** area, select the **Grow to Largest** option:



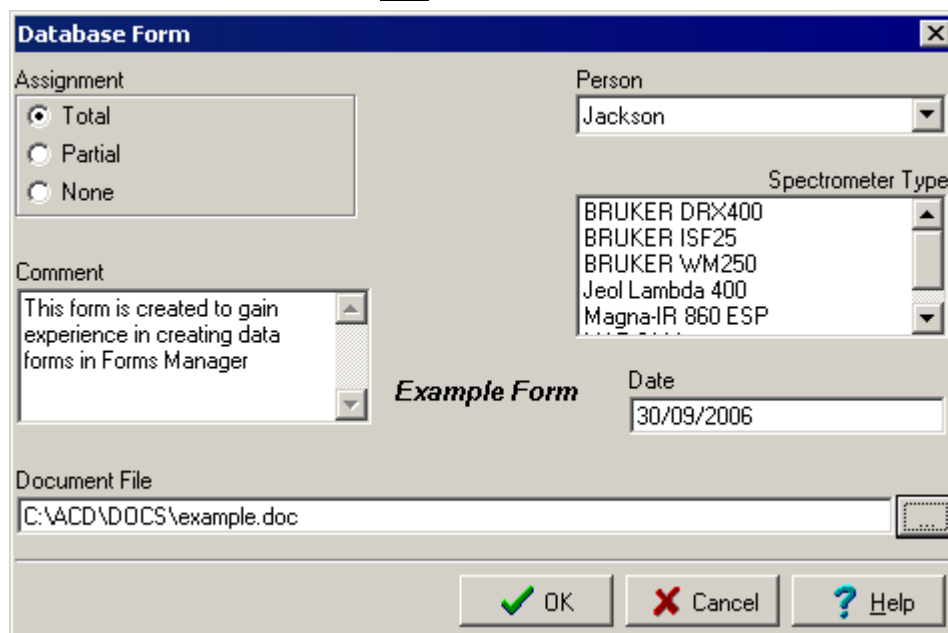
9. Click **OK** to make the **Person** item as wide as the **Spectrometer Type** one.
- 10.: Make sure that the **Person** and **Spectrometer Type** items are selected. Hold down SHIFT and click the **Date** item. Now, you have three items selected.
11. On the Top toolbar, click **Align Right** to align the selected items over the right border of the rightmost item.



12. Click in the workspace, away from all of the items to cancel the current selection.

13. Select the **Comment** and **Date** items and the **Example Form** label by clicking them while holding down SHIFT, and then on the toolbar, click **Make Horizontal Space Equal** .

14. On the Top toolbar, click **Test Form**  to see the results of the formatting style:



15. Click **OK**.


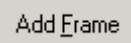
1.3.4 Adding Frames

It is very convenient to group the related items in a screen form and separate them from the rest. The easiest way to achieve this is to add frames. There are four types of frames offered by Forms Manager: **Normal**, **Horizontal Line**, **Vertical Line**, and **Rectangle**.

The database form we have created is simple enough, and there seems to be no need to combine any items by frames. However, you can practice dealing with frames on this form.

Note The result of the operations described in this section is not saved and the screen shots, shown later in this guide, do not contain any frames.


1. On the Top toolbar, click **Add Frame**  to place a frame in the Edit Form window.

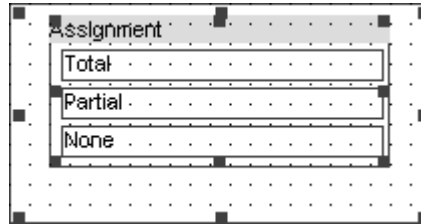
Tip Alternatively, to display the frame, on the toolbar, click **Add Data Item** , and then in the **Select Data Names** dialog box that appears, select **Add Frame** .

2. Drag it to the upper left corner of the window. Adjust its size, if needed, by dragging the frame borders.

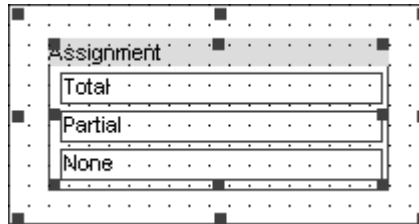
3. Drag the **Assignment** item to position it inside the frame. Adjust the item size if needed.

4. Select the **Assignment** item by clicking it, and then click the frame while holding down SHIFT to select both.


5. On the Top toolbar, click **Align Center** . The selected items are aligned along the horizontal axis.

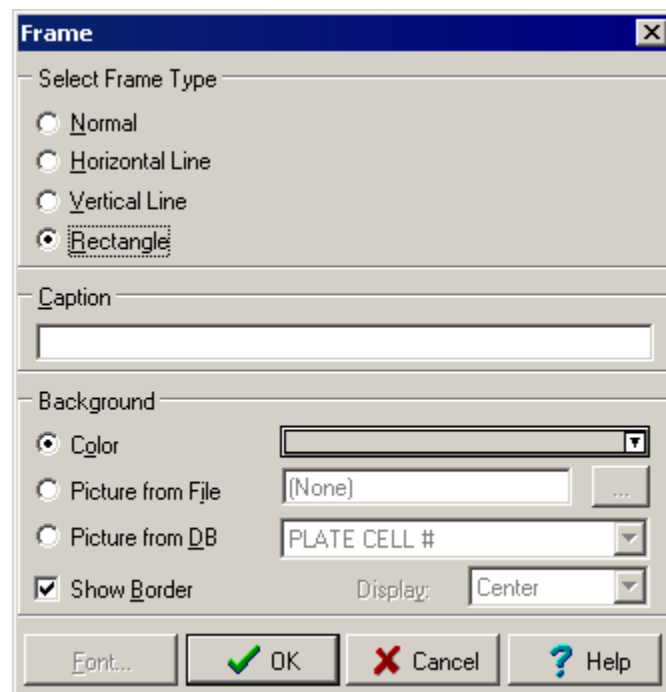


6. Now on the Top toolbar, click **Align Middle** . The selected items are aligned along the vertical axis.



Note Each command can also be accessed by the corresponding shortcut key. For example, the V key corresponds to the **Middle** command from the **Align** submenu (**Layout** menu).

7. On the Top toolbar, click **Add Frame**  once again to insert another frame into the window.
8. To customize the appearance of the frame, double-click it to display the **Frame** dialog box where you can specify the view of the frame. Note that you should click in the workspace away from all other items; otherwise the item you click will be selected.



If the **Normal** frame type is chosen, you can also set a caption that appears as a title of the frame.

If the **Rectangle** frame type is selected, you can change the background color or specify the background picture to be used as background. The graphic files of the following formats are supported:

Bitmap (*.bmp;*.dib),

Graphics Interchange Format (*.gif),

JPEG File Interchange Format (*.jpg; *.jpeg),

Portable Network Graphics (*.png),

Tagged Image File Format (*.tif; *.tiff),

Windows Metafiles (*.wmf; *.emf).

9. Select the **Horizontal Line** option and click **OK**. This will turn the frame into a horizontal line.

10. While holding down SHIFT, click the frame around the **Assignment** item. Make sure that both frames are selected, and then press DELETE to remove them.

1.4 Setting Focus Order


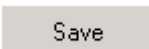
To fill the database entry form at optimal speed, the user can press TAB to move from one data field to another. The focus order sets the order which will be used to switch between the user data items by pressing TAB. The item numbered as first is active by default. As you press TAB, the item numbered as second is activated, and so on.

1. On the toolbar, click **Set Order** **1,2** to view the current tab order. As you click this button, a number is automatically assigned to each data item and the crosshair cursor appears:

The screenshot shows a form with the following fields and their assigned focus order numbers:

- Assignment**: 4
- Person**: 1
- Equipment**: 2
- Comment**: 6
- Date**: 3
- Document File**: 5
- Small empty box**: 7

2. To assign an item a different number, click the item until its number is changed to the required value.
3. Click **Set Order** **1,2** once again, to return to the normal editing window.

4. On the toolbar, click **Test Form**  to test the dialog box entry form you have created. The test form appears, and the cursor is in the box number one. This should correspond to the item you have specified as the first in the Set Order mode. Pressing TAB will make the items active sequentially, in the order you have defined. The **OK** and **Cancel** buttons are the last to become active.
5. Enter the information requested into the form's fields.
6. Click **OK** to close the test form window.
7. In the Edit Form window, click **Save**  to save the changes you have made.
8. Click **Close** to close the Edit Form window and to return back to the **Forms Manager** dialog box. As soon as the form is created, you can attach it to the database.

Note In the **Forms Manager** dialog box, **List of Forms** contains the names of the forms that have been created and saved for the current database only.

1.5 Attaching a Database Form to a Database

A form can only be attached to a database that is currently open, and is in Update mode.

Please note the following:

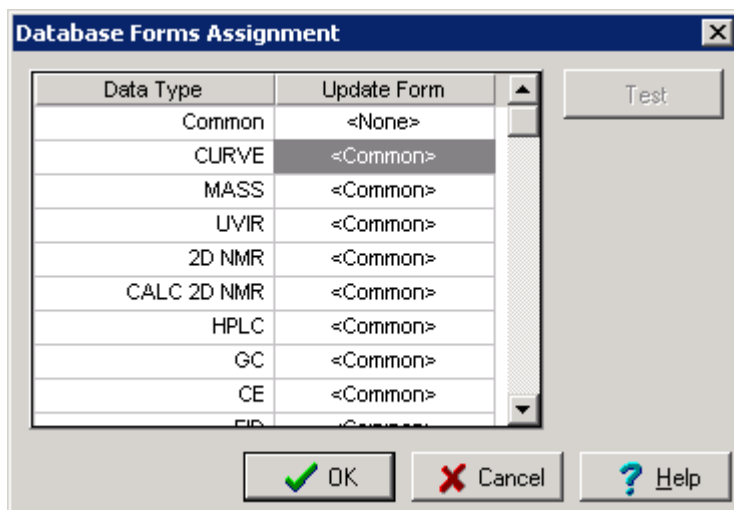
- You can attach the same database form to multiple databases.
- You can list multiple database forms for a single database, but you can assign only one form to be used for any given update session.
- The database form is used only when a new record is being created. If you want to enter data for an existing record, you cannot create a form to do so. For more information on how this can be done, refer to the sections describing the user data managing in the tutorials of the appropriate products.

1.5.1 Attaching in SpecDB

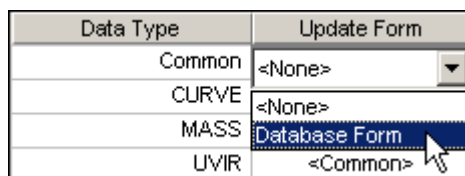
The database supported by ACD/SpecDB can contain data of different types (NMR spectra, MS spectra, chromatograms, etc.) and you can attach several forms to one database and define for what data type a specific form should appear when you update the database.

1. In the **Forms Manager** dialog box, make sure that the **List of Forms** contains the form you want to attach.
2. Click **Save** in the **Forms Manager** dialog box to save all of the settings, and then click **Close**.

- From the **Options** menu, choose **Assign Database Forms**, to display the following dialog box:



- If you want the same form appear for any type of data added to the database, in the **Common** line, double-click **<None>** to display the drop-down box and select the required form:



- Now, if you do not set any forms for other data types available in the list, the form set in the **Common** line will appear when you update any type of data to the database. If you want any other form to appear when the database is updated with a specific data type (e.g., a chromatogram or an MS spectrum), double-click the corresponding cell next to the required data type and select another form.

Note For more information on how the attached forms work in ACD/SpecDB, refer to Section 2.2.





1.5.2 Attaching in Other Programs

For other programs that include database management (such as, ChemFolder, C+H NMR Predictors, XNMR DB, etc.), you can only attach one form to a database.

- In the **Forms Manager** dialog box, in the **New Entry Form** area, from the drop-down list, select the form to be attached, and then click **Set**.
- In the **Forms Manager** dialog box, click **Save** to save all of the settings. The selected form will appear whenever you try to update the database with a new record.

1.6 Operations with Database Forms

Once you have created a list of database forms, you may need to write them to your hard drive, delete them, etc.

1. In the Database window with a database loaded (from the **Database** menu, choose **Open**), switch to the Update mode ().
2. From the **Options** menu, choose **Database Forms Manager** to display the **Forms Manager** dialog box.
3. To delete a form, select it in the **List of Forms** box, and then click **Delete** .
4. To import an existing form, click **Import** . In the **Select Form File to Import** dialog box that appears, specify the name and location of an .FRM file, and then click **Open**.
5. To export an existing form, select it in the **List of Forms** box, and then click **Export** . In the **Select Form File to Export** dialog box that appears, specify the name and location of the .FRM file the current form is to be saved to, and then click **Save**.

Note The **Forms Manager** dialog box settings (forms, names, etc.) are available by default only for the database where they have been created, edited, and saved.

2. Applying a Database Form

2.1 Objectives

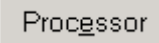
To see the created form at work, we will now update the database with a new entry. Please refer to the section that is relevant to the ACD/Labs software product you are using (listed in order below):

- ACD/SpecManager (1D NMR Manager, 2D NMR Manager, MS Manager, UV-IR Manager, Curve Manager, and ChromManager)
- ACD/C+H NMR Predictors
- ACD/ChemFolder

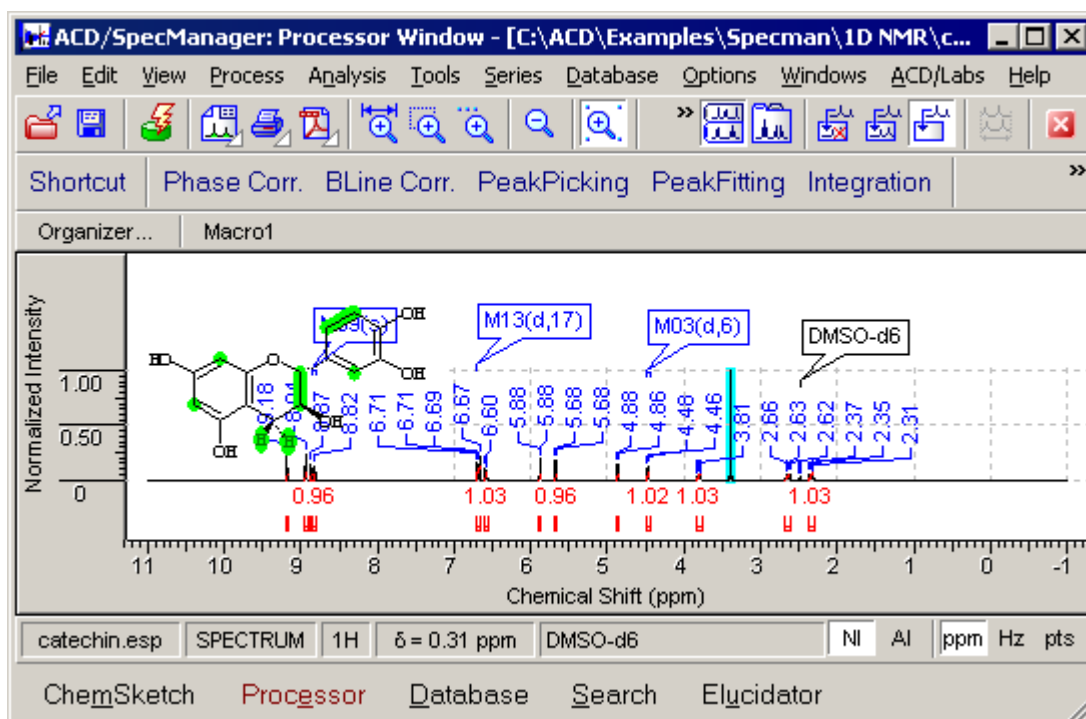
2.2 ACD/SpecDB Example Database Form


This example is applicable for the SpecDB databases (ACD/SpecDB is the general spectral databasing module available for the NMR, UV-IR, Curve, Chrom and MS Manager modules, only the data type changes). In this example, we will add a spectrum with an attached chemical structure to the database as a new record. Please skip this section if you do not own ACD/SpecDB.

Before applying the following operations, make sure that:

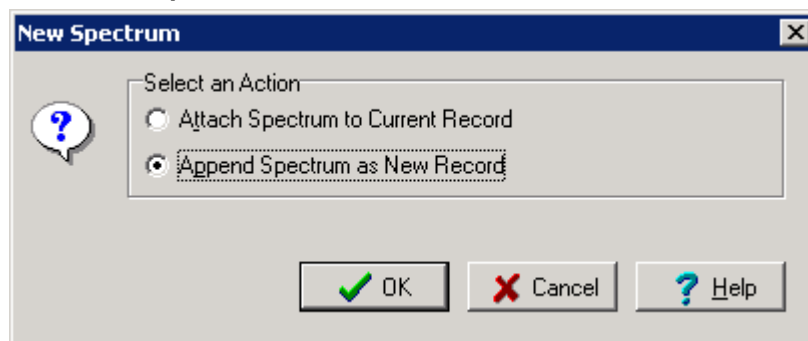
- A database is open in the Update mode in the Database window of ACD/SpecDB;
 - A database form made in Forms Manager (in this case—"Database Form" that is present in the EXAMPLES\FORMSMAN directory as the DFMEXAMP.FRM file) is attached (see Section 1.5.1, *Attaching in SpecDB*).
1. In the Database window, open the database you want to update the attached created form or the example form DFMEXAMP.FRM available in the EXAMPLES\FORMSMAN directory (for more information on how to attach a database form, refer to Section 1.5.1).
 2. On the Window Switching bar, click **Processor**  to switch to the Processor window.
 3. On the **File** menu, point to **Import**, and then choose the directory corresponding to the desired module. The **Import** dialog box appears.
 4. In the **Files of type** list, select **ACD Spectrum (.ESP)**, and then select an example file. Example files are provided in the corresponding sub-folder of the EXAMPLES\SPECMAN folder.

5. Click **OK** to open the spectrum with the attached structure in the Processor window:




6. On the General toolbar, click **Update Database** .

Tip If the spectrum does not contain a structure, the **New Spectrum** dialog box appears. Select **Attach a Spectrum as a New Record**, and then click **OK**:



7. The **Database Form** dialog box (the one you have created) appears.
8. Enter the information requested into the form's fields.

Note In the **Date** box, you can enter the following textual information: *yesterday*, *tomorrow*, or *today*. The system will recognize it by the first three letters, and will transform it to the corresponding date in the set format after database updating.

9. Click **Browse**  next to the **Attached File** box to display the **Select File Name** dialog box. Specify the name and location of a desired file and click **Open** to insert the selected file into the database form.

Note You can select either an existing file name or type a new one.

10. The completed database form should look like this:

Database Form2

Assignment
☒ Total
☐ Partial
☐ None

Comment
 Example

Person
 Brown

Spectrometer Type
 BRUKER WM250
 Jeol Lambda 400
 Magna-IR 860 ESP
 MAT-311A

Date
 30/09/2006

Attached File
 C:\ACD\DOCS\example.doc

OK Cancel Help

11. Click **OK** to apply updating.

12. The program automatically switches you back to the Database window. The information from the completed form is displayed in the corresponding user data subwindow(s) according to the parameters specified in **Type** box of the **Add New Data Name** dialog box, when the data names were created. In our example, the Record User Data subwindow is updated with new user data fields:

Document Parameters
 Acquisition Time (sec): 2.559

Document User Data
 HNMR RMS of Assignment: 0.20

Structure User Data
 FW: 290.2681
 Formula: C₁₅H₁₄O₆
 <Double-click to e

Record User Data
 Person: Brown
 Date: 30 September 2006
 Assignment: Total
 Document File: C:\ACD\DOCS\

ID: 2 A: 1/1 B: 1 1H Multi DBs

ChemSketch Processor Viewer Database

Note If the current screen form does not contain the required user data subwindow(s), on the **View** menu, point to **Screen Forms**, and then choose another screen form (for example, **Default** or **Chromatography**).

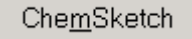
2.3 ACD/C+H NMR Predictors Example Database Form




In this example, we will add a chemical structure to a user database of the ACD/C+H NMR Predictors program, as a new record. Please skip this section if you do not have access to ACD/C+H NMR Predictors.

Note Creating a new record in ACD/XNMR DB is entirely analogous.

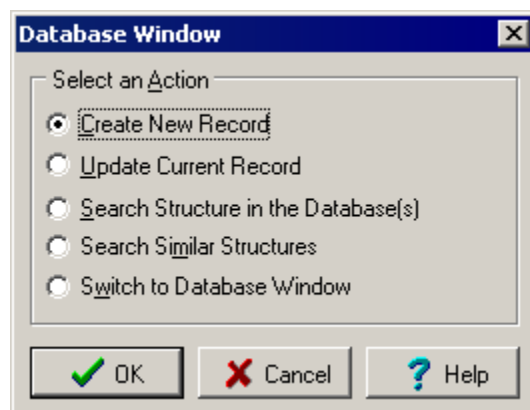
Before applying the following operations, make sure that:

- A database is open in the Update mode in the Database window of ACD/C+H NMR Predictors;
- A database form made in Forms Manager (in this case—"Database Form" that is present in the EXAMPLES\FORMSMAN directory as the DFMEXAMP.FRM file) is set as a new entry form in the **Forms Manager** dialog box (see Section 1.5.2, *Attaching a Database Form to a Database*).

1. On the Window Switching bar, click **ChemSketch**  to switch to the ChemSketch window.
2. Draw a structure to be added to the database.

Tip If there are several structures on the current ChemSketch page, use either of the **Select/Move**, **Select/Rotate/Resize**, or **3D Rotation** tools    on the Structure toolbar to select the required structure first.

3. On the Window Switching bar, click **Database**  to make the Database window available and to display the **Database Window** dialog box:



4. Select the **Create New Record** option, and then click **OK** to display the **Database Form** dialog box.

5. Specify the desired parameters in this form, and then click **OK**. The program automatically switches to the ACD/CHNMR Database window. The data from the form is displayed in the **User Data** subwindow:

ACD/CHNMR Predictors and DB: Database Window - [C:\ACD\EXAMPLES\TE...]

Database View Record Search Lists Table Training Options ACD/Labs Help

¹³C Data User

Atom No. Chemical

1st No. 2nd No.

Assignment: Total
 Comment: Example
 Person: Brown
 Date: 30 September 2006

ID: 1 A: 1/1 B: 1 Last Updated: 30/09/2006 13:33

ChemSketch Spectrum History Database

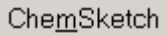
2.4 ACD/ChemFolder Example Database Form




In this example we will add a chemical structure to the ACD/ChemFolder database as a new record.

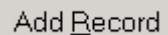
If you do not own ACD/ChemFolder, please skip this section.

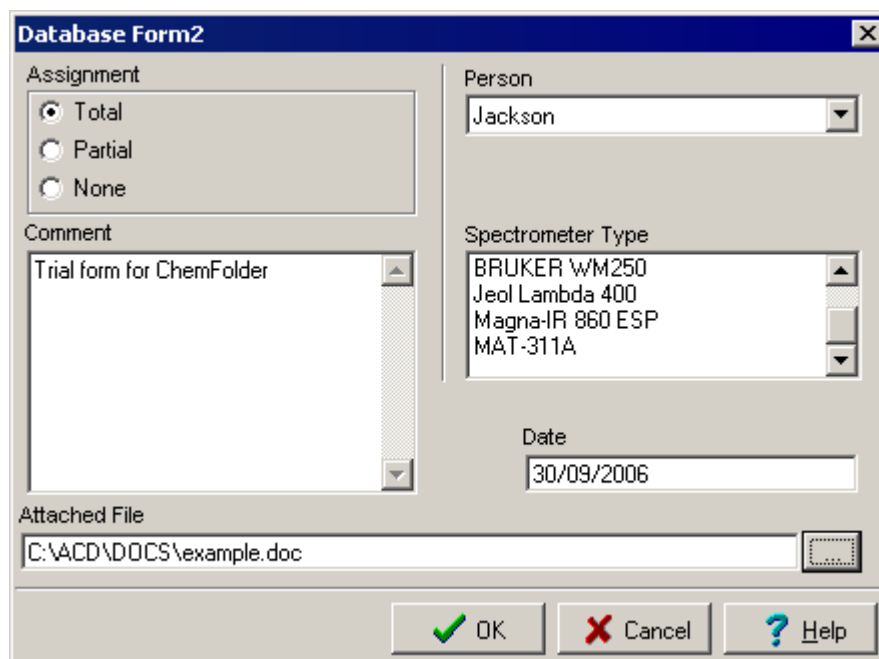
Before applying the following operation, make sure that:

- A database file in the Update mode is open in the Database window of ACD/ChemFolder;
- The desired database form (in this case—"Database Form" that is present in the EXAMPLES\FORMSMAN directory as the DFMEAMP.FRM file) is set as a new entry form in the **Forms Manager** dialog box (see Section 1.5.2, *Attaching a Database Form to a Database*).

1. On the Window Switching bar, click **ChemSketch**  to switch to the ChemSketch window.
2. Draw a structure to be added to the current database.

Tip If there are several structures on the current ChemSketch page, use either of the **Select/Move**, **Select/Rotate/Resize**, or **3D Rotation** tools    to select the required structure first.

3. Click **Add Record**  to display the **Database Form** dialog box.
4. Specify the desired parameters in this form:



Database Form2

Assignment

☒ Total
☐ Partial
☐ None

Comment

Trial form for ChemFolder

Person

Jackson

Spectrometer Type

BRUKER WM250
Jeol Lambda 400
Magna-IR 860 ESP
MAT-311A

Date

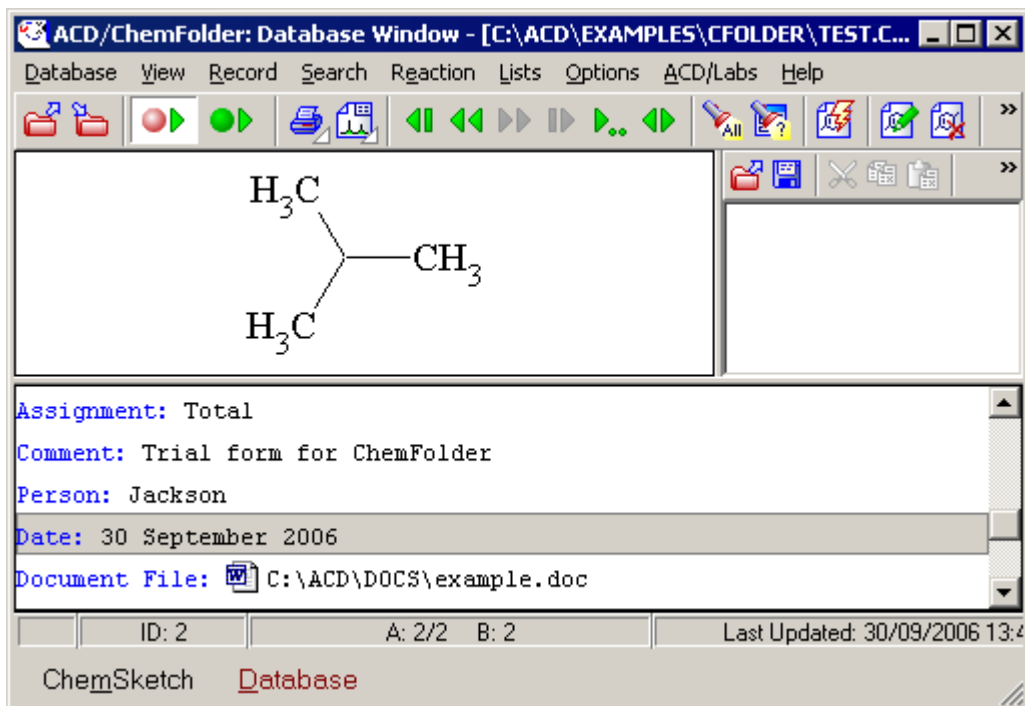
30/09/2006

Attached File

C:\ACD\DOCS\example.doc

OK Cancel Help

5. Click **OK**. The program automatically switches back to the Database window. The information added to the **Database Form** dialog box is displayed in the User Data subwindow:



Note For more information on the operations available within the user database and other subwindows, refer to the *ACD/ChemFolder Reference Manual* (CFOLD_R.PDF) and *Tutorial* (CHFOLD_T.PDF) located in the ACD/Labs documentation folder (\\DOCS).

The procedures of applying database forms for other ACD/Labs programs are similar to those described above.