

# Help Topics - DatabasePlus

[Introduction to DatabasePlus](#)

[Database Concepts](#)

[Gettings Started](#)

[Tutorials and Examples](#)

[Tips and Tricks](#)

## Components

---

[My Desktop](#)

- [Account Info](#)
- [Create a New Database](#)
- [Use a Template...](#)
- [Add a new Workgroup](#)

[The Navigation Bar](#)

[Workgroups](#)

- [Edit Settings](#)
- [Invite Users](#)
- [Review Invitations](#)
- [Remove Users](#)
- [Send Group E-mail](#)

## Authoring

---

[Author Database](#)

- [Basic Settings](#)
- [Advanced Settings](#)
- [Modify Access Rights](#)
- [Value Lists](#)
- [Publish Reports](#)

[Author Tables](#)

- [Basic Settings](#)
- [Table Fields](#)
  - [Field Types](#)
- [Access Control](#)
  - [Modify Access Rights](#)
- [Table Events](#)

[Author Views](#)

- [Basic Settings](#)
- [View Fields](#)

- [Edit Calculation](#)
  - [Calc Functions](#)
  - [Calc Operators](#)

[Author Reports](#)

- [Basic Settings](#)
- [Report Fields](#)
  - [Display Formats](#)
- [Filter](#)
- [Sort](#)
- [Tabs](#)
- [Fields in Tabs](#)

# Browsing

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[Browse Database](#)

[Browse Tables](#)

- [Add & Modify Record](#)
- [Sort Records](#)
- [Search & Replace](#)
- [Import & Export](#)

[Browse Views](#)

- [Add & Modify Record](#)
- [Sort Records](#)
- [Search / Replace](#)
- [Export](#)

[Browse Reports](#)

- [Add & Modify Record](#)
- [Sort Records](#)
- [Search & Replace](#)
- [Import & Export](#)

[Help Topics](#)

## Introduction to DatabasePlus

DatabasePlus is an extensible web based database system that stores, manipulates and presents data in a structured format.

Some of the features of DatabasePlus are:

- A simple, intuitive interface that allows you to define and navigate through your data. One specific feature is the [Navigation Bar](#).
- Many [Fields Types](#) such as text, number, date, file, and history types are available.
- [Access Rights](#) allow you to choose who sees what and who can modify what.
- [Value Lists](#) allow you to create pull-down menu choices. For example, a list of states.
- [Table Events](#) allow you to be notified when data in a table has been added, modified or deleted.
- Data can be displayed by different types of [relationships](#). For example, a one-to-one such as an Employee to a Person, or a one-to-many, such as an Employee to a Timesheet.
- [Calculated Fields](#), [Functions](#) and [Operators](#) allow you to perform complex calculations and multi-table modifications.
- [Importing](#) and [Exporting](#) is easy with wizards to help you exchange data from many types of formats, such as comma or tab delimited and HTML tables.
- [Searching](#) for, [Sorting](#), and [Replacing](#) data is built into DatabasePlus.
- [Workgroups](#) allow you to share your data with anybody who has a web browser.
- DatabasePlus supports a number of [Display Formats](#) for date, time, number and currency types that can be used in reports.
- You can [Publish Reports](#) to an e-mail recipient or embed the report in a web page.

To get started, check out [Getting Started](#) or the [Tutorials and Examples](#) section, with examples and tutorials to get you on your way to creating your own databases.

[Help Topics](#)

## The Navigation Bar - DatabasePlus

The navigation bar allows you to quickly jump between the authoring and browsing your tables, views, and reports.

Here is a sample picture of the navigation bar: (scroll right to view the entire image)

The image shows a horizontal navigation bar with a light gray background. It contains four main components: a 'Task:' label followed by a pull-down menu showing 'Author'; a 'Type:' label followed by a pull-down menu showing 'Tables'; a 'Name:' label followed by a pull-down menu showing 'Contacts'; and a 'Go!' button on the far right.

Click on the Task, Type and Name pull-down menus to navigate through your items.

- Task - Switches between task modes. The two available task modes are:
  - Author - Allows you to modify settings, fields, access rights, table events, and to publish reports.
  - Browse - Allows you to add, browse, search, replace, modify, sort, import and export records.
- Types - Switches between item types. The four available types are:
  - Database - Displays actions related to the database.
  - Tables - Displays actions related to tables.
  - Views - Displays actions related to views.
  - Reports - Displays actions related to reports.
- Name - Switches between items, such as a table, view or report.

## Field Types - Tables

The field type specifies how to store and display data for the field.

There are 12 data types available:

- Text - Use to store any combination of letters, numbers and symbols (alphanumeric). For efficiency, only use text field types if your value does not work with any of the other field types. Size?
- Number - Use when you have a value that can not be classified as a date, time or money amount. The largest allowed number is 1.44e+17, while the smallest is -1.44e+17. The number of decimal places can be configured in [Database Advanced Settings](#).
- True/False - Use when the question can be answered by a single check-box. Use this field type to store true/false, yes/no and other two-state data. Also known as a Boolean.
- Date - use to to store dates. Dates can be entered in most common [date formats](#) such as 'Dec 31, 2001' or '12/31/2001'.
- Time - Use to store times, in 12 hour or 14 hour formats. Times can be entered in most common [date formats](#) such as '1:30 PM' or '13:30'.
- File - Use to store pictures, sound or any other type of file. Viewable image types are jpeg and gif formats.
- Currency - Use to store currency. Currency format can be set in the database Advanced Settings.
- URL - Use to store references to web page addresses, ftp locations and other URL (Universal Resource Locator) types. Example: <http://www.calific.com>.
- HTML - Use to store text that contains HTML. Using this field enables you to store content rich documents.
- Comment Field - Use to enter comments about each record. Comments are date and time stamped and the e-mail address of the user is recorded. Multiple comments can be added to a record.
- History Field - Use to track changes to individual records. The History field type will generate the date, time, e-mail address of the user who made the change, and a notation about the change. Changes to Comment field types are not tracked by the History field.
- Table Reference - Use to set up relationships between tables. Relationships in DatabasePlus are very extensible. See the [Table and View Relationships](#) example for more details.

[Help Topics](#)

## Author Table - DatabasePlus

This screen enables you to change basic properties of your table, such as the name and description.

From here, you can go to:

- [Basic Settings](#)  
Manage the name and description of this table.
- [Table Fields](#)  
Manage the data elements, or fields, in this table.
- [Access Control](#)  
Control access to this table by granting permissions to users and groups.
- [Table Events](#)  
Define e-mail alerts to trigger when certain actions such as adds, deletes, or modifications occur to the table.
- Delete Table  
Permanently remove this table and all it's records from the database. **WARNING:** This will permanently delete all data in the table.

# Basic Settings - Tables

This screen enables you to change basic properties of your table, such as the name and description.

Basic properties:

- Name - The name of the table.
- Description - The description for the current table.

[Help Topics](#) > [Author Table](#)

## Table Fields - Tables

This page allows you to add, delete, edit, and reorder fields.

The table fields are listed under the Fields list. To modify a field, simply click on the field name. To create a new field, click Add.

The following is a brief explanation of the field properties. Some types have additional properties, which are listed under the standard.

- Name - The name of the selected field. The name is used as the field label.
- Description - The description of the selected field. The description can be displayed above a field in the reports. Use it to include entry instructions.
- Type - The type of data the selected field will contain. Field types are used to associate additional functionality and display formats for fields. Options specific to that type will be displayed. For a complete list of field types and their options, see [Field Types](#).
- Value List - Associate a value with the selected field. Only the value lists which match the selected field's type are displayed. Along with custom value lists, some field types have system value lists such as the Date and True/False formats. Value Lists are defined in author database under [Value Lists](#).
- Default Value - A value that is inserted when a record is created. Some types allow dynamic values such as the current date for Date fields. Not all types support a default value, such as the File type.
- Required Field - Requires a value to be entered before a record can be saved.

Options for the Number type:

- Serial Number - Generates a number sequence starting with 1. This is useful for generating sequential items such as order numbers.

Options for the Date and Time types:

- Current Date/Time - Inserts the current date or time when a new record is created.

Options for the Table Reference type:

- Relate to Table - This is used to create relationships between tables. See [Example & Tutorials](#) for examples of how to use this field.



## Value Lists - Database

The Value Lists editor allows you to create, modify, and delete value lists. A Value List is a pull-down menu that allows the user to choose a value.

Click Add to create a value list. Click Edit or Delete on an item to edit or delete it.

- Name - The name of the value list.
- Description - The description for the value list.
- Type - The type of field the selected value list works with. Calculation, File, HTML, and URL types are not supported by value lists.

Number options:

- Graph Value with Icon - Allows you to create a rating scale with values set in the value list. Here, you can select:
  - Default Icon - Uses the default icon, which is a star.
  - Custom Icon - Uses a custom icon, which you provide. Click Browse to select a jpg or gif image to use.

Click Edit Items to edit the value list.

Note: Text is the only value list type for which the value is optional. If the value is omitted the name is entered into the field.

[Help Topics](#)

## Author Database - DatabasePlus

This page provides buttons to modify settings, security, value lists and to publish reports.

From here, you can go to:

- [Basic Settings](#)  
Allows you to edit the name and description of the database.
- [Advanced Settings](#)  
Allows you to select the date, time, currency and number formats of this database and turn copy protection on or off.
- [Access Control](#)  
Control access to the database by granting permissions to users and groups.
- [Value Lists](#)  
Create or maintain your own set of value list pop-ups for the database.
- [Publish Reports](#)  
Publish reports by creating a URL to embed in a web page or by sending an email to your colleagues.

[Help Topics](#) > [Author Database](#)

## Basic Settings - Database

This editor enables you to change basic properties of your database, such as the name and description.

You can modify the following fields:

- Name - The name of the database. This is used to reference the database in other sections such as views and reports.
- Description - The description for the database.

[Help Topics](#) > [Author Database](#)

## Advanced Settings - Database

This page allows you to set copy protection options and default display formats for fields.

Copy protection check-box options:

- Copy Protection - Prevents others from making a duplicate of your DatabasePlus. If checked, the Copy button will be hidden in all database views.

Default format pull-down menus:

- [Date Format](#) - The default date format used in views and reports.
- [Time Format](#) - The default time format including 12 hour and 24 hour.
- [Currency Format](#) - The default unit of money. DatabasePlus supports US Dollars, Japanese Yen, and European Union Euro.
- [Number Format](#) - The default number format. Quantity values that can be expressed as integers or decimals. Use a number field when you have a quantity value that can't be better classified as a date, time or money amount.

## Display Formats - DatabasePlus

The field type specifies how to store and display data for that field. Some types have display formats that can be set in reports.

### Date Formats

- 12/31/99
- 12/31/1999
- Dec 31, 1999
- December 31, 1999
- Fri, December 31, 1999
- Friday, December 31, 1999
- 31/12/1999
- 31 Dec 1999
- 1999/12/31
- 19991231
- 1999-12-31
- 1999

### Time Formats

- 00:00 PM (12 Hours)
- 00:00:00 PM (12 Hours)
- 00:00 (24 Hours)
- 00:00:00 (24 Hours)

### Number Formats

- No Decimal Places
- 1-10 Decimal Place

### File Formats

- Icon/Picture Only
- File Name Only
- Icon/Picture and File Name

### Currency Formats

- US Dollars
- Euros
- Pounds
- Yen
- Deutschmarks

[Help Topics](#)

## Author Report - DatabasePlus

This page allows you to create, modify and delete reports.

From here, you can select:

- [Basic Settings](#)  
Manager the name and description of this report.
- [Fields in Tabs](#)  
Specify which fields are in which tabs, and which report to use for one-to-many fields.
- [Fields](#)  
Specify the field label, presentation, and alignment properties. Also specify which report to use for one-to-one fields.
- [Filter](#)  
Filter records by specifying search criteria.
- [Sort](#)  
Specify the sort order of the fields for this report.
- [Tabs](#)  
Add, modify, delete, or reorder tabs on this report.
- Delete Report  
Delete this report and permanently remove it from this database.

[Help Topics](#) > [Author Report](#)

## Basic Settings - Reports

This page allows you to set the name and description of the report, select the the base table or view, and select which actions are available when record browsing.

From here, you can modify:

- Name - The name of the report.
- Description - The description of the report.
- Choose a Table or Choose a View - Sets the base table or view for the report. The base object provides field and relationship information. Click Change to View or Change to Table to switch between the type of base objects.

You can show or hide the following buttons in your report. This does not restrict or grant user access to these functions from other tables, views or reports.

Record browser properties:

- Add Record - Displays the Add Record button.
- Import - Displays the Import button.
- Export - Displays the Export button.
- Detail - Displays the Details button. This appears in the modify record page.
- Modify Record - Displays the Modify Record button.
- Delete Record - Displays the Delete Record button.
- Sort - Displays the Sort button.
- Search - Displays the Search button.
- Search/Replace - Displays both Search and Replace buttons.
- Printer Friendly - Displays the Printer Friendly button.

[Help Topics](#) > [Author Report](#)

## Fields in Tabs - Reports

This page allows you to add or remove fields from the table or view into the report tabs, and specify which fields are in which tab.

### One-to-one Relationships

Select a tab from the Available Tabs pull-down menu. Fields included in the tab will be show in the Fields in this tab list just below.

The Summary tab is used as the default for tables, views, and reports that display a one-to-many relationship with other tables, views, and reports.

To add a field to a tab:

- Select the field from the Available Fields list, then click Add Field.

To remove a field from a tab:

- Select the field from the Fields in this tab list, then click Remove Field.

### One-to-many relationships

If you select a tab that is a one-to-many relationship, you have the option of selecting the base object used for the detail records. To choose an object:

- Select a table or report from the One-to-many pull-down menu. Tables are listed first, then reports next.

### Field Positions

You can rearrange the order of the fields by using the position buttons. Select the field from the Fields in this tab list, then click:

- Move Up - Moves the field up by one position.
- Move Down - Moves the field down by one position.

Click Save to save your changes, or Cancel to discard them and return to the previous page.



[Help Topics](#) > [Author Report](#)

## Report Fields - Reports

This page allows you to specify the labels, presentation, and alignment properties of fields.

Select the tab that contains the field you want to modify from the Available Tabs pull-down menu.

Select the field you want to modify from the Fields in this tab pull-down menu.

Report field properties:

- Label - Select the label to use for this field. You can choose from one of four styles:
  - ☐ **Name** - Use only the field's name as the label.
  - ☐ **Description** - Use only the field's description as the label.
  - ☐ **Name & Description** - Use both the field's name and description as the label.
  - ☐ **No Label** - Do not provide any label.
- Entry Presentation - Select the type of control. You can use one of four types for Text:
  - ☐ **Text Field** - A one line text entry box.
  - ☐ **3 Line Scrolling Text** - A three line text entry box with a scrollbar.
  - ☐ **6 Line Scrolling Text** - A six line text entry box with a scrollbar.
  - ☐ **Password Field** - A one line text entry box that displays asterisks (\*) for each character.
- [Display Format](#) - Select the display format for the field.
- Text Alignment - Select the text alignment for the field. You can use one of three styles:
  - ☐ **Align Left** - Align the text horizontally to the left.
  - ☐ **Align Center** - Align the text horizontally in the center.
  - ☐ **Align Right** - Align the text horizontally to the right.
- Read Only - Do not allow users to modify this field in the report.

Click Save to save your changes, or Cancel to discard them and return to the previous page.

[Help Topics](#) > [Browse Records](#)

## Search and Replace - DatabasePlus

The search and replace tools allow you to find records and replace data using criteria you define.

You can add additional expressions by clicking Add Expression and specifying AND or OR for each one.

To build an expression, enter data into the following fields:

- Field - Select a field from the Field pull-down menu.
- Expression - Select an expression from the Expressions pull-down menu. There are five choices:
  - Starts With
  - NOT Starts With
  - NOT Ends With
  - Contains
  - NOT Contains
- Value - Enter the value to compare.

Replace additional options:

- Replacement Value - Enter a replacement value for the records found. This option has a sub-option:
  - Replace Entire Field - Replace the contents of the entire field. For example, searching for 'Tim' and replacing with 'Tom' will change records with 'Tim Bear' to 'Tom'.

Click Search to start the search, or Replace if using Replace, or...

Click Show All to remove the filter and view all records, or...

Click Cancel to return to the previous page.

[Help Topics](#)

## Record Browsing - DatabasePlus

This page displays data in the table, view or report. If there are table relationship defined, data from each are displayed in separate tabs.

While browsing records, several buttons are available:

- [Add Record](#) - Creates a new record in the table. Click Save to save your changes, or Cancel to abandon them and return to the previous page.
- [Sort](#) - Sort records by one or more fields.
- [Search](#) - Search for specific records.
- [Replace](#) - Search and replace data.
- [Import](#) (Tables) - Import data from an external data file.
- [Export](#) - Export data from an external data file.
- Printer Friendly - Takes you to a page that is printer friendly. Use the Back button in your browser to return.

### Fields Header

To sort on a field, click the field name. Clicking twice will change the sort order. If you need to sort by multiple fields, use the Sort option.

Click Modify to modify the record data.

### Records Footer

- Select All - Select all viewable records.
- Deselect All - Deselect all viewable records.
- Delete Selected - Delete all selected records.

### Page Navigation

If there are more records than can be displayed on the page, you can enter a page number in the Jump to Page text box and click Go!

You can change the number of records displayed per page by entering a value in the Records per Page text box and clicking Update.

[Help Topics](#) > [Browse Records](#)

## Sort Records - DatabasePlus

This page allows you to change the sort order of fields.

To sort in ascending or descending order, add a field to the Sort Order list and select it. Click on Reverse Sort Order to change the sort direction (ascending/descending). A caret(^) to the right of the selected field denotes ascending order. No caret denotes descending order.

To add a field:

- Select the field from the Available Fields list and click Add Field.

To remove a field:

- Select the field from the Sort Order list and click Remove Field.

To arrange the sort order of fields:

- To move the field up one item, select the field from the Sort Order list and click Move Up.
- To move the field down one item, select the field from the Sort Order list and click Move Down.
- To reverse the order of the fields, click Reverse Sort Order.

Click Save to save your changes and return to the previous page. Or, click Cancel to abandon them and return to the previous page.

## Report Tabs - Reports

This page allows you to add, modify, delete, or reorder tabs on the report.

The summary tab is used as the default for tables, views and reports that display a one-to-many relationship with other tables, views, and reports.

Select a tab by clicking on the name in the Current Tabs in Report list. Click Add to create a new tab.

Tab properties:

- Tab Name - The name of the tab.

Tab positions:

- Move Up - Moves the position of the tab up one position. On the report, the tab will move to the left.
- Move Down - Moves the position of the tab down one position. On the report, the tab will move o the right.

Click Save to save your changes, or Cancel to discard them and return to the previous page.

[Help Topics](#) > [Browse Records](#)

## Add | Modify Record - DatabasePlus

This page allows you to edit record details and displays tabs and summary records for each related table and user defined tabs.

### Searching and Adding detail records

If a record displays a Search button, you can locate a related table's record and associate it with the current record. To associate a detail record:

- Click Search, then click Select on the record you want to associate.

If a record displays an Add button, you can add a related table record. To create a new detail record:

- Click Add, then enter your information into the details table's fields.
- Click Done to return to the previous page.

### The Date Selector

The Date Selector can be used to select dates from a standard visual style calendar. To enter a date using the date selector:

Click the  button, then:

- Change the month by clicking the white arrows on either side of the displayed date and year.
- Change the year by selecting it from the year pull-down menu near the bottom of the window.
- Click the day of the month to select that day and close the navigator window.

Click Save to save your changes. Click Cancel to abandon them and return to the previous page.

[Help Topics](#) > [Browse Records](#)

## Import | Export Records

The import and export wizards allow you to easily transfer data to and from the database.

### Importing Data

Begin: Review the fields in the table.

Step 1: Choose a file to load

Click Browse to bring up the file chooser.  
Click Next.

Step 2: Specify a file type

Select a file type from a list:

- Tab Delimited - Data for each field is separated by a tab. Commonly used when importing from a desktop table or spreadsheet application.
- Comma Delimited - Data for each field is separated by a comma. Commonly used when importing from a desktop table or spreadsheet application.
- HTML Formatted - Data for each field is in it's own separate cell of an HTML table. Each new row is a new record.
- dBASE Formatted - dBASE formatted files that are exported from the dBASE application.

Step 3: Map fields

- Select Check if first record contains headings if the first row in your data is the name of the fields.
- You can change the currently previewed record by selecting the row from the Show pull-down menu.
- For each field in the imported data, select the field that matches from the Field Names pull-down menus.

Step 4: Import data

If the preview data is importing, correctly, click Import and your data will be imported. Click Previous to fix the field list or Cancel to exit the import wizard.

### Exporting Data

Images and other files can not be included in tab or comma delimited export files. The exported records will be down-loaded to your PC as a Zip file to the directory you specify. Your browser must be configured to decode the Zip file using an appropriate helper application such as WinZip. The following formatting options are available:

- Tab Delimited - Separates your data by a tab in the exported file. Use when exporting to a desktop table or spreadsheet application.
- Comma Delimited - Separates your data by a comma in the exported file. Use when exporting to a desktop table or spreadsheet application.
- HTML Formatted - Separates your data into HTML table rows. Use when exporting to an HTML file.

Click Start Download to transfer the file.

## Modify Access Rights

The Access Control editor allows you to view and modify user and group permissions for the database or table.

There are two built-in accounts that can be modified, but not deleted:

- Public - Anyone who logs into the system anonymously through a published a report or survey. You must enable this account to allow anonymous logins.
- Record Creator - When a record is created, the person who created it is associated with that record. Modifying this permission changes access for the person who created that record.

### Adding/Modifying Access Rights

In the Modify Access Rights page:

- Click Add to create a new Access Control Entry, or click Edit on a row to edit an existing entry.
- To delete an access entry, click Delete.

If adding a new entry, select the user or group names you wish to add from the users and groups list.

You can modify the following options:

#### Status (Edit)

When editing an entry, you have the option of enabling or disabling the entry.

- Enabled - Gives the user or workgroup access to the database or table.
- Disabled - Prohibits the user from any access to the database or table. This option is useful to temporarily remove access.

### Access Rights

There are a number of options you can use for access rights.

Access Rights check boxes:

- Can ADD new records - allows the user to add records to the database or table.

Access Rights radio buttons:

- NONE - Disallow any access to this database or table. The user is not allowed to view or modify any records.
- Can VIEW records - Allow the user to view records in the database or table.
- MODIFY records - Allow the user or workgroup to modify and view records in the database or table.
- Can MODIFY or DELETE records - Allow the user or workgroup to view, modify, or delete records in the database or table.

### Additional Security (Tables)

Additional security can be enforced on specific tables. Security can be set for view, modify and delete operations.

- Table Level - Access Control specified above applies to all rows in the table.
- Row Level - Access Control specified only applies to the rows returned by a query.
- [Edit Query](#) - Use the expression builder to create a query that limits view access.



[Help Topics](#) > [Author Reports](#)

## Filter - Reports

The filter tool allows you to display records using criteria you define.

Add an expression by clicking Add Expression. When entering multiple expressions, specify AND or OR for each one.

To build an expression, enter data into the following fields:

- Field - Select a field from the Field pull-down menu.
- Expression - Select an expression from the Expressions pull-down menu. There are five choices:
  - Starts With
  - NOT Starts With
  - NOT Ends With
  - Contains
  - NOT Contains
- Value - Enter the value to compare.

Click Done to accept the filter expression, or click Cancel to return to the previous page.

[Help Topics](#) > [Author Database](#)

## Publish Reports - Database

The Embed a Report and E-Mail a Report wizards enable you to send reports to others. It also allows you to collect data from people in the form of surveys.

From here, you can:

- Embed a Report - Create the HTML needed to embed one of your reports into another web site. Follow the steps in the wizard to embed your report.
- Email a Report - Send links to your reports in an email to friends, family, and colleagues. Follow the steps in the wizard to e-mail your report.

NOTE: You must enable the Public account in [Database Access Control](#) to allow anonymous users to view or modify your data.

[Help Topics](#)

## Tutorials and Examples - DatabasePlus

The examples and tutorials in this section are designed to help you use DatabasePlus to its fullest, from simple table and view creation, to multi-view and multi-report configurations.

### Database Plus Tutorials

- Tutorial 1:  
[A Simple Contact Manager](#)

This short tutorial will get you acquainted with creating tables and relations, using value lists, and creating views.

- Tutorial 2:  
[Extending the Simple Contact Manager](#)

This short tutorial will get you acquainted with constructing calculated fields and creating summary and detail reports.

- Tutorial 3:  
[Completing the Contact Manager](#)

This short tutorial will get you acquainted with creating workgroups, granting access rights, publishing reports, and adding events to tables.

[Help Topics](#) > [Concepts & Tutorials](#)

## DatabasePlus Tutorial 1

### A Simple Contact Manager

This short tutorial will get you acquainted with creating tables and relations, using value lists, and creating views.

The tutorial starts by creating a basic table and then adding records to it. It then moves on to creating a value list for contact categories. Last, it explains how to create a table and create a link to another table, then how create a view to display the results.

## 1. Creating the Contacts database

Click Create a New Database

- Enter Contact Manager into the Name text box, then click Save
- Click Author under your database

## 2. Creating the Contacts table

Here, you will create the contacts table.

Select Tables from the Type navigation pull-down menu

- Click Basic Settings  
Enter Contacts into the Name text box, then click Save
- Click Fields
- Click Add
  - Enter Full Name into the Name text box
  - Select Text from the Type pull-down menu
- Click Add
  - Enter Age into the Name text box
  - Select Number from the Type pull-down menu
- Click Add
  - Enter Birthday into the Name text box
  - Select Date from the Type pull-down menu
- Click Save

The Contacts table should look like this:

### 3. Adding records into the Contacts table

Here, you will add the first record into the contacts table.

Select Browse from the Task navigation pull-down menu

- Click Add Record
  - Enter your name into the Full Name text box
  - Enter your age into the Age text box
  - Enter your birthday into the Birthday text box
  - Click Save

You have now created a simple table and added data into it. From here, you can:

- Click Modify to edit your data
- Click Printer Friendly to display a report style page
- Select the check-box next to your name and click Delete Selected to delete the data

### 4. Adding more functionality

Here, you will create a Value List to create a contact category with the values **Business** and **Personal**.

Select Author from the Task navigation pull-down menu, and Database from the Type navigation pull-down menu

- Click Value Lists
- Click Add
- Enter Category into the Name text box
- Click Edit Items
  - Click Add
    - Enter Business into the Name and Value text boxes
  - Click Add
    - Enter Personal into the Name and Value text boxes
  - Click Done
- Click Save

The Category value list should look like this:

Name:

Category

Description:

Type:

Text

Edit Items...

This value list contains the following entries

Name	Value
Business	Business
Personal	Personal

Select Tables from the Type navigation pull-down menu

- Click Fields
- Click Add
  - Enter Category into the Name text box
  - Select Category from the Value List pull-down menu
- Click Save

Select Browse from the Task navigation pull-down menu

- Click Modify on the row with your name
- Change Category from Business to Personal
- Click Save

## 5. Linking data together in tables

Here, you will create a new table called Journal and create a table reference and a view to see it in action.

Select Author from the Task navigation pull-down menu

Select Add a Table from the Name navigation pull-down menu

- Enter Journal into the Name text box
- Click Save
- Click Fields
- Click Add
  - Enter Notes into the Name text box
- Click Add
  - Enter Date into the Name text box and select Date from the Type pull-down menu.
  - Select Current Date/Time to automatically insert the current date when a new record is created.
- Click Add
  - Enter Contact Link into the Name text box
  - Select Table Reference from the Type pull-down menu
  - Select Contacts from the Relate to Table pull-down menu. This tells the table that this field links to the Contacts table.
- Click Save

The Journal table should look like this:

Fields:

- Notes
- Date
- Contact Link

Move Up

Move Down

Move to Top

Move to Bottom

Name: Contact Link

Description:

Type: Table Reference

Relate to Table: Contacts

☐ Required Field

Select Views from the Type navigation pull-down menu

- Enter Simple into the Name text box
- Select Contacts from the Base Table pull-down menu
- Click Save
- Click Fields
  - Click Add View Fields
  - Select all fields from the Available Fields list. This is usually accomplished by selecting the first item, then holding down the shift key and selecting the last item.
  - Click Add Field
  - Click Done
  - Select the [Journal]Contact Link field from the Fields list
  - Replace the contents of the Name text box with Journal
- Click Save

Select Browse from the Task navigation pull-down menu

- Click Modify
  - In the Journal tab, click Add Record
  - Enter Created a database in the Notes text box. Notice the date was inserted automatically. You may change the date if it is not correct.
  - Click Done
- Click Save

The Contact detail view should look like this:

Full Name	<input type="text" value="Mike"/>		
Age	<input type="text" value="27"/>		
Birthday	<input type="text" value="9/9/1999"/>	(mm/dd/yyyy)	
<b>[Journal]Contact Link</b>			
<a href="#">Add Record...</a>   <a href="#">Printer Friendly...</a>			
<b>Notes</b> 			
<b>Date</b>			
<b>Con</b>			
<input type="checkbox"/>	<a href="#">Modify</a>	Created a database	Feb 7, 2001 <a href="#">Con</a>

You now have a simple, but relatively powerful starting point for a contact manager. This concludes Tutorial 1.



## DatabasePlus Tutorial 2

### Extending the Simple Contact Manager

This short tutorial will get you acquainted with constructing calculated fields and creating summary and detail reports.

The tutorial starts by creating a calculated field for Age, then moves on to creating reports for summary and detail views. Last, it shows how to use modify access rights to grant other members access to your database.

#### 1. Creating a Calculated Field

Here, you will remove the Age field from the Contacts table and replace it with a calculated field that uses the contact's birthday to calculate the person's age.

From the Desktop, click Author under your database

Select Tables from the Type navigation pull-down menu

- Click Fields
- Select the Age field and delete it by clicking Delete.
- Click Save

Select Views from the Type navigation pull-down menu

- Click Fields  
Select the Age field and delete it by clicking Delete Field.
- Click Add Calculation  
Enter Age into the Name text box.
- Click Edit Calculation
- Select Number from the Result Field Type.
- To enter the formula "Year( Today() ) - Year( 'Birthday' ) - 1", simply type it in the Calculation Formula text box, or follow these steps to use the calculation tools:
  1. Select YEAR(Date) from the Functions pull-down menu and click Enter Formula
  2. Select TODAY() from the Functions pull-down menu and click Enter Formula
  3. Click the close parenthesis ')' button, then the minus '-' button in the Operators section
  4. Select YEAR(Date) from the Functions pull-down menu and click Enter Formula
  5. Select Birthday from the Fields pull-down menu and click Insert Field
  6. Click the close parenthesis ')' button , then the minus '-' button, then enter 1
- Click Done
- Click Save

It should look like this:

The screenshot shows the DatabasePlus interface. On the left, a 'Fields' list contains: Full Name, Birthday, Company.Name, Company.Address, Journal, and Age (which is highlighted in blue). On the right, there are three input fields: 'Name' containing 'Age', 'Description' (empty), and 'Formula' containing 'Year(Today())-Year('Birthday')-1'. Below the 'Formula' field is a button labeled 'Edit Calculation...'.

Select Browse from the Task navigation pull-down menu to view the results.

Notice that the Age field is about right (if you entered your real birth-date in Tutorial 1), but it has one decimal point and a trailing 0. That is because the default number format set in the database section is set to One Decimal Place. You can change the database default, but there is a better solution: create a report.

A report is similar to a view when browsing, but has many more features for formatting. A view is still needed to consolidate multiple tables into one picture and to create calculations. Reports can be based on tables or views, but by using views, you have much more control in the final results.

## 2. Creating the Contacts Report

Here, you will create the contacts report.

Select Author from the Task navigation pull-down menu and Reports from the Type menu.

- Click Basic Settings
- Enter Summary in the Name text box.
- Click Change to View if not currently in View mode.
- Select Basic from the Choose a View pull-down menu.
- Click Save.
- Click Fields.
- Select the Age field from the Fields in this tab list.
- Select No Decimal Places from the Display Format pull-down menu.
- Click Save.

It should look like this:

The screenshot shows a configuration window for a report. On the left, under 'Available Tabs:', 'Summary' is selected. Below that, under 'Fields in this tab:', a list of fields includes 'Full Name', 'Birthday', 'Company.Name', 'Company.Address', and 'Age', with 'Age' highlighted. On the right, several settings are configured: 'Label:' is set to 'Name', 'Entry Presentation:' is 'Number Field', 'Display Format:' is 'No Decimal Places', and 'Text Alignment:' is 'Align Left'. There is also an unchecked 'Read Only' checkbox at the bottom.

Select Browse from the Task navigation pull-down menu.

You'll notice that the Age field is displayed as an integer, with no decimal places. Now click Modify on one of the records to view its details. You'll notice that there is a field called Contacts, with all of the fields data set to Contacts. This happens because the details view of this record is only a table, not a report. If you choose a report as a details view, you have the power to use a view's calculated fields and data relationships.

## 3. Creating the Summary Details Report

Create a Journal View using the steps used to create a Contacts View in Tutorial 1.

Select Author from the Task navigation pull-down menu.

- Select Add a Report from the Name navigation pull-down menu.
- Enter Journal Details into the Name text box.
- Select Journal View from the Choose a View pull-down menu.

- Click Save

Select Summary from the Name navigation pull-down menu.

- Click Fields in Tabs
- Select Journal from the Available Tabs pull-down menu.
- Select Journal Details from the One-to-many Table or Report pull-down menu
- Click Save

Select Browse from the Task navigation pull-down menu.

Now click Modify on one of the records to view its details. You'll notice that the Journal tab is now using the Journal Details report, which includes all the fields from contact, not just a Contact field as before.

It should look like this:

Full Name	Mike
Birthday	11/16/1973 (mm/yy)
Company Name	<input type="button" value="Search"/> <input type="button" value="Add"/>
Company Address	<input type="button" value="Search"/> <input type="button" value="Add"/>
Age	27

Journal

[Add Record...](#) | [Sort...](#) | [Search...](#) | [Replace...](#) | [Printer Friendly](#)

Notes	Date	Contact, Full Name
<input type="checkbox"/> <a href="#">Modify</a>	11/16/2001	Feb 8, 2001 Mike

You should now have a clearer picture of how to use DatabasePlus to construct tables, views and reports. This concludes Tutorial 2.

# DatabasePlus Tutorial 3

## Managing Workgroups, creating Access Rights, publishing Reports and creating Table Events

This short tutorial will get you acquainted with Workgroups, Access Control, publishing Reports, and adding Events to tables.

The tutorial starts by creating a workgroup and adding access rights. It then moves on to publishing reports. Last, it shows how to create tables events to notify people when a record is created, modified or deleted.

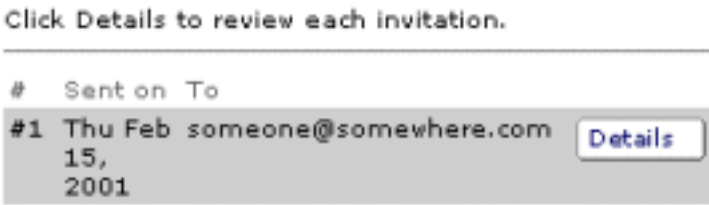
### 1. Creating the Workgoup

Here, you will create a new workgroup and invite users to join the workgroup. You may invite anybody who has an e-mail address.

From My Desktop, click Add new Workgroup

- Enter Human Resources into the Name text box
- Click Save
- Click Invite Users
- Enter the e-mail addresses of the people you wish to include in this group. They do not need to have a Bitlocker account at this time, but will need one later to access your data. You may use your own address for this tutorial.
- Click Invite Users
- Make any changes you want in the Subject text box, then click Send.
- Click Done to return to the Workgroup Editor
- Click Done to return to My Desktop

You can review your invitations by clicking Review Invitations. It should look similar to this:



### 2. Granting Access Rights

Here, you will grant the Human Resources group access to add, modify or delete any records in any table in your database.

Click Author under the Contact Manager database

- Click Access Control
- Click Add
  - Select Human Resources
  - Select Can ADD new records if not already selected
  - Select Can MODIFY or DELETE records
  - Click Save
- Click Done

It should look like this:

	Workgroup Name	Description	Members
<input checked="" type="checkbox"/>	Human Resources		0

---

Access Rights:

☒ Can ADD new records.

☐ NONE - Can not View, Modify, or Delete.

☐ Can VIEW records.

☐ Can MODIFY records.

☒ Can MODIFY or DELETE records.

Next, you will set specific access rights on the Contacts table. Setting table level security bypasses database security. You can grant or deny access to to a table just like the database.

Select Tables from the Type navigation pull-down menu

- Click Access Control
  - Click Set Access Control Level
  - Select Use table level security
  - Click Save

Now you can edit table access rights:

- Click Modify Access Rights
  - Click Edit on Record Creator
  - Select Enabled for Status
  - Click Can MODIFY records
  - Click Save
  - Click Add
  - Select Human Resources
  - Select Can ADD new records if not already selected
  - Select Can MODIFY or DELETE records
  - Click Save
- Click Done

It should look like this:

Name: Record Creator

---

Status:

☒ Enabled

☐ Disabled

---

Access Rights:

☒ Can ADD new records.

☐ NONE - Can not View, Modify, or Delete.

☐ Can VIEW records.

☒ Can MODIFY records.

☐ Can MODIFY or DELETE records.

### 3. Publishing a Report

Here, you will publish a report to an e-mail recipient or recipients. There are two options when publishing reports: Embed a Report, when allows you to copy the result and paste it directly in a web page; and E-mail a Report, which provides a link to the report. In this tutorial, we will E-mail the report. To publish reports to non-members, you must enable the Public account under Database Access Control.

Select Database from the Type navigation pull-down menu

- Click Publish Reports
- Click Email a report
- Click Next
  - Select the Summary report
- Click Next
  - Select No Input if not already selected. Setting a report as a survey allows the viewer to enter data into a new record. For surveys to work with non-members, you must enable the Public account under Database Access Control.
- Click Next
  - Enter the e-mail addresses of the recipients for which you want to send the report, separating each one with a semicolon.
- Click Next
  - Make any changes you want to the message, then click Send
- Click Done

If everything worked, you should have an e-mail in your e-mail in-box. Open the message and click the web page link, then create a new account. After logging in, you should have access to the Contact Manager reports.

### 4. Creating an Event

Events allow you or others to be notified when a record has been created, modified or deleted. It is best used with the workgroup and shared database features.

Select Tables from the Type navigation pull-down menu.

- Click Events
- Click Add
- Select New from the Upon Event pull-down menu
- Select Workgroup from the Send Email To option, then select Human Resources
- Click Field from the With Subject option, then select Full Name
- Click Save

- Click Done

Upon Event:	<div>New ▾</div>
Send Email To:	<div><div><input type="radio"/> Database Owner</div><div><input checked="" type="radio"/> Workgroup</div><div><div>Human Resources ▾</div></div><div><input type="radio"/> Custom</div></div>
With Subject:	<div><div><input checked="" type="radio"/> Field</div><div><div>Full Name ▾</div></div><div><input type="radio"/> Custom</div></div>
Use Report:	<div>Summary ▾</div>
Include Link:	<div><input checked="" type="checkbox"/> Include a link to the report in the email message</div>
Include Content:	<div><input type="checkbox"/> Include the content of the report in the email message.</div>

Now, any time a new contact is entered, all members of the Human Resources group will be notified. This concludes Tutorial 3.

## DatabasePlus Concepts 2

### Table and View Relationships

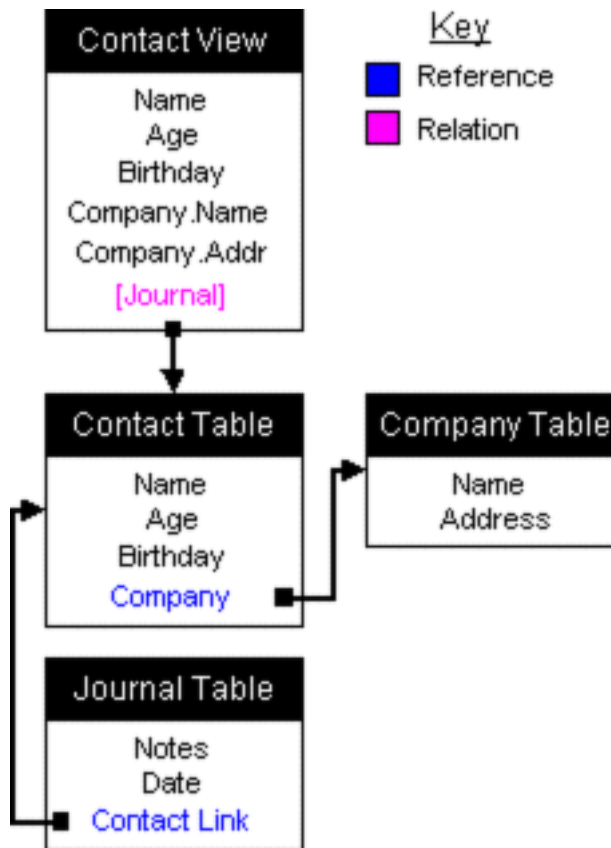
This page demonstrates several database layouts that are possible with DatabasePlus.

The more data and different type of data you store, the more likely you will want to create relationships between tables. This allows you to consolidate your data into one or several different views, allowing you to see more at a glance, and to view it in different perspectives.

There are four types of relationships you can build:

- One-to-One Relationship - This type of relationship states that one record in one table refers to exactly one record in another.
- One-to-Many Relationship - This type of relationship states that one record in one table refers to one or more records in another.
- Many-to-One Relationship - This is similar to a one-to-many relationship, but the reference is reversed. It simply changes the perspective.
- Many-to-Many Relationship - This type of relationship states that one or more records in one table refer to one or more records in another. This type of relationship requires an intermediate table. Details on this type are discussed further in this section.

Here is a diagram of a three table and one view model that makes up a simple contact manager:



Notice that the Journal table has a reference to the Contacts table. This order is very important, because where you create the link determines the type of relationship. In this case, it creates a one-to-many relationship - there are many journal entries for one contact, and Contacts is the primary table. If you created a link to the Journal table in the Contacts table, you would have created a one-to-one relationship, which would only allow you to have one journal entry per contact. The Contacts to Company reference is an example of a one-to-one relationship, where one contact can only belong to one company.

The general rule of thumb is:

- To create a one-to-one relationship, create a link in the primary table.
- To create a one-to-many relationship, create a link in the table that will have many records to one record in the



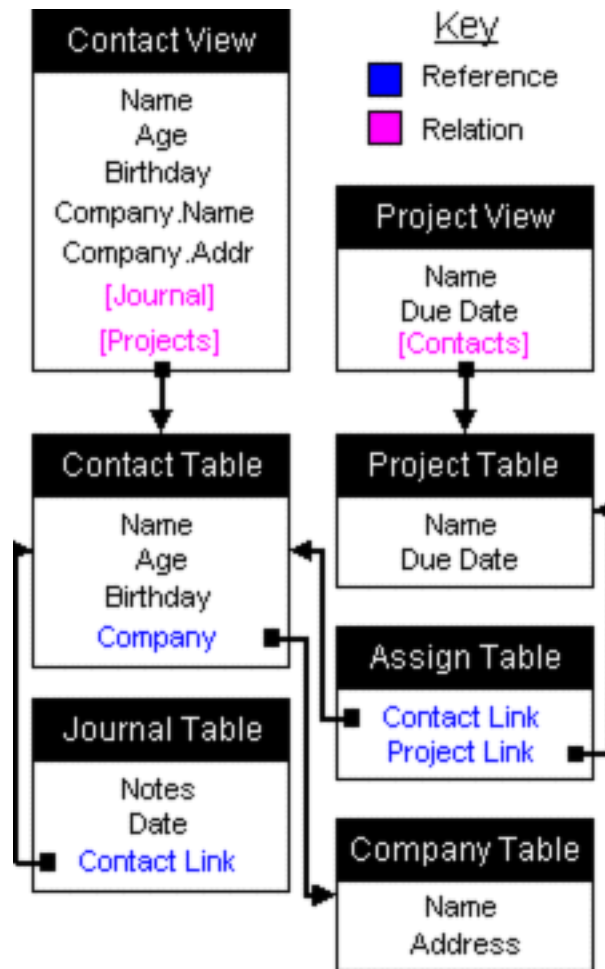
primary, or master table.

### More On Many-to-Many Relationships

Sometimes you need a many-to-many relationship, where many records in one table reference many records in a second. An example would be Projects-to-People, where multiple people can be working on the same project, but any one person may also be working on multiple projects.

To accomplish this, you need an intermediate table. This table acts as a bridge between the two tables that use a many-to-many relationship. As in a one-to-many relationship, the reference is created in the table that has many records to the one record in the other. The result is to create two references in the intermediate table - one to the first table, and one to the second. Create your views using the base tables and you will have a one-to-many relationship for each primary table.

Here is an updated Contact Manager diagram that includes a many-to-many reference between the Contacts and Projects tables:



[Help Topics](#) > [Author Table](#)

## Access Control - Tables

The table Access Control editor allows you to set the access control level for the table and view the current permissions.

### Set Access Control Level

Table security can be set to use the security entries from the database or use table specific access entries.

To change the table access control level:

- Click Set Access Control Level.
- Select Use security settings from the parent database if you wish to use security defined in the database
- Select Use table level security if you wish to define specific access rights for the table.
- Click Save to save your changes.

If you have chosen table level security, the Modify Access Rights option will appear in the Access Control page.

### [Modify Access Rights](#)

This editor allows you to view and modify user and group permissions for the table.

## Table Events - Tables

This page enables you to add or edit events that send an e-mail when a record is added, modified, or deleted.

Click Add to add a new event, or click Edit on the item's row to edit the event.

Select from the following options:

Upon Event:

- Modify - Generates an event when a record has been modified.
- Delete - Generates an event when a record has been deleted
- New - Generates an event when a new record is created.

Send E-Mail To:

- Record Creator - Sends an e-mail to the person who created the record.
- Database Owner - Sends an e-mail to the owner of the database.
- Workgroup - Sends an e-mail to a specific workgroup. Select the workgroup from the pull-down menu.
- Custom - Sends an e-mail to a specific address. Enter the address in the text box.

With Subject:

- Field - Sends the e-mail with the field name as the subject.
- Custom - Send the e-mail with the specified subject. Enter the subject into the text box.

Use Report - Select the report to use for the e-mail.

Include Link - Includes a link to the report in the email message

Include Content - Include the content of the report in the email message.

[Help Topics](#) > [Author Views](#)

## Edit Calculation - Views

The calculation editor allows you to create dynamic fields build upon functions, fields and operators.

The Calculation Formula text box is the formula editor. You may enter expressions manually, or use the formula tools to create your formulas.

Select the result type from the Result Field Type pull-down menu (Text, Number, True/False, Date, Time, Currency, HTML, URL). This will be used as the field type.

To use the formula tools, follow these hints:

- To insert a [Function](#), select it from the Functions pull-down menu and click Enter Formula.
- To insert a field, select if from the Fields pull-down menu and click Insert Field.
- To insert an [Operator](#), simply click on the operator's button.

Click Done to save your changes, or Cancel to abandon them. You will then be brought back to the Fields Editor.

[Help Topics](#)

## Author Views - DatabasePlus

This View Editor allows you to edit basic setting, add and remove fields, and to delete the view.

From here, you can go to:

- [Basic Settings](#)  
Allows you to change the name and description of the view.
- [View Fields](#)  
Add, modify, delete or reorder fields in the view.
- Delete View  
Permanently delete this view.

[Help Topics](#) > [Author View](#)

## Basic Settings - Views

This screen enables you to change basic properties of the view, such as the name and description.

- Name - The name of the view.
- Description - The description for the view.

## View Fields - Views

This page allows you to add and modify data and calculation fields. It also allows you to arrange the field headings and delete fields.

The Fields list displays the currently defined data and calculation fields. You can edit a field's properties by selecting it from the list.

To add a field, click Add View Field. This will take you to the field chooser. Follow these steps to complete the addition:

- Select the field or fields from the Available Fields list and click Add Field.
- Click Expand to show a referenced table's fields.  
Click Collapse to hide a referenced table's fields.
- Click Done when finished.

To add a calculation, click Add Calculation and name it. Next, click Edit Calculation. This will take you to the [formula editor](#).

To delete a field from the view, select the field from the Fields list and click Remove Field.

Fields can be rearranged in any order. Use the rearrange buttons to do this:

- Move Up - Moves the selected field up one item.
- Move Down - Moves the selected field down one item.
- Move to Top - Moves the selected field to the top of the list.
- Move to Bottom - moves the selected field to the bottom of the list.

[Help Topics](#) > [Author Views](#) > [Edit Calculation](#)

## Calculation Functions

The following functions are available for use in Calculation Formulas.

DatabasePlus supports standard text, number, date, and time functions. Number functions also work with the Currency field type. Number or Text functions also work with the True/False field type. For all functions listed below, the variables (text, number, date, time) can be either a constant or the field name.

Function Syntax	Function Description
ABS(number)	Returns the Absolute Value of (number).
CreationDate()	Returns the date that a record is added. Tip: Use this function to create a hidden calculation field to track when a survey is submitted.
CreatorAccountName()	Returns the registered DatabasePlus account name of a user who adds a record.
CreatorName()	Returns the registered first and last name of a user who adds a record.
Date(month,day,year)	Returns the numerical data type date. For example, 1/1/2000. Year is represented by four digits.
DatetoText(date)	Returns date as data type text.
DAY(date)	Returns just the day part of the date, as a number.
DayName(date)	Returns just the day part of the date, as text.
DayOfWeek(date)	Returns the position of day part of the date, from 1 (Sunday) to 7 (Saturday).
DayOfYear(date)	Returns the number of days elapsed since the day part of the date, from January 1 of the date year.
Exact(text,text)	A case sensitive function that compares original text with new text. This returns a "1", if there is a match and a "0" if not.
Hour(time)	Returns just the hour part of the time.
EXP(number)	Returns the value of "e" to the power of number. Exponential, like PI, has a standard numerical value.
If(condition, true statement, false statement)	<p>Enter a condition (formula). If the formula returns a result that is true, then the result of the expression in the true argument is displayed in the calculation field. If the formula returns a result that is false, then the result of the expression in the false argument is displayed in the calculation field.</p> <p>For example, to calculate how much you'll have to pay an hourly worker, who gets time and a half for over 8 hours of work per day, you'd use the following IF statement:</p> <p><b>If (hours &lt; = 8), rate*hours, (rate*8)+(rate*(hours-8)*1.5)</b></p> <p>where Rate = rate of pay for work completed, say \$10 per hour, and Hours = number of hours worked per day, say 12.</p> <p>Note: In order for this formula to work, first create a field called Rate with the type currency, a field called Hours with the type number, and a calculation field with a name such as, Cost per Day with the type calculation. Then put the formula, shown above, in the Current Formula box on the Edit Calculation dialog and select the Calculation Result type: currency.</p>
INT(number)	Returns just the integer part of a number.
Left (text,number)	Returns the character/s in text, determined by the number, counting from the left. For example, if the text entered into this field is "Green", and the number in this function is 2, then it returns "Gr."
Length(text)	Returns the number of characters entered into this field. For example, if "Jennifer" were entered, this field would return the number 8.
Lower(text)	Returns text in lower case.
Minute(time)	Returns just the minute part of the time.
ModificationDate()	Returns the date that a record was last modified (edited).
ModifierAccountName()	Returns the registered Bitlocker account name of the user who last modified a record.
ModifierName()	Returns the registered Bitlocker first and last name of the user who last modified a record.
Month(date)	Returns just the month part of the date.
MonthName(date)	Returns just the month part of the date, as text.
NumToText(number)	Returns number as a text data type.
PI()	Use this symbol to add the number for PI to a formula. For example, PI()*(R*R) is the formula for calculating the area of a circle.



Position(text,search text, start, occurrence)	Returns the position of the specified occurrence of search string in text, from start. Returns zero, if the string doesn't appear as specified. Use this to find a text string in some text. For example, you can find the second occurrence of the text string, "how", in the a text field named Comments, by using the following values in this formula: Position('Comments', "how", 1,2). For this example, the contents of the field Comments is: "How are you, how is it going?". The value returned will be a number that represents the location of the first letter in the text string starting from the first character in the text (14 in this case). Note: To speed up this calculation, you can set Start to any number. In this example, it is set to begin the search at the first character.
POW(number1, number2)	Returns number1 to the number2 power. For example, Pow (3,5) will return 3 to the 5th power or 243 (3*3*3*3*3).
Random()	Returns a random number between 0 and 1. To include a random number between 1 and 100, enter the formula: Random()*100.
Replace(text, start, size, replacement text)	Replaces characters in text with replacement text, from the position of start and containing the number of characters in size. Use this to replace a portion of text in a text field. For example, you can replace character spaces 5-13 of text in the text field, Instructions, with "business", by using the following values in this formula: Replace('Instructions',5, 8, "business "). The original text is, "Use Home address". The result will be "Use business address".
Right(text,number)	Returns the character/s in text, determined by the number, counting from the right. For example, if the text entered into this field is "Green", and the number in this function is 2, then it returns "en".
Round(number, precision)	Returns the number, rounded to the number of decimal places specified in the precision argument. If precision is less than zero, then all digits right of the decimal separator are dropped and number is rounded to the nearest ten for a precision of -1, the nearest hundred for a precision of -2, etc. A negative precision is allowed only for the Round function, not for the Truncate function.
Seconds(Time)	Returns just the seconds part of time.
Sign(number)	Returns -1 when the number is negative, 0 when the number is zero, and 1 when the number is positive.
Sqrt(number)	Returns the square root of a number.
TextToDate(text)	Returns text as data type date.
TextToNum(text)	Returns text as data type number.
TextToTime(text)	Returns text as a data type time.
Time(hours, minutes, seconds)	Returns the data type time. For example, 10:45:29 or 10:45 and 29 seconds. To indicate AM or PM, use military time, 1-23, for the hours digits. The system will display AM or PM, as appropriate, when the data is shown in database views. Also, the format of time can be changed, using the Views Dialog, after you create this formula.
TimeToText(Time)	Returns (time) as the data type text.
Today()	Returns the current date.
Trim(Text)	Returns (text) without spaces before and after.
Truncate(number, precision)	Returns the number, truncated to the number of decimal places specified in the precision argument.
Upper(text)	Returns text in upper case.
WeekOfYear(Date)	Returns the week number of the date. Week number 1 is the first week of the date year. Part of a week is counted as a full week.
WordCount(text)	Returns the number of words in (text).
Year(Date)	Returns the year part of date, as a number.

## Calculation Operators

There are 16 calculation operators available.

Operator	Description	Example
=	equal to	'Name' = "Mike"
< >	not equal to	'Date' <> "9/9/1999"
<	less than	'Quantity' < 5
>	greater than	'Price' > 100
+	addition	'Quantity' + 1
-	subtraction	'Quantity' - 1
*	multiplication	'Quantity' * 2
/	division	'Quantity' / 2
(	open parenthesis	2 * (3 / 4)
)	close parenthesis	2 * (3 / 4)
and	logical and	'a' = "a" and 'b' = "b"
or	logical or	'a' = "a" or 'b' = "b"
not	logical not, or negation	not 'Status'
> =	greater than or equal to	'Quantity' >= 5
< =	less than or equal to	'Quantity' <= 5
%	modulo - division remainder	'Quantity' % 10

[Help Topics](#) > [My Desktop](#)

## Edit Workgroup - DatabasePlus

The Workgroups editor allows you to edit basic settings, invite and remove users, and send group e-mail. You can create as many workgroups as you need. Each workgroup is shared by all the databases in your account.

A workgroup is a list of Bitlocker members. Using workgroups allows you to control who can view and modify your DatabasePlus databases. See Workgroups for details. From here, you can:

- [Edit Settings](#)  
This page allows you to set or modify basic workgroup settings.
- [Invite Users](#)  
This page allows you to invite other members or non-members to join this workgroup.
- [Review Invitations](#)  
This page allows you to review, expire and re-send the invitations that you have sent.
- [Remove Users](#)  
This page allows you to remove users from the workgroup.
- [Send Group E-mail](#)  
This page allows you to send e-mail to everyone in the workgroup.

## [Help Topics](#)

# My Desktop - DatabasePlus

My Desktop is the front page of DatabasePlus, where you can view and manage your databases, workgroups, and account information.

The top section of the page displays your name and the amount of storage space in megabytes (MB) remaining in your account. It also contains buttons to manage your account. Here, you can select:

- Logout - Ends your DatabasePlus session and takes you to the bitlocker home page.
- [Account Info](#) - Takes you to the account information page, where you can change your name and e-mail address, or change your password.

The next section displays your name, and allows you to create a new database.

- [Use a Template...](#) - Brings you to the templates page, where you can select from many styles of databases. You can create just a template, or include sample data in your database.
- [Create a New Database](#) - Creates a new, empty database and takes you to the Basic Settings page of the new database.

## My Databases

This sections lists your databases and reports with last modified times, and buttons to manage the databases. Here, you can:

- Copy - Makes a copy of the structure and data in the database. The new database is named identical to the original, with a sequence number appended.
- Template - Copies only the structure of the database. The new database is named identical to the original, with a sequence number appended.
- Delete - Deletes the entire database. A prompt will ask you to verify your action. **WARNING!** - this will delete all data in your database.
- Author - Takes you to the database authoring page. There, you can manage settings, security, value lists and publish reports.

## Shared Databases

A shared database is one that is shared among a particular workgroup. By setting a database's audience to workgroup, it is automatically published to each member's Shared Database listings.

This section lists shared databases and reports that you have access to, along with the authors of the databases and the last modified times.

## My Workgroups

A workgroup is a list of Bitlocker members. Using workgroups allows you to control who can view and modify your DatabasePlus databases. See [Workgroups](#) for details.

The Workgroups editor allows you to create, delete, and edit workgroups. You can create as many workgroups as you need. Each workgroup is shared by all the databases in your account. Here, you can:

- [Add new Workgroup](#) - Creates a new workgroup and takes you to the Edit Settings page.
- Delete - Deletes the workgroup. A prompt will ask you to verify your action. Click OK to delete the workgroup, or Cancel to return to My Desktop.

[Help Topics](#) > [My Desktop](#)

## Account Info - DatabasePlus

This page allows you to update your account information.

Edit the following fields to change your information:

Account details:

- Account Name - The account name used to log into DatabasePlus.
- New Password - If you want to change your password, enter it here and in the Confirm Password field.
- Confirm Password - See above.
- First Name - Your first, or given name.
- Last Name - Your last, or surname.
- E-mail Address - The e-mail address used for communication to you within DatabasePlus.

Additional options:

- Yes, I would like to be included in the [workgroup](#) feature
- Yes, I would like to be notified of new services, features, and special offers by e-mail

Click Submit to save your changes.

## Edit Settings - Workgroups

This page allows you to set or modify basic workgroup settings.

**Basic information:**

- Name - The name of the workgroup.
- Description - The description of the workgroup.

[Help Topics](#) > [My Desktop](#) > [Workgroups](#)

## Invite Users - Workgroups

This page allows you to invite other members or non-members to join the workgroup.

Enter your information into the following fields:

- E-mail Addresses - Enter the e-mail addresses of the members you wish to invite. Separate multiple recipients with a semicolon.
- Confirmations Request - Select Requires confirmation if you wish to receive a confirmation that the member has joined the workgroup.
- Invitation Expirations - Enter the number of days the member has to join the workgroup, or use the default value.
- Comments - Enter any comment you want to include in the message. The text will appear under additional comments.

Click Invite Users to preview the e-mail, or Cancel to return to the previous page.

The next page will allow you to preview your message. Preview the message and add any Carbon Copy addresses separated by semicolons, then click Send.

[Help Topics](#) > [My Desktop](#) > [Workgroups](#)

## Review Invitations - Workgroups

This page allows you to review, expire and re-send the invitations that you have sent.

Click Details on an item to view it's details.

- Click Re-send to re-send the invitation in case the member did not respond or receive the invitation.
- Click Expire Now to expire the invitation. This disallows any attempts to join the workgroup using this invitation.

Click Done to return to the previous page.



[Help Topics](#) > [My Desktop](#) > [Workgroups](#)

## Remove Users - Workgroups

This page allows you to remove users from the workgroup.

To remove a user or users from the workgroup:

- Select one or more check boxes to the left of each user, then click Remove Users.

Or, click Cancel to return to the previous menu.

[Help Topics](#) > [My Desktop](#) > [Workgroups](#)

## Send Group E-mail - Workgroup

This page allows you to send e-mail to everyone in the workgroup.

Fill in the appropriate fields:

- To - This text box contains the list of addresses to send, separated by semicolons.
- CC - The CC, or Carbon Copy text box is used to enter addresses in which you want people copied.
- Subject - Enter the subject of the message in this text box.
- Message - Enter your message in this multi-line text box.

Click Send to send the message, or...

Click Don't Send to cancel and return to the previous page.

## Database Templates - DatabasePlus

This page allows you to create a new database based on a pre-built template, with or without sample data.

Click on a database template to create a database, or click 'with Sample Data' to create a database with sample data. Click done to return to My Desktop.

[Help Topics](#)

## Getting Started - DatabasePlus

This section helps you get started building DatabasePlus applications by creating value lists, tables, views, reports, workgroups, access rights and table events.

A database is composed of structured data, in the form of tables, records and fields. A table is similar to a spreadsheet, which contains rows and columns of data. In a database, a row is called a record, and a column is called a field. For an illustration of all the components of a DatabasePlus database, see [The Big Picture](#).

To create an an empty database...

From My Desktop, click Create new Database, then:

- Enter the name of your database in the Name text box.
- Click Save.
- You will be brought back to My Desktop.

To create a database from a pre-built template...

From My Desktop, click Create a New Database, then:

- Click the template you wish to use, such as Customer Support Template, or click ...with Sample Data to create a database with sample data.
- You will be brought back to My Desktop.

The following sections describe how to create tables, views, reports, workgroups, assigning access and creating events within DatabasePlus.

1. [Creating Value Lists](#)
2. [Creating Tables](#)
3. [Creating Views](#)
4. [Creating Reports](#)
5. [Creating Workgroups](#)
6. [Assigning Access Rights](#)
7. [Creating Table Events](#)

## Creating Value Lists

---

Value lists allow you to define pull-down menu options for fields. If a value list is attached to a field, it will show a pull-down menu with the available options everywhere the field is visible - in tables, views, reports, and in the search page. Value Lists can also be viewed as Radio Buttons and an expanded List.

To create a value list...

From My Desktop, select Author under your database, then:

- Click Value Lists.
- Click Add.
  - Enter the name of the value list in the Name text box.
  - Click Edit Items.
  - Click Add.
    - Enter the name of the item in the Name text box.
    - Enter the database value associated with the item in the Value text box.
    - Click Done.

- ☐ Click Save.

## Creating Tables

---

Tables define the structure of your data, and store data in records. You can add events and define access rights for each table you create.

To create a table...

Select Author from the Task navigation menu.

Select Tables from the Type navigation menu, then:

- Select Add a Table from the Name navigation pull-down menu.
  - ☐ Enter the name of the table in the Name text box.
  - ☐ Click Save.
- Click Fields.
  - ☐ Click Add to add a new field.
  - ☐ Enter the name of the field in the Name text box.
  - ☐ Select the field type using the Type pull-down menu.  
See [Field Types](#) for details.
  - ☐ Enter a value into the Default Value text box if you want the field to be filled automatically.
  - ☐ Select Required Field if you want the field to enforce a value.
  - ☐ Click Save.
- Click Events if you want to add events to the table.
  - ☐ Click Add to add a new event.
  - ☐ Select the criteria and values you want for the event.  
See [Table Events](#) for details.
  - ☐ Click Save.

## Creating Views

---

Views allow you to combine tables into one table view, relabel fields, and add calculated fields.

To create a view...

Select Author from the Task navigation menu.

Select Views from the Type navigation menu, then:

- Select Add a View from the Name navigation pull-down menu.
  - ☐ Enter the name of the view in the Name text box.
  - ☐ Select the base table from the Base Table pull-down menu.
  - ☐ Click Save.
- Click Fields.
  - ☐ Click Add View Fields.
    - Select the fields you want to include in the view from the Available Fields list and click Add Field.
    - Click Done.
  - ☐ Click Add Calculation if you want to add a calculated field.
    - Enter the name of the calculation in the Name text box.
    - Click Edit Calculation.
    - Select the field result type from the Result Field Type pull-down menu.  
See [Field Types](#) for details.
    - Enter your calculation formula using the formula tools or simply type it in the Calculation Formula text box.  
See [Edit Calculation](#) for details.

- ☒ Click Done.
- ☐ Click Save.

## Creating Reports

---

Reports allow you to format fields, create and order tabs, assign available actions, and add sort and filter criteria.

To create a report...

Select Author from the Task navigation menu.

Select Reports from the Type navigation menu, then:

- Select Add a Report from the Name navigation pull-down menu.
  - ☐ Enter the name of the report in the Name text box.
  - ☐ Select the base table or view from the Choose a Table or Choose a View pull-down menu.
  - ☐ Click Save.
- Click Fields in Tabs.
  - ☐ When creating a new report, fields will be added to the summary tab automatically. If you wish to remove an item or items, select the field from the Fields in this tab list and click Remove Field. See [Report Fields](#) for more details.
  - ☐ Click Save.
- Click Tabs if you want to add custom tabs.
  - ☐ One-to-many fields in your report will automatically create a tab for the table or report. To rename a tab, select it from the Current Tabs in Report list and enter the name into the Tab Name text box.
  - ☐ To add a custom one-to-one field tab to your report, click Add.
  - ☐ Enter the name of your tab in the Tab Name text box. See [Report Tabs](#) for more details.
  - ☐ Click Save.
- Click Field Settings.
  - ☐ Select a field from the Fields in this tab list, and modify any of the properties such as the Label, Entry Presentation and Text Alignment. Select Read Only to display static text, not a text edit box. See [Report Fields](#) for more details.
  - ☐ Click Save.
- Click Filter if you want to add a filter to your report
  - ☐ Click Add Expression to add criteria.
  - ☐ Select the Field, Expression and enter your filter Value.
  - ☐ Click Add Expression to add another, and select AND or OR. See [Report Filters](#) for more details.
  - ☐ Click Done.
- Click Sort if you want to sort fields in your report automatically.
  - ☐ Select the field you wish to sort on from the Available Fields list and click Add Field.
  - ☐ To change the sort order of a field, select it from the Sort Order list and click Reverse Sort Order. See [Sort Records](#) for more details.
  - ☐ Click Save.

## Creating Workgroups

---

Workgroups allow you to share your data and to collect data from others.

To create a new Workgroup...

From My Desktop, click Create new Workgroup, then:

- Enter the name of the report in the Name text box.

- Click Save.
- Click Invite Users.
- Enter the e-mail addresses of the people you want to invite to your workgroup, separating each address with a semicolon (;).
- Click Invite Users.
- Review the subject and message and make any changes you want.
- Click Send.
- If successful, you will get a message "Your email has been queued for delivery".
- Click Done.
- To review your invitations, click Review Invitations.

When a recipient receives your invitation, they should click on the URL provided, and log in under their bitlocker account. If they do not have an account, they can create one at this time.

### Assigning Access Rights

---

Access Control allows you to set security rules for workgroups, individual members, and special accounts such as Public and Record Creator. Access control can be set at the database, table, and table row levels.

To allow a workgroup access to your database...

From My Desktop, click Author under your database, then:

- Click Access Control.
- Click Add.
- Select the Workgroup Name. The number of members in that workgroup are shown under Members.
- Select the Access Rights you want to assign to that workgroup, such as Can ADD new records, and Can VIEW records. For details on access rights, see [Access Control](#).
- Click Save.

### Creating Table Events

---

Table Events allow you to define e-mail alerts to trigger when certain actions such as adds, deletes, or modifications occur to the table.

To create a table event...

From My Desktop, click Author under your database.

Select Tables from the Type navigation menu.

Select your table from the Name navigation menu, then:

- Click Events.
- Click Add.
  - Select the event type from the Upon Event pull-down menu. You can select from Modify, Delete, or New.
  - Select the recipient of the e-mail. It may be sent to the Record Creator, the Database Owner, a Workgroup, or a Custom address.
  - Select the subject of the message to be sent. You can select Field, which simply reports the field, or Custom, where you can enter your own subject text.
  - Select the report to use for the e-mail, and whether to provide a Link or include the Content the report in the e-mail.
  - Click Save.

[Help Topics](#)

## Database Concepts - DatabasePlus

In general terms, a database is a structured data storage facility. It uses tables, records and fields with relationships between tables to combine loosely tied data into an application.

### Database Concepts

- Example 1:  
[Tables, Records, and Fields](#)

This example covers concepts about storing data with tables, records, and fields.

- Example 2:  
[Table and View Relationships](#)

This example demonstrates several database layouts that are possible with DatabasePlus.

Jump to the [Tutorials and Examples](#) section.



# DatabasePlus Concepts 1

## Tables, Records and Fields

This example covers concepts about storing data with tables, records, and fields.

Information can be stored in many different ways, from simple sticky notes to paper forms and reports to small and large computer systems. The advantage of using a computer system is that information is stored electronically. Once information is stored in this format, it can be searched, sorted, viewed and compared very easily.

### Structured Data

Similar to a spreadsheet, a table in a database represents a two-dimensional grid that contains rows and columns. Information of this type is called structured data, because every row contains the same type of information and the columns describe the individual pieces of information. In a database, a row is called a record, and a column is called a field.

Here is a diagram of a simple table:

John Doe	33	4/5/1967
Bill Doe	40	1/2/1960
Susan Doe	25	2/1/1975

This table has three fields: Contact Name, Age, and Birthday. You'll notice that the rows, or records, contain a whole piece of information: a contact, while the columns, or fields, contain the bits of information.

### Field Types

Fields in a table can be one of many types, and must be specified. Choosing the correct field type is crucial for speed, efficiency and functionality of the field. For example, a number can be stored as text, but it is inefficient and you will loose numeric sorting functionality.

The definition for the previous table would be:

Contact Name	Text
Age	Number
Birthday	Date

The Contact Name field type is set to Text because names are alphabetic. The Age field type is set to Number because age is numeric. The Birthday field type is set to Date because birthday is a date.

[Help Topics](#)

## Tips & Tricks - DatabasePlus

This section provides tips and tricks you can use to provide enhanced functionality within DatabasePlus.

Calculated fields allow you to perform calculations and call functions to achieve a wide variety of results. Calculated fields are found in a View, and may be one of the following types:

Text, Number, True/False, Date, Time, Currency, HTML or URL

### HTML and Calculated Fields

---

Support for HTML in a field is a powerful tool, but not as powerful as using a calculated field of type HTML. By dynamically creating HTML, you can change font sizes and colors, build sub-tables, insert inline frames, and much more.

Example 1:  
Show overdue tasks status with a red "OVERDUE"

- In a table, create a field named "Due Date" of type Date.
- In a view, create a calculated field named "Status" of type HTML.
- Enter the following formula:

```
if( 'Due Date' > Today(),  
  "<font color='red'>OVERDUE</font>",  
  "On Time" )
```

and set the return type True/False.

Example 2:  
Insert an inline frame into your field

- In a view, create a field named "Small Chart" of type HTML.
- Enter the following formula:

```
"<iframe  
  src='http://www.yahoo.com'>  
</iframe>"
```

- You can change the dimensional of the frame by specifying width and height tags:

```
<iframe width=320 height=240...
```

- Here are some other tags you can in an iframe:

```
frameborder= [pixel thickness]  
marginwidth= [pixel width]  
marginheight= [pixel height]  
scrolling= [yes|no|auto]
```

Consult the HTML iframe specifications section at [www.w3.org](http://www.w3.org) for more details.

### Building a Calculated URL

---

How about building a URL so you can retrieve information dynamically from the web? This is easily done with a calculated URL.

Example 1:  
Create a link to a users Yahoo profile

- In a table, create a field named "User Profile" of type Text.
- In a view, create a calculated field named "Profile" of type URL.

- Enter the following formula:

`"http://profiles.yahoo.com/" + 'User Profile'`

## Dynamic Report Filters

---

In reports, you have the ability to filter for specific criteria. Although you cannot use functions directly within report filters, you can add a calculated field that returns true if your criteria is met, then filter on the calculated field in a report.

Example 1:

Only show shipments for today or earlier

- In a table, create a field named "Ship Date" of type Date.
- In a view, create a calculated field named "Ship Today" of type True/False.
- Enter the following formula:

`'Ship Date' <= Today()`

- In a report based on this view, filter on the field "Ship Today" for a value of 1, which is equivalent to "True".

[Help Topics](#)

## Browse Database - DatabasePlus

This page shows a summary of the objects you have created in the database.

It displays:

- Tables - The number of fields and records for each table.
- Views - The base objects used for views.
- Reports - The base objects used for reports.
- Value Lists - The type and number of items for each list.