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User Guide

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Table of Content

Overview

This PDF documentation covers **version 7.1**. To view the documentation of previous versions please refer to the PDF files available in the *Downloads* section of our website: http://www.objectiflune.com/OL/Download/DownloadCenter.

Icons used in this guide

Some icons are used throughout this guide in order to catch your attention to certain particular information.

Notes: This icon shows you something that complements the information around it. Understanding notes is not critical but may be helpful when using PrintShop Mail Suite.

Warnings: This icon shows information that may be critical when using PrintShop Mail Suite. It is important to pay attention to these warnings.

Technical: This icon shows technical information that may require some technical knowledge to understand.

Other Documentation

For other related documentation , please see the drop-down menu at the top-right corner of this page.

About PrintShop Mail

Developed to simplify the production of variable data printing (VDP) jobs, PrintShop Mail Design is the perfect application for digital print operations and is a standalone application.

Pre-designed PDF or EPS files are imported into the application and variable information from a database file is overlaid by a simple drag-and-drop operation. Business rules can be added, and the data can be formatted and sorted using an expression wizard.

On the output side, PrintShop Mail Design caches static elements of the print job, which results in an optimized print stream that minimizes network congestion, decreases ripping time and allows digital printers to run near or at rated speed.

A VDP assembly technology, PrintShop Mail Design removes the need to use plug-ins to graphics design tools. Users can simply take the provided designs and overlay the variable data and variable images.

For more information about the possibilities of PrintShop Mail, please visit http://www.printshopmail.com/

PRINTSHOP MAIL SUITE

Getting Started

This section will get you started with the installation and setup of PrintShop Mail, as well as its activation procedure.

Installing PrintShop Mail

Before you start

If you are installing PrintShop Mail on a computer with Windows 2000, XP, 2003 or Vista, make sure you are logged in with full administrative rights before running the installation program.

Installing in Windows

Your installation file may have been delivered digitally or downloaded through our website. In this case, "CD-Rom" refers to the download location of the software and "Setup.exe" refers to a file that may be called "PrintShop Mail Suite 7.exe"

1. Locate the **setup.exe** file on the CD-ROM.
2. Double click this file to start the installation wizard.
   The installer loads the setup (this may take a few minutes).
3. Select the language you want to use for the installation then click **OK**.
4. If your computer is missing prerequisites necessary for PrintShop Mail to be installed, a dialog appears and indicates that they will be installed.
5. Click **Next** to download and install the required components.
6. A warning is displayed indicating that PrintShop Mail Web will be installed with a demo license, if it is installed. Click **OK** to dismiss the message.
7. Click **Next**. The *License Agreement* page is shown.
8. When you have read and understood the license agreement, click on **I accept the terms of the license agreement**. Click **Next**.

   You must accept the terms of the license agreement to continue.

9. Check the features that you want to install with PrintShop Mail. You cannot unselect PrintShop Mail itself, but can choose not to install its optional components. If you want to install PrintShop Mail Web, check that option. Click **Next**.
10. The *Destination Folder* screen displays the drive and folder where PrintShop Mail Suite will be installed. To install the software elsewhere, click **Change...** and navigate to the desired folder.
11. The *Program Folder* name determines the name that appears in the *Start Menu*. Keep the default name or change the name as desired, then click **Next**.
12. Click **Next** to start copying the files and install the software. The *Setup Wizard* starts installing the files.
    When the copying is complete, the final window appears.

You may check **Check for Updates** to check for updates after the installation has finished (recommended).

13. Click **Finish** to complete the installation of PrintShop Mail Suite.

Installing on Mac OS

> PrintShop Mail 5.4 is supported on Mac OS 10.4.11 through 10.9.X.

1. Locate the PrintShop Mail 5.4.x.dmg file on the CD-ROM or download location.
2. Double click on this file.
3. Select the language you want to use for the installation.
4. Read the license agreement and select " **Agree**". (If you select " **Disagree**" , the installation will be canceled).
5. A window will be displayed " Opening PrintShop Mail 5.4.x.dmg".
6. You can drag the PrintShop Mail icon to the Applications folder or to any other location on your computer.

Hardware Key and License

Without a hardware key, also known as "Dongle", PrintShop Mail runs in **Designer** mode. In this mode, all PrintShop Mail functions are available, but you can only print up to 25 records per session and a watermark is printed over each layout output.

You can use each credit on your hardware key to print one record.

To install the hardware key

This is a picture of the USB hardware key (though your key may differ slightly in appearance).

The Hardware Key

Windows

- Attach the hardware key to the USB port on your computer.

> Though Windows should recognize your key by default and install it without intervention, in some cases it may not be able to do so. In these cases, you will need to manually download and install the Aladdin HASP key drivers, available online at: http://www.aladdin.com/support/hasp/enduser.aspx

Mac OS

1. Attach the hardware key to the USB port on your computer.
2. Start PrintShop Mail
3. From the **Help** menu, select **Install Dongle Software...**
4. Follow the instructions on the screen

To activate the hardware key

Windows

1. Attach the hardware key to the USB port on your computer.
2. Start PrintShop Mail Suite
3. From the **Help** menu, select **Activate Upgrade**. The *Activate Upgrade dialog* appears.
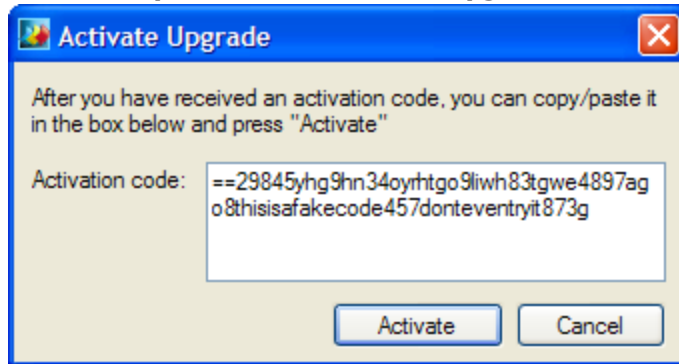
4. Copy and paste the Activation code that was provided to you when you redeemed your voucher, in the **Activation code** box.
5. Click on **Activate**

To view credit information on the hardware key:

1. Start PrintShop Mail.
2. From the **Help** menu, select **Credit Information**.

The Credit Information dialog will also display your License type, Serial Number, remaining credits as well as the Features included in your dongle. The Features are usually the OL Care Maintenance agreement end date and other possible features depending on the version.

Upgrading PrintShop Mail

The hardware key contains the license information of the PrintShop Mail application.

To view the license information, select **Help**/**Credit Information**.

To use certain features in PrintShop Mail, your license must be upgraded before you are allowed to use this feature. This count for the amount of credits, CARE, automated printing and multi user licenses.

Credits

Unlimited or Production version, allows unlimited records to be printed.

Limited or Standard version, allows 200,000 records to be printed.

CARE

The care date determines which PrintShop Mail version is licensed. Each PrintShop Mail version has an own release date, which is compared with your care date. If your care date is equal or newer than the release date, the application will run as licensed, otherwise the application will run in demo mode.

Cross Platform

All current PrintShop Mail dongles are cross platform and any user that has a valid OL Care contract can request a voucher for a cross platform license.

PrintShop Mail upgrade options

The **Upgrade** options are only enabled when the PrintShop Mail hardware key is attached to the computer where the upgrade procedure is performed.

To upgrade your hardware key

From the **Help** menu, you can select from three different upgrade menu items:

- **Voucher**: If you have a PrintShop Mail voucher number, click on the "Voucher" option. A PrintShop Mail voucher web page will open. Here you need to enter the voucher number and some additional information to confirm the request.
- **Upgrade request**: If you want to add credits, upgrade the version, add OL CARE or another option, click on the "Upgrade" option. The PrintShop Mail Upgrade page will open. Here you select the options you want and some additional information to confirm the request.
- **Activate dongle**: If you have received an Authorization code back from your voucher or upgrade request (by email), you have to copy that code into the Activate dongle screen. Then click "**Activate**".

Installing a Printer Driver

PrintShop Mail is capable of generating PostScript and non PostScript output.

PostScript output

To generate PostScript output, PrintShop Mail must communicate with a PostScript printer driver. The PrintShop Mail installer installs a PostScript printer which will be used by the application to generate PostScript output.

We recommended that you use either the Adobe or Microsoft printer driver in order to install your own printer.

Adobe PostScript Driver

Printer installation using the Adobe PostScript driver requires the AdobePS installer and a PPD (PostScript Printer Description) file.

For more information about Adobe PostScript Driver, please visit www.adobe.com.

Microsoft PostScript Driver (Windows only)

You can install a printer using the Microsoft PostScript driver with the **Add Printer** wizard in the Windows **Control Panel**. The wizard prompts for an INF file containing printer specific information.

Non PostScript output

When you want to print to a non PostScript printer, you just have to select the printer driver for that printer. PrintShop Mail will print through that printer driver non optimized output. Printing and spooling time will be significantly slower compared to other print technologies like Optimized PostScript.

The PrintShop Mail program interface

The PrintShop Mail Program Window

The PrintShop Mail Program Window is divided into multiple sections:
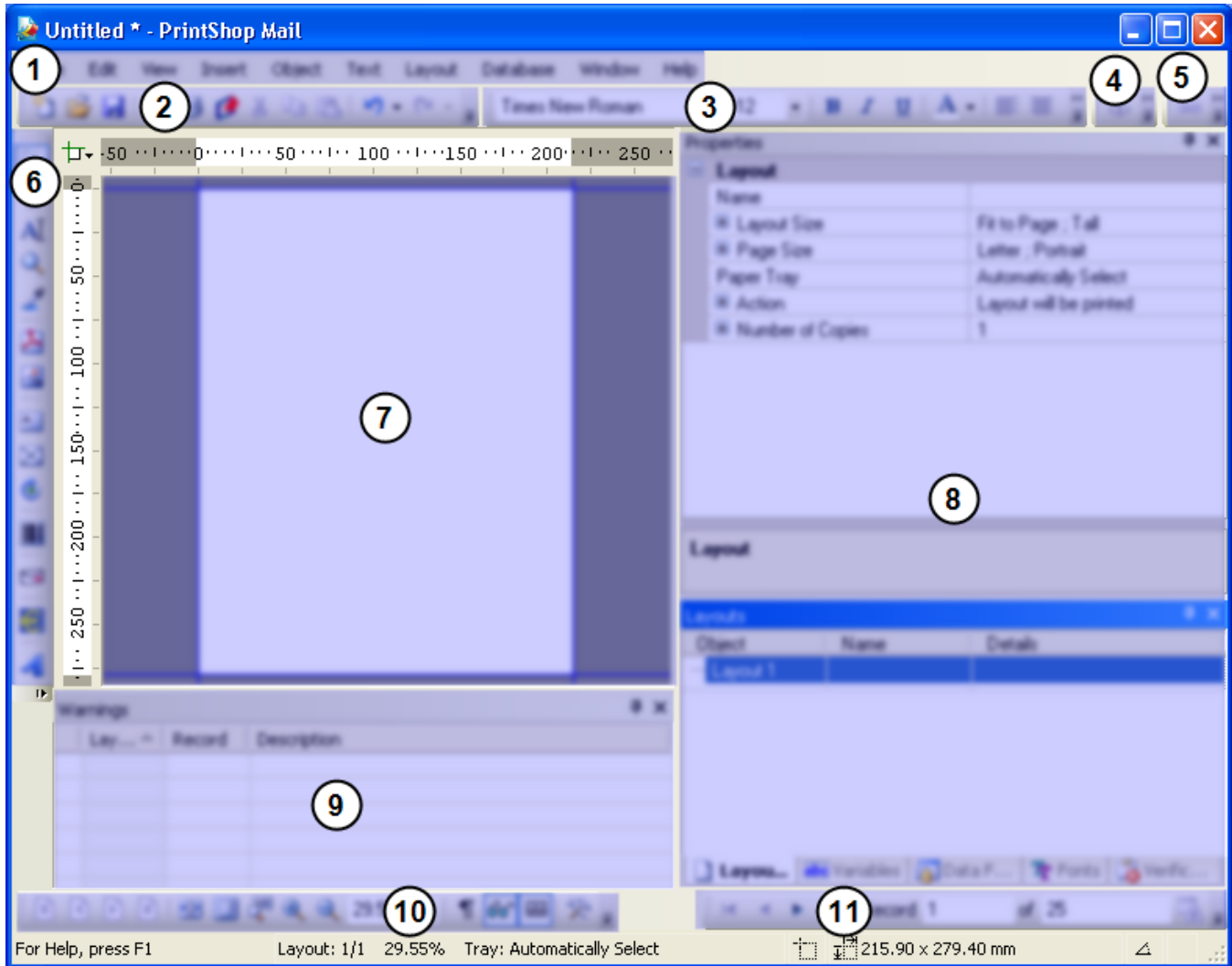
The PrintShop Mail Program Window and its components: (1) The Menu contains all of the useable menus referred to in this documentation. (2) The "Standard Toolbar" (page 17) lets you manipulate documents as well as clipboard functions. (3) The "Text Formatting Toolbar" (page 17) lets you set text and paragraph styles and formatting. (4) The "Objects Toolbar" (page 18) lets you manipulate object properties. (5) The "Text Link Toolbar" (page 19) lets you set links for text objects. (6) The "Tools Toolbar" (page 19) lets you add and manipulate objects in your document. (7) The Layout area is where your document and its objects appear. (8) The "Dockable Panels" (page 22) display various utilities such as your layouts, variables, data fields and more. (9) The "Warnings Panel" (page 24) displays warnings about errors in your document. (10) The "View Toolbar" (page 20) lets you change how you see your document by zooming in and out. (11) The "Database Toolbar" (page 21) lets you navigate through the records in your database.

PrintShop Mail Toolbars

The PrintShop Mail Program Window contains multiple toolbars that can be moved and customized. This section looks at each toolbar and its buttons.

Main (Top) Toolbar:

- Standard Toolbar
- Text Formatting Toolbar
- Objects Toolbar
- Text Link Toolbar

Objects Toolbar:

- Tools Toolbar

Bottom Toolbar:

- View Toolbar
- Database Toolbar

Standard Toolbar

The Standard Toolbar and its button.

Button	Function
	Create a new document, based on a blank layout.
	Open an existing document.
	Save your current document.
	Preview the current document.
	Print the current document.
	Publish templates to PrintShop Web.
	Cut the selected object(s).
	Copy the selected object(s).
	Paste the selected object(s).
	Undo the last action.
	Redo the last action.

To undo or redo multiple actions at one time, click the drop-down button next to the arrow.

Text Formatting Toolbar

The Text Formatting Toolbar and its button.

Click this button...	To do this...
Times New Roman ▾	Select the font name
12 ▾	Select the font size.
B	Make the selection **bold**.
I	Make the selection *italic*.
U	Underline the selection.
A	Select the font color.
≡	Left align text.
≡	Center text.
≡	Right align text.
≡	Justify text.
¶◄	Change the text to "Right to Left".
⊟	Vertical Layout

Objects Toolbar

The Objects Toolbar and its button.

Click this button...	To do this...
⚓	Add or Remove anchor.
⊫	Align left edges to the left edge of the last selected object.
⊣	Align right edges to the right edge of the last selected object.
⊤	Align top edges to the top edge of the last selected object.
⊥	Align bottom edges to the bottom edge of the last selected object.
◮	Rotate the object 90 degrees counter-clockwise.
◮	Rotate the object 90 degrees clockwise.
⊞ ▾	Select the fill color.
≡	Specify the border width (or no border).
▦	Specify the border style
✎ ▾	Select the border color.

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Text Link Toolbar

The Text Link Toolbar and its button.

Click this button...	To do this...
🔗	Create Forward Text Link.
✂	Break Forward Text Link.
◀	Select Previous Text Box.
▶	Select Next Text Box.

Not only can multiple text boxes can be linked together with text flowing between them, they can also be linked across layouts. See for more details.

Tools Toolbar

Windows

The Tools Toolbar and its button.

Click this button...	To do this...
▷	Activates the Select tool. Click on an object to select it.
✋	Activates the Pan tool. You can then click and hold within the design area and move the mouse to pan the area in all directions (best used when zoomed in).
A̲I	Activates the edit text tool. Click on an existing text object to edit it (same effect as double-clicking a text object).
🔍	Activates the zoom tool: left click to zoom in, right click or hold down CTRL to zoom out.
✏	Lets you pick a Fill, Text, or Border color based on the RGB values of any pixel on the screen.
📄	Places a PDF file. See Place PDF.
🖼	Places a static image. See Image Object.
A̲	Places a text object. See Text Object.
▦	Places a barcode object. See "Barcode Properties" (page 32).
✉	Places a variable image object. See Image Object.
↻	Lets you rotate an object to any angle by dragging the mouse cursor.
✉	Places a "DirectSmile Object" (page 91).

Click this button...	To do this...
€	Places an AcceptGiro object.

Mac OS

The Tools Toolbar and its button in Mac OS.
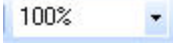
Click this button...	To do this...
▲	Select the tool.
T	Select the edit text tool.
🖼	Select the place variable image tool.
🖼	Place a static image.
🔍	Select the zoom tool.

View Toolbar

The View Toolbar and its button.

Click this button...	To do this...
◄	Go to the first layout.
◄	Go to the previous layout.
►	Go to the next layout.
►	Go to the last layout.
🗐	Fit Layout Width
🗎	Display Whole Layout
🔍	Display the Layout Actual Size

Click this button...	To do this...
Zoom In	Zoom In
Zoom Out	Zoom Out
100%	Specify the zoom level
¶	Show or hide Formatting Marks.
👓	Toggle Preview mode.
🔲	Show or hide the rulers.
🛠	Show or hide a specific toolbar.

Database Toolbar

Click this button...	To do this...
⏮	Go to the first record.
◄	Go to the previous record.
►	Go to the next record.
►▏	Go to the last record.
Record 1	Go to the current record.
of 25	Display the total number of records in the database.
🔍	Open the Find Record dialog (see below)
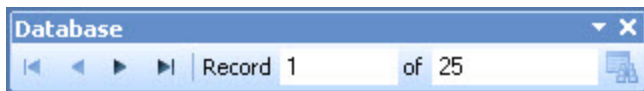
The Database Toolbar and its button.

>>> The **Total number of records** edit box is read-only when a database is open.
When no database is open, you can change the total number of records, in the Database toolbar. To do this, enter the desired number of records and press Enter.

>>> The **Total number of records** edit box is read-only when a database is open.
When no database is open, you can change the total number of records by entering the desired number of records and pressing Enter.

Find Record

The Find Record feature is available from the Database menu, the database toolbar or via its shortcut key (CTRL+F). It is only available when a database is open, and will be grayed out otherwise.

Though not part of the Database Toolbar, a very useful feature for open databases is the Find Record feature. This feature is available from the Database menu, or via its shortcut key (CTRL+F). It is only available when a database is open, and will be grayed out otherwise.

The find record dialog appears with the following options:

- **Find what**: Enter a term (word, phrase, character) to search for.
- **Look in**: Click the drop-down to select the database field in which to search.
- **Match whole word only**: Only match if the word is separated. For example, if this is selected the word *tom* would not be found in the word *tomatoes*. If it is not selected, words part of others will be matched.
- **Match case**: Click to force a match only if each letter of the word is in the same case. For example, if this is selected, *Tom* will not be matched with *tom* or *ToM*. Otherwise, the search is case insensitive.
- **Direction**: Select whether to look forward in the records (down) or backwards in previous records (up).
- **Find Next**: Click to find the next occurrence of the search term.
- **Cancel**: Closes the dialog.

Dockable Panels

The PrintShop Mail Program makes it easy to view the correct information precisely when you need it, by dividing that information into different panels. These panels will change depending on the situation.

These panels can be undocked and moved in order to customize the interface to your liking.

Layouts Panel

The **Layouts** panel contains the layout(s) and their object(s). The objects are listed as a part of the layout in a tree view.

The Layout Panel, showing two layouts and a few objects.

Variables Panel

The **Variables** panel shows the list of variables, the Name, Expression and calculated Result.

The Variables panel, showing the name, expression and result for each variable.

To edit a variable:

1. Double click on the variable. This will open the *Expressions Editor* (**"The Expression Editor" (page 119)**).
2. Modify the expression, then click **OK**.

To edit a variable's properties and change its category:

1. Click on the variable.
2. Click on the Window menu, then Properties.
3. Change the properties of the variable (see "Variables Properties" (page 31))

To add a Persistent Variable (See "Working With Variables" (page 91) for information on persistent variables):

1. Right-click anywhere in the Variables Panel, then click on **Add Variable**.
2. Type the name you want for the variable.
3. Click **OK** to create it.

To delete a Persistent Variable:

1. Right-click on the variable you want to delete.
2. Click **Delete Persistent Variable**.

To copy a variable's expression:

1. Right-click on the variable.
2. Click **Copy Expression**.
3. Right-click on another variable where you want to paste the expression.
4. Click **Paste Expression**.

For detailed information about how to format variables, see "Variables Properties" (page 31).

Data Fields Panel

The **Data Fields** panel will show the field names , database name of the opened database and the number of records it contains.

The entries you will find in the **Data Fields** panel in PrintShop Mail, represent data fields that occur in the document. These fields are either referred to in expressions (for variables or layout conditions, without the need to directly being linked to a database), or they refer to actual database fields (when the document is already linked to a specific database).

When a data field is used in the PrintShop Mail document, it will have a check mark in the **Data Fields** panel.

To create a Data Field without opening a database:

1. Create a variable: **@variable@**.
2. Enter the **Expression Editor** by double clicking on the **@variable@** in the **Variables** panel.
3. Type: [My data field].
4. Click **OK**.

You can browse the records in the database by clicking the browse buttons in the Database toolbar, or by making the following selections from the Database menu:

- First Record (ALT+Up)
- Previous Record (ALT+Left)
- Next Record (ALT+Right)
- Last Record (ALT+Down)
- Record...Allows you to select a specific record.

The following information is displayed for each data field in the database:

> These **Data Fields** properties are only relevant for PrintShop Web, they will not affect the behavior of PrintShop Mail.

- **Checkmark**: A checkmark will be visible if the data field is used somewhere in your document. If no checkmark is present, the data field is not used anywhere in your document.
- **Name**: A unique identifier, either automatically generated or corresponding to the field name in the database. You cannot modify this value here.
- **Value**: The value of the field for the current record.
- **Type**: Displays the type of data in the data field. "Default" means that at the moment no data source is available for this field. Once there is a data source available, the **Type** column will display the data type for that field, as specified in the data source, like number, text, etc.

Warnings Panel

While you are working, PrintShop Mail will dynamically check for any possible errors on the layout and will display any occurring errors in the **Warnings** panel.

	Layout	Record	Description
⚠	1	-	Object is not entirely placed on the layout
⚠	1	-	Object is placed beyond the printable area
⚠	1	1	No image specified
⚠	2	-	Object is placed beyond the printable area
⚠	2	-	Text does not fit in its bounding box
⚠	2	-	Variable "DATE" is not linked to an expression
⚠	2	1	Image "Branch Den Helder" not found

Warnings (7)

Layouts | abc Variables | Data Fi... | ⚠ Warni... | Verific...
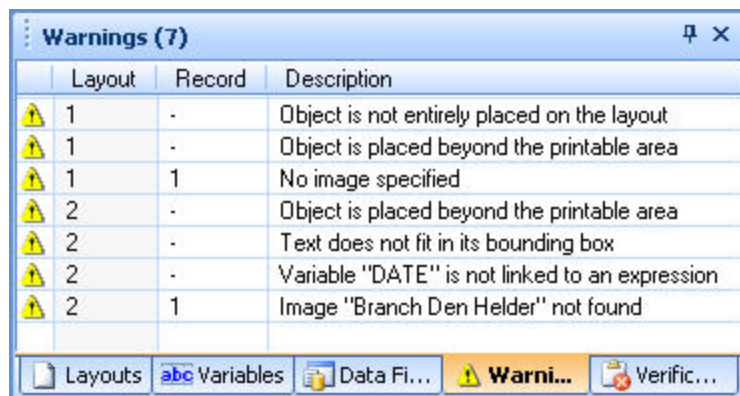
The Warnings Panel, showing any warning that occurs in your document.

Fonts Panel

The **Fonts** panel will show the fonts used in the PrintShop Mail document and any missing font.

Fonts		⏚ ✕
ⓘ This list is only up-to-date for the current record		Update
Name ▲	Occurs in	Status
Arial	Text 1	Available
PSMC128Bwr3P72DhTt	Text 2	Missing
Tahoma	Text 4	Available
📄 Layouts abc Variables 🗐 Data Fi... ₸ Fonts 🗐 Verifica...		
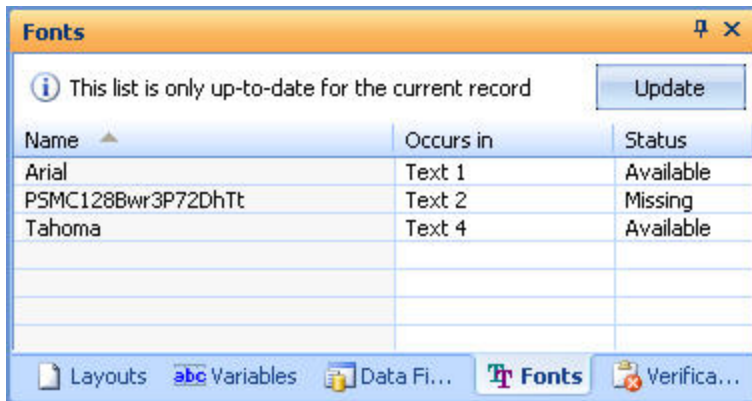
The Fonts Panel, showing any all the fonts used in your document.

Verification Result Panel

When you select from the **Layout** menu, **Verify Document** a progress bar will be displayed, showing the amount of records being checked. The warnings for the whole document will be listed in the **Verification Result** panel.

	Layout	Record	Description
⚠	1	-	Object is not entirely placed on the layout
⚠	1	-	Object is placed beyond the printable area
⚠	2	-	Object is placed beyond the printable area
⚠	2	-	Text does not fit in its bounding box
⚠	2	-	Variable "DATE" is not linked to an expression
⚠	2	1	Image "Branch Den Helder" not found
⚠	1	1	No image specified
⚠	1	2	No image specified
⚠	1	3	No image specified
⚠	1	4	No image specified
⚠	1	5	No image specified
⚠	1	6	No image specified
⚠	2	7	Image "Branch Leiden" not found
⚠	1	7	No image specified
⚠	1	8	No image specified
⚠	1	9	No image specified
⚠	1	10	No image specified

Verification result (17) — 📄 Layouts abc Variables 🗐 Data Fields ⚠ Warnings (7) 🗐 **Verification res...**

The Verification Results Panel, showing the results of the Verify Document procedure.

It is possible to save messages displayed in the **Warnings** panel and the **Verification Results** panel by right clicking on the message and Copy/Paste the text to a text file.

Properties Panel

You can change the properties for any object in the Properties Panel. The properties of each type of object is separated into groups.

The following groups are common to all (or most) objects:

Object Group

Option	Description
Name	The unique name that identifies an object.

The following limitations apply to "objects name":

- No white spaces leading or trailing.
- Maximum 255 characters.
- Not editable when multiple objects are selected.

Frame Group

Option	Description
Lock Position	Locks the position, size and rotation attributes of this object.
Bounding Box	Displays the dimensions of the bounding box using the location of the top left corner, and the height and width. These values can also be entered manually.
Snap Frame to Content (Windows Only)	Snaps the frame to the proportions of the content. When this option is set to "Yes", the object's bounding box (frame) will automatically resize to the dimensions of the image or resize vertically to accommodate larger amounts of variable text that would otherwise not fit in the text box. When set to "No", a verification warning will be shown, when variables do not fit in the box. **Note**: When using text linking, Snap Frame to Content is only allowed for the last object in the chain.
Border Size	Change the border size. You can choose from hairline width, or a pixel width (1-12px). You can also create a Custom Size.
Border Color	You can choose one of the standard colors, or create your own custom RGB, CMYK, Gray or Spot color for the border. To learn more about PrintShop Mail Spot Colors click "Specify Spot Colors" (page 74).
Border Style (Windows Only)	Choose the border style. The following options are available: • Solid ——————— • Square dot ...... • Dash — — — — — • Dash Dot — · — · — · • Long Dash —— —— —— • Long Dash Dot —— · —— · • Long Dash Dot Dot —— · · —— · ·
Fill Color	The fill color can be transparent, or it can be set to a solid fill color. The standard Windows palette is available, but you can also create your own custom RGB, CMYK, Gray or Spot color. To learn more about PrintShop Mail Spot colors click "Specify Spot Colors" (page 74).

Option	Description
Rotation	Shows the current rotation applied to the item.
Anchor	**Master Object**: Master object name to anchor to. **Horizontal**: Horizontal aspect of the master object to anchor to. **Vertical**: Vertical aspect of the master object to anchor to.

Printing Group

Option	Description
Print	Specifies whether the object will be printed or previewed only.
Global Scope for PPML (images only)	Specifies whether an image should get Global Scope. Images with a Global Scope can be reused on the printer across multiple PPML or PPML/VDX jobs. When set to "Yes" images will be stored in a specified Environment and can be reused in others print jobs. This property will be ignored for other technologies.

Text Properties

The Text Properties lets you change all of the properties for any text object in your document. The options available are different in the Windows and Mac OS versions of the software.

To open the text properties in Windows

1. Click on the text object of which you want to display the properties.
2. Click in the **Window** menu, then click **Properties**.
3. The Properties window appears or, if it is already present, is brought to the front and selected.

To open the text properties in Mac OS

1. Click on the text object of which you want to display the properties.
2. Click on Items, then Show Object Properties. You can also right-click on the text object and select Show Object Properties from the drop-down menu.
3. The Object Properties dialog appears.

Available Options

All objects share some properties. To see these shared properties (the "Object", "Frame" and "Printing" groups), see Properties Panel.

Content Group

Option	Description
Alignment horizontal	Horizontal Text alignment (Left, Centered, Right, Justified).
Alignment vertical	Vertical text alignment (Top, Centered, Bottom)
Copy fitting	**Copy fitting** is a feature that will automatically shrink text by reducing the font size when there is more text than the text box can hold. The font size will be reduced to the font size needed to fit the text in the text box. However, text will not be shrunk beyond the specified minimum font size. When the text needs to be resized, all text will be

Option	Description
	resized step by step until the text fits or the minimum font size is reached. **Minimum font size**: When Copy Fitting is enable, the minimum size the font can reach is 1, by default the minimum font size is 8. **Allow line breaks** is a feature which automatically replaces some of the blank spaces between words by line breaks, in a way that each line fits in the viewable window. In PrintShop Mail "Allow line breaks" is set to Yes by default. When Copy Fitting is set to "Yes", individual words can be broken due to word wrap. When Copy Fitting is set to "No", text only fit if the individual words are not broken. Text will break on spaces only. **Note**: Copy Fitting is not allowed for linked objects.
Remove Empty Lines	This setting allows you to remove empty lines in a text box. When set to "No", empty lines will be shown in the text box. This is useful where the variable is for instance an address and some records in the database have empty fields. If you select this function the empty lines caused by the empty field(s) will be preserved. When set to "Yes", both empty lines which are caused by empty fields in the database and white lines which are manually inserted will be removed. When set to "Only in variables", all empty lines will be removed in the variables only, static empty lines will be preserved.
Vertical Layout	This setting is specifically designed for vertical text with Asian characters which need to be printed vertically, other characters will simply be rotated 90°. This feature is supported under Windows XP, Windows 2003 and Windows Vista.

Mac OS Note: The "Remove Empty Lines" feature can be switched on using a checkbox in the Expression Editor Window.

Data Field Properties

The Data Fields Properties will let you change the properties of data fields that have been defined in a linked database, or defined manually in an expression. Note that these options are only used when uploading a document to PrintShop Mail Web as they determine how to collect the information. When using only PrintShop Mail Design, they are ignored.

To open the data field properties

1. Open the Data Fields panel. To do this, click the Window menu, then click Data Fields.
2. Click on the data field of which you want to change the properties.
3. Click in the **Window** menu, then click **Properties**.
4. The Properties window appears or, if it is already present, is brought to the front and selected.

Available Options

Data Field Group

- **Name**: A unique identifier, either automatically generated or corresponding to the field name in the database. You cannot modify this value here.
- **Default Value**: You can set a Default Value here, this will be a string value that will be displayed in PrintShop Web, once the document is published, as a placeholder when no data source is available (yet) for this Data Field. You will find this string value back in PrintShop Web, after the document has been selected (before the stage where a data source is provided).
- **Remarks**: You can define a Remark here, this will be a string value that will be displayed in PrintShop Web once the document is published. You can use this, for example, to give clients a hint about this variable data field.

Publication Group

- **Source**: The data source can be either "Database", a database uploaded by the PrintShop Web client, or "User input", data provided by for example a web form.

Image Properties

The Image Properties lets you change all of the properties for any image object in your document. The options available are different in the Windows and Mac OS versions of the software.

To open the image properties in Windows

1. Click on the object of which you want to display the properties.
2. Click in the **Window** menu, then click **Properties**.
3. The Properties window appears or, if it is already present, is brought to the front and selected.

To open the image properties in Mac OS

1. Click on the object of which you want to display the properties.
2. Click on Items, then Show Object Properties. You can also right-click on the object and select Show Object Properties from the drop-down menu.
3. The Object Properties dialog appears.

Available Options

All objects share some properties. To see these shared properties (the "Object", "Frame" and "Printing" groups), see "Properties Panel" (page 26).

Content Group

Set this option...	To specify...
Alignment horizontal	Horizontal alignment of the images (Left, Centered, Right).
Alignment vertical	Vertical alignment of the images (Top, Centered, Bottom).
Scale (Windows) Clipping (Mac OS)	Here you can specify options on how the image is resized relative to the bounding box. **Original size**: The image is always shown in its original size, regardless of the size of the frame. Original size resets the image content to 100%. **Fit in Frame**: The image will be resized to fill the frame, maintaining the image aspect ratio, showing the actual scale percentage of the image. Images are not clipped. **Crop to Frame**: Proportionally scales the images filling the entire frame. Images may be clipped.

Set this option...	To specify...
Image Filename	Displays the image filename. The contents can only be changed through the **Expression Editor**.
Image Folder	This points to the path where the variable images are stored. Clicking on the icon allows you to browse to a different search folder.
Search Subfolders	Specify whether PrintShop Mail should only look for files in subfolders. When set to "No" PrintShop Mail will only look in the current folder. When set to "Yes" PrintShop Mail will look in subfolders as well.
Page Number	The PDF page number represents the page number in the original PDF file, ranging from one to the number of pages in the PDF. An image object can be linked to a single PDF file. As a PDF can contain multiple pages you can specify the page(s) to be used in your document through an expression (TOTALPAGES), in that case you can use variable pages within that PDF file. If the page number refers to a non existing page, a warning will be shown in the warnings panel:"Page number X is invalid; this file contains Y pages only.
Two Color (Windows only)	**Convert to Two Colors**: When set to "No" images will shown it's original color. Setting this option to "Yes" will convert the image to two colors. **Threshold**: Lets you specify at which luminosity percentage to consider the background color to be transparent. The default value is 50%, values are 0% to 100%. **Background Color**: Convert background color to specified color. **Foreground Color**: Convert foreground color to specified color.

The following limitations apply to "Two Color" option for images:

- The **Two Color** option does not support the image format EPS.
- **Two Color** option will be disabled when using the Print Technology specific options, OPI, APR and Do no send images (VIPP).
- The Print Technology PPML support the **Two Color** option, when you check "Embed Images in PDF" in the Print Dialog.

> PrintShop Mail for Windows preserves the color space in images format EPS, TIFF and JPEG. To learn more about Color Management, click "Color Settings" (page 47).
> PrintShop Mail for Macintosh converts the color space that is embedded in the image to the color space of the printer driver. You can check the color space of the printer driver, selecting from the File menu, Print/ColorSync.

Layout Properties

When you select a layout in the Layouts panel, the following properties will be displayed:

Option	Description
Layout Name	Name of the selected layout.
Layout Size	Size of the selected layout. More information about this topic , can be found in Specify the Layout Size.
Description	Select a standard size: Fit to Page (Default), Fit to Objects, Custom Size, A3, A4, A5, B5, US Letter, US Legal.

Option	Description
Width	Enter custom width. This setting is editable if you select "Custom Size".
Height	Enter custom height. This setting is editable if you select "Custom Size".
Paper Size	Size and orientation of the paper for the current layout. More information about this topic can be found in Page Setup.
Description	Select the paper size for the selected layout. The paper size depends on the printer driver selected in the Page Setup dialog.
Width	The width of the page.
Height	The height of the page.
Paper Tray	If your printer supports different paper trays and your document consists of multiple layouts, you can send different layouts to different trays. More information about this topic can be found in Select Paper Trays
Action	The action to be performed for this layout, PRINT, BLANK or SKIP. More information about this topic can be found in Use Layout Condition.
Number of copies	Number of copies to be printed for the selected layout, must be at least one. More information about this topic can be found in Number of Copies.

Variables Properties

The Variables Properties lets you change all of the properties for any variable used in your document. This panel is only available in the Windows version of PrintShop Mail.

To open the variables properties

1. Open the Variables panel. To do this, click the Window menu, then click Variables.
2. Click on the variable of which you want to change the properties.
3. Click in the **Window** menu, then click **Properties**.
4. The Properties window appears or, if it is already present, is brought to the front and selected.

Available Options

Variable Group:

- **Name**: This value can only be changed for global variables (it cannot be changed for variables created by objects, or typed in a text box).
- **In Use**: This value cannot be changed, it displays whether or not the variable is used by any text object.
- **Persist**: Indicates whether or not the variable is persistent. For more information on persistent variables, see "Working With Variables" (page 91).

Format Group:

- **Category**: Sets the category of the variable. Changing the category will change the rest of the available options.

Text Category: This category does not have any options. Text variables have no special formatting and are displayed as-is.

Email Category: This category does not have any options. Email variables will only accept values that correspond to a valid email address: [identifier]@[domain].[tld]

Date Category: This category is used for dates used in your documents, and has the following options:

- **Locale**: Specify the locale and language used for the date.
- **Date Format**: Specify the exact format of the date (available options depends on the locale)

Currency Category: This category is used for amounts in your local currency, and has the following options:

- **Locale**: Specify the locale and language used for the currency display.
- **Currency Symbol**: Specify what symbol will be used for currency.
- **Positive Format**: Specify how positive currency amounts will be displayed.
- **Negative Format**: Specify how negative currency amount will be displayed.
- **Decimal Symbol**: Specify what character is used to separate the amount with its decimals (for example, dollars and cents)
- **Decimal Places**: Specify how many decimal places to display after the decimal symbol. Note that the amount will be rounded to the last decimal displayed.
- **Digit Grouping Symbol**: Specify what character is used to separate groupings (for example, a space or comma to separate thousands, millions, billions)
- **Digit Grouping**: Specify how many digits to group together (for example, 3 for north-American currencies).

Number Category: This category is used to display numbers. It has the same options as the currency, except for the following options:

- **Positive Format** is not displayed
- **Currency Symbol** is not displayed
- **Leading Zeroes** is added: Specify how many leading zeroes to add at the end of the decimal places, up until the number specified by the decimal places option.

Barcode Properties

The Barcode Properties lets you change all of the properties for any barcode object in your document. The options available are different in the Windows and Mac OS versions of the software.

To open the barcode properties in Windows

1. Click on the object of which you want to display the properties.
2. Click in the **Window** menu, then click **Properties**.
3. The Properties window appears or, if it is already present, is brought to the front and selected.

To open the barcode properties in Mac OS

1. Click on the object of which you want to display the properties.
2. Click on Items, then Show Object Properties. You can also right-click on the text object and select Show Object Properties from the drop-down menu.
3. The Object Properties dialog appears.

Available Options

All objects share some properties. To see these shared properties (the "Object", "Frame" and "Printing" groups), see Properties Panel.

Content Group

> The Content group options may change depending on the barcode. The greatest majority of barcodes have the following options only.

Option	Description
Data	The expression used as data for the barcode. Please refer to the documentation for your barcode reader or the barcode itself to learn which information is supported for any particular barcode. See "The Expression Editor" (page 119). Note that the data should never contain barcode functions such as onecode() or postnet() , as the barcode object itself takes care of formatting the string.
Encoding	Select the encoding type, either **String** or **Hexadecimal**. Refer to the barcode reader documentation to know what option to choose.
Alignment	**Horizontal**: Select whether the barcode itself is aligned at the left, center or right of the barcode object. **Vertical**:Select whether the barcode itself is aligned at the bottom, center or top of the barcode object.

Barcode Group

⚠️ The Barcode group options may change depending on the barcode. The greatest majority of barcodes have the following options only.

Option	Description
Type	Specifies the barcode type that will be printed. For a list of available barcodes in PrintShop Mail, see "Barcodes Supported by PrintShop Mail" (page 86).
Module Width	Specifies the width of the barcode object (and not the barcode itself). It can be automatic or manually entered.
Align to Pixel Raster	Aligns and resizes the barcode in order to correctly fit your print area. This ensures a more precise output at the printer since the barcode bars will now precisely fit within your printer's output resolution.
Dot Gain Compensation	Dot gain occurs when ink bleeds or spreads as it is absorbed by paper, enlarging the pixels. The amount of dot gain varies for each printer and depends on ink coverage on the printing press. You can compensate for the effect by specifying a value between 0 and 100 for the Dot Gain Compensation property (0 disables the feature).
Quiet Zone	The quiet zone is the blank margin on either side of the barcode that's used to tell the barcode reader where a barcode's symbology starts and stops. You can specify any value in points in this box.
Human Readable Text	Indicates whether you want a human-readable (alphanumerical) string to appear below or above the barcode, or none at all. This option is only visible on barcodes that support human-readable text.
Font Size	Specifies the font size for the human-readable text, when it is available.
Check Digit Method	Specifies the check digit method to calculate the barcode's check digit. Select Automatic to use the default for this barcode, or select another check digit method. Refer to your barcode reader's documentation to know which option to enter here.

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Mac OS Note: PrintShop Mail 5 for Mac OS still uses fonts to create its barcodes.

DirectSmile Properties

The DirectSmile Properties lets you change all of the properties for any DirectSmile object in your document. The options available are different in the Windows and Mac OS versions of the software.

To open the DirectSmile properties in Windows

1. Click on the object of which you want to display the properties.
2. Click in the **Window** menu, then click **Properties**.
3. The Properties window appears or, if it is already present, is brought to the front and selected.

Available Options

All objects share some properties. To see these shared properties (the "Object", "Frame" and "Printing" groups), see [Properties Panel](#).

DirectSmile Group

Option	Description
Host	The IP, network computer name or domain name of a server where DirectSmile Generator is installed. Clicking on this opens the DirectSmile Editor window.
Image Set	The image set used to generate the image, from a list of available sets on the DirectSmile Generator server. Clicking on this opens the DirectSmile Editor window.
Text on Layer X	These expressions determine the text that will appear in the DirectSmile image that is being generated. The number of available properties (X) is determined by the image set and will be one or more.

Some DirectSmile templates may not be designed to support all characters of a language. In this case, a warning may pop up, or the generated image may contain no personalization.

Manipulating Objects

You can manipulate objects that are on the page easily using the tools in this section. For more information on the different types of objects you can use, see ["Objects in PrintShop Mail" (page 83)](#).

Selecting Objects

There are several ways to select objects.

- Select a first object then press SHIFT or CTRL while clicking on another object on the layout.
- Drag a selection box (lasso) around more than one object.
- From the **Edit** menu, choose **Select All** or press CTRL+A (Windows) or Command+A (Mac OS)

To select underlying objects

If you cannot select an object with a mouse click because it is covered by another object, repeatedly press the TAB key to cycle through the objects on the visible layout.

Press SHIFT+TAB to select the previous object.

To extend a selection

There are several ways to extend a selection. You can:

- Press and hold SHIFT or CTRL to ensure that any active selection is not cleared.
- To extend the current selection, press and hold SHIFT while left clicking on additional objects.
- To toggle an object selection state, press and hold CTRL while left clicking on the object.

> You can also combine the use of SHIFT and CTRL with the lasso object to add multiple objects at once.

Moving and Resizing Objects

To move objects using the mouse

Windows

1. Select one or more objects.
2. Left click on the selection and drag it to the new location.

> While dragging, the objects will be snapped to any nearby guide line.

Mac OS

1. Select one or more objects.
2. Click on the selection, hold down the mouse and drag it to the new location.

To move objects using the keyboard

Windows

1. Select one or more objects.
2. Use the arrow keys on your keyboard to nudge the selection to a new location on the layout. (Each nudge offsets the objects by one pixel.)

To move objects by entering the new coordinates (to place an object at a specific location)

Windows

1. Select the object.
2. In the **Properties** panel/ **Boundin**g box, enter the desired Left and Top position.

Mac OS

1. Select the object.
2. From the **Item** menu, select **Show Object Properties**, or press Shift and double click.
3. In **Position**, enter the X and Y coordinates.
4. Click **OK**.

To resize an object using the mouse

1. Select the object.
2. (**Windows**): Left click on one of the sizing handles.
   (**Mac OS**): Click on the sizing handles and hold down the mouse button.
3. Drag the handle to resize the object.

> For static images, resizing always maintains the original aspect ratio of the image. For any other object, resize proportionally by holding down the CTRL key while dragging. While dragging, the sides of the objects that you are resizing will be snapped to any nearby guide line.

To resize an object by entering the new dimensions

Windows

1. Select the object.
2. In the **Properties** panel/ **Bounding** box, enter the new Width and Height.

Snap Frame to Content

Snap the frame to the proportions of the content.

When this option is set to "Yes", the object bounding box (frame) will automatically resize according to its contents. In case of an image it will resize to the dimensions of the image. In case of text (static or variable) it will resize vertically to accommodate larger amounts of text that would otherwise not fit in the text box. When set to "No", a verification warning will be shown at printing time, when objects do not fit in the box.

> When you have linked text boxes, Snap Frame to Content will only work for the last text box in the chain.

Mac OS

1. Select the object.
2. From the **Item** menu, select **Show Object Properties**, or press Shift and double click.
3. In **Position**, enter the new Width and Height.
4. Click **OK**.

Copying Objects

To copy objects using the mouse

1. Right click and drag one or more selected objects to another location.
2. Release the mouse button.
3. On the menu, choose **Copy Here** to create duplicates of the selected objects.

To copy objects using the clipboard

1. Select one or more objects.
2. From the **Edit** menu, select **Copy** or press CTRL+C in Windows, COMMAND+C in Mac OS.

To paste an object in the clipboard

1. Go to the layout where you want to paste the object.
2. From the **Edit** menu, select **Paste** or press CTRL+V in Windows, COMMAND+V in Mac OS.

> You can paste the contents of the clipboard to any layout, even in a separate instance of PrintShop Mail .

To paste objects to multiple layouts

If your document consists of more than one layout, you can create multiple copies throughout your document. Choose either:

- **Edit**, then **Paste To** and then **Entire Document** to paste the contents of the clipboard to every layout in your document.
- **Edit**, then **Paste To** and then **Remainder of Document** to paste to the remainder of your document (for example, to every layout, starting with the next layout).

> If the current layout happens to be the last layout in your document, the option **Remainder of Document** is not available.

Aligning Objects

You align the edges of the objects in the selection to the object LAST selected. You can align to the left, right, top or bottom edges of the object.

To align objects:

- **In Windows:**
    1. Select the objects which you want to align, ending with the object you want to align to.
    2. Either use one of the alignment buttons in the **Tools** toolbar, or go to the **Object** menu then **Align Edges** and click one of the options.
- In Mac OS:
    1. Hold down the Shift key while you select the objects you wish to align, or draw a box (lasso) that encloses all objects that need to be aligned.
    2. From the **Item** menu, select **Align**.
    3. Select one of the available options from the submenu. (see figure below)

Mac OS Alignment options:

Alignment Option	Description
Left Edges	To align the selected objects along their left edges.
Right Edges	To align the selected objects along their right edges.
Top Edges	To align the selected objects along their top edges.
Bottom Edges	To align the selected objects along their bottom edges.
Horizontal Centers	To align the selected objects along their horizontal edges.
Vertical Centers	To align the selected objects along their vertical edges.

> If you don't know which object you selected last, for example if you selected everything with Select All or pressing CTRL+A, reselect the object to align to, while holding down the SHIFT key.

Arranging Objects

You can move objects in front or behind each other.

1. Select the object.
2. From the **Object** menu, select **Arrange**. You can also right click on the selection and select an option from the submenu under **Arrange**.

3. Select the appropriate option:
      - **Bring to Front**: To move the object in front of all other objects.
      - **Bring Forward**: To move the object one position forward.
      - **Send Backward**: To move the object one position backward.
      - **Send to Back**: To move the object behind all other objects.

Locking Objects

Locking an object, protects it from accidental changes in size or position. The text in a text box remains editable, however.

To lock an object

1. **In Windows:**
      - Select the object.
      - From the **Object** menu, select **Lock Position**. Alternately, right click the object and choose **Lock**, or from the **Properties** panel change **Lock Position** to **Yes**.
2. **In Mac OS:**
      - Select the object.
      - From the **Item** menu, select **Show Object Properties**, click on **Unlocked**. Alternately, from the **Item** menu select **Lock Position**.

To unlock an object

1. **In Windows:**
      - Select the locked object.
      - From the **Object** menu, select **Unlock Position**. Alternately, right click the object and choose **Unlock**, or from the **Properties** panelchange **Lock Position** to **No**.
2. **In Mac OS:**
      - Select the object.
      - From the **Item** menu, select **Show Object Properties**, click on **Locked**. Alternately, from the **Item** menu select **Unlock Position**.

Linking Text Objects

Multiple text object can be linked together in order to have text overflow between them.

Text objects can be linked within a page, but they can also be linked between pages (Page Overflow).

To link text objects

1. Make sure the destination text object(s) to which you want your text to flow towards already exists.
2. Select the first text object.
3. From the **Text** menu, select **Create Forward Link**, or on the Text Link toolbar, click the **Create Text Link** button.
4. Point with the mouse cursor to the text object where you want your text to overflow towards (the destination object).

When you move the mouse over a text object which can be linked to, the border of this object will become green if it is possible to link to this object, and red if this is not possible.

Anchored Objects

Anchored objects are items, such as images or text boxes, that are connected to each other in such a way that a change in position or size of the Master object will affect the position of any number of Child objects.

An example use of this technique is to add a signature at the bottom of a letter. If the letter has a height that changes between records, the text box could potentially be too small (the signature is too far down) or too large (the text goes over the signature). This can happen if, for example, your text box contains a variable that displays the content of a database field with text that can vary in size. Using the Anchor tool, you can force the signature (Child) to lock to the bottom of your text box (Master) , moving up and down as the height of the text object changes.
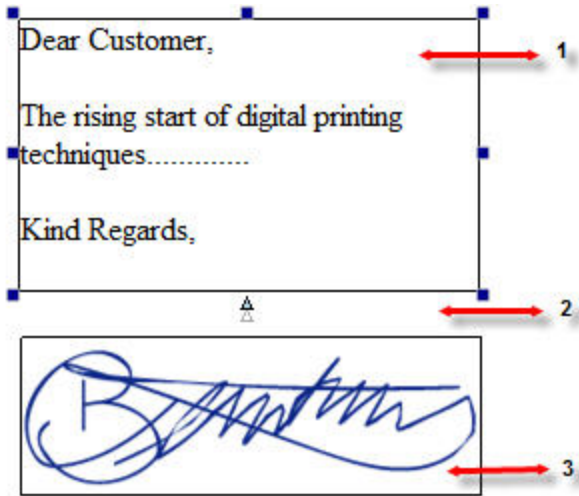
Two anchored objects: (1) the Anchor Master, (2) Distance between the Master and Child, (3) Anchored Child.

To anchor two object through the **"Objects Toolbar" (page 18)**

1. Select the object to be anchored (anchor Child).
2. In the Object toolbar, click on the "Add or Remove Anchor" button.
3. Move the mouse over another object (anchor Master).
4. Left click on this object that serves as anchor Master to link the two objects together.

To anchor two object through the **"Properties Panel" (page 26)**

1. Select the object to be anchored (anchor Child).
2. In the **Properties** panel, click on the **Anchor** property, to expand the **Master Object** property.
3. Select the name of the anchor Master object.

> When anchoring objects, the object will be highlighted in green if it is a valid anchor Master or in red if it is not.

To remove anchoring through the **"Objects Toolbar" (page 18)**

- Select the anchored object (anchor Child).
- In the Objects toolbar, click on the "Add or Remove Anchor" button, to remove the anchor.

To remove anchoring through the **"Properties Panel" (page 26)**

- Select the anchored object (anchor Child).
- In the **Properties** panel, click on the **Anchor** property, to expand the **Master Object** property.
- From the drop down menu, select the "empty" option.

> A Child object can only have one Master, but a Master can have more than one Child. To change the Master of a Child object, start by removing the anchor for the Child, then add a new anchor to the other Master.

Anchor settings

Anchor settings can be changed in the **Properties** panel of the object.

Horizontal anchors:

- **Left**: The anchor Child position will be relative to the left side of the anchor Master.
- **Right**: The anchor Child position will be relative to the right side of the anchor Master.
- **Width**: The anchor Child width will be relative to the width of the anchor Master.

Vertical anchors:

- **Top**: The anchor Child position will be relative to the top side of the anchor Master.
- **Bottom**: The anchor Child position will be relative to the bottom side of the anchor Master.
- **Height**: The anchor Child height will be relative to the height of the anchor Master.

Default Setting:

These defaults will be selected when you first create the anchor between a Child and Master, depending on the position:

- If the anchored Child is positioned to the left of the anchor Master, the Horizontal position will be set to **Left**.
- If the anchored Child is positioned to the right of the anchor Master, the Horizontal position will be set to the **Right**.
- If the anchor Master is positioned under the Child, the Vertical position will be set to **Top**.
- If the anchor Master is positioned above the Child, the Vertical position will be set to **Bottom**.

When resizing or moving an anchored Child, it is possible to modify the distance between two anchored objects.

When an anchor Master object is deleted, the link between the Master and Child objects is broken. In the **Properties** panel of the Child object, Master Object property, will get the suffix "Unresolved". To re-establish the anchor, you can either link the Child to a new Master, or create a new object and call it the same name as the previous Master.

Formatting Text

Text formatting in PrintShop Mail can be applied in three different ways. You can apply styles directly to part of your text (see "Text Style" (page 40)), apply formatting to a paragraph (see "Paragraph Style" (page 42)), or use "Rich Text File" formatting by using the Text_File function and an external .RTF file (see "TEXT_FILE" (page 153)).

Text Style

You can change the text style (for example, font name, size, color, and style properties) of any part of the text in a text object or for multiple text objects.

PrintShop Mail offers multiple ways of formatting your text. These styles can be combined for better control.

- Bold (**example**)
- Underlined (example)
- Italic (*example*)
- Superscript (^{example})
- Subscript ($_{example}$)
- Strikethrough (~~example~~)

You can also modify the following text properties:

- **Font**: Change the fonts using available system fonts (see PrintShop Mailk Fonts section below)
- **Font Size**: Allows you to make the fonts look bigger or smaller.
- **Font Color**: Allows you to change the color of a font.
- **Kerning**: Selects whether special character pairs (such as A and W) are detected and placed closer together, in order to conserve space. Note that not all fonts support kerning, and that this feature is not supported on Windows 2000.
- **Tracking**: Allows a uniform adjustment of spacing between all characters in the text. Lower tracking compresses text together, while higher values spreads the text apart.

> In MacOS, the terms Kerning and Tracking are reversed than in Windows. For simplicity's sake, we use the Windows names in this documentation.

To change the styles and properties, first select either a text object, multiple text objects, or any number of characters within a text object. Then use one of the following options:

- *In Windows:*
    - The **Text menu** allows you to change the following styles: Font Size, Bold, Italic, Underline, Font Color, Kerning, Tracking.
    - The **Font dialog (menu Text -> Font...)** allows you to change the following styles: Font, Font Size, Bold, Italic, Underline, Font Color, Superscript, Subscript, Strikethrough
    - The **Font toolbar** allows you to change the following styles: Font, Font Size, Bold, Italic, Underline, Font Color
- *In Mac OS:*
    - The **Text menu** allows you to change the following styles: Kerning, Baseline (subscript/superscript), Bold, Italic, Underline, Font Color.
    - The **Fonts dialog (menu Text, Font, Show Fonts)** allows you to change the following styles: Font, Font Size, Bold, Italic, Underline.
    - The **Font Toolbar** allows you to change the following styles: Font, Font Size, Bold, Italic, Underline, Font Color.

You can also use **keyboard shortcuts** to control some of the styles:

- CTRL+B (Windows) or COMMAND+B (Mac OS): triggers Bold
- CTRL+I (Windows) or COMMAND+I (Mac OS): triggers Italic
- CTRL+U (Windows) or COMMAND+U (Mac OS): triggers Underline

Note: The text style of a variable depends on the style of the first delimiter, the character marking the beginning of a variable. (Applying style to variable = apply style to first marker)

Note: The precision of a font size is up to 0.5 points. For example, a font size of 10.5 points is allowed, but 10.3 is rounded to the nearest half (10.5).

PrintShop Mail Fonts

PrintShop Mail, just like any other software on your system, enables you to use any font installed in your system folders. Additionally (in Windows only), PrintShop Mail can also read any font file located in the same folder as the PrintShop Mail Document, or a Fonts subfolder located in the same folder as the PrintShop Mail Document.

Windows Only: Font reading priority: If you have fonts of the same name in all three possible locations, the priority in which PrintShop Mail reads the fonts is as such: Fonts in the same folder as the document are checked first. Fonts in the Fonts subfolder are checked second. Fonts in your operating system fonts folder are checked last.

Fonts can always be used by multiple PrintShop Mail Documents.

Paragraph Style

A paragraph is a contiguous range of characters sharing formatting properties such as:

- Alignment
- Margins
- Indentation
- Tab stops
- Formatting marks
- Copy Fitting

Paragraphs are separated by carriage returns. To start a new paragraph, press ENTER while you are typing text.

To align text

To apply alignment to all paragraphs in one or more text objects:

1. Select the objects.
2. (**Windows**): Click an alignment button in the Text Formatting toolbar. Alternatively in the **Properties Panel**, select **Alignment**.
   (**Mac OS**): Click an alignment button in the Text Formatting toolbar. Alternatively from the **Text** menu, select **Alignment**.

To apply text alignment for a specific paragraph:

1. Double click in a text object to enter **Edit** mode.
2. Select a paragraph.
3. (**Windows**): Click an alignment button in the Text Formatting toolbar. Alternately, from the **Text** menu, select **Paragraph**. In the dialog box, you can specify alignment, margins and first line indentation values. An appearance sample is provided to preview the current settings.
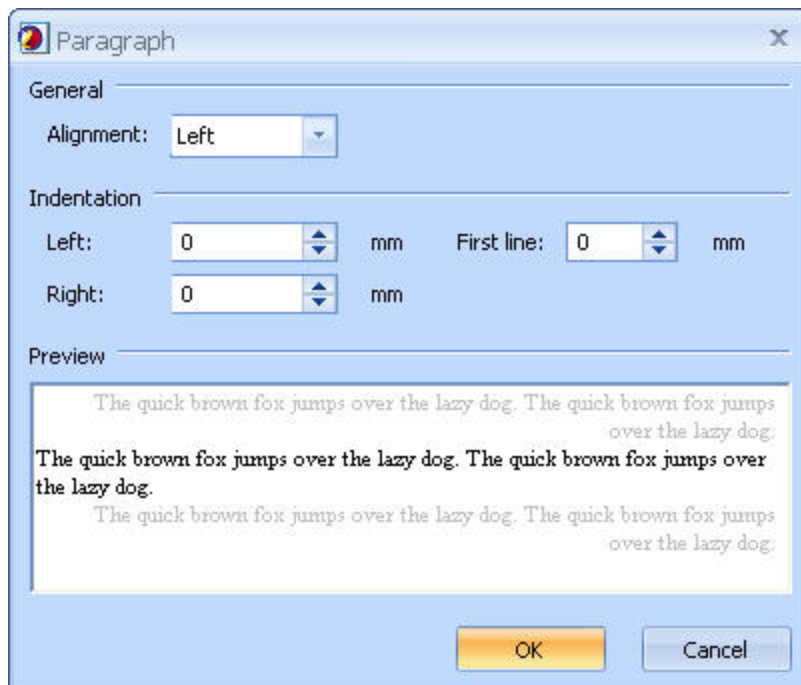
(**Mac OS**): Click an alignment button in the Text Formatting toolbar. Alternatively from the **Text** menu, select **Align-men**t.

Text direction

To apply text direction.

1. Double click in the text box to enter in **Edit** mode.
2. In the Text Formatting toolbar, click on the **Right** to **Left** button.

Windows

About tab stops

Tab stops enable you to line up text to the left, right or center.

You can select the following tab stops:

⌐ Left Tab   Text extend to the right from the tab stop.

⊥ Center Tab Text is centered at the tab stop.

⌐ Right Tab   Text extends to the left from the tab stop until the tab's space is filled, and then the text extends to the right.

To set and change tab stop positions

To change default tab stop positions:

1. From the **Text** menu, select **Default Tab Stops**.
2. Choose your interval value.
3. Click **OK**.

To set and remove custom tab stop positions, there are two methods available:

- Use the **Tab Stops** dialog box.
- Use the horizontal ruler.

To use the **Tab Stops** dialog box:

1. Double click in a text object to enter **Edit** mode.
2. Select a paragraph.
3. From the **Text** menu, select **Tab Stops**.
   Tab stop positions are relative to the left side of the text object.
4. To add a position, type a value in the edit box and click **Set**.
5. To add alignment, you can select:
   Left: Left text extends to the right from the tab stop.
   Center: Center text is centered at the tab stop.
   Right: Right text extends to the left from the tab stop until the tab's space is filled, and then the text extends to the right.

6. To remove a position and alignment, select it in the list box and click **Clear**.
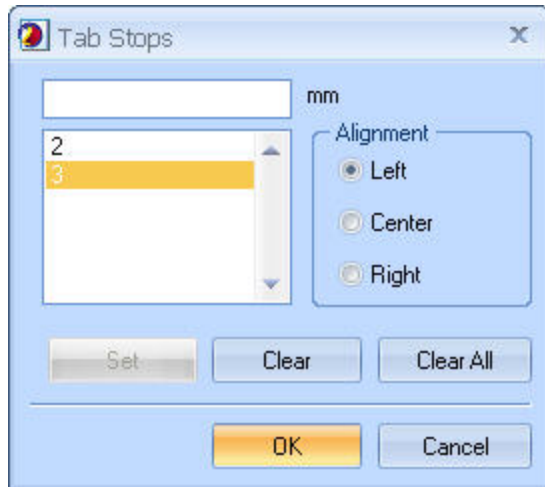
Formatting marks

PrintShop Mail enables you to control whether formatting marks are hidden or visible in text objects. Formatting marks are newlines, tabs, and spaces. By default, after starting PrintShop Mail, all formatting marks will be hidden.

You can tell PrintShop Mail to show formatting marks by selecting from the **View** menu **Formatting Marks**, or by using the button "**Show or Hide Formatting Marks**" on the View toolbar. This works as a toggle for all text objects.

Formatting marks are just a visual aid, they will not be printed. The marks will scale to the zoom factor of your document, and they will scale to the font size of the surrounding text. They will also be visible while you're editing text.

New line symbol: ¶

Space symbol: .

Tab symbol: (right arrow)

Copy Fitting

Copy fitting is a feature that will automatically shrink text by reducing the font size, when there is more text than the text box can hold. The font size will be reduced to the font size needed to fit the text in the text box. However, text will not be shrunk beyond the specified minimum font size. When the text needs to be resized, all text will be resized step by step until the text fits or the minimum font size is reached.

Minimum font size

When Copy Fitting is enabled, the minimum font size the font can reach is 1; by default the minimum font size is 8. The downsizing of the text in the box stops if one of the containing font sizes reaches the minimum value or if the text fits.

Allow line breaks

By default the Allow line breaks feature is set to Yes.
When **Allow line breaks** is set to "Yes", the texts only fit if the individual words are not broken. Text will break on spaces only. It can occur that lines are broken at spaces, but individual words won't be broken.
When **Allow line breaks** is set to "No", the text won't break at spaces, only at returns. The text will be downsized until it fits (or gives a warning if it still doesn't fit)

To change this option:

1. Select the text box. If you have multiple text boxes, you can select all of them.
2. In the **Properties Panel**/**Content**, select **Copy Fitting**.
3. Set **Reduce Font Size** to **Yes**.
4. Change the **Minimum Font Size** to the desired value.

Mac OS

To change Paragraph settings

You can set the space between lines of text by using the **Spacing** pop up menu on the PrintShop Mail ruler when a text box is in edit mode.

To set the line spacing, double click on the text object and select the text you want to adjust and choose **Single**, **Double**, or **Other** from the **Spacing** pop up menu.

If you chose **Other**, choose options for:

- Line height: Distance from the top of a line to the top of the line below it.
- Inter-line spacing: Distance from the bottom of a line to the top of the line below it.
- Paragraph spacing: Distance from the bottom of a paragraph to the top of the first line in the paragraph below it.
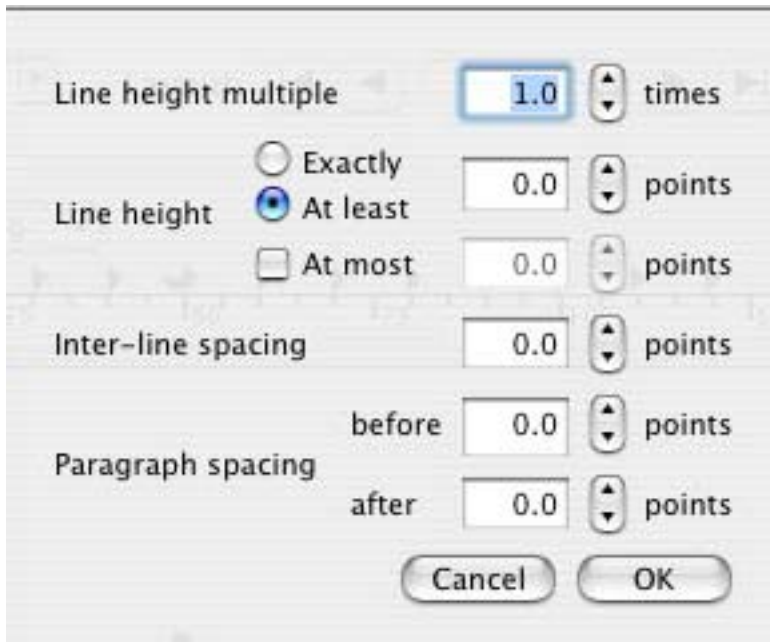
To change default tab stop positions:

You can set margins, paragraph indentation, and text tabs by using the ruler in the edit mode of the text box.

There are four kinds of tab stops and two types of margins, each indicated by a differently shaped icon:

- A right facing triangle indicates a tab stop at which text will be left justified.
- A diamond indicates a tab stop at which text will be centered.
- A left facing triangle indicates a tab stop at which text will be right justified.
- A circle indicates a decimal tab stop at which numbers will be justified around a decimal point.
- A downward facing triangle indicates a page margin.
- A horizontal rectangle indicates the indentation of the first line of a paragraph.

To use the horizontal ruler:

1. Left click on the horizontal ruler to add a paragraph marker.
   The marker type depends on the state of the paragraph marker button in the intersecting area of the two rulers (top-left).
2. Left click the paragraph marker button to cycle through all possible paragraph marker types, including first line indentation, or right click this button to select a marker type from the menu.

Note: You can also use the horizontal ruler to specify left and right margins. To do this, left click on the position of either the left or right side of the text box and drag the margin to the desired location.

Copy Fitting

To change this option:

1. Select the text box.
2. From the **Item** menu, select **Show Objects Properties**.
3. In the **Object Properties**, change **Copy Fitting** to **Yes**.
4. Change the **Minimum Font Size** to the desired value.

The Preferences Window

The Preferences window lets you set up preferences and settings for PrintShop Mail as well as for the currently opened document. This section demonstrates each section of the Preferences window and its features.

Program Settings

The Program Settings section applies to your whole PrintShop Mail Design software, not just to this document. When changing these options, they will remain the same between all your documents and templates.

1. (**Windows**): From the **Edit** menu (CTRL+K), select **Preferences**.
   (**Mac OS**): From the **PrintShop Mail** menu (Command,), select **Preferences** .
2. In the left pane, click the **Program Settings** icon.

About general preferences

Set this option...	To do this...
Variable Markers	Specify the characters that delimit (enclose) the variables in your text objects. See
Measurement in	Select the unit of measurement for PrintShop Mail.
Items without database	Specify the total number of records when no database is open.
Interface language (Windows Only)	Specify which language you want to use.

Set this option...	To do this...
Interface theme (Windows Only)	Specify the appearance of the application user interface. It is possible to choose from: **Classic**, **Blue**, **Aqua**.
Panels fade out (Mac OS Only)	When inactive, panels from the Window menu fade out, moving the mouse over a panel fades it back in.

About layout appearance preferences

Set this option...	To do this...
Bleed	Specify color.
Folding lines	Specify color.
Crop marks (Mac OS Only)	Specify color.
Printable area	Specify the order in which the printable areas are drawn, relative to the objects. **Top** specifies that the areas are always visible, **Bottom** that they are obscured by objects.
Guide lines	Specify the order in which the guide lines are drawn, relative to the objects. **Top** specifies that the lines are always visible, **Bottom** that they are obscured by objects.
Magnetic strength	Define guide line sensitivity when moving or resizing objects. When the cursor comes within the specified pixel range on either side of a guide line the object snaps to it.
Generate EPS for vertical text objects(Mac OS Only)	During printing, PostScript for vertical text object is generated in an alternative way.

Color Settings

Color Management compares the color space in which a color was created to the color space in which the same color will be outputted, and makes the necessary adjustments to represent the color as consistently as possible.

>>> The Color Settings section applies only to this document. When changing these options, they are saved with your document and may change when opening or creating a new document.

PrintShop Mail **Color Management** is designed to accurately display the same on-screen color as the color on the printed output. When you install PrintShop Mail, the color space profiles (Adobe ICC Profiles) will be installed in "Windows\System32\spool\drivers\color\" . When staring PrintShop Mail, the application will load the profiles allowing you to define colors for the different objects placed in your document.

PrintShop Mail handles the Color Management at two levels:

1. PrintShop Mail originated colors. The colors defined in PrintShop Mail for objects, like border color, fill color and text color.
2. PrintShop Mail Embedded Color Management. The colors defined for certain image file types, like TIFF, EPS, JPG

>>> PrintShop Mail does not change the Color Management of your image, if your image files have embedded color profiles, these colors will not be overruled by PrintShop Mail's Color Management.

To enable Color Management:

From the **Edit** menu, select **Preferences** or press Ctrl+K and click on the Colors icon.

1. Check the option "**Enable color management**".
2. In the working space section select your desired color profile.
3. Click **Apply**.

When Color Management is enabled it is possible to change the working spaces profiles, which allows for colors to be adjusted.

The default working space color profiles settings are:

- RGB: sRGB
- CMYK: U.S Web Coated (SWOP) v2
- Gray: Gamma 1.8
- Rendering: Absolute colorimetric

For example

Suppose you have a colored text box with the following CMYK values:

- Cyan: 100 %
- Magenta: 0%
- Yellow: 0%
- Black: 0%

These values are an indication of the color intended to be printed, but because of the different monitors, printers, inks, types of paper these values may yield a different color on the printed output.

To avoid this, Color Management translates colors with the help of color profiles.

The colored object will change slightly depending on the chosen color profile, but in the **Properties** panel the CMYK values for that color will stay the same.

Rendering

Rendering is the process of converting one color space to another color space. The result of choosing a rendering intent depends on the content of documents and on the profiles used to specify color spaces. Some profiles produce identical results for different rendering intents. Differences between rendering intents are apparent only when you print a document or convert it to a different color space.

The following rendering intent options are available:

- Absolute colorimetric
- Perceptual
- Relative colorimetric
- Saturation

In a Color Management workflow, you can use the precision of color profiles to soft proof your document directly on the monitor. You can display an on-screen preview of how your document's colors will look when reproduced on a particular output device. The reliability of the soft proof depends upon the quality of your monitor, the profiles of your monitor and output devices. To preview how the color will look when printed, select **Print Preview** and click **ColorSoft proof**.

Soft proof colors show the color profile defined in the Color Management.

	This feature is enabled when Color Management is activated.

Color Management for on-screen preview is different from Color Management reproduced in a particular output device. You have more control over the appearance of the document on a particular output device than with on-screen preview, because your document may appear on a wide range of possible uncalibrated monitors and video display systems which limits control over the color consistency.

To control the color consistency it is possible to assign a color profile to the monitor. In a workflow such a profile would be provided by the monitor manufacturer or the profile would be created using specialized equipment that measures the monitor's color space.

To provide a practical means for color consistency, you can change the monitor color profile to match your output device. To do this:

Windows 2000 and Windows XP

1. In the **Control Panel**, select **Display**.
2. Click on the **Setting** tab.
3. Click on **Advanced**
4. Select the "**Color Management**" tab.
5. Click on **Add**, to add the desired monitor color profile for your documents

You need to restart PrintShop Mail for the changes to take effect.

Windows Vista

1. In the **Control Panel**, select **Personalization**.
2. Select **Display Settings** from the list.
3. Click on the **Advanced Setting** tab.
4. Select the "**Color Management**" tab.
   Here you can add color profiles for each device on your system (monitor and printers).
5. Click on the **Advanced** tab and from the drop down menus select the desired color profiles.

Print Job Settings

The Print Job Settings section applies only to this document. When changing these options, they are saved with your document and may change when opening or creating a new document.

To specify print job preference settings

1. (**Windows**): From the **Edit** menu (CTRL+K), select **Preferences**.
   (**Mac OS**): From the **PrintShop Mail** menu (Command,), select **Preferences** .
2. In the left pane, click the **Print Job Settings** icon.

About print job preferences

Set this option...	To do this...
Print Margins	Print Margins are empty spaces all around the page. The margin (top, bottom, left, right) is usually the empty space between where the page is cut and the layout area of the page. PrintShop Mail allows you to make changes to the print margin for all layouts in the document. It is possible to: • **Center** (**Windows only**): Where the layout(s) will be centered on the paper. • **Offset**: Where you can specify different values for each print margin: Top-Bottom (Y offset) and Left-Right (X offset). • **Note**: PrintShop Mail supports different paper sizes within one document. Print Margins settings will be applied to the whole document.
Technology	Select which print technology is used to optimize your PostScript output. See "Print Technologies" (page 51) for more information on these options.
Print report page	Specify that a report page is printed at the end of the job.
Send custom error handler (Windows only)	Specifies whether a Postscript error will generate a custom error page containing tips on how to solve the problem. Leave this box unchecked if you want your printer to handle any errors.

Print Technologies

Because every print technology uses PostScript Level 2, PrintShop Mail requires the use of a PostScript printer driver and a PostScript Level 2 compatible RIP.

Some technologies are based on the PostScript standard, which means that they are supported by every type of RIP available. Other technologies are based on extensions of PostScript, which are only supported by specific RIP types.

Printing Technologies:

- Standard PostScript
- Optimized PostScript
- Adobe PDF and Adobe PDF/VT-1

RIP type and vendor dependent technologies:

- AHT
- Creo VPS
- Fiery FreeForm
- Fiery FreeForm 2
- PPML
- PPML/VDX 7(**Windows only**)
- PrintStreamer(**Mac OS only**)
- VIPP

If you want to print to a non PostScript printer, you just have to select the printer driver for that printer. PrintShop Mail will print through that printer driver non optimized output. Printing and spooling time will be significantly slower compared to other print technologies like Optimized PostScript.

To select a print technology

1. (**Windows**): From the **Edit** menu (Ctrl+K), select **Preferences**.
   (**Mac OS**): From the **PrintShop Mail** menu (Command,), select **Preferences**.
2. In the left pane, click the **Print job** icon.
   The Print job settings dialog box appears.
3. Check if your RIP supports one of the RIP type and vendor dependent technologies. If so, you can select that specific technology. If not, it is advisable to select Optimized PostScript.

> You can also select the print technology directly from the Print dialog. Simply click on the currently selected print technology and select the one you want from the drop-down.

To specify technology specific options

1. From the **File** menu, select **Print**.
2. On the **Print** dialog box, specify technology specific options .

Standard PostScript

Standard PostScript does not use any special optimization mechanism, except that you can use OPI to speed up spooling.

Use this technology if your system does not support any of the other technologies.

Optimized PostScript

Optimized PostScript caches image data in reusable PostScript forms. This speeds up the printing process, since each unique image is only sent once.

Some printer drivers offer the possibility to change the **PostScript Output Options**: "Optimize for Speed" or "Optimize for Portability". For a maximum print speed, change the **PostScript Output Option** to "Optimize for Speed". You can find this property in the **Printer driver/Advanced Options**.

GDI Printer Output

The GDI Printer Output (or Windows Driver Output) Print Technology allows you to print to a non PostScript Printer, using a Windows printer driver installed on your system.

This option is not available in the **Preferences** panel with the others Print Technologies. **GDI Printing** will be automatically applied when selecting a non Postscript printer in the **Page Setup** or in the **Print Dialog**.

When selecting a non PostScript printer the print output will not be optimized, printing and spooling time will be significantly slower compared to other technologies. This is because the job needs to be converted into the Windows printing language (EMF) before being sent to the printer.

The **Print Dialog** will show the following message:

"The selected printer driver is not a Postscript Level 2 compatible device. Printing speed will be reduced and some features might not be supported".

The following features might not be supported by non Postscript printers:

- Subset finishing
- Color Management
- Spot color
- Caching

Adobe PDF

Adobe PDF Print Technology allows you to save optimized PDF output files to disk directly from PrintShop Mail. The PDF output files can be used for printing to PostScript level 3 printers and soft proofing when uploading PrintShop Mail documents to PrintShop Web.

When using "Adobe PDF" Print Technology, it is advised to activate Split job option for the best performance.

Adobe PDF/VT-1

The Adobe PDF/VT-1 (or VT1) print technology is a VDP type of file, similar to PPML/VDX and VPS files. The PDF/VT-1 format was created by Adobe as an alternative to vendor-specific VDP technologies that were only available on certain printers, instead creating a more "open" format that could be compatible with more printer brands and models.

The main features of Adobe PDF/VT-1 Technology are:

- **Image Caching**: Each image is saved at the beginning of the file and each instance of the image points to this saved copy, which means images are never repeated.
- **Printing Speed**: On printers that can natively print PDF/VT-1 files, the print speed is much higher compared to regular PDFs.

For more information about the PDF/VT technology, see this post on adobe.com's forums.

Print dialog box settings

- **PDF Settings**: Select one of the .joboptions files on the system. .joboptions are generally created by Adobe Distiller and saved in specific folders (look for joboptions in the Adobe Distiller manual for your versions to learn the location of

the joboptions files).

JobOptions Location

The .joboptions files that are listed in the PDF Settings box can be located in two different folders, depending if they are document-specific or shared between documents.

- **Document-specific** .joboptions files should be placed in the same folder as your PrintShop Mail Design Document (.psmd) file. It will not be visible from any other document.
- **Global** .joboptions files should be placed in a specific shared location, which (on any system) can be accessed through the following folder: **%AllUsersProfile%\Shared Documents\Adobe PDF\Settings**

AHT

Select this technology if you have an AHT RIP. AHT uses an optimization mechanism similar to Optimized PostScript. Print dialog box settings

1. Store forms on printer's hard disk
2. Custom cache size
3. Use OPI, don't spool images

Creo VPS

VPS (**V**ariable **P**rint **S**pecifications) is a PostScript language extension, created and maintained by Creo.

It allows PrintShop Mail to classify each element on a page as either reusable (occurring more than once) or inline (occurring only once). This distinction allows the VPS RIP to decide when image data can be reused. This avoids unnecessary repeated processing and speeds up the print process.

One of the main differences between Optimized PostScript and VPS is that VPS re-uses rasterized data instead of PostScript.

Print Technology specific setting

Use Automatic Picture Replacement: Automatic Picture Replacement (APR) allows you to speed up the printing process by using the image substitution capabilities of your VPS RIP. The image format support of APR is limited to EPS, but some RIP versions support other formats like TIFF and JPEG.

> While previous versions of PrintShop Mail gave the option not to generate booklets, this has been removed since version 7.0 because it caused the output not to be valid according to Creo.

Fiery FreeForm and FreeForm 2

FreeForm jobs make use of the fact that the data in your document is divided in two layers, which contain the text and image objects in the document.

The master layer in a FreeForm job consists only of "static" objects, but the variable layer can contain a mix of both variable and static objects, depending on the order of the objects on your layout. This is a consequence of the fact that FreeForm does not allow data in the master layer to be printed on top of data in the variable layer.

These layers are sent to the FreeForm RIP in two separate jobs, not necessarily at the same time. The master data job is rasterized first, and stored under a user defined numeric ID. The RIP overlays the rasterized master data with the rasterized data of any variable data job that references the same ID. In this way, you can reuse the same master data for different variable data jobs.

How the objects are separated

Static objects have content that remains constant throughout the entire record set. An image object is static when it has an expression with a constant result. A text object is static when it does not contain any variable markers. A PDF object is always static. All other objects are considered to be variable. A variable object is reusable when its content is the same for at least two different records in the record set.

At printing, PrintShop Mail tries to assign as many static objects to the master layer as possible, starting with the object at the back of your layout, and working towards the front. All static objects up to (but not including) the first variable object are put in the master layer. All other objects make up the variable layer. Any reusable data in the variable layer will be cached in PostScript forms.

> When using FreeForm and FreeForm 2, try to make sure that static objects are not placed on top of variable objects in the object order on your layout.

FreeForm does not fully support layout conditioning. In particular, it does not allow you to conditionally skip layouts. When SKIP is used, a BLANK page will be printed instead.

FreeForm 2 is an extension of FreeForm. The differences are:

1. **FreeForm 2** fully supports layout conditioning.
2. The **FreeForm 2** master ID consists of a name instead of a number.

Preference settings

- **Form number (FreeForm)**: A numeric ID used to identify the master data job.
- **Master ID (FreeForm 2)**: An alphanumerical name used to identify the master data.

Print Technology specific settings

Along with the regular print dialog box settings (see Print a Document), Fiery Freeform has these options:

- **Send Master data**: Send only the Master (template) to the Fiery server.
- **Send Variable data**: Send only the variable data, assuming the Master is already present in the Fiery server.
- **Send Master and Variable data**: Send both the Master and Variable data together.

PPML

PPML is short for Personalized Printing Markup Language . A PPML file describes the entire personalized printing job and contains all necessary elements to print the contents (layout and variable data).

The technology PPML in PrintShop Mail is very similar to PPML/VDX. The difference is that the content (PDF) and page layout description (PPML) are sent separately.

Windows

Print Technology specific settings

1. **Create ZIP archive**: When checked, the PDF and PPML files will be zipped before being sent to the printer. This option is used for specific printers, which expect a PPML-ZIP file. The ZIP file contains the PPML and the PDF file.
2. **Embed images in PDF**: When checked, all images will be embedded in the PDF.
3. **Environment**: The path specified in the Environment setting will place the images with a "Global Scope" in the Environment. The Consumer (RIP) stores and/or caches the images for later use.
4. **Send**.

   4.1- **Send "All Images"**: A PDF file will be created containing images that have a "Global Scope" or a "Local Scope".

This option also creates a PPML job, using this PDF, with instructions to use the Local and the Global images. Images with a "Global Scope" are stored in the specified Environment. After this job the "Global images" can be reused for recurring print projects, for example with the option "Send Local Images".

4.2- **Send** "**Global Images**": A PDF file will be created containing images that have a "Global Scope". This option also creates a PPML job, using this PDF, with instructions for storing these images into the specified Environment.

4.3- **Send** "**Local Images**": A PDF file will be created containing images that have a "Local Scope". This option also creates a PPML job, using this PDF, with instructions to use these Local images and the Global Images that are stored in the specified Environment. For that reason, images that have a "Global Scope" should be present in the specified Environment. Images with a "Global Scope" will only be referenced in the PPML job.

Note: The settings "**Environment**" and "**Send**" should not be changed when you are not familiar with PPML terms!

For more information about PPML, visit the Website of PODi (Print On Demand Initiative), http://www.podi.org.

PrintShop Mail offers an option to define if an image should have a "Global Scope". If the **Global Scope** of an image is set to "**Yes**" in the **Properties Panel**, the image will have a "Global Scope". For recurring print projects, a central benefit of PPML is its ability to reference Reusable Objects using Global Scope. This feature allows for transmitting smaller datasets and eliminates repetitive processing of the reusable content.

Note: Please make sure that your RIP supports at least PPML 1.5, including the "application/pdf" source format.

Printing speed can be improved by using a "Global Scope" for one or more images, or possibly (depending on your RIP) by unchecking the "**Embed images in PDF**'" checkbox in the **Print dialog**.

Mac OS

When using PPML as Print Technology, printing directly to the printer/RIP will result in the output being placed o the Desktop (either a ZIP file or a folder), which conatins the PPML file and (if used)images recurring in the document. In order to print the PrintShop Mail document you need to download the output to your printer/RIP.

PPML/VDX 7

PPML/VDX is an abbreviation for Personalized Print Markup Language/Variable Data Exchange. The output consists of an optimized PDF in which reusable content elements occur only once. The PDF also contains a block of PPML data that describes the page layout.

Note: PPML/VDX 7 requires both Adobe Acrobat(r) and Distiller(r) to be installed on your system.

To help ensure correct output there are "PSMail joboptions" files for the Acrobat Distiller versions 5, 6, or 7 in the Printshop Mail installation folder.

These settings will tell Acrobat Distiller how to handle fonts, color, images, etc., when it creates the optimized PDF.

If so desired, you can change these output options for PPML and VDX by changing the Distiller joboptions. Double click on the "joboptions" file you want to modify, change and save it.

Note: PSMailx.joboptions files should be saved in the PrintShop Mail installation folder, next to the executable. The "x" specifies the Acrobat Distiller version that the file corresponds to.

More information about the Acrobat Distiller joboptions can be found in the online Help of the Acrobat Distiller.

Print Technology specific settings

1. **Environment:** The path specified in the Environment setting will place the images with a "Global Scope" in the Environment. The Consumer (RIP) stores and/or caches the images for later use.

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2. **Send**

2.1- **Send "All Images"**: A PDF file will be created containing images that have a "Global Scope" or a "Local Scope". This option also creates a PPML job, using this PDF, with instructions to use the Local and the Global images. Images with a "Global Scope" are stored in the specified "Environment". After this job the "Global images" can be re-used for recurring print projects, for example with the option "Send Local Images".

2.2- **Send "Global Images**: A PDF file will be created containing images that have a "Global Scope". This option also creates a PPML job, using this PDF, with instructions for storing these images into the specified Environment.

2.3- **Send "Local Images"**: A PDF file will be created containing images that have a "Local Scope". This option also creates a PPML job, using this PDF, with instructions to use these Local images and the Global Images that are stored in the specified Environment. For that reason, images that have a "Global Scope" should be present in the specified Environment. Images with a "Global Scope" will only be referenced in the PPML job.

PrintStreamer

This printing technology sends two separate files to the RIP, one master file and one with variable data.

> ⚠️ PrintStreamer is only available on the Mac OS edition of PrintShop Mail Design. It is not available in the Windows edition.

Print dialog box settings

1. Use OPI, don't spool images

Print Technology specific settings

1. Send Master and variable data
2. Send Master data
3. Send Variable data

VIPP

VIPP is an acronym for Variable data Intelligent PostScript Printware. The output of this technology consists of a PostScript stream in which reusable images occur only once.

The main difference between VIPP and Optimized PostScript is that images are cached using a proprietary VIPP specific mechanism instead of PostScript forms. The cached images are stored in print ready format.

Print Technology specific settings

1. **Don't spool images (EPS, TIFF, JPEG)**: This option allows you not to send the recurring images twice to the RIP. The output will only contain references (by filename) to images stored in the project folder.
2. **Project Folder**:This option allows you to store recurring images on the fly, and before printing the job, to a "project folder" on the (VIPP enabled) RIP. The folder name can be specified in the **Print Dialog**.

Encapsulated VIPP supports the following image formats: JPEG, TIFF, EPS and PDF.

Note: This technology requires a RIP that has been enabled for Encapsulated VIPP, and a hardware key that has been upgraded to enable VIPP. For more information on how to upgrade the hardware key, see Upgrading PrintShop Mail.

Repetition Settings

The Repetition Settings lets you specify how a layout is repeated on your page. This is known as Multi-Up printing, or N-Up printing where N represents the number of repetitions within a page (for example 2up, 4up or 8up). See "Use Layout Repetition" (page 93) for more information.

> The Repetition Settings section applies only to this document. When changing these options, they are saved with your document and may change when opening or creating a new document.

To specify repetition preference settings
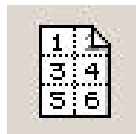
1. (**Windows**): From the **Edit** menu (CTRL+K), select **Preferences** .
   (**Mac OS**): From the **PrintShop Mail** menu, select **Preferences** .
2. In the left pane, click the **Repetition Settings** icon.

About repetition preferences

Set this option...	To do this...
Layout Repetition	Specify how the actual multi-up is done. The number between parentheses indicates the maximum number of repetitions possible with the current layout and print settings. • **Horizontal** repetition: Specify the amount of layouts positioned in the horizontal direction (number of columns). • **Vertical** repetition: Specify the amount of layouts positioned in the vertical direction (number of rows).
Spacing between layouts	Specify the horizontal and vertical distance between each layouts when using layout repetition.
Repetition Preview	Shows the repetition order on the page. When the defined Horizontal and Vertical repetition does not fit on the page, the layouts on the left and bottom are represented with a dash line.
Priorities	Specify the priorities (1,2,3) and direction (Left to Right, Right to Left , Top to Bottom, Bottom to Top, Front to Back, Back to Front) in which the records in your document are going to be printed. You can specify: • **Left to Right**, **Right to Left**: Influences the horizontal repetition. • **Top to Bottom**, **Bottom to Top**: Influences the vertical repetition. • **Front to Back**, **Back to Front**: Allows printing Through-the-stack
Mirroring	Specify that the positions of the layouts on the back of each page should match de positions of the layouts on the front of

Set this option...	To do this...
	each page. In effect, the layout positions on the back will mirror the layouts in front of the page. • **Based on driver settings**: The document will be printed duplex according to the settings in the printer driver, provided the driver supports this. • **Flip on long edge**: Layouts in the back side of the page will be mirrored through the long edge of the page. • **Flip on short edge(Windows only)**: Layouts in the back side of the page will be mirrored through the short edge of the page. • **Simplex**: The document does not require mirroring of the layouts. ⚠ When selecting Based on Driver Setting, the Preview dialog will not show the correct mirroring since it cannot read the printer's settings.

PrintShop Mail for Windows supports mixed layout sizes, except when layout repetition is used. When using layout repetition, the first layout size will be the layout size for the complete document.

Imposition Settings

The Imposition Settings section applies only to this document. When changing these options, they are saved with your document and may change when opening or creating a new document.

To open the Impositions preference dialog:

1. (**Windows**): From the **Edit** menu (CTRL+K), select **Preferences**.
   (**Mac OS**): From the **PrintShop Mail** menu (Command,), select **Preferences** .
2. In the left pane, click the **Imposition Settings** icon.

Available options:

• **Bleed Margins**: This specifies bleed margins (see "Bleed Margin" (page 64))
  • **Page Level (Windows Only)**: To add bleed to the page, the bleed is positioned around a set of layouts, thus keeping the layout size the same as before.
  • **None**: No bleed margin will be used.
  • **Include in Job**: To subtract the bleed margin from your layout, the bleed is positioned around each layout, thus keeping your layout size the same as before.
  • **Width**: To set the width of the bleed margin.
• **Crop Marks**: Specify crop marks settings (see "Crop Marks" (page 64)). This option is only available if the Bleed Margins is not set to **None**.
  • **None**: No crop marks will be drawn.
  • **Standard**: One line will be indicated for each trim position.
  • **Japanese**: Two lines will be indicated for each trim position.

- **Double Sided**: When using duplex and you select this option the crop marks will be printed in both sides of the paper.
- **Gap size**: Specify gap size as the distance between the actual crop mark and the edge of the layout.
- **Color (Windows Only)**: It is possible to select a color for the Crop marks.
- **Folding Lines**: Specify the length of folding lines. (See ["Folding Lines" (page 63)](#))
- **Center Layouts on page (Mac OS Only)**: Select this option to center layouts on the physical paper.

PrintShop Mail Web Settings

Use the settings bellow to fill in the URL and the login account for your company Web Server. See [Publishing Documents](#), for more information about creating and publishing PrintShop Mail documents to PrintShop Web.

>>> The PrintShop Mail Web Settings section applies to your whole PrintShop Mail Design software, not just to this document. When changing these options, they will remain the same between all your documents and templates.

To specify PrintShop Web Preference settings

1. From the **Edit** menu (CTRL+K), select **Preferences.**
2. In the left pane, click the **PrintShop Mail Web** icon.

About PrintShop Web preferences

Set this option...	To do this...
Server address (URL)	Specify the company Web Server.
Login (Username and Password)	Specify the username and password assigned by the administrator to log in the company Web Server. If you do not have an account, please contact your Web server's administrator.
Test Connection...	To establish a connection with the publication server.
Also publish database	To add the opened database to the published document.

PlanetPress Suite Settings

PlanetPress Workflow Tools is a powerful printing software for transforming and distributing print jobs from virtually any host. Transforming and distributing print jobs allows for automated local and remote printing, integrated PDF generation for archiving, emailing and faxing.

>>> The PlanetPress Suite Settings section applies only to this document. When changing these options, they are saved with your document and may change when opening or creating a new document.

Options for the PlanetPress Suite can be added to a PrintShop Mail output job through the Preferences panel, which enables you to send PrintShop Mail output to a location or queue that is being watched by PlanetPress Workflow Tools. This makes that PrintShop Mail output can be further processed to be archived or emailed or sent by fax.

For example, PDF files can be automatically generated and mailed to addresses defined by the customer.

Defining fields in PrintShop Mail

1. Create a PrintShop Mail document.
2. From the **File** menu, select **Preferences,** click on the **Publish to Web** icon.
   Make sure the Server address and login settings are empty.
3. Click on the **PlanetPress Suite** icon.
4. Define the output type for your document.

Set this option...	To do this...
Fax	**Number**: Specify the fax number from the data fields of the currently opened database or the variable you created. **Description**: Specify the description from the data fields of the currently opened database or the variable you created.
Email	**Number**: Specify the email address from the data fields of the currently opened database or the variable you created. **Subject**: Specify the email subject from the data fields of the currently opened database or the variable you created. **Body text**: Specify the email content from the data fields of the currently opened database or the variable you created.
PDF Book-mark	Create a standard PDF bookmark.
Archive	**Name**: Defines a descriptive name for the archive or for the item to be archived. **Variable**: Specify a data field of the currently opened database or the variable you created.

5. Click on the **Publish to Web** icon in the **Standard** toolbar or from the **File** menu select the submenu **Publish to Web.**
6. When you click **Finish** in the **Publish to Web** dialog, a window will be opened to save the document as a zip file.
7. PlanetPress Workflow Tools captures the PostScript file (zip fle) and routes it to the appropriate device to output the document.

For more information about PlanetPress Workflow Tools, please visit http://www.objectiflune.com/

Default Settings

When you start PrintShop Mail, it always opens with a blank document that uses default settings for the layout sizes and other preferences. You can change those preferences so that new blank documents will have your own, custom settings. This can be a time saver if you often create new documents and have to set your preferences each time.

To modify the default preferences:

1. Close your currently opened document by clicking on the File menu then selecting Close.
2. Open the Preferences menu:
   - In Windows: From the Edit menu, select Preferences (or use the CTRL+K keyboard shortcut)
   - In Mac OS: From the PrintShop Mail menu, select Preferences (or use the ⌘+, keyboard shortcut)
3. Make the changes you want to any of the sections of the preferences.
4. Click OK in the preferences window to save the changes.

Starting from now, any new document that you create will use these preferences. To change the default settings in the future, simply repeat these steps.

To reset PrintShop Mail to its default settings

You can reset the preferences to the default settings that were in effect when you first installed PrintShop Mail.

1. Close PrintShop Mail
2. Double-Click on the PrintShop Mail icon on your desktop, or click on it from the **Start Menu**, **Programs**, **PrintShop Mail Suite 7**
3. Immediately when the Splash Screen appears, press and hold the **CTRL** and **SHIFT** keys on your keyboard. The following dialog is displayed:
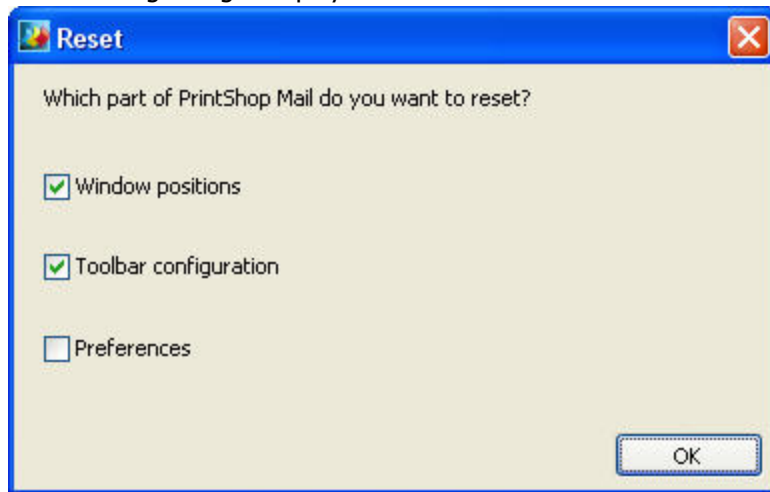
4. Check the settings that you want to reset to the defaults:
   - **Window positions**: Resets all of the windows and panels to their original, default locations and states.
   - **Toolbar configuration**: Resets the position, order and appearance of all the toolbars and their buttons to their original defaults.
   - **Preferences**: Resets all of the Preferences to their original defaults, except for the language of the interface.
5. Click **OK** to apply the reset and open PrintShop Mail.

Layout Basics

A PrintShop Mail document can consist of multiple layouts.

To insert a layout

1. From the **Layout** menu, select **Insert**.
2. Choose where you want to insert the layout.
3. Click **OK**.

To see your current layouts:

- **In Windows**: Open the "Layouts Panel" (page 22) from the Window menu.
- **Mac OS**: Select **Show Document Layouts** from the Window menu.

To duplicate a layout

1. Go to the layout which needs to be duplicated.
2. From the **Layout** menu, select **Duplicate**.
   Alternatively (Windows): in the **Layouts Panel**, right click on the layout you want to duplicate and from the submenu select **Duplicate**.

Alternatively (Mac OS): in the **Layout Panel**, click on the layout you want to duplicate, then click on the plus sign at the lower right corner of the panel.

To remove a layout

1. Go to the layout which needs to be removed.
2. From the **Layout** menu, select **Remove**.
   Alternatively (Windows): in the **Layouts Panel**, right click on the layout you want to remove and from the submenu select **Remove**.
   Alternatively (Mac OS): in the **Layout Panel**, click on the layout you want to remove, then click on the minus sign at the lower right corner of the panel.

To change the layout size and orientation

1. From the **Layout** menu, select **Size**.
2. Make the appropriate changes.

Under **Windows**, you can apply the changes to:

- Selected Layout
- Current Layout
- This point forward
- Whole document

>>> Under **Mac OS**, PrintShop Mail does not support multiple layout sizes within one document.

Guide Lines

Guide lines are non printing grid lines to help you to arrange and position objects. Moving or resizing objects to within a certain distance of a guide line causes the selection to snap to the line.

To add a guide line

Windows
1-Insert from the **Insert** menu
From the **Insert** menu, select **Guide line**
Select Horizontal or Vertical line.
Drag the mouse to the exact position where you want to place the guide line and left click on it.
2-Insert from the **Ruler**
Right click on the ruler. The contextual menu will show "Guide line" and "Folding line".
Select Guide Line.
Use the horizontal ruler to add a vertical guide, and the vertical ruler to add a horizontal guide. Left clicking on a ruler adds either a guide line or a folding line, depending on the icon displayed in the top left corner of your work area.
Mac
From the **View** menu, select **Layout Ruler**. Select either a horizontal or vertical guide line.
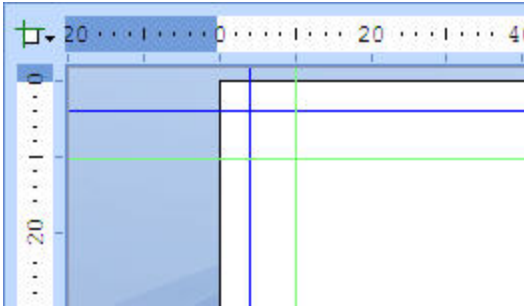
Note: When you drag a guide line, its default behavior is to snap to any existing objects. You can change this behavior by selecting or clearing the Guides Snap to Objects option in the View menu .

To set the "snap to" distance

Set the distance required for objects to snap to guide lines in Program settings, under Magnetic strength. The indicated number of points is the distance from the guide, within which an object will be drawn to the guide position.

To modify a Guide line position

1. Select the Guide line.
2. Right click on it.
3. From the menu select "Position".
   The window will show the current coordinates of the Guide line.
4. Enter the new coordinates for the line position.

To remove a guide line

It is possible to remove a guide line by dragging it to an invalid location outside the layout. The drag cursor is updated to reflect whether releasing the mouse button will move or remove the folding line. Alternatively right click on the guide line and from the menu select " Remove" .

Folding Lines

You can use folding lines to determine where to fold documents. Folding lines are printed on the visible part of the document (the part that will remain when the document is cut to the right size, for example they are also printed when there is no bleed margin). Unlike guide lines, folding lines are part of the print output, they are printed on either side of the document.

To add a folding line

Windows
1-Insert from the **Insert** menu
From the Insert menu, select **Folding line**
Select Horizontal or Vertical line.
Drag the mouse to the exact position where you want to place the folding line and left click on it.
2-Insert from the **Ruler**
Right click on the ruler. The contextual menu will show "Guide line" and "Folding line".
Select Folding Line.
Use the horizontal ruler to add a vertical line, and the vertical ruler to add a horizontal line. Left clicking on a ruler adds either a guide line or a folding line, depending on the icon displayed in the top left corner of your work area.
Mac
From the **View** menu, select **Layout Ruler**. Select either a horizontal or vertical guide line.
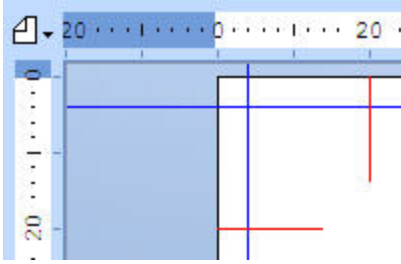
To change a folding line:

- **Length** - Use the Imposition settings dialog box to change the length of the folding line. The overlay length of a folding line specifies the length on the visible part of your document (for example, excluding any bleed margin).
- **Color** - Use the Program settings dialog box to change the color of the folding line.

To modify a folding line position

1. Select the Folding line.
2. Right click on it.
3. From the menu select "Position"
   The window will show the current coordinates of the folding line.
4. Enter the new coordinates for the line position.

To remove a folding line

It is possible to remove a folding line by dragging it to an invalid location outside the layout. The drag cursor is updated to reflect whether releasing the mouse button will move or remove the folding line. Alternatively right click on the folding line and from the menu select " Remove" .

Bleed Margin

A bleed margin is a part of your layout that is printed to the edge of a finished page.

Once a page is reproduced on press, the bleed margin is removed.

In PrintShop Mail, your total layout size (as seen in **Size** in the **Layout** menu) includes the bleed margin. To learn how to set bleed margins, see "Imposition Settings" (page 58).

> ⟩⟩⟩ When applying a Custom size to a layout and the bleed margin selected is at Page Level, the bleed is not displayed at the edge of the paper, but around the set of layouts.

Once you specified the Bleed Margin, check the "Crop marks" option and specify the Gap size, which is the distance between the crop marks and the edge of the document.

Crop Marks

Crop marks are printed lines that make it easier to trim the document to its finished size after the bleed margin is removed.

Crop marks are only printed if the layout includes a bleed margin.

To learn how to add crop marks, please see "Imposition Settings" (page 58).

Supported Image Formats

These are the supported graphical formats and associated filename extensions:

Graphics Format	Filename Extension
Encapsulated PostScript	EPS or EPSF
Windows Bitmap	BMP
Portable Document Format (*)	PDF
JPEG File Interchange Format	JPG, JPE or JPEG
Tagged Image File Format (**)	TIF or TIFF
Windows MetaFile	WMF
PNG	PNG
GIF	GIF

- (*) Microsoft Word documents (DOC, DOCX) are converted to PDF.
- (**) PrintShop Mail fully supports LZW-compression.

> The Mac version of PrintShop Mail uses QuickTime to handle image files. The supported image file formats therefore depend on your version of QuickTime. For a list of image file formats you can visit www.apple.com.

Windows Shortcuts

The following keyboard shortcuts can be used to save some time by using the keyboard instead of reaching for the mouse.

File Menu

Menu	Action
New Blank Document	Ctrl+N
New PDF Based Document	Ctrl+Shift+N
Open	Ctrl+O
Close	Ctrl+W
Save	Ctrl+S
Save As...	Ctrl+Shift+S
Page Setup	Ctrl+Shift+P
Print Preview	Ctrl+F2
Print	Ctrl+P
Exit	Ctrl+Q

Edit Menu

Menu	Action
Undo	Ctrl+Z

Menu	Action
Redo	Ctrl+Y
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Select All	Ctrl+A
Preferences	Ctrl+K

View Menu

Menu	Action
Preview	F2
Zoom In	Ctrl++
Zoom Out	Ctrl+-
Actual Size	Ctrl+Alt+0
Whole Layout	Ctrl+0
Rulers	Ctrl+R
Object Borders	Ctrl+H

Insert Menu

Menu	Action
PDF	Ctrl+Shift+W
Image File	Ctrl+Shift+E
Variable Text	Ctrl+Shift+T
Image Box	Ctrl+Shift+G

Text Menu

Menu	Action
Italic	Ctrl+I
Bold	Ctrl+B
Underline	Ctrl+U

Editing Text (advanced)

Action	Keys
Change bullet style	Ctrl+Shift+L
Line spacing = 1 lines	Ctrl+1
Line spacing = 2 lines	Ctrl+2
Line spacing = 1.5 lines	Ctrl+5
Select font name	Ctrl+Shift+F
Increase font size	Ctrl+Shift+>
Decrease font size	Ctrl+Shift+<

Action	Keys
Increase character spacing	Ctrl+Shift+]
Decrease character spacing	Ctrl+Shift+[
Reset character spacing	Ctrl+Space

Database Menu

Menu	Action
Open	Ctrl+D
Close	Ctrl+Shift+D
First Record	Alt+Up
Previous Record	Alt+Left
Next Record	Alt+Right
Last Record	Alt+Down
Find Record	Ctrl+F

Window Menu

Menu	Action
Layouts	Ctrl+1
Variables	Ctrl+2
Database	Ctrl+3
Warnings	Ctrl+4
Verification Result	Ctrl+5
Properties	Ctrl+6
Fonts	Ctrl+7

Help Menu

Menu	Action
Help Topics	F1

Macintosh Shortcuts

PrintShop Mail Menu

Menu	Action
Preferences	Command,
Hide PrintShop Mail	Command + H
Hide Others	Alt + Command + H
Quit PrintShop Mail	Command + Q

File Menu

Menu	Action
New	Command + N
New PDF based Document..	Shift + Command + N
Open	Command + O
Close	Command + W
Save	Command + S
Save As...	Shift + Command + S
Page Setup	Shift + Command + P
Print...	Command + P
Print Record	Alt + Shift + Command + P
Print Report Page	Alt + Command + P

Edit Menu

Menu	Action
Undo	Command + Z
Redo	Shift + Command + Z
Cut	Command + X
Copy	Command + C
Paste	Command + V
Delete	Backspace
Select All	Command + A
Spelling	Command:
Check Spelling	Command;

View Menu

Menu	Action
Toolbar	Alt + Command + T
Preview	Command + Y
Layout Rulers	Alt + Command + R
Zoom in	Command + +
Zoom out	Command + -
Actual size	Command + =

Insert Menu

Menu	Action
Image File	Shift + Command + E
Variable Text	Shift + Command + T
Variable Image	Shift + Command + G

Item Menu

Menu	Action
Lock Position	Command + L
Unlock Position	Shift + Command + L
Show Object Properties	Command + Return

Text Menu

Menu	Action
Show Fonts	Command + T
Copy Font	Alt + Command + C
Paste Font	Alt + Command + V
Style Bold	Command + B
Style Italic	Command + I
Style Underline	Command + U
Copy Tabruler	Command + 8
Paste Tabruler	Command + 9
Show Colors	Shift + Command + C

Layout Menu

Menu	Action
First	Alt + Shift + Command + Left
Next	Shift + Command + Right
Previous	Shift + Command + Left
Last	Alt + Shift + Command + Right
Go To...	Command + J

Database Menu

Menu	Action
Open	Alt + Command + O
Close	Alt + Command + W
First Record	Alt + Left
Next Record	Command + Right
Previous Record	Command + Left
Last Record	Alt + Right

Window Menu

Menu	Action
Minimize	Command + M
Show Database	Command + 1
Show Variables	Command + 2
Show Layout Conditions	Command + 3

Menu	Action
Show Fonts	Command + 4
Show Document Layouts	Command + 5
Show Warnings	Command + 6

Help Menu

Menu	Action
PrintShop Mail Help	Command + ?

Working with PrintShop Mail Documents

Create a New Document

You can create a new PrintShop Mail document either from a blank document, a template, or a PDF file. By default, PrintShop Mail always starts with a blank document with a default size.

To start with a blank document

1. Open the **File** menu
2. Select **New**
3. Select **Blank Document**

You can also create a new blank document by use the CTRL+N (Windows) and ⌘+N (Mac OS) keyboard shortcuts.

The size of this blank layout is set to **Fit to Page**. For more information on layout sizes, see "Specify the Layout Size" (page 73).

To create a new document from a PDF:

1. Open the **File** menu.
2. Select **New**.
3. Select **PDF-based document**.
4. Browse to the PDF file you want to use for your document.
5. Click **Open**.

You can also use the keyboard shortcut CTRL+SHIFT+N in Windows to create a new PDF-Based document.

PrintShop Mail will automatically create one layout per page in your PDF, so if your document has 5 pages you will now have a PrintShop Mail document with 5 layouts. Each layout size is the same as the size of the page in the PDF. PDF pages are treated as separate objects. It is possible to scale the PDF pages around on the layout.

You can also use a Microsoft Word (.doc) document in PrintShop Mail. If you select a Word document, it is automatically converted into PDF format and treated as a PDF throughout your design. If the original Word document is modified, PrintShop Mail will notify you that the document has changed and will ask if you want to update the PDF in your PrintShop Mail document.

To create a new document from a template:

1. Open the **File** menu.
2. Select **New**.
3. Select **Template-based document**.
4. Browse to the template file you want to use
5. Click **Open**.

In order to use a template you have to first create one. Please see "PrintShop Mail Templates" (page 72).

PrintShop Mail Templates

PrintShop Mail allows you to create PrintShop Mail templates. Templates are PrintShop Mail documents that you can design for later use, for example for Publishing to PrintShop Web. These templates contain the (background) layout and the document settings.

To create a template

1. Create a PrintShop Mail document either by opening an existing blank one, opening an existing document, or creating a new template-based document.
2. Make any modifications to the document that you desire in your template
3. From the **File** menu, select **Save as Template**.

PrintShop Mail templates are saved with the extension ".PSMT". By default PrintShop Mail templates will be saved in the **Template** folder which is located in the PrintShop Mail application folder.

Modifying the template

It is possible to modify PrintShop Mail templates to change the document settings or content.

1. From the **File** menu, select **Open Template**.
2. Make the desired changes.
3. From the **File** menu select **Save As Template**.

> A template does not save the link to the database you may have used in the designed stage of the PrintShop Mail document.

Page Setup

The **Page Setup** of your document allows you to specify which printer to print to, the paper size, source, and other characteristics of your print media.

The settings in the **Print** dialog are applied to the current print job only, but the settings in the **Page Setup** dialog will be stored in your document file.

You can specify a different **Page Setup** for each layout, but you can only send layouts to one printer. This allows you to mix paper sizes (**Windows only**), orientations, media types, and finishing options throughout your document, provided that this is supported by your printer.

Windows

There are different ways of changing the **Page Setup**:

1. From the **File** menu, select **Page Setup**, and choose either:
   - **Selected Layouts:** layouts selected in the **Layouts** window.
   - **Current layout**: layout selected in the **Layouts** window.
   - **This point forward**: current layout and all layouts below it.
   - **Whole document**: all layouts in the document.
2. Select the **Layouts** tab in the **Properties** panel, select one or more layouts, select **Page Size**, and click on the [...] button.
3. Right click on the layout and select **Page Setup** to open the dialog.

Use the **Page Setup** dialog box to specify printer options, as well as the media your job will be printed on.

Mac OS

To change the **Page Setup**:

1. From the **File** menu, select **Page Setup**.
2. In the dialog box, you can change:

- Settings
- Format
- Orientation
- Scale

Use this dialog box to specify printer options, as well as the media your job will be printed on.

Specify the Layout Size

Windows

A PrintShop Mail document may consist of one or more layouts, which can be of different sizes. PrintShop Mail for Windows supports multiple layout sizes within one document.

To access the layout size properties:

1. Select the layout of which you want to change the layout size from the "Layouts Panel" (page 22).
2. Open the **Properties Panel** by clicking on **Window**, the selecting **Properties**.
3. Click on the **Layout Size** option in the **Properties Panel**. This triggers the **[...]** button next to the layout size.
4. Click on the **[...]** button to open the **Layout Size** options
5. Modify the options you want
6. Click **OK** to save the changes.

PrintShop Mail for Windows Layout Size Options

Setting	Description
Size	Select the layout size from the following options: - **Fit to Page**: Fits the layout so it corresponds exactly to the Page Size. - **Fit to Objects**:The layout will start at the top-left of the page and will resize itself dynamically to fit all the objects on the page until the lower-rightmost corner of the lower-rightmost object. - **Custom Size**: Lets you specify any custom size. - **A3/A4/Legal/Letter/etc**: Lists all of the paper sizes available in the printer that is currently selected in the Page Setup dialog.
Width	Enter custom width. This setting is editable if you select "Custom Size".
Height	Enter custom height. This setting is editable if you select "Custom Size".
Shape	Select either Tall or Wide.
Apply to	**Current Layout**: Will apply only to the currently selected layout. **This point forward**: Will apply to this layout and any located after it. **Whole document**: Will apply to all of the layouts including this one.

>>> PrintShop Mail for Windows supports mixed layout sizes, except when layout repetition is used. When using layout repetition, the first layout size will be the layout size for the complete document. See "Repetition Settings" (page 57).

Mac OS

A PrintShop Mail document may consist of one or more layouts, all having the same size. There are two ways to specify the layout size and orientation.

Automatic Layout Size

You can choose to base your layout size on the currently selected paper size in the **Print Setup** dialog, by selecting **Layout Size Automatic** in the **Layout** menu. This will cause PrintShop Mail to dynamically resize your layouts to fit on the paper, even when you are using layout repetition.

Fixed Layout Size

You can specify a fixed layout size in the **Layout Size** dialog. This will force your layout size to stay the same, independent of the currently selected printer and paper size.

PrintShop Mail for Mac OS Layout Size Options

Setting	Description
Size	Select a standard size for the PrintShop Mail document, A4, A5, B5, US Letter, US Legal. Select Custom Size to enter customized settings.
Width	Enter custom width. This setting is editable if you select "Custom Size".
Height	Enter custom height. This setting is editable if you select "Custom Size".
Orientation	Select either Tall or Wide.

Specify Spot Colors

Spot Colors are special premixed inks used instead of, or in addition to CMYK inks. Spot Colors are used in offset printing to reduce printing cost or to provide solid colors that can not be exactly reproduced using process colors (such as CMYK). For example to be able to print colors like gold and silver, some printers can accommodate an extra toner or cartridge filled with that dedicated ink.

>>> Spot Colors are only available in PrintShop Mail for Windows, and are not currently available in the Mac OS version.

PrintShop Mail allows you to enable **Spot colors** in order to print the document with the desired colors.

To open the Spot Color dialog

1. From the **Edit** menu, select **Spot Colors.**
    The **Spot Color** window is shown
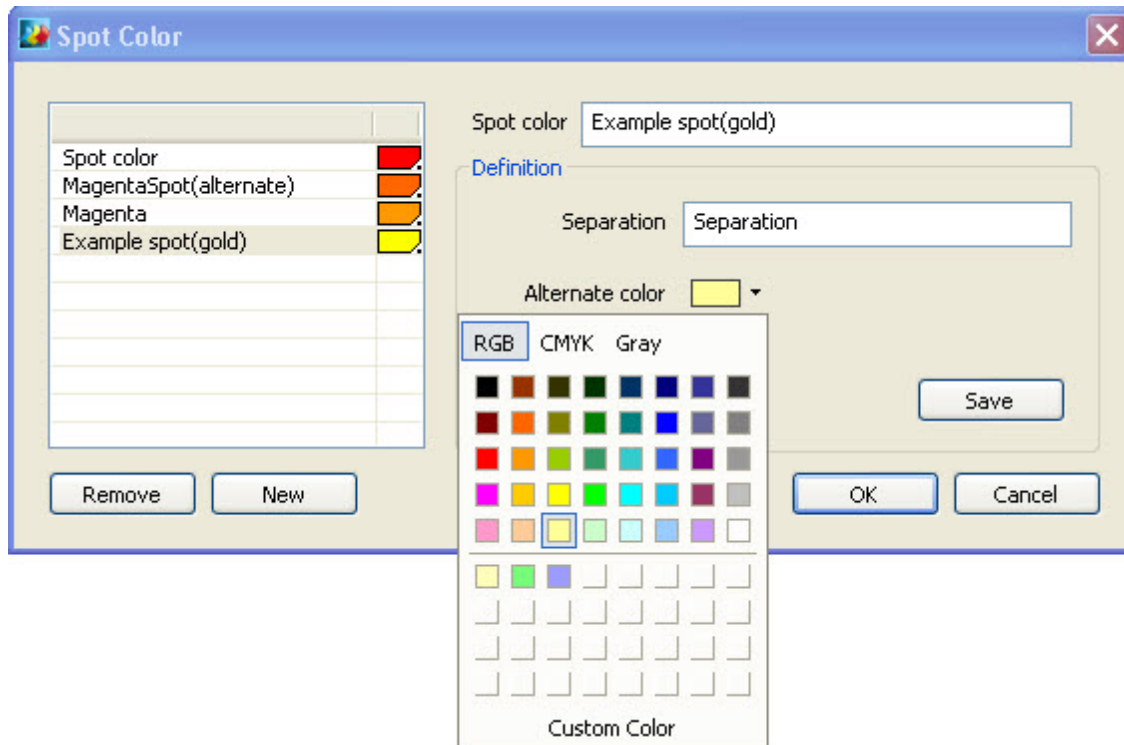
2. **Spot Color** " Name": A descriptive name is defined here.
3. **Separation**"Name": The name of the ink/cartridge as known on the device (printer/RIP). This must be identical to the name configured on the device.
4. **Alternate color**: The **Alternate** color will be used at printing if the **Spot Color** is not available on the device and it will be used as the displayed color on the screen preview at design time. This color may be complete different from the actual **Spot Color**

To add a new Spot Color

1. Click the **New** button.
2. Type the **Separation** name.
3. Select the desired **Alternatecolor** from the drop down list or create a **Custom** color.
4. Click **Save**.

>>> Spot Colors are saved with the current document. The Spot Color will not be saved as an application setting.

To remove a Spot Color

1. Select the Spot Color you want to remove
2. Click the Remove button.

>>> If a Spot Color is currently used in your document, it cannot be deleted, only modified.

To modify an existing Spot Color

1. Select the Spot Color you want to modify
2. Change the name, separation and alternate color as desired.
3. Click Save.

Spot Colors in EPS files

Spot Colors defined in EPS files are recognized and loaded in the Spot Color dialog as though it is defined in the document itself. If a Spot Color defined in an EPS file has the same name as an already existing Spot Color definition but is in fact a different Separation, a warning will be shown. As a result the used Spot Color will be sent to the printer (unmodified) and depending on the availability of the Spot Color on the printer, the Spot Color or the Alternate color will be printed.

Limitations

There are some limitations based on the printer and PrintShop Mail capabilities.

- The number of Spot colors used in a document is limited to the printer capabilities.
- PrintShop Mail cannot determine if a Spot Color is available on the device.
- Support for EPS with DCS (Desktop Color Separation) is limited to one separation in the DCS. If the EPS exceeds this limitation, PrintShop Mail will return a warning: "«filename».eps is a color separated file and might not print correctly."
- When verifying a document, the verification results show all used Spot Colors in the document.

Open a Database

A database is a file or service that contains data that you can use in your document. PrintShop Mail can read a database one record at a time and use the fields on that line in your text as variables. A field is a single piece of information, a record is one complete set of fields and a file is a collection of records. Traditional databases are organized by fields, records and files.

To open a database file:

1. From the **Database** menu, select **Open**.
2. Browse for a database file (see "Supported Database Formats" (page 78)).
3. Select the database and click on **Open**.

> If you open a delimited text file (such as CSV or Tab-Delimited files), you will be presented with the Open Delimited Text File dialog (Windows Only). See Delimited Text Files.

To open a database through ODBC (Windows Only):

1. From the **Database** menu, select **Open**.
2. Click on **ODBC Data Sources** on the left.
3. Select an ODBC Data Source on the right and click on **Open**.

> ODBC Data Sources can be created via the Windows Control Panel / Administrative Tools / ODBC Data Sources. For more information on creating ODBC Data Sources, please refer to the Microsoft Windows documentation.

PrintShop Mail only supports one active table at a time. If a database contains multiple tables, you will be presented with the **Select Table** dialog.

To select a specific table or view in your database, simply click on it in the list of available tables in the **Select Table** dialog.

You can also use an SQL query in order to display custom data. This is only available with database formats that support SQL queries (Access, SQL, Excel)

To create a custom query (Windows only):

1. Click on the "Custom" item in the list, then double-click on the description row.
    The Edit Query box appears.
2. Modify the existing query. This can be any SQL query that your database format supports. For more information, consult your database software's documentation.
3. Click Apply to see a preview of the results in the Select Table behind.
4. Click OK when you are satisfied with the results to save the query.

> Custom tables can also be used to call stored procedures in SQL databases. Check your SQL manual for details on how to create and use them.

To sort the database

In Windows:

1. Select from the menu **Database** : **Sort** > **Edit**.
2. Specify your sort conditions by selecting a database field from the drop down menu and specifying the sort order.
3. Click **OK**.

In Mac:

1. Open the **Database** floater and click the **Edit** button next to **Sort** checkbox.
2. Select a database field in the list to the left and press **Add** button to copy it to the **Sort Order** list to the right. Double clicking the field name has the same effect. Repeat the steps with all the fields that you want to use as further sort keys.
3. It is possible to specify the **Sort Order** per selected field, which is either **Ascending** or **Descending** by selecting a sort key in the list to the right and dragging it up or down, or remove a sort key by selecting it and clicking **Clear**, or double click the sort key.
4. Press **Sort** to sort the database and **Ready** to close the dialog.

To filter the database

In Windows:

1. Select from the menu **Database**: **Sort** > **Edit**.
2. Select up to 4 filter criteria, by selecting the database field to compare, the type of comparison to do (see list below) and what value to compare it too.
    Available types of comparison:
    - **Contains**: Database field contains the string indicated.
    - **Equals**: Database field is exactly equal to the string indicated.
    - **Does not equal**: Database field is not exactly equal to the string indicated.
    - **Is less than**: Database field is numerically smaller than the number indicated.
    - **Is less than or equal to**: Database field is numerically smaller or equal to the number indicated.
    - **Is greater than**: Database field is numerically larger than then number indicated.
    - **Is greater than or equal to**: Database field is numerically larger or equal to the number indicated.
    - **Is empty**: Database field is empty
    - **Is not empty**: Database field is not empty (contains any character, even a space)
    - **Starts with**: Database field starts with he string indicated.
3. At the end of each criteria, select if you want to combine all the conditions together (And) or if any condition can be true for the record to appear (or).
4. Click OK.

In Mac OS:

- Open the **Database** window and click **Edit** button next to the **Filter** checkbox.
- Enter an expression of which the result can only be true or false.
- Select **Filter** from the **Database** menu or click the **Filter** checkbox in the database window to apply your filter set-tings. Selecting or deselecting the filter option, toggles between using the entire database or using only the filtered records. The filter option is enabled only when the database is currently open.

> Data Fields: For the purpose of publishing PrintShop Mail documents to PrintShop Web, you can design a PrintShopMail document with or without linking it to a database. The entries you will find in the Data Fields panel in PrintShop Mail, represent data fields that occur in the document. These fields are either referred to in expressions (for variables or layout conditions, without the need to be directly linked to a database), or they refer to actual database fields (when the document is already linked to a specific database). Data Field Properties are relevant for Publishing to PrintShop Web. For more information about Data Fields, see Publishing Documents.

Supported Database Formats

These are the supported database formats and associated file name extensions:

Database Format	File Name Extension	Note
dBase	DBF	
Extensible Markup Language	XML	See "XML Database Format" (page 78)
Microsoft FoxPro	DBF, DBC	**Windows Only**
Microsoft Access	MDB, MDA, MDE, ACCDB, ACCDA, ACCDE	**Windows Only**
Microsoft Excel	XLS, XLSX, XLSB, XLSM	
Paradox	DB	**Windows Only**
Text	TXT or CSV	See "Delimited Text Files" (page 81)
Oracle	Through ODBC connection	**Windows Only**
SQL Server	Through ODBC connection	**Windows Only** Support for SQL Schema
DB2	Through ODBC connection	**Windows Only**

XML Database Format

> A PrintShop Mail designer normally does not have to design XML databases on their own, it is provided by a third-party or is generated by a software. This page is meant as information to be forwarded to whomever is controlling how the XML is generated so that it is compatible with PrintShop Mail.

PrintShop Mail can map the elements in an XML file to records and fields and use it as a data source, as long as the XML conforms to certain rules.

Encoding

Any XML encoding is supported. If the encoding is not specified, it is assumed to be UTF8.

Hierarchy

There must be one root element. The root element can have one or more record elements, which form a recordset. Each record element can have one or more field elements.

Example 1: Basic flat hierarchy

```
<root>
 <record>
  <field2>Record 2, Field 2</field2>
  <field1>Record 2, Field 1</field1>
 </record>
 <record>
  <field2>Record 1, Field 2</field2>
  <field1>Record 1, Field 1</field1>
 </record>
</root>
```

If a field element has child elements, the field element is considered to be an embedded recordset. The value of an embedded recordset is a combination of the values of its records, separated by newlines. You will see this value when you use the field in your layout. For performance reasons, the Select Table dialog and Data Fields pane do not display an actual preview of an embedded recordset - they only display the text "(Multiple records)".

Example 2: Dynamic product list

```
<orders>
 <order>
  <name>Mr. A.</name>
  <product type="Cranberry Sauce" price="$40.00"/>
 </order>
 <order>
  <name>Mrs. B.</name>
  <product type="Dried Pears" price="$30.00"/>
  <product type="Cajun Seasoning" price="$22.00"/>
  <product type="Aniseed Syrup" price="$10.00"/>
 </order>
</orders>
```

Attributes

Attributes are interpreted as child elements. For example: <elem attrib="1"/> is identical to <elem><attrib>1</attrib></elem>.

Exceptions:
- PrintShop Mail will not include an attribute as a data field if its name starts with "xmlns"
- PrintShop Mail will not include an attribute as a data field if its name is
"xsi:noNamespaceSchemaLocation", "xsi:schemaLocation", "xsi:type", "xsi:nil", "xml:base", or "dt:dt"

A special case is <elem attrib="1">InnerText</elem>. PrintShop Mail will expose "attrib" as a data field since it's a named child element, but the InnerText value will be hidden. If you want to use the InnerText value you have two options:

- Turn it into a named child element: <elem attrib="1"><value>InnerText</value></elem>
- In an expression, add a reference to the hidden data field [$Text]

Multiple tables

PrintShop Mail 7.1 introduced support for multiple tables. Also, PrintShop Mail 7.1 no longer requires the record elements to be at the second level in the hierarchy. A 'table' in an XML data file is a collection of record elements, with the same name, at the same hierarchy level. If more than one table is found, the user will be asked to select one in the Select Table dialog.

Exceptions:

- PrintShop Mail will not list a table if its name is "s:Schema" (XML persistence schema)
- PrintShop Mail will not list a table if it only consists of embedded recordsets (no regular fields)

Example 3: Data at deeper level

```
</inventory>
 <level2>
  <level3>
   <level4>
    <car color="red" year="1999"/>
    <car color="lime" year="2000"/>
    <car color="black" year="2010"/>
   </level4>
  </level3>
 </level2>
<inventory>
```

Example 4: Two tables, '/car' and '/bike'

```
<inventory>
 <car color="red" year="1999"/>
 <car color="lime" year="2000"/>
 <car color="black" year="2010"/>
 <bike type="unicycle"/>
 <bike type="two-seater"/>
</inventory>
```

Validation

PrintShop Mail will display an error message with context information if the XML has an incorrect syntax.

It should be possible to have PrintShop Mail validate the XML against a DTD or XSD schema, but we noticed that the MSXML 4.0 parser can have some trouble processing certain DTD schemas. If you run into any strange behavior, try removing the schema reference.

Data types

Anything between CDATA brackets is considered to be literal character data instead of markup. Angle brackets ('<', '>') and ampersands ('&') within a CDATA section do not need to be escaped.

CDATA Example:

```
<elem><![CDATA[Hello world]]></elem>
```

PrintShop Mail has limited support for typed XML. Types need to be specified in an external XDR schema (the inline dt:dt attribute is not supported). Note that the "fixed.14.4" type is assumed to represent currency.

Example 5: XDR schema

[File: weather.xml]

```
<?xml version="1.0"?>
<weather xmlns="x-schema:weather.xdr">
 <date>1970-09-30</date>
 <degrees>67.5</degrees>
</weather>
```

[File: weather.xdr]

```
<Schema xmlns="urn:schemas-microsoft-com:xml-data" xmlns:dt="urn:schemas-microsoft-
com:datatypes">
 <ElementType name="date" content="textOnly" dt:type="date"/>
 <ElementType name="degrees" content="textOnly" dt:type="float"/>
 <ElementType name="weather" content="eltOnly">
  <element type="date"/>
  <element type="degrees"/>
 </ElementType>
</Schema>
```

Delimited Text Files

PrintShop Mail supports opening any text file that is delimited with a special character. Generally these files are CSV files (Comma Separated Value), but can also be tab-delimited, pipe-delimited, etc.

When you open a delimited text file using the Database, Open menu, you are presented with the Open Delimited Text File dialog.
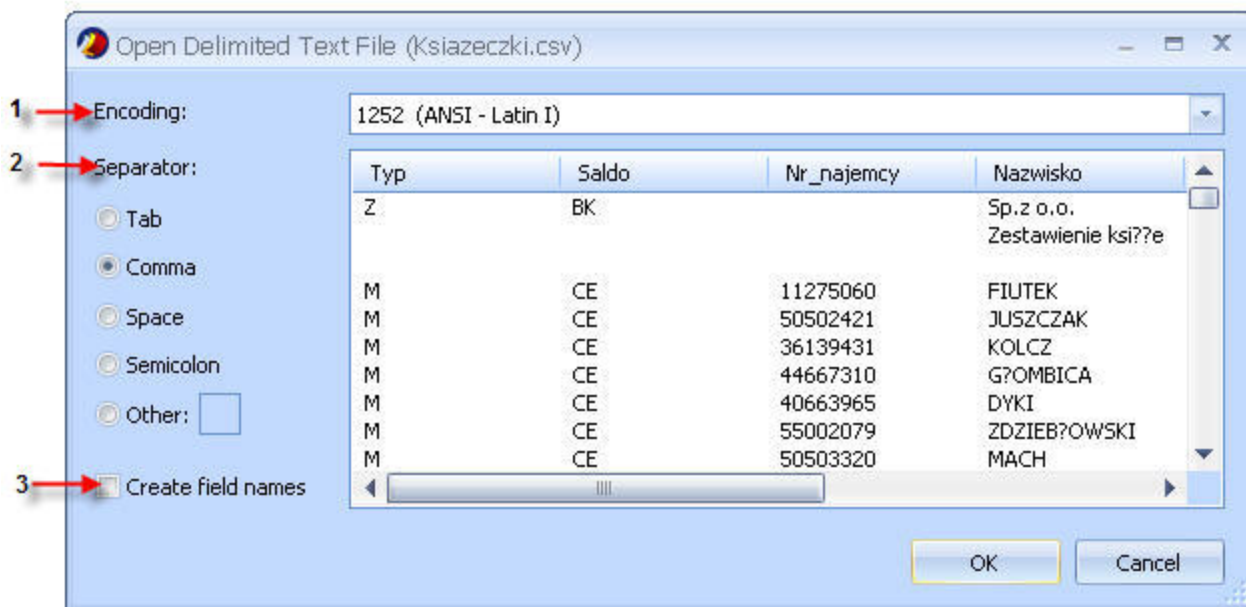
1. **Encoding**: Select the encoding that is used in the text file. PrintShop Mail detects the encoding automatically. In most cases, you can leave this setting as its default. If you know that the text file was created using a different encoding that the encoding that you are using on your computer, you should change this setting to match it. For example, if your

computer is set to use encoding **1251(Cyrillic**, **Windows),** but you know that the file was created by using encoding **1252(Western European, Windows),** you should change it to 1252.

2. **Separator**: Select the character that separates values in your text file. If the character is not listed, select the **Other** check box, and then type the character in the box that contains the cursor.

3. **Create field names**: If no field names are part of the database, PrintShop Mail can add the field names for you. The field names have the following structure **Field <<number>>,** where the number is formatted as three digits with leading zeros starting at 1 (such as Field1, Field2, etc).

Delimited Text File Limitations:

- The maximum number of fields supported is 255 for all types of delimited text files. Any column beyond 255 is ignored by PrintShop Mail.
- The first line in your text file should contain the field names.
- Field names should only contain alphanumeric characters and underscores.
- The records should be listed on the following lines.
- The field separator is either a tab, a comma, a space, a semicolon or a user-defined character (not alphanumeric or underscore) and these separators cannot be used in field contents.
- If a field contains a field separator character, it should be enclosed in double quotes in order to be treated as one string.
- Two adjacent field separators imply that an empty field is placed between them.
- The record separator is a newline character.
- Any missing fields at the end of a line are left empty.

Objects in PrintShop Mail

Objects are pieces or components that you place in your PrintShop Mail document to display some sort of data on your page. Objects include text, images, barcodes and others.

To learn how to manipulate objects, see "Manipulating Objects" (page 34).

Text Object

You can display text on your page using a mix of static and variable text. Variable text is generally constructed using pieces from your database, sometimes using conditions to control what text appears and when.

To add a text object to your document:

1. Click on the Text Object button in the Tools toolbar (▨)
2. Using your mouse, create a box on the document by clicking and holding the mouse button where you want one corner to be, then moving the mouse to where you want the opposite corner and letting go of the button.
3. Start typing your text using static text and variables (see "Working With Variables" (page 91)).
4. You can apply styles and formatting to your paragraphs and text. See "Text Style" (page 40) and "Paragraph Style" (page 42)).
5. Click outside of the text object to see the result as it will appear.

>>> You can also create a text box of the default size by dragging a Database Field onto your page. This creates a text box that contains one variable with the same name as your data field, and that variable will have the data field as an expression.

Manipulating the text object

The text object can be manipulated in the following ways. You can:

- Edit its properties (See "Text Properties" (page 27))
- Select it (see "Selecting Objects" (page 34))
- Move and resize it (see "Moving and Resizing Objects" (page 35))
- Copy it (see "Copying Objects" (page 36))
- Align it with other objects (see "Aligning Objects" (page 37)) and arrange it (see "Arranging Objects" (page 37)).
- Lock it (see "Locking Objects" (page 38))
- Link it with other text objects (see "Linking Text Objects" (page 38))
- Anchor it with other objects (see "Anchored Objects" (page 38))

Add Static and Variable Images

In PrintShop Mail, image objects can contain either static or variable images. Using variable images with PrintShop Mail allows you to personalize your documents with pictures.

>>> **Note**: For a list of supported image formats, see Supported Image Formats.

About static images

Static images are not linked to a variable, which means that they are always associated with the same image file throughout your whole document.

To insert a static image

1. Click on the Image Object button in the Tools toolbar.
2. Using your mouse, create a box on the document by clicking and holding the mouse button where you want one corner to be, then moving the mouse to where you want the opposite corner and letting go of the button.
3. In the dialog box, browse to the image to insert.
4. Click **Open**.

> You can also insert the Image Object via the Insert -> Image File menu. This create the Image Object at the top-left corner of the document.

Images added to the document will be within an area called the Bounding Box. You do not manipulate the image directly but rather its bounding box. Images will always fit within the bounding box and their image ratio will not change. For example, if you resize the bounding box horizontally to make it wider, the image will center itself but not be bigger. If you resize the box vertically afterwards, then the image will grow to fit. The initial size of an image depends on its resolution. PrintShop Mail assumes an image resolution of 96 DPI (Dots Per Inch), except for EPS (72 DPI) and TIFF files. The resolution of a TIFF image is stored in the file itself.

About variable images

Variable images are linked to variables in the same way as variable text. The result of the expression associated with a variable image should be an image file name.

To insert a variable image

1. Click on the Insert Image Box button in the Tools toolbar.
2. Using your mouse, create a box on the document by clicking and holding the mouse button where you want one corner to be, then moving the mouse to where you want the opposite corner and letting go of the button.

To set the variable image folder and file name

1. Double-click on the variable image box.
2. Browse to the folder where you want to look for images.
3. Double-click on one of the images.
4. Open the Variables tab and double-click on the variable that corresponds to the name of the image object you just created (such as Image1, Image2, Image3).
5. Use the Expression Editor to determine what image will appear. The result of the expression must be the actual file name of the image in the same folder, including the extension (.jpg, .png, etc). See "Building Expressions" (page 120).

> Technically, both image objects are the same - we offer both for the convenience of adding the one that will offer the correct dialog box. Both image types are cached using your print technology, where each individual image is cached once and referred to multiple times.

Examples of Variable Image documents

Example: Image filename is "As is".

If your database contains a field that already has the name of the image you want do display including the extension, you can refer to it directly in the image's expression. For example, if your database has a field called "Car Pic", you could simply use the expression [Car Pic] in your expression.

ZIP	CAR	CAR PIC

91335	Mustang	Mustang.jpg
75038	Explorer	Explorer.jpg
60173	Windstar	Windstar.jpg
33351	Explorer	Explorer.jpg

Result:

Example: Condition triggered by the contents of a data field.

If your database contains a small trigger that can be used to dynamically determine what image will be displayed, you can use a condition in the expression to determine what image will be shown depending on that trigger. For example, if you have a field called "Car Type" that contains either A, B or C which refer to a specific car type, you can use that.

ZIP	CAR	CAR TYPE
91335	Mustang	A
75038	Explorer	B
60173	Windstar	C
33351	Explorer	B

Expression

```
IF([CAR TYPE] = "A", "Mustang.jpg",
 IF([CAR TYPE] = "B", "Explorer.jpg",
  IF([CAR TYPE] = "C", "Windstar.jpg","")))
```

Place PDF

You can insert a PDF file as a static PDF object or as a variable image object. As a variable image object allows for using variable pages within a (single) PDF document.

To insert a PDF image as a static PDF object, you can:

1. Drag and drop a PDF file to your layout, or
2. From the **File** menu, select **New PDF based document**, or
3. In the Tools toolbar, click the **Insert PDF** button, or from the **Insert** menu, select **PDF...**.

To insert a PDF file as a variable image object, you can:

1. In the Tools toolbar, click the **Insert Image File** button, or from the **Insert** menu, select **Image File.**
2. In the Tools toolbar, click the **Insert Image Box** button, or from the **Insert** menu, select **Image Box.**

Note: An image object can be linked to a single PDF file. As PDF files can contain multiple pages you can specify the page(s) to be used in your document through an expression, in this way you can use variable pages within that PDF file.

1. In the Tools toolbar, click the **Place Variable Image** button and drag a rectangle to the desired size on your layout, or from the **Insert** menu, select **Variable Image**.
2. Double click the name of your variable image in the **Variables** window, to display the **Expression Editor**.
3. In the **Expression Editor**, define an expression or select a database field that contains the image filename.

Note: PrintShop Mail for Macintosh converts the color space that is embedded in the image to the color space of the printer driver. You can check the color space of the printer driver, selecting from the File menu, Print/ColorSync.

Barcode Object

The most commonly known barcodes are composed of a sequence of vertical bars and spaces varying in width. Some barcodes use start and stop characters, which are defined as patterns of bars and spaces that tell the barcode reader where the code begins and ends. Others have a checksum, which is an integer value that the reader can use to verify the integrity of the barcode data. Some include human readable characters below the bars.

With PrintShop Mail you can add a variety of barcodes to your documents. For detailed descriptions of each one of the options offered by specific barcodes, or for background information on barcodes, refer the documentation provided by individual barcode suppliers.

To add a barcode:

1. Create a new document or open an existing document.
2. Click the *Barcode* tool in the toolbar to insert a new barcode. The barcode object shows a default barcode.

To change the barcode properties, see .

For a list of supported barcodes in PrintShop Mail, see .

Barcodes Supported by PrintShop Mail

This page lists all the barcodes supported by PrintShop Mail Web, along with any specific requirements or notes regarding them. Note that these barcodes are generally supported by both the PrintShop Mail Barcode Fonts (for versions previous to 7.0) and the PrintShop Mail Barcode Object (for versions 7.0 and higher).

Linear Bar Codes (1D)

Name	Description	Expected Data
CodaBar 2 Widths	CodaBar (2 Width), CodaBar2	
Code11	Code 11, Code-11	
Code 2OF5 Data Logic	Code 2 of 5 Data Logic Version	
Code 2OF5 IATA	Code 2 of 5 IATA Version (International Air Transport Association)	
Code 2OF5 Industry	Code 2 of 5 Industry Version	
Code 2OF5 Interleaved	Code 2 of 5 Interleaved (alias ITF or Code 2/5 IL),	
Code 2OF5 Matrix	Code 2 of 5 Matrix (alias 2of5 Standard)	
Code 2OF5 Standard	Code 2 of 5 (identical with Code 2 of 5 Matrix)	

Name	Description	Expected Data
Code 39	Code 3 of 9 alias Code-39	
Code 39 Full ASCII	Code 3 of 9 Extended Version (ASCII)	
Code 93	Code 93	
Code 93 Full ASCII	Code 93 Extended Version (ASCII)	
Code128	Code-128 all sub sets and Compressed Mode	
Code128A	Code 128 Subset A	
Code128B	Code 128 Subset B	
Code128C	Code 128 Subset C	
EAN13	EAN-13 (also JAN or IAN),	
EAN13 P2	EAN-13 (also JAN or IAN) with 2 digit add-on	
EAN13 P5	EAN-13 (also JAN or IAN) with 5 digit add-on	
EAN14	EAN-14 (GTIN coded with EAN-128 symbology)	
EAN8	EAN-8 (also JAN or IAN)	
EAN8P2	EAN-8 (also JAN or IAN) with 2 digit add-on	
EAN8P5	EAN-8 (also JAN or IAN) with 5 digit add-on	
EAN128	EAN-128 alias UCC-128 alias GS1-128	
Flattermarken	Flattermarken	
GS1-128	GS1-128, identical to EAN-128 / UCC-128	
GS1-DataBar	GS1-DataBar Symbologies: all variants of GS1 DataBar are supported (GS1 DataBar is based upon RSS)	
ISBN	ISBN	
ITF-14	ITF14, Code 2of 5 Interleaved (14 digits)	
LOGMARS	DOD Logmars, Department of Defense Logmars	
MSI	MSI Barcode variants with different check digits	
NVE-18	NVE 18 (Nummer der Versandeinheit)	
Pharmacode One-Track	Pharmacode One Track (1 Track)	
Pharmacode Two-Track	Pharmacode Two Track (2 Track)	
PLANET 12 Digit	Planet Code 12 digits (Postal Alpha Numeric Encoding Technique)	
PLANET 14 Digit	Planet Code 14 digits	
Plessey	Plessey Code Unidirectional	
Plessey Bidirectional	Plessey Code Bidirectional	
PZN	Pharma Zentralnummer (Deutschland)	
RSS Expanded	EAN/UCC RSS Expanded (Reduced Space Symbology)	
RSS Limited	EAN/UCC RSS Limited (Reduced Space Symbology)	
RSS-14	EAN/UCC RSS14 (Reduced Space Symbology)	

Name	Description	Expected Data
RSS-14 Truncated	EAN/UCC RSS14 Truncated (Reduced Space Symbology)	
RSS-14 Limited	EAN UCC RSS14 Limited (Reduced Space Symbology)	
GS1 DataBar Expanded	GS1 DataBar Expanded (Reduced Space Symbology)	
GS1 DataBar	GS1 DataBar / RSS14 (Reduced Space Symbology)	
GS1 DataBar Truncated	GS1 DataBar Truncated (Reduced Space Symbology)	
GS1 DataBar Limited	GS1 DataBar Limited (Reduced Space Symbology)	
SSCC-18	SSCC 18 Shipping Container Code	
Telepen	Telepen	
Telepen Alpha	Telepen Alphanumerisch	
UCC/EAN-128	UCC/EAN 128	
UCC-128	UCC 128	
UPC12 / UPCA	UPC 12 (alias UPC-A),	
UPC-A	UPC A (alias UPC-12),	
UPC-A P2	UPC Version A with 2 digit add-on	
UPC-A P5	UPC Version A with 5 digit add-on	
UPC-E	UPC Version E	
UPC-E P2	UPC Version E with 2 digit add-on	
UPC-E P5	UPC Version E with 5 digit add-on	
UPCSCC	UPC Shipping Container Code (refer to ITF14, SCC-14)	-

Postal Codes (1D)

Name	Description	Expected Data
Australian Post Custom	Australian Post Standard Customer, Customer2, Customer 3	
Australian Post Redirect	Australian Post Redirection	
Australian Post Reply Paid	Australian Post Reply Paid	
Australian Post Routing	Australian Post Reply Routing	
DPD Code	German Parcel Service Label Code	
DP Identcode	Deutsche Post Identcode	

Name	Description	Expected Data
DP Leit-code	Deutsche Post Leitcode	
Japanese Postal	Japanese Postal Barcode	
Italian Postal	Italian Postal Code (based on 2of5 IL)	
KIX	Dutch Postal Barcode	
Korean Postal Authority	Korean Postal Barcode	
RoyalMail 4State (RM4SCC)	Royal Mail 4 State Barcode (RM4SCC)	
USPS OneCode (4-CB)	USPS OneCode (4-CB) alias USPS 4-State Customer Barcode	
USPS PostNet	United States Postal Service PostNet barcode. Supports ZIP, ZIP+4, Zip+4+Delivery Point.	"Content" properties support: **ZIP**: 5 digit or 5 Digit + 4. **Address Data**: Street number and street name, used for automatic Delivery Point calculation. Note that you cannot use "raw" data (!12345123478!) to generate a bar-code, you need the actual ZIP and Address data. Delivery point and checksum are automatically added.

Two-Dimensional (2D) Codes

Name	Description	Expected Data
Codablock-F	CodablockF (Stacked Code128), used by HIBC	
Data Matrix	Data Matrix (ECC200 standard with error correction), Auto Compaction	
MaxiCode	Maxi Code (used by UPS®)	
MicroPDF417	Micro PDF-417, MicroPDF	
PDF417	PDF-417 (all encodation modes with auto compaction)	
PDF417 Truncated	PDF-417 Truncated Version	
QR-Code	QRCode (Quick Response Code) (mostly used in Asia)	
Aztec Code	Aztec Code	
RSS-14 Stacked	EAN/UCC RSS14 Stacked	
RSS-14 Stacked Omnidir	EAN/UCC RSS14 Stacked Omnidirectional	
RSS Expanded Stacked	EAN/UCC RSS Expanded Stacked	
GS1 DataBar Stacked	GS1 DataBar Stacked	
GS1 DataBar Stacked Omnidir	GS1 DataBar Stacked Omnidirectional	
GS1 DataBar Expanded Stacked	GS1 DataBar Expanded Stacked	-

EAN-UCC Composite Variants (2D)

Name	Description	Expected Data
RSS-14	Composite Component CC-A / CC-B	
RSS-14 Stacked	Composite Component CC-A / CC-B	
RSS-14 Stacked Omnidirectional	Composite Component CC-A / CC-B	
RSS Limited	Composite Component CC-A / CC-B	
RSS Expanded	Composite Component CC-A / CC-B	
RSS Expanded Stacked	Composite Component CC-A / CC-B	
EAN 13	Composite Component CC-A / CC-B	
EAN 8	Composite Component CC-A / CC-B	
UPC A	Composite Component CC-A / CC-B	
UPC E	Composite Component CC-A / CC-B	
UCC/EAN128	Composite Component CC-A / CC-B / CC-C	-

GS1 DataBar Composite Variants (2D)

Name	Description	Expected Data
GS1 DataBar	Composite Component CC-A / CC-B	
GS1 DataBar Stacked	Composite Component CC-A / CC-B	
GS1 DataBar Stacked Omnidirectional	Composite Component CC-A / CC-B	
GS1 DataBar Limited	Composite Component CC-A / CC-B	
GS1 DataBar Expanded	Composite Component CC-A / CC-B	
GS1 DataBar Expanded Stacked	Composite Component CC-A / CC-B	

Related Symbologies

With the listed symbologies you can generate also the following variants:

- USS Code 39
- AIAG
- HIBC
- USS Code 128
- UCC-128
- ISBT-128
- SCC-14
- JAN
- Bookland
- ISSN
- USS ITF 2-5
- I-2/5
- ITF-14
- SSC-14
- DUN14
- USPS
- DOD Logmars (Department of Defense Logmars)
- UPC SCS (UPC Serial Shipping Symbol)

DirectSmile Object

Despite the fact that the integration of DirectSmile with PrintShop Mail benefits from state-of-the-art optimization and speed improvements techniques, the generation of personalized images can still consume considerable amount of computer resources. Therefore, DirectSmile must run on a separate computer than the one where PrintShop Mail is installed in order to spread computer resources. System responsiveness may be affected dependent upon system specifications and number and complexity of images used.

> ⚠️ The DirectSmile plug-in should be installed and available by default. If not, please re-install PrintShop Mail and check the DirectSmile plugin option.

If the connection between PrintShop Mail and DirectSmile is lost, images can no longer be requested nor received. It is therefore very important to verify the connection settings and make sure the PrintShop Mail document has access to the DirectSmile server. The same holds true when using DirectSmile in a multiple users environment as well as when printing PrintShop Mail documents with PrintShop Mail Web.

To insert a DirectSmile object on the page:

- Click the DirectSmile icon in the Tools toolbar.
- Double-Click the object that is added to the page.
- Type in the Server name and select an image set.
- Click Open.

The properties of a DirectSmile object are available in DirectSmile Properties.

Working With Variables

Variables are basically words that contain data, which can be used throughout your document in any text object. You can have as many variables as you want in your text, and they can be re-used as many times as you want. Changing the expression (content) of one variable will change its result in each place it is used.

Variables can be created manually by typing its name in a text object, automatically by dragging a data field on your document, or automatically by objects that you add.

To create a variable manually:

1. Create a new text object in your layout or use an existing text object.
2. Type in a variable name, surrounded by the variable delimiter (by default, this is the @ symbol). For example: **@FIRSTNAME@** , or **@Last Name@** .
3. Click outside of the text object. The variable appears in the "Variables Panel" (page 22).

To create a variable from a data field:

1. Open the "Data Fields Panel" (page 23).
2. Click on a data field and hold your mouse button.
3. Move your mouse to where you want the contents of the data field to appear.
4. Let go of the mouse button. A variable with the same name as the data field appears in the "Variables Panel" (page 22).

To assign database fields to the variables

The next step is to connect the variables to fields in the database. To do this,

1. (**Windows**): Double click on a variable in the **Variables Panel** to display the **Expression Editor**, or right click on the text object and select the variable in the **Edit Expression** submenu.
   (**Mac OS**): Double click on a variable in the **Variables** floater.
2. Double click on the database field to which to associate the variable.
3. Click **OK** to close the window.

Persistent Variables

A persistent variable is a variable that will remain present in your document even when it is not present in any text object. Persistent variables are normally useful when used in combination with the "TEXT_FILE" (page 153) function. In order for any variable in the contents of your external file to be replaced by an expression, create a persistent variable and change that variable's expression to reflect what you want to appear. For more information see "TEXT_FILE" (page 153).

To create a Persistent Variable

1. Right-click anywhere in the "Variables Panel" (page 22), then click on **Add Persistent Variable**.
2. Type the name you want for the variable.
3. Click **OK** to create it.

To modify the properties of a Persistent Variable

1. Click on the variable in the "Variables Panel" (page 22).
2. Go to the "Properties Panel" (page 26).
3. Edit the "Variables Properties" (page 31).

Use Layout Conditioning

Use layout conditioning to conditionally skip certain pages of your document or to leave them blank during the printing process. The PRINT and BLANK commands will not influence the amount of pages printed.

There are three options for applying a condition to a layout:

- **PRINT**: The layout will be printed (default).
- **BLANK**: A BLANK page will be printed instead of the layout.
- **SKIP** : The layout will be skipped and the next layout will take its place.

To specify layout conditioning

Select the layout for which you want to set the condition:

- (**Windows**): It is possible to specify layout condition in three ways:
  1. From the **Layout** menu, select **Edit Condition**.
  2. Right click on the layout and select **Edit Layout Condition**.
  3. In the **Layouts** panel, select the layout and click on **Action** to **Edit Condition**.
- (**Mac OS**):
  1. From the **Windows** menu, select **Show Layout Condition**s.
  2. From the **Windows** menu, select **Show Variables** and click on **Layout Conditions**.

Use Case Example

You want to print a one page newsletter or promotional letter, but you want to use a different page (different colors or images, for example) for your clients depending if they are male or female. Luckily, your database contains a field that says "M" for male clients and "F" for female clients.

The following expression can be used on the layout that is meant for your male clients:

```
IF( [GENDER] = "M", Print, Skip)
```

In plain words, "If the GENDER field is equal to "M", print the page, otherwise skip it".

The expression for your female audience will be very similar:

```
IF( [GENDER] = "F", Print, Skip)
```

> 〉〉〉 FreeForm and FreeForm 2 print technologies do not fully support layout conditioning and do not allow you to conditionally Skip layouts. When SKIP is used, a BLANK page will be printed instead.

Note: When you use layout condition SKIP for your PrintShop Mail documents with multiple layouts, or when you have applied variable Number of Copies, this may cause that the size of the record sets (the number of actual printed layouts per record) will be different per record set. This in turn may cause that some record sets will be split across different stacks.

When should Layout Conditions be applied?

- Output of multiple versioned documents within one PrintShop Mail file.
- Sending a different promotional coupon to clients that have purchased more or less than a specific amount (perhaps when sending a "thank you for your previous purchase" letter)
- Inserting blank pages

Note: For more information on expressions, see Expression Overview.

Use Layout Repetition

PrintShop Mail can print multiple layouts on a single page that is larger than the layout itself, which is useful for printing address stickers, postcards and business cards. This concept is sometimes referred to as Multi-Up or N-Up, where N is the number of layouts in a page (e.g. 2-up, 4-up, 8-up, etc). The technique can also be used to save "clicks" on printers that charge you each time a physical page is ejected, by placing multiple copies or records on a single, larger sheet.

This is done by using the Layout Repetition settings in the PrintShop Mail Preferences dialog (see "Repetition Settings" (page 57)).

Use Cases and examples:

- You can print 10 business cards on a single Letter-sized thick paper by creating a layout that is 3.5" wide by 2" high, with 2 horizontal repetitions and 5 vertical repetitions.
- You can use half as many physical pages ("clicks") on your printer by using an 8.5"x11" layout, repeated twice horizontally on a Tabloid-sized page.
- You can print postcards 4-up (2 horizontal, 2 vertical) on a Tabloid page.

Cut & Stack (aka Through-the-Stack) in Simplex mode

You can use the repetition settings to re-order the output so it creates stacks. This is useful when you are cutting the stack at printout, in order to retain the precise order of the records. For example, if you are printing 500 "tickets" 4-up using a "COUNTER" (page 143) function to display a serial number, you would probably want to keep the order as 1-500.

To do this, you can set the first priority settings to be (**1**) on **Front to back**, the second to be (**2**) on **Top to bottom** and finally (**3**) on **Left to right**. This way the first record is printed on the top-left of the first page, the second record on the top-left of the first page, etc. Record 126 will be on the top-right of the first page, and 500 will be at the bottom-right of the last page.

When you cut the output stack in 4, you can then simply order them in the order of: top-left, top-right, bottom-left then bottom-right stacks, and this will retain your 1-500 order.

Cut & Stack and Duplex mode

If you are creating a PrintShop Mail document with two layouts per record and **Cut & Stack**, you will need to use the Front to back option in priority 1 as described above, or else your "back" layout would end up besides your front one instead of on the back of the page. In order for this system to work correctly, you need to make sure that every record always generates two layouts.

When duplexing, you also need to remember to correctly select the proper Mirroring setting to the same option as your Duplexing option on the printer, so the layouts on the back are correctly ordered. For example, if you print in Short-Edge Duplex in your printer, select Flip on Short-Edge in the Mirroring option.

> When you use layout condition SKIP for your PrintShop Mail documents with multiple layouts, or when you have applied variable Number of Copies, this may cause the size of the record sets (the number of actual printed layouts per record) to be different per record set. This in turn may cause some record sets to be split across different stacks. To avoid this, always make sure that the number of layouts per record is correct (you can use conditional "blank" layouts to do this).
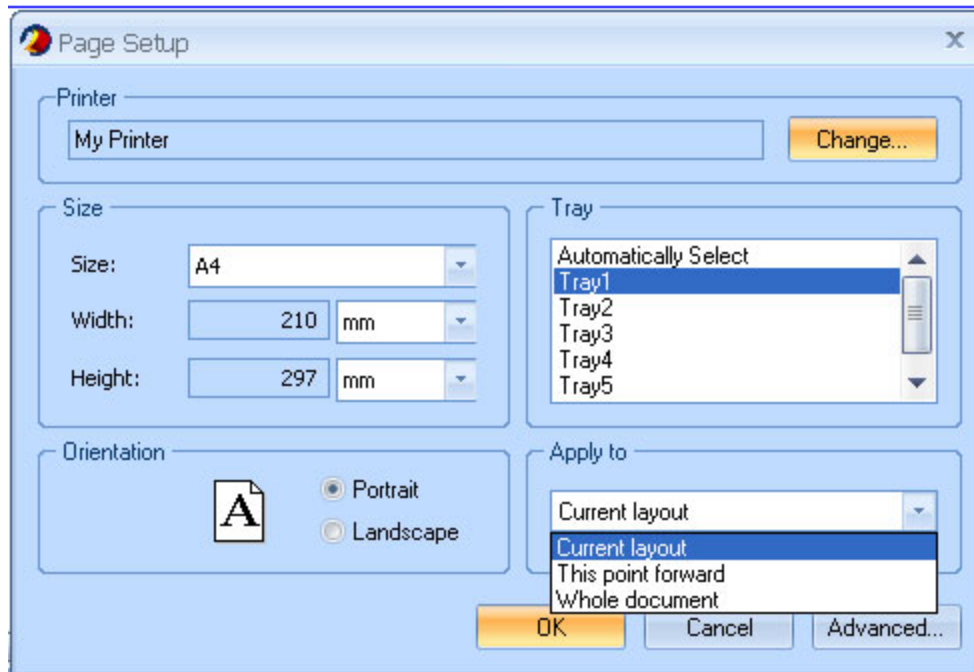
Select Paper Trays

If your printer supports different paper trays and your document consists of multiple layouts, you can send different layouts to different trays.

To associate a layout with a paper tray

Windows

1. From the **File** menu select **Page Setup**, or right click on the layout and choose **Page Setup**. Alternatively in the **Properties panel**, select **Page Size**.

2. From the Tray box, select the desired paper tray.
3. In the **Apply** to box select:

   Current layout: layout or layouts selected in the Properties Panel.
   This point forward: current layout and all layouts below it.
   Whole document: all layouts in the document.
4. Click **OK**.

If your printer supports more trays but they are not available in the Page Setup window, use the following steps to select a tray in the Advanced properties of the printer driver:

1. From the **File** menu select **Page Setup**, or right click on the layout and choose Page Setup.
2. Click on the **Advanced** tab.
3. In the **Printer Document Properties** select **Advanced**.
4. In the **Printer Advanced Options** select **Printer Features**.

> The options outline above, must be repeated for each layout, if each layout need a different tray.

Another way to associate a layout with a paper tray is by selecting the layout in the **Layouts** panel, then select the Paper Tray property and choose the desired tray from the drop down menu.
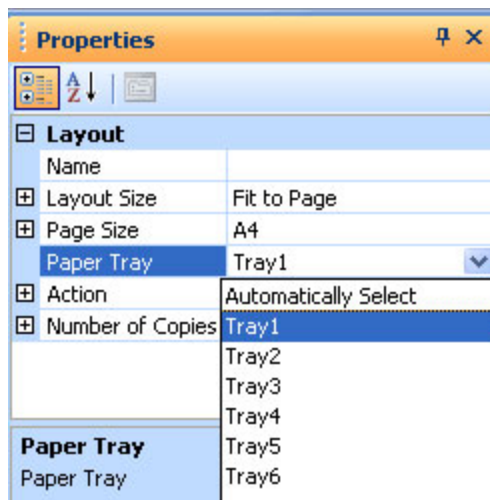
Mac OS

From the **Layout** menu, select **Paper Tray**. Depending on the selected PPD, a list with the available trays will be displayed.
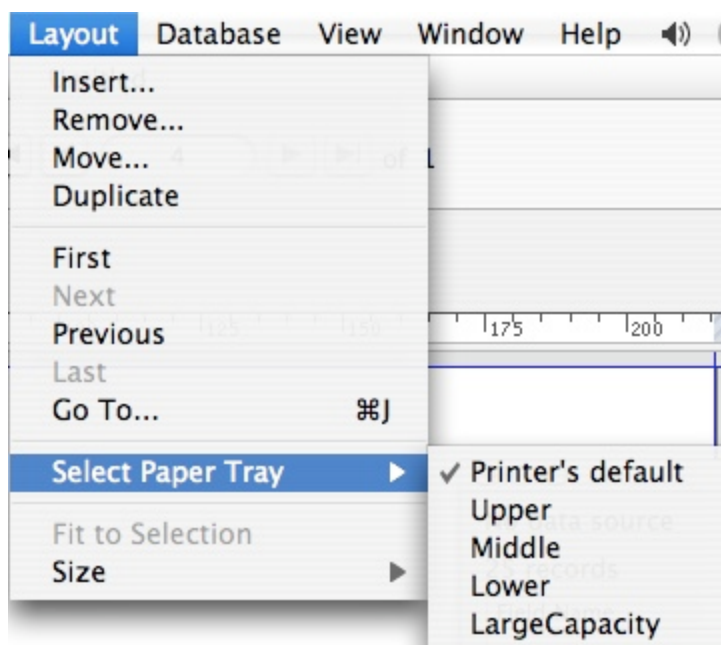
Number of copies

PrintShop Mail allows you to print a number of copies per page. The **Expression Editor** can be used to generated multiple copies of each page in your document.

To setup the number of copies

- Select the **Layouts** panel.
- Select the desired layout and click on **Number of Copies**, to open the **Expression Editor**.

Number Text String

Once the **Expression Editor** is open:

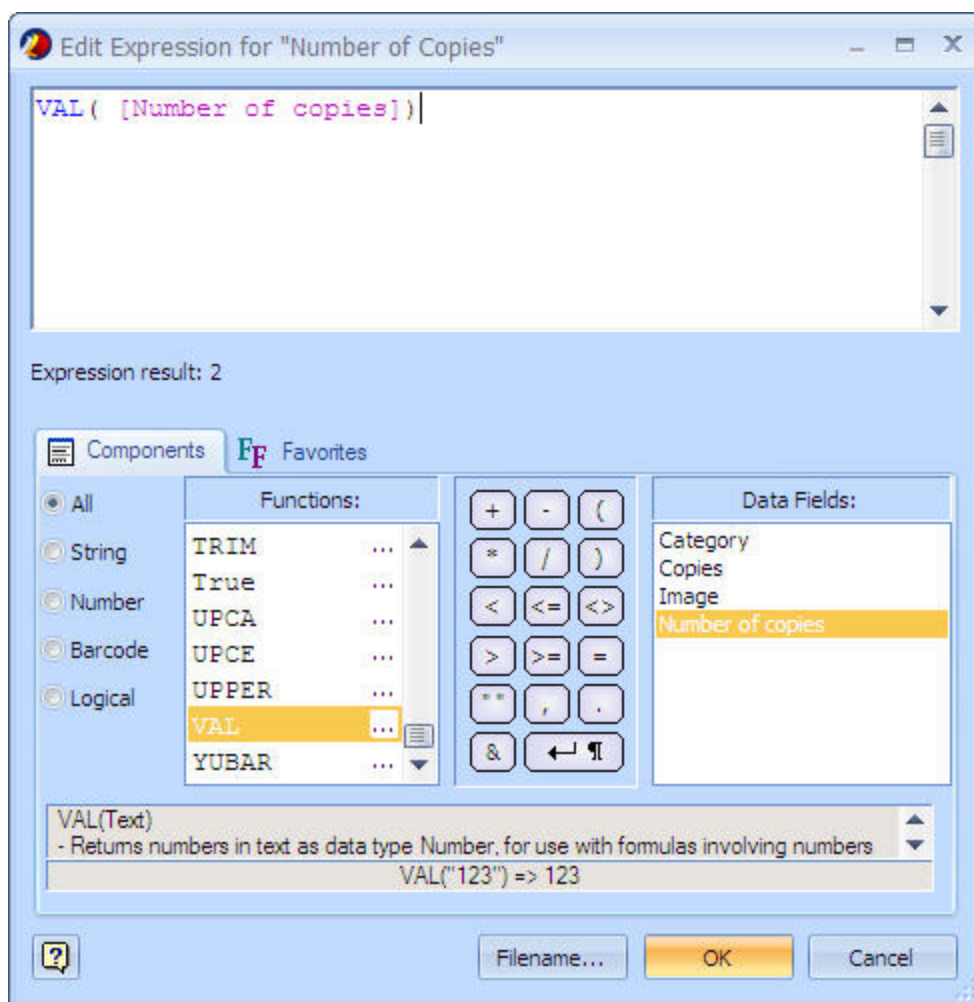1. Double click on the VAL function from the function list. The expression will be pasted into the **Expression Edit** field.
2. Select the string value of the database field containing the number of copies.

Non-numerical Text String

In this case, the data field does not contain a number string, but it does have a field to be used as "Trigger".
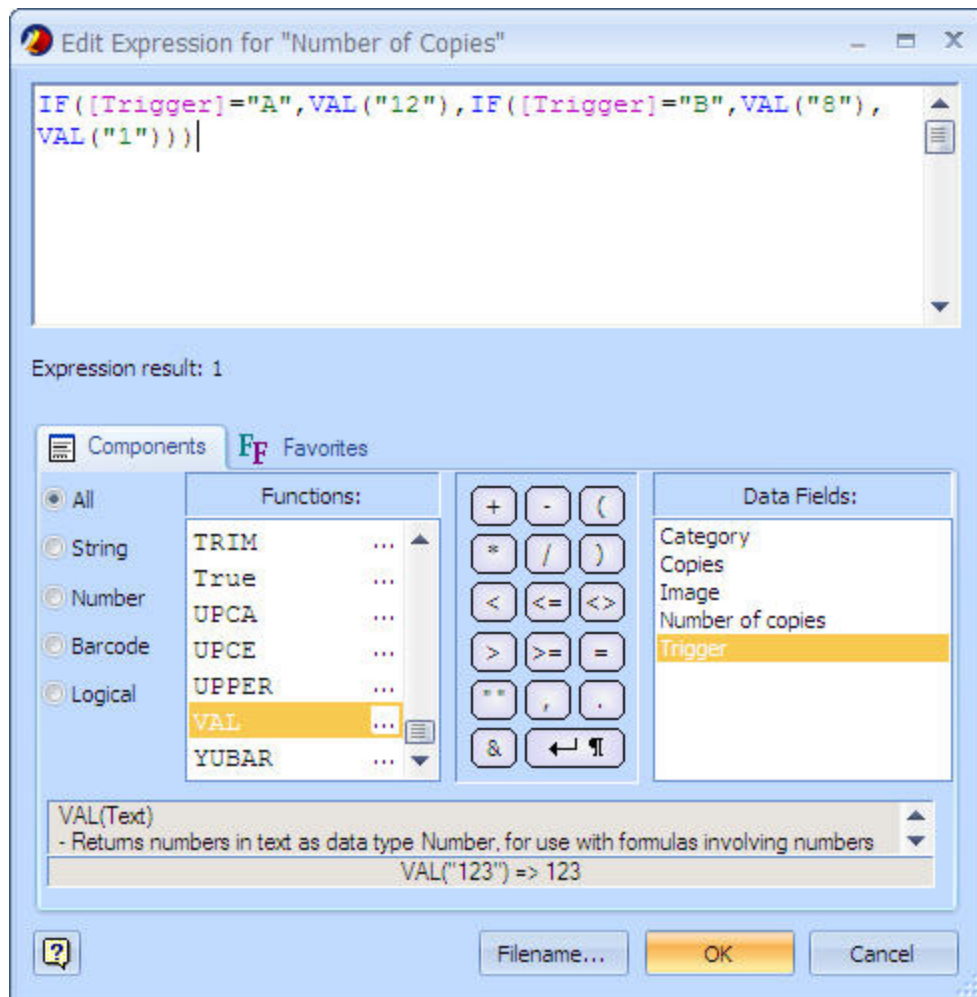
In the expression "IF([TRIGGER]="A",VAL("12"),IF([TRIGGER]="B",VAL("8"),VAL("1"))) ", the field name "TRIGGER" has either an "A" or a "B" in it. The number of copies for "A" would be 12, and the number of copies for "B" would be 8. At the end of the expression, you need to add VAL("1"), because the function must result in a numeric value.

Note: When you use layout condition SKIP for your PrintShop Mail documents with multiple layouts, or when you have applied variable Number of Copies, this may cause that the size of the record sets (the number of actual printed layouts per record) will be different per record set. This in turn may cause that some record sets will be split across different stacks.

You can also print multiple copies of your document by entering the desired number of copies in the Print Dialog. To do this:

- On the **File** menu, click **Print**.
- In the **Number of copies** box, enter the number of copies you want to print.

To print a complete copy of the document before the first page of the next copy is printed, select the **Collate** check box. If you prefer to print all copies of the first page and then print all copies of subsequent pages, clear the check box.

Limitations

- The output result will be one copy if a single zero ("0") is used in any part of the Expression.
- For multi-page documents, you need to set the number of copies per each individual page.
- Number of copies can not be used in combination with Layout Repetition.
- Number of copies can not be used when FreeForm Print Technology is selected, use FreeForm 2 instead.

Verify a Document

Before printing, you can verify your document for possible problems.

To perform document verification

PrintShop Mail performs the following checks at Layout level:

- Are any images or PDF files missing?
- Are all items placed within the printable area?
- Does a text object contain more text than the text box can hold?
- Are there fonts missing in your system that are referred to in the document?

When you select **Verify Document** from the **Layout** menu, a progress bar will be displayed, showing the amount of records being checked. The warnings for the whole document will be listed in the **Verification Results** panel.

	Layout	Record	Description
⚠	1	-	Object is not entirely placed on the layout
⚠	1	-	Object is placed beyond the printable area
⚠	2	-	Object is placed beyond the printable area
⚠	2	-	Text does not fit in its bounding box
⚠	2	-	Variable "DATE" is not linked to an expression
⚠	2	1	Image "Branch Den Helder" not found
⚠	1	1	No image specified
⚠	1	2	No image specified
⚠	1	3	No image specified
⚠	1	4	No image specified
⚠	1	5	No image specified
⚠	1	6	No image specified
⚠	2	7	Image "Branch Leiden" not found
⚠	1	7	No image specified
⚠	1	8	No image specified
⚠	1	9	No image specified
⚠	1	10	No image specified

Verification result (17)

📄 Layouts   abc Variables   📋 Data Fields   ⚠ Warnings (7)   📋 **Verification res...**

Verify document checks the document at two levels:

- **Layout level**: Warnings at layout level will show the warning with the layout number in the **Warnings** panel.
- **Record level**: Warnings at record level will show the warning with the layout number and record number in the **Warnings** panel.

> »» Verify document will be stopped when 1000 warnings are found or when you press the **Cancel** button on the progress bar.

Here is a list of a few possible messages:

Error Message	Possible Solution
Object is placed beyond the printable area	Move the object on the layout so it is directly on the page
Object is not entirely placed on the layout	Move the object on the layout so it is completely on the page
Text file not found	Verify the expression that creates the filename used by the TEXT_FILE function.
Variable X is not linked to an expression	Check the Variables Panel for any variable that does not have an expression.
Text does not fit in its bounding box	Verify the text box where the error occurs. Either make the text box bigger, or use Text Links to flow the text into another text box.
Image X not found	Verify the file name or expression that calls the images file in your Image box.
Error loading image	Verify that the image you are calling is a valid type supported by PrintShop Mail and that it is not corrupted.
Page number X is invalid; this PDF only contains Y pages	Verify the expression used to choose the page displayed by the PDF, and that the PDF name is the correct one.
Variable X: argument Y is invalid	Verify the expression for the variable.
Variable X: barcode input string Y is invalid	Verify the expression for the barcode object and make sure it corresponds to what the barcode is expecting.
Variable X: date format Y is invalid	Verify the date format for the variable.
X contains at least one TrueType font that is not embedded in the PDF	Recreate the PDF in order to embed all the TrueType fonts.
Variable X: database field Y not found	Verify the database field name in the variable's expression.

> »» You can save any error message in the Verification Results panel or the Warnings panel. To do so, right-click on the message and select Copy. You can then paste it somewhere else, for example by emailing it to technical support.

Save a Document

When saving a document, it is recommended to use one folder for the document file and its supporting files that is, the image files and the database. The reason for this is because the supporting files for a PrintShop Mail document are not included in the document file. This file only contains references, stored as paths relative to the document folder.

For example:

If you save your document in...

"C:\My Documents"

and it contains an image...

"C:\My Documents\Images\Car.tif",

the reference to this image is stored as...

"Images\Car.tif"

If you move the **Documents** folder and its subfolders to another drive, PrintShop Mail will still be able to locate the image.

Windows Note: PrintShop Mail 6.1 documents can be opened in all PrintShop Mail 6.X versions (downward/upward compatibility). You can import PrintShop Mail 98, 4.x, 5.x and 6.x documents into new versions of PrintShop Mail, but PrintShop Mail 98, 4.x and 5.x will not be able to interpret documents saved by the new version of PrintShop Mail . If you try to overwrite an existing PrintShop Mail 98/4.x/5.x/6.x document in the new PrintShop Mail format, PrintShop Mail will issue a warning.

Mac OS Note: You can open PrintShop Mail documents created in PrintShop Mail 4.3.X or older, but PrintShop Mail 4.3.x will not be able to interpret documents saved by the new version of PrintShop Mail. If you open an existing PrintShop Mail 4.3.x document in the new PrintShop Mail format, PrintShop Mail will issue a warning, asking you whether you really want to save this document as soon as you close the document, even if you have not changed anything.
When opening PrintShop Mail documents from versions 4.3.6 or 4.2.9 (Japanese language) in PrintShop Mail 5, the following settings might be lost:

-Format settings in DATE and TODAY expressions will not be converted automatically; this settings can be rest manually.
-Variable images will be opened with an empty expression.
-Leading between lines setting can not be converted, this setting can be reset manually. Variables embedded in an EPS (@variable@) is not supported.
-Transparency will be converted to white, this setting can be reset manually.
-The COUNTER function will be converted using an end value of 2.000.000.

If you wish to use documents made in earlier versions of PrintShop Mail than versions 4.3.6/4.2.9 (Japanese language) before you open them in PrintShop Mail 5.x.

To save your documents

You can save a PrintShop Mail document in three ways:

1. As a PrintShop Mail document, with the extension ".PSMD".
   From the **File** menu, select **Save as**.
2. As a PrintShop Mail template, with the extension ".PSMT".
   From the **File** menu, select **Save as Template**. For further guidance in saving PrintShop Mail templates, see Create a New Document.
3. **Save for Output** archived in a "ZIP" file which contains all files used in the PrintShop Mail document.
   From the **File** menu, select **Save for Output**.
   When selecting **Save for Output**, PrintShop Mail collects and copies all the files needed into a compressed folder. The collected data includes the PrintShop Mail document, static and variable images, database, fonts and a summary file which shows a list of all the copied image file names.

To revert to the last saved version of the document, select **Revert** from the **File** menu.

📑 Document Output

PrintShop Mail Design can generate multiple types of printed and file outputs, even some that are device-specific and meant for certain PostScript RIPs. It can also output to non-postscript printers as well as PDF files. Documents can also be printed through, or published to, a PrintShop Mail Web server.

- To preview a document before printing it, see "Print Preview" (page 103).
- To print a document, see "Printing a Document" (page 103).
- To print for a specific type of printer, see "Print Technologies" (page 51).
- To create a PDF, see "Save as PDF Dialog" (page 105).
- To print your document through PrintShop Mail Web, see "Print To Web" (page 106).
- To publish your document for it to be used through PrintShop Mail Web, see "Publishing Documents" (page 107).

Print Preview

While you are working on your document, it is possible to view an on screen representation of the printed output. In this **Print Preview** it is possible to browse through pages and view multiple layouts and records at the same time.

You can enter the **Print Preview** mode in two ways:

1. From the **File** menu, select **Print Preview**.
2. Click the **Print Preview** toolbar button in the Standard toolbar.

In **Print Preview** mode, four menu items are shown:

- **Page combo box**: Allows you to select the view of a single page or multiple pages at the same time. By default you will see two pages horizontally and one vertically.
- **Print button**: When you click this button, PrintShop Mail returns to the design view and the **Print Dialog** will be opened.
- **Book Preview**: Click the Book Preview to force the preview window to display the pages as they would appear when printing duplex and stapling on the left. Odd-numbered pages will be displayed on the right, even-numbered pages are displayed on the left. To correctly display the book preview, make sure you are displaying 2 pages as once, horizontally (see Page combo box option).
- **Close button**: When you click this button, PrintShop Mail returns to the design view. Alternatively, you can close the Print Preview by pressing Esc, or by pressing Alt+F4.
- **Color softproof:** Allows you to display an on-screen preview of how your documents colors will look when reproduced on a particular output device. This feature is enabled when **Color Management** is activated.

Printing a Document

Before you do the actual printing, PrintShop Mail offers different ways to optimize your output, allowing you to select how many pages or records you want to print. Additionally, you may wish to print the currently selected record, or proof your document in PDF format before printing. To do this, click on the **File** menu and select **Print** to open the **Print Dialog**.

When printing through PrintShop Mail Design, the following options will be available to you:

- **Operating System Default Print Options**
  - **Printer**: The printer you wish to print to.
  - **Printer Properties**: Controls printer options, for example layouts options and paper quality.
  - **Print to File**: Instruct the printer driver to print to a file on the disk, instead of the printer.

- **Number of copies**: Indicates the number of copies you wish to print of each page. If the value is set to one, only the original page will be printed.
- **Collate**: Determines how the layouts are ordered within a record, the layouts within the record set will keep the order intact. By default this option is **On**.
- **Print Options**:
    - **All Records**: By default "All Records" is selected. This option allows you to print the complete job. Behind this selection the amount of available records is displayed.
    - **Record Range**: This option allows you to print a certain range of records. If the range of records you wish to print exceeds the number of records available, a message will be displayed until the amount of records is equal or less than the total amount of records available.
    - **Page Range**: This option allow you to print a certain range of pages. When using layout repetition and you select this option the complete number of pages needs to be calculated to output the correct pages.
    - **Current Record**: This option allows you to print the selected record, using Standard PostScript print technology. No Credits will be charged from your hardware key.
    - **Softproof PDF**: This option generates a PDF file of the current record, using Standard PostScript print technology. No Credits will be charged from your hardware key. When a non PostScript printer is selected, it will use the PostScript printer driver installed by the PrintShop Mail installer to generate output.
    - **Report Page**: This option allows you to print a Report Page, using Standard PostScript print technology. No Credits will be charged from your hardware key.
    - **Variable Markers**: This option allows you to print the current layout(s) with the variable markers on it, using Standard PostScript print technology. No Credits will be charged from your hardware key.
- **Split job**: This option allows you to split the job per record or per page in several outputs. Print speed will be improved when using limited job sizes. Please note that the number of pages is round up to the nearest record boundary, so if a document produces 10 pages per record and the split is set to 5, the split will actually happen every 10 pages.
- **Save Print Options**: Click this button to save the settings that have been modified in this window. If you cancel the print dialog, your options will still be saved. Note that clicking Print or Verify and Print will also save the print options.
- **Print Technology**: Use this option to select a specific print technology that is compatible with your printer. To select a print technology, simply click on the name of the currently selected print technology, and click the one you want in the drop-down. For more details on Print Technologies, see "Print Technologies" (page 51). Print technology options are described below.

> If you use the options "Store forms on printer's hard disk" or "Custom cache size", and the RIP is password protected you might get a printer error. Consult the RIP manual or consult the system administrator to change the settings on the RIP.

Print Technology Options

These options are available in one or more print technologies, as indicated.

- **Use OPI, don't spool images**: Most print technologies support OPI (**O**pen **P**repress **I**nterface), allowing you to use an image substitution server to speed up the printing process. OPI only supports EPS and TIFF image formats. Available in the following print technologies: Standard PostScript, Optimized PostScript, AHT, Fiery FreeForm, Fiery Freeform 2.
- **Store forms on printer's hard disk**: Storing PostScript forms (cached reusable content) on hard disk will prevent out of memory conditions if your document contains large high resolution images. Only use this option if your RIP has access to a hard disk. Available in the following print technologies: Optimized PostScript, AHT, Fiery FreeForm, Fiery Freeform 2.
- **Custom cache size**: Increasing the PostScript form cache size can help to improve performance. You may want to experiment in order to determine the optimum value. Specifying a custom cache size only works if the system settings

of your RIP are not password protected. Available in the following print technologies: Optimized PostScript, AHT, Fiery FreeForm, Fiery Freeform 2.

- **PDF Settings**: Click on the drop-down to view the available job option profiles found on the system, and click one to apply it to the PDF output. The job option profiles are related to PDF quality settings and can only be created, managed or deleted through Adobe Distiller. For more information on job options, please see the Adobe Distiller documentation. Available in the following print technologies: Adobe PDF, Adobe PDF/VT-1.
- **Use Automatic Picture Replacement (Creo VPS only)**: Automatic Picture Replacement (APR) allows you to speed up the printing process by using the image substitution capabilities of your VPS RIP. The image format support of APR is limited to EPS, but some RIP versions support other formats like TIFF and JPEG.
- **Form Number (Fiery FreeForm only)**:
- **Form ID (Fiery FreeForm 2 only)**: A numeric ID to identify the Master Data job. If a Master with the ID already exists and you send Master data, the previous form will be overwritten.
- **Send** (Freeform): Select what is being sent to the Fiery server. Available in the following print technologies: Fiery FreeForm, Fiery Freeform 2.
    - Master data: Send only the Master (template) to the Fiery server.
    - Variable data: Send only the variable data, assuming the Master is already present in the Fiery server.
    - Master and variable data: Send both the Master and Variable data together.
- **Create ZIP archive (PPML only)**:
- **Environment**:
- **Embed images in PDF (PPML only)**:
- **Send** (PPML):
    - All images:
    - Global images:
    - Local images:
- **Don't spool images (EPS, TIFF, JPEG) (PPML/VDX 7 Only)**:
- **Project Folder (VIPP Only)**:

Available in the following print technologies: Standard PostScript, Optimized PostScript, Adobe PDF, Adobe PDF/VT-1, AHT, Creo VPS, Fiery FreeForm, Fiery Freeform 2, PPML, PPML/VDX 7, VIPP.

Save as PDF Dialog

When you click on File, Save As PDF, the Print Dialog opens and selects the Adobe PDF print technology by default. This gives you the ability to create a PDF from PrintShop Mail without having to rely on a separate PDF print such as Adobe Acrobat.

You can also save as PDF by selecting Print or Print To Web and then changing the Print Technology to Adobe PDF or Adobe PDF/VT-1. In both those print technologies, only the PDF Settings (aka joboptions) drop-down is displayed. If you need to fine-tune your PDF options, you will need to use Adobe Distiller to create a joboptions file. See "Adobe PDF" (page 52).

Subset Finishing

Subset finishing is the process of applying a finishing option (such as stapling or binding) to each subset in a print job.

PrintShop Mail defines a subset as a set of pages belonging to the same record. If you are not using layout repetition or layout conditioning, the number of pages in each subset will equal the number of layouts in your document.

To use subset finishing

You can specify a finishing option in the printer driver, using the **Properties** button in the **Print dialog** or using the **Advanced** button in the **Print Setup** dialog box.

PrintShop Mail can embed certain PostScript instructions in the output to signal that the finishing option should be applied.

You can specify which instructions to embed in the Embed PostScript dialog box.

It is possible to write your own PostScript set and save them. If you go to **New** you can give the PostScript set a name. The given instructions at the "Start of Page", "Start of Job" and "Between Sets" will be saved. You can also turn it to the default setting by selecting the button "**Set Default**".

Locating this dialog box

File > Embed PostScript

There are 4 options:

1. **General**: This option can be used to give the PostScript set a "Name" and write a "Description".
2. **Start of Page**: These instructions will be injected at the start of each page.
3. **Start of Job**: Instructions given there will be injected in the header of the job.
4. **Between Sets**: Instructions given in this field will be injected between the sets.

For stapling or binding, the default setting (Generic Subset Finishing) should suffice.

Print To Web

Print to Web allows you to print PrintShop Mail documents to PrintShop Mail Web. The output will be generated on the PrintShop Mail Web server, not on the computer where the PrintShop Mail document is created.

There are a few specific points that must be handled for this integration between Design and Web to be functional:

- It is strongly recommended that the Operating System be the same on the server and all client machines.
- It is recommended not to mix 32 and 64 bit versions of the operating systems and drivers (x86 and x64).
- Each PrintShop Mail Design user must have a their own username and password defined in PrintShop Mail Web.
- Printers that will receive jobs from PrintShop Mail Web must be accessible from the PrintShop Mail Web server and activated within PrintShop Mail Web's interface.
- Printer names must be the same across all machines that share PrintShop Mail documents, as well as the server.
- Printshop Mail Design users must have the printer drivers installed on their local machines for every printer they intend to output to through PrintShop Mail Web. It does not matter if the output printer is accessible or not from the Design machine, only that the driver be present. This is because the page setup and driver settings are set from PrintShop Mail Design but will actually be used from PrintShop Mail Web so they must match.

From the **File** menu, select **Print to Web...**

When selecting **Print to Web**... option, the PrintShop Mail document can be saved before it is uploaded, otherwise the original document will be sent to PrintShop Mail Web.

The following options are displayed in the Print to Web dialog:

- **Destination Group**
    - **Server address (read-only)**: Displays the server configured in the PrintShop Mail preferences. See PrintShop Web Preferences.
    - **Company**: This option list the available Companies. PrintShop Mail will store the last selected company with the document.

- **Remote Printer**: This option list the available printers installed on the PrintShop Mail Web server. If no printers are installed, the combo box will show "No printers available" and the print button will not be enabled.
- **Print to File**: This option will generate a print file when creating output, instead of actually printing. The file will be saved in the default PrintShop Mail Web Output folder.
- **Print Group**:
  - **All Records**: By default "All Records" is selected. This option allows you to print the complete job. Behind this selection the amount of available records is displayed.
  - **Record Range**: This option allows you to print a certain range of records. If the range of records you wish to print exceeds the number of records available, a message will be displayed until the amount of records is equal or less than the total amount of records available.
  - **Split job**: This option allows you to split the job per record or per page in several outputs. Print speed will be improved when using limited job sizes.
- **Print Technology**: Use this option to select a specific print technology that is compatible with your printer. To select a print technology, simply click on the name of the currently selected print technology, and click the one you want in the drop-down. For more details on Print Technologies, see ["Print Technologies" (page 51)](#). Here are the options available in the Print Technology group:
  - **Use OPI, don't spool images**: Most print technologies support OPI (**O**pen **P**repress **I**nterface), allowing you to use an image substitution server to speed up the printing process. OPI only supports EPS and TIFF image formats.
  - **Store forms on printer's hard disk**: Storing PostScript forms (cached reusable content) on hard disk will prevent out of memory conditions if your document contains large high resolution images. Only use this option if your RIP has access to a hard disk.
  - **Custom cache size**: Increasing the PostScript form cache size can help to improve performance. You may want to experiment in order to determine the optimum value. Specifying a custom cache size only works if the system settings of your RIP are not password protected.
  - **PDF Settings** (*Adobe PDF and Adobe PDF/VT1 only*): Click on the drop-down to view the available job option profiles found on the system, and click one to apply it to the PDF output. The job option profiles are related to PDF quality settings and can only be created, managed or deleted through Adobe Distiller. For more information on job options, please see the Adobe Distiller documentation.

Save Print Options: This option allows you to store specific print options with the PrintShop Mail document.

Print: When printing the document and its related files will be sent to PrintShop Mail Web print queue.

> Directsmile note: In order to print PrintShop Mail documents using DirectSmile objects with a PrintShop Mail Web server, you must make sure that the PrintShop Mail Web server has the proper access to the DirectSmile server.

Publishing Documents

PrintShop Mail Web is an easy to use, powerful and open Web to print application that allows for printing over the Web.

PrintShop Mail Design allows to prepare and add documents to PrintShop Mail Web. PrintShop Mail Design documents are used as the basis for print jobs, meaning that it is possible to reuse the documents by uploading new databases. The designer can publish (upload) an existing or new document and customers will be able to use PrintShop Web to order print jobs based on this document. Print jobs can be previewed and validated before they are submitted to the printer.

Preparing PrintShop Mail documents for publishing

You, "**the designer**" create documents and templates in PrintShop Mail.

When the document is ready for publishing, you can start the upload process by clicking on **Publish to Web** selecting the **File** menu or clicking the **Publish to Web** button in the Standard toolbar.

You can design a document with or without linking it to a database. The variable data in the document preview in PrintShop Web will be based upon **Data Fields** that you assign in PrintShop Mail. For more information about data fields, see "Data Field Properties" (page 28) and the "Data Fields Panel" (page 23).

Publishing documents to PrintShop Mail Web

Before publishing your document, you must first ensure that the link between PrintShop Mail Design and PrintShop Mail Web is established and working.

To set the PrintShop Mail Web Connection

1. Click on the **Edit** menu
2. Click on **Preferences**
3. Click the **PrintShop Mail Web** icon.
4. Enter the URL, Username and Password for PrintShop Mail Web (see "PrintShop Mail Web Settings" (page 59)).
5. Verify the information by clicking on **Test Connection**.

If no PrintShop Web Server address has been defined in the PrintShop Mail **Preferences**, the document and its attributes (images and fonts) will be saved in a zip archive (Publish to zip) for later publishing.

To publish your document to PrintShop Mail Web

1. Click on the **File** menu.
2. Click **Publish to Web**... . The *Publish to Web* dialog appears.
3. Fill in the information in this dialog:
   - **Name**: Enter a name for this document. If the name already exists on PrintShop Mail Web in the same company and publication type, the document will be overwritten with the one you upload.
   - **Printer**: Select a printer on the PrintShop Mail Web server on which this document is setup to print.
   - **Operator Instructions**: Type in any special instructions to the operator that will print the job. For example, this can be instructions to cut & stack or post-printing finishing touches.
   - **Publication Type**: This is the publication type as defined in the PrintShop Mail Web server. Publication types contain one or more document and are part of a company. This dialog displays all the companies that you, as a user, have access to on the server.
   - **New Company**: If you have the proper permissions, click to open the New Company dialog. Type in a company name and click OK. New companies are disabled by default.
   - **New Pub Type**: If you have the proper permissions, select an existing company and click to open the New Publication Type dialog. Type in a publication type name and click OK. New publication types are disabled by default.
4. Click **Next** when ready. If your document contains any images, the Add Variable Images window appears.
5. In the *Add Variable Images* window, PrintShop Mail displays all the resources that are used by the document including all external files, PDFs and images. This includes files called using TEXT_FILE as well as fonts. PrintShop Mail Design detects files called using variable expressions, so all the files here should be the only ones needed. You can, however, click Show Browser to browse to extra files to upload, select them and click Add to add them.
6. Click **Next**. PrintShop Mail Design prepares the document by compressing all its files in a single compressed ZIP file.

7. Click **Finish** to compress the document.
8. Once the message **Successfully uploaded** the new document appears, click **OK**.
9. Check for any warnings then click **OK** to send the document to PrintShop Mail Web, or **Cancel** to close the dialog and return to PrintShop Mail.

>>> It is possible to upload documents made in older versions of PrintShop Mail WE to PrintShop Web through PrintShop Mail 5.2 and higher.

What is sent with the document?

When PrintShop Mail Design prepares and sends a document to PrintShop Mail Web, a number of files are included with the actual PrintShop Mail Design document alongside it in the zip file. This is a list of files that are sent.

- **Fonts**: Only freely distributable fonts will be added automatically. A warning message will be displayed about fonts that need license before publishing. You need to verify if the necessary licenses are available to add the fonts that need licenses. It is possible to choose to upload the licensed fonts directly to avoid a manual upload of the fonts at the PrintShop Web server.
- **Plugins**: When publishing a PrintShop Mail document which contains plugin objects, the availability and the version of the plugin will be checked with the PrintShop Web server before publishing.
- **Macros**: When publishing a PrintShop Mail document which contains external macros, the availability of the macro will be checked with the PrintShop Web server before publishing. The check is based on the filename only.
- **Images**: All images that are referred to by the document, even with variable expressions, are sent along.
- **PDF Settings**: If your document has specific PDF Settings (jobinfos, only used when generating PDFs), they are included in the zip file.
- **Text Files and RTF files**: When using the TEXT_FILE function, all text files referred to by your expression are included.

More information about managing uploaded documents, Companies and Publication Types can be found in the PrintShop Mail Web Administration Guide.

Automated Printing

PrintShop Mail allows you to automate certain tasks, such as opening and printing documents.

⚠ Automation features are no longer sold and are being deprecated. You may continue to use the features, however new dongles are not shipped with these features enabled, and no upgrades are possible with this feature enabled. Automation features are now available by combining PrintShop Mail with the power of PlanetPress Workflow Tools, part of PlanetPress Suite.

Windows

When you right click on a PrintShop Mail document file in a Windows Explorer window, you will notice that the menu contains the submenu **Print**. You can print the document without starting PrintShop Mail, and you can drag a PrintShop Mail document to a specific printer.

More advanced ways of automate the printing process is to use one of the next available features:

- Automated Printing using Command-line Arguments
- Automated Printing using Extended Scripting
- Automated Printing using DDE

Note: To be able to use this feature, you need to activate the automated printing option. See Upgrading PrintShop Mail to learn how to add this feature to your license.

Note:When using automated printing, any errors will be logged in the Autoprint.log file, which usually is located in:

C:\Documents and Settings\User\Application Data\PrintShop Mail.

If you have installed .NET Framework 2.0, the errors will be logged in the Event Viewer.

To open the Even Viewer:

- Start/Run/eventvwr.msc, or
- Start/Control Panel/Administrator tools/Event Viewer

Note: Automated printing allows you to print PrintShop Mail documents and PrintShop Mail templates automatically through the Command line or script file . Make sure to use the appropriate extension (<document name>.psmd or <document name>.psmt) in the Command line or in the script file.

Mac OS

PrintShop Mail allows you to automate the printing process to a high extend. Instead of opening a document in PrintShop Mail and selecting the "Print" submenu, the program can be told to monitor a HotFolder and execute print jobs as soon as the necessary files (a PrintShop Mail document and/or a database file) are found there.

- Automated Printing using the HotFolder

Command line Arguments

You can order PrintShop Mail to perform certain actions by specifying them on the command line.

> Automation features are no longer sold and are being deprecated. You may continue to use the features, however new dongles are not shipped with these features enabled, and no upgrades are possible with this feature enabled. Automation features are now available by combining PrintShop Mail with the power of PlanetPress Workflow Tools, part of PlanetPress Suite.

Supported command line arguments

Argument	Description
<document name>	Filename of a PrintShop Mail document. Example: "Mailing November.psmd"
-p	Prints the specified document to the default printer selected in the PrintShop Mail document properties. Example: "Mailing November.psmd" -p
-pt	Prints the specified document to a specific printer, enclosed in quotes. Example: "Mailing Novembert.psmd" -pt "Laserwriter 16/600"
-db <database>	Links the specified document to a certain database. Example: "Mailing November.psmd" -db "Database.mdb"

How to use command line arguments

A simple example using command line arguments can be created by following the next steps:

1. Create a PrintShop Mail document, for example "Sample.psmd"
2. Create a database you wish to use with this document, or copy an existing database to the folder where you saved the PrintShop Mail document.
3. Create a shortcut to the PrintShop Mail executable usually located at "C:\Program Files\PrintShop Mail6 \PSMail6x.exe". Copy this shortcut to the same folder as you saved the document you created in step 1.
4. Right click on the shortcut and choose **Properties**. In the field **Target**, specify the document name by adding it to the target. It should look something like "C:\Program Files\PrintShop Mail6\PSMail6x.exe" Sample.psmd.

If you double click on the shortcut you've just created, PrintShop Mail will be started and the specified document will be opened. You are now ready to use any of the other supported command line arguments by adding them to the target.

A few examples

"C:\Program Files\PrintShop Mail6\PSMail6x.exe" Sample.psmd -db "Database.mdb"

"C:\Program Files\PrintShop Mail6\PSMail6x.exe" Sample.psmd -p

Dropping a database on a shortcut

You can create a shortcut that will make PrintShop Mail open any supported database you drop on it, by specifying the next text in the target field of the Shortcut's properties:

"C:\Program Files\PrintShop Mail6\PSMail6x.exe" Sample.psmd -db

If you drop a database on the shortcut, PrintShop Mail will be started, opening the document "Sample.psmd" with the database you just dropped.

Note: Automated printing allows you to print PrintShop Mail documents and PrintShop Mail templates automatically through the Command line or script file . Make sure to use the appropriate extension (<document name>.psmd or <document name>.psmt) in the Command line or in the script file.

Extended Scripting

Extended Scripting is a fast and flexible way of automating your print jobs. This feature allows you to print any PrintShop Mail document, combined with any database to any printer. You can even schedule an Extended Scripting job on a certain date and/or time where your printer is usually idle.

> Automation features are no longer sold and are being deprecated. You may continue to use the features, however new dongles are not shipped with these features enabled, and no upgrades are possible with this feature enabled. Automation features are now available by combining PrintShop Mail with the power of PlanetPress Workflow Tools, part of PlanetPress Suite.

You specify a certain action, or a range of actions, in a plain text file and tell PrintShop Mail to use that file by adding it to a shortcut:

1. Create a shortcut to the PrintShop Mail executable usually located at "C:\Program Files\PrintShop Mail6\PSMail6x.exe".
2. Add "**-script scriptfile.txt**" to the Target in the properties of the shortcut.

Note: When the script file has a name with spaces ("My<space>Script.txt") be sure to enclose this file name with quote marks ("") in the Target line of the PrintShop Mail shortcut: "C:\Program Files\PrintShop Mail 6\PSMail6x.exe" -script "My Script.txt". Include the quote marks if you copy this line.

In the script you can specify a set of predefined commands to perform certain actions.

Supported Commands

Command	Description
FileOpen *[name]*	Opens the specified document. If another document is opened, it will be closed by PrintShop Mail. Example: *FileOpen C:\Documents\MassMailing.psmd*
FileClose	Closes the currently opened document.
FilePrint	Prints the currently opened document to the default printer selected in the PrintShop Mail document properties.
FilePrintTo *[printername]*	Prints the currently opened document to the specified printer. The name of the printer should equal the name specified in the Printer's properties. Example: *FilePrint MyPrinter*
FilePrintToFile *[file-*	Prints the currently opened document to the specified file. If its print technology would create multiple

Command	Description
name]	files, FilePrintToFile will generate a zip file.
SetPrintTech *[tech-nology]*	Will change the current print technology. Example: *SetPrintTech Standard*
FilePrintRange *[start] [stop]*	Prints the specified record range to the default printer selected in the PrintShop Mail document properties. **Note**: It is not possible to print a record range to a non-default printer. Example: *FilePrintRange 5 10* Prints record 5 to 10 from the currently opened document.
FileExit	Quits PrintShop Mail. No other scripting commands followed by this command are executed.
DatabaseOpen *[file]*	Opens the specified database. If any other database is opened, it will be closed by PrintShop Mail. If the database contains multiple tables, DatabaseOpen will automatically select the first table. You can then use DatabaseSelectTable to select a different table. Example: *DatabaseOpen C:\Documents\Example.mdb* Opens the Microsoft Access database "Example" from the folder C:\Documents.
DatabaseOpenODBC *[source]*	Opens the specified data source. If any other database is opened, it will be closed by PrintShop Mail. Example: *DatabaseOpenODBC MyDSN* Opens the data source called "MyDSN"
DatabaseSelectTable *[table name]*	Selects a different database table in the currently opened document.
DatabaseFilter *[filter]*	Filters the database according to the specified filter. Example: *DatabaseFilter [CITY] = 'New York'* Filters the database, only records where the value of field "CITY" equals "New York" will be used.
DatabaseClose	Closes the currently opened database. Example: *DatabaseClose*

The argument <technology> must have one of the following predefined values.

Print Technology	Script Value
Standard PostScript	SetPrintTech Standard
Optimized PostScript	SetPrintTech Optimized
Adobe PDF	SetPrintTech PDF
Adobe PDF/VT1	SetPrintTech PDF/VT1
AHT	SetPrintTech AHT
Creo VPS	SetPrintTech VPS
FreeForm	SetPrintTech FreeForm
FreeForm2	SetPrintTech FreeForm2
PPML	SetPrintTech PPML
PPML/VDX	SetPrintTech PPMLVDX
VIPP	SetPrintTech VIPP

How do I create an Extended Scripting job?

You create an extended scripting job by following the next steps:

1. Create a PrintShop Mail document and save it, for example "ScriptTest.psmd".
2. Create a textfile containing all commands you want to perform.
3. Create a shortcut to PrintShop Mail.

4. Add the argument "-script scriptfile.txt" to the command line (where "scriptfile.txt" is the textfile containing the commands)

Note: It is advised to save your script file as "UNICODE" encoding.

Note: Automated printing allows you to print PrintShop Mail documents and PrintShop Mail templates automatically through the Command line or script file . Make sure to use the appropriate extension (<document name>.psmd or <document name>.psmt) in the Command line or in the script file.

In the script file, you specify all commands you want to perform:

```
FileOpen ScriptTest.psmd
FilePrint
FileExit
```

This simple scriptfile opens the document "ScriptTest.psmd", prints it to the default printer and quits PrintShop Mail.

You can create a batch process by telling PrintShop Mail to use another document:

```
FileOpen ScriptTest.psmd
FilePrint
FileOpen AnotherDocument.psmd
FilePrint
FileExit
```

PrintShop Mail first opens the document, "ScriptTest.psmd" and prints it to the default printer. When this is done, PrintShop Mail opens the second document, "AnotherDocument.psmd" and prints it to the same default printer. Of course, you can choose to specify a different printer by using the command "FilePrintTo". Finally, PrintShop Mail exits.

It's possible to use the same document with different databases:

```
FileOpen ScriptTest.psmd
FilePrint
DatabaseOpen AnotherDatabase.MDB
FilePrintTo Printer2
FileExit
```

This opens the document "ScriptTest.psmd" and prints it to the default printer. When this is done, PrintShop Mail opens the database "AnotherDatabase.MDB" and prints it to another printer, called "Printer2". Finally, PrintShop Mail exits.

A combination of the commands is also possible:

```
FileOpen ScriptTest.psmd
FilePrintRange 5 10
DatabaseOpen AnotherDatabase.MDB
FilePrintRange 10 15
DatabaseOpen ThirdDatabase.XLS
FilePrintTo Printer2
FileOpen Document2.psmd
FilePrint
FileExit
```

This opens the PrintShop Mail document "ScriptTest.psmd" and prints records 5 to 10 to the default printer. When this is finished, it opens the database "AnotherDatabase.MDB" and records 10 to 15 are printed to the default printer. Then, the database "ThirdDatabase.XLS" is opened and all records are printed to printer "Printer2". Eventually, the PrintShop Mail document "Document2.psmd" is opened, printed to the default printer and PrintShop Mail exits.

It's possible to change the Print Technology used when the document was created, or print the same document using different Print Technologies:

```
FileOpen ScriptTest.psmd
SetPrintTech Optimized
FilePrint
FileOpen ScriptTest.psmd
SetPrintTech Standard
FilePrint
```

Database Filters

A database filter consists of a **field name**, an **operator** and a **condition**. Suppose you have the following database:

NAME	CITY	GENDER
Eddy	New York	M
Pamela	Los Angeles	F
Tim	Washington	M
Robert	New Jersey	M

The available field names in this database are "**Name**", "**City**" and "**Gender**". The database has 4 records.

An operator should be one of the ANSI SQL operators listed in the table below.

Operators	Definition
=	Equal
<>	Not equal
<	Less than
>	Greater than
<=	Less than or equal
>=	Greater than or equal

A filter is used to construct the WHERE clause of an SQL statement. It does not include the reserved word WHERE to filter the record set.

Except for "Distinct", "Like" and "Between", all SQL commands are supported. For more information about the SQL commands, please visit www.sql.org.

If you want to select and print the records where the field name "City" equals "New York", the following line should be added to the script file:

DatabaseFilter [CITY] = 'New York'

Result: One record will be printed.

Note: Please notice that we have used single quotes around the conditional values 'New York'. SQL uses single quotes around text values. Numeric values should not be enclosed in quotes.

Suppose you want to send a mailing to all persons in the database where [GENDER] does not equal 'F'. The filter should look like:

DatabaseFilter [GENDER] <> 'F'

Result: Three records will be printed.

Or, you want to print all records where the [GENDER] equals 'F' OR where [CITY] does not equal 'Washington':

DatabaseFilter [GENDER] = 'F' OR [CITY] <> 'Washington'

Result: Three records will be printed

These are just three examples of a database filter. You can create very advanced and powerful database filters. Please refer to your SQL manual or an online resource for advanced examples.

If you need to have data from more than one table in the database, you can make a query in SQL or MS Access and export the result of this query into Excel, Access or a text file. This file can be used as a database in PrintShop Mail.

Scheduling a job

It is possible to schedule a certain job on a certain date and time. This can be achieved by using the Windows Scheduler. For more information about the Windows Scheduler and how to create a scheduled task, please refer to your Microsoft Windows® manual.

DDE

DDE Dynamic Data Exchange is a more flexible way to automate printing than using command line arguments, but it requires knowledge of a programming language that supports DDE, such as Visual Basic or C++. Please refer to the Win32 API documentation to learn how to establish a DDE connection.

> Automation features are no longer sold and are being deprecated. You may continue to use the features, however new dongles are not shipped with these features enabled, and no upgrades are possible with this feature enabled. Automation features are now available by combining PrintShop Mail with the power of PlanetPress Workflow Tools, part of PlanetPress Suite.

To connect to the PrintShop Mail DDE Server, make sure PrintShop Mail is running and open a DDE-connection to server "PrintShopMail6".

Visual C++ 6.0

```
// include "ddeml.h"

UINT iReturn = DdeInitialize(&idInst, (PFNCALLBACK)DdeCallback,

APPCLASS_STANDARD | APPCMD_CLIENTONLY, 0 );

HSZ hszApp = ::DdeCreateStringHandle(idInst, "PrintShopMail6", 0);

HSZ hszTopic = ::DdeCreateStringHandle(idInst, "C:\\untitled.psmd", 0);

HCONV hConv = ::DdeConnect(idInst, hszApp, hszTopic, NULL);

::DDEExecute(idInst, hConv, "[FileExit]");
```

Visual Basic 6.0

```
TextBox.LinkTopic = "PrintShopMail6|Connect" ' Set link topic.

TextBox.LinkMode = vbLinkManual ' Set link mode.

On Error Resume Next 'TextBox thinks DDE is not executed,

'when actually it is.

TextBox.LinkExecute "[FileExit]"
```

On Error GoTo 0

PrintShop Mail accepts the following DDE commands:

Command	Description
[FileNew]	Closes the current document (if any) and creates a new document.
[FileOpen "filename"]	Opens the specified document.
[FileClose]	Closes the current document.
[FilePrint]	Prints the current document to the default printer.
[FilePrintRange "start", "end"]	Prints a range or records to the default printer.
[FileExit]	Closes PrintShop Mail.
[DatabaseOpen "filename"]	Opens the specified database.
[DatabaseClose]	Closes the current database.
[DatabaseOpenODBC "source"]	Opens the specified ODBC data source.

Note: This only applies to PrintShop Mail 6.x or later. PrintShop Mail 4.x and 5.x are slightly different. If desired, the text can be adapted for 4.x and 5.x by changing the word "PrintShopMail6" to "PrintShopMail4.x" or PrintShopMail5.x (all 3 occurrences).

HotFolder

This page refers to PrintShop Mail Mac Edition only. For Windows users, you can automate PrintShop Mail using PlanetPress Workflow.

This feature allows more than one user to "drop" their database files and/or documents into the "HotFolder", causing a print job to start without further interaction (and without even needing access to the PrintShop Mail program from their computers).

You can transfer your database into the HotFolder using an AppleScript or other third-party automation tools. For example, if you receive your database via Email you can use an AppleScript to retrieve the attachment from the inbox and place it in the HotFolder.

Initializing the HotFolder

1. From the **PrintShop Mail** menu, select **Preferences** and click on the **HotFolder** icon.
2. Click on **Browse** to select the folder containing the desire documents to monitor.
3. Click **Apply.**
4. From the **File** menu, select **Monitor HotFolder**.
5. To stop monitoring and automatic printing of the document, click on the **Cancel** button.

Using the HotFolder

1. Create a PrintShop Mail document and store it in the **HotFolder**.
   Since there will not be any user interaction with the program when the document is automatically printed, users should verify the document before saving it.
2. Drop the document or/and the database file into the HotFolder.
   Within 30 seconds, PrintShop Mail combines the database with the available PrintShop Mail document and starts the print job.
3. After PrintShop Mail has printed the document, the database file is moved to a folder "PSMPrinted", in the HotFolder.
   The PrintShop Mail document remains in the same location and can be used again.
4. PrintShop Mail writes a log of its actions into a log file. Since the timestamp of the log file is automatically adjusted every time when PrintShop Mail becomes active, this timestamp can be used to check whether PrintShop Mail is still running

or not. If no PrintShop Mail document and/or database file was found, the log file is still updated. The log file is located in the folder **/Users/user name/Library/Logs/PSM.log.**

PRINTSHOP MAIL SUITE

🦋 Using Expressions

The Expression Editor

Expressions allow you to display information in your document by using special functions, operators and conditions. By combining these features, you can manipulate data and text coming from the database and display it on the page depending on certain criteria.

The Expression Editor interface appears whenever you edit a variable by double-clicking on it in the Variables tab (see "Working With Variables" (page 91))
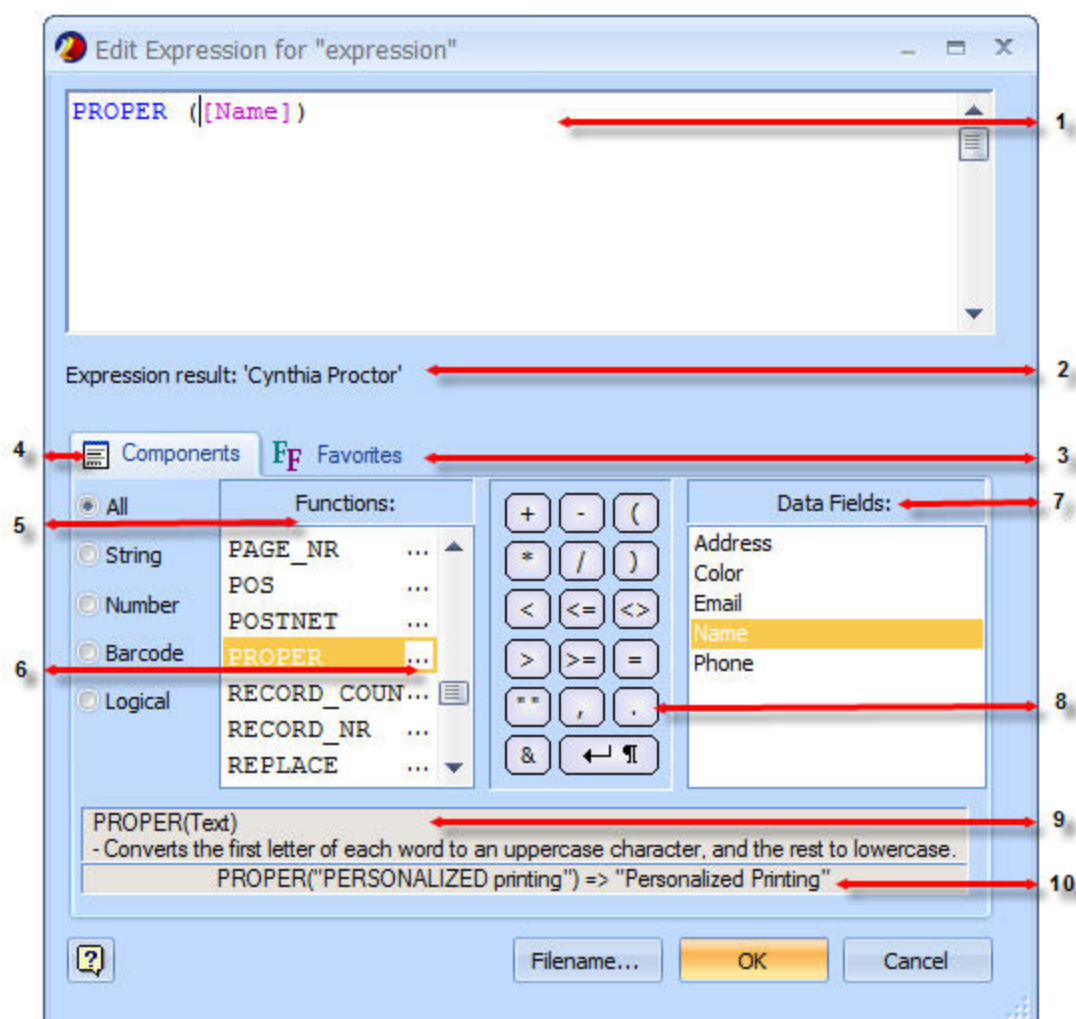
1. **Expression Edit field**: Allows adding, deleting and modifying the expressions. See "Building Expressions" (page 120).
2. **Expression result**: Checks the expression and shows the result if the expression is valid.
3. **Favorites**: Allows saving the favorites expressions. See "Favorite Expressions" (page 124).
4. **Components**: Shows the components you can use to build your expressions, such as Functions, Operators and Data Fields.
5. **Functions**: Shows the functions list. See "Functions Overview" (page 127).
6. **Open Assistant button**: Opens a new Expression Assistant window for that function. See "Building Expressions" (page 120).
7. **Data Fields**: Shows the content of the opened database.
8. **Operators**: Allows combining, comparing or modifying the value of an expression.
9. **Help text**: Shows the description of the selected function.
10. **Example**: Shows an example of the selected function and the result of the function when applied.

Expression texts are displayed as follows:

- **Blue text**: Functions
- **Green text:** String
- **Purple text**: Database fields
- **Red text**: Logical
- **Dark red text**: Variables

Building Expressions

Expressions are built from the following components:

- **Database Fields**: You can add fields from your database into the Expression Editor, by double-clicking on the field in the "Data Fields:" list. Database fields are always surrounded by square brackets (e.g. : [FirstName])
- **Variables**: You can refer to any variable except the one that you are currently editing. Variables are always surrounded by the variable markers (e.g.: @MyVariable@)
- **Constants**: PrintShop Mail has a few constant values you can use such as "true" and "false".
- **Functions**: You can use functions to manipulate the data into many different ways. Functions are built from the function name followed by its parameters surrounded by parenthesis, such as FUNCTION(Param1,"Param2").
- **Strings**: You can add static text to the expressions. Static text is always surrounded by double quotes (e.g.: "Hello World!").
- **Operators**: You can manipulate data using operators such as mathematical operators (+, -, etc) and concatenations (&, AND, OR, etc).

You build your expression by adding these components so they work together. You can do this manually by starting to type any of the component's name in the **Expression Edit** field.

> The **Expression Editor** tries to automatically complete variable names, database fields, functions and constants for you. For example, if you type "P" in the **Expression Edit** field, a list of functions will automatically appear, starting with the ones with the letter P. You can use the up/down arrow keys to navigate this list and press **Enter** to select it from the list.

You can also add components to the expression automatically by using the function list, data field list and operators box below the **Expression Edit** field. For example, double-clicking on the PROPER() function will automatically add PROPER(Text) to your **Expression Edit** field.
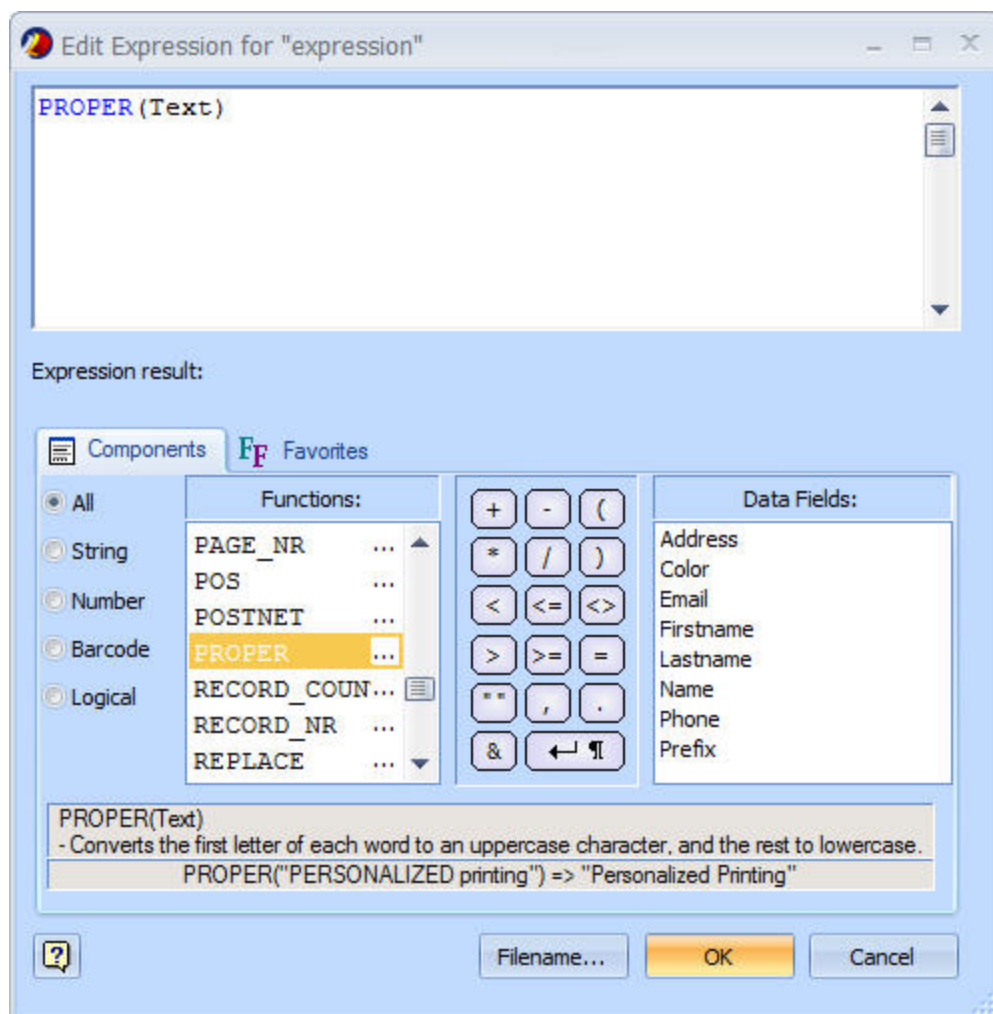
The Expression Assistant

When using functions in your expression, you can use the **Expression Assistant** to help you fill in the function's parameters and values. To do this, click on the [...] icon next to the function name. You can also double-click on the function name in the **Expression Edit** field to open the **Expression Assistant**.
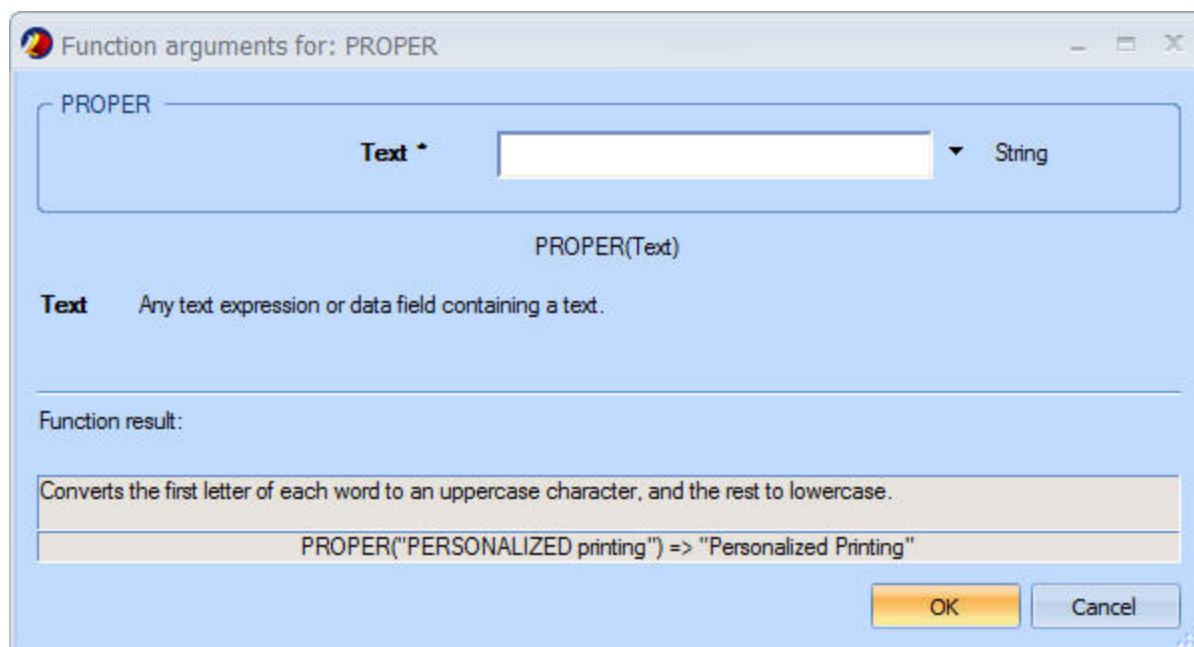
To help you to add the correct names of database fields, variables or functions, you can select those items from the pop up menu on the right hand side of the edit box.
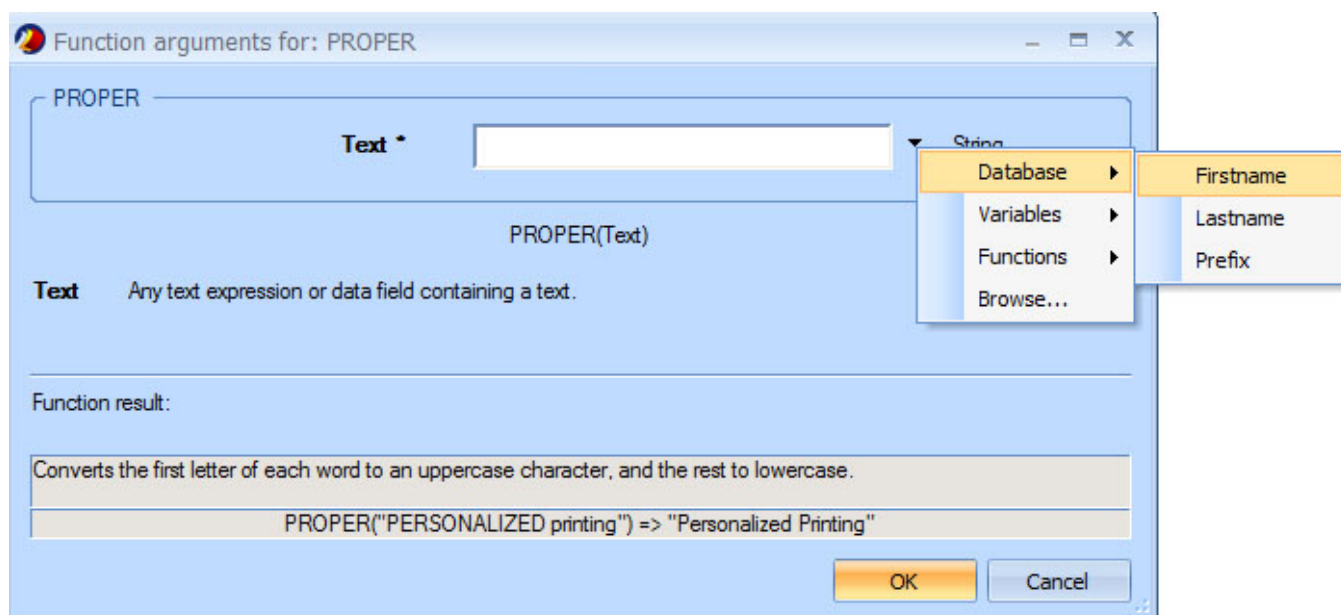
The result of the function you created here, will be pasted into the **Expression Edit** field. For example: PROPER ([First name]).

Result and debugging

You can always see the result of the expression itself just under the Expression Edit field. If there are any errors in the expression or if your expression returns no result, this box will be empty. If the result is a constant such as PRINT or SKIP, or if it is a number, the result is always shown as a string of text in the Expression Results box.

If there is any error in your expression, a few things can happen:

- Database fields that do not exist will be shown in darker purple, and will be italicized.
- Functions that do not exist will remain in normal, black text.
- Parameters of the wrong type will be underlined and put in bold (example: putting a number in the PROPER() function, which expects a string)
- The Expression Result box will not display anything.
- An error will be displays in a small tooltip with a red X icon. This tooltip should explain the error in a basic way.

When you click OK to save the expression and close the Expression Editor, further validation is done, and any error will be shown in the Expression Edit field as a tooltip. The expression will not be saved until you correct the error and click OK again.

Variable Dependencies

You can use regular and global variables within your expression the same way you would use them in your document by entering the variable name surrounded by the variable marker (by default the @ symbol, e.g. @MyVariable@). If you attempt to use the name of a variable within its expression (such as entering @MyVariable@ while editing the MyVariable expression), this causes a "Deadlock" error, also known as a circular reference. This permits you to re-use expressions by calling their variable within another expression, as well as break up complex expressions into smaller parts.

> Variables names are case-sensitive. This means that @myvariable@ is not the same as @MyVariable@, or @MyVaRiAbLe@. If you type in a variable name that does not exist, it will be created in the Variables panel and given an empty string ("") expression.

Expression Operators

The operators used in the expressions are displayed in PrintShop Mail in the "Components" section of "The Expression Editor" (page 119). To add an operator in your Expression Edit field at the location where your cursor is located, simply click on the desired operator (you can also type any of these operators except the Line Feed character, which is not on your keyboard).
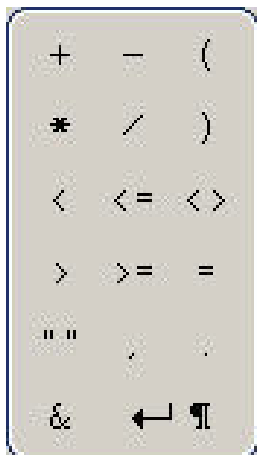
There are more than one kind of operator. Here is an exhaustive list.

Mathematical Operators:

Operator	Definition	Example	Result
+	Add	23 + 11	34

Operator	Definition	Example	Result
-	Subtract	30 - 2	28
*	Multiply	2 * 5	10
/	Divide	42 / 2	21

Comparison Operators:

Operators	Definition	Example	Result
<	Less than	(32 < 21)	FALSE
<=	Less than or equal	(21 <= 21)	TRUE
<>	Not equal	("Foo" <> "Bar")	TRUE
>	Greater than	(55 > 3)	TRUE
>=	Greater than or equal	(43 >= 44)	FALSE
=	Equal	("String" = "Strings")	FALSE

Other Operators:

Operators	Definition	Description
(and)	Left and Right parentheses	Gives priority to what is inside of the parentheses just like in mathematical operations. Can also be used to give priority to conditions.
" "	Double quotes	Literal strings (text) entered into an expression needs to be surrounded by double-quotes to be identified as such (e.g. "Hello, World!"). However, no other component should use double-quotes (number, functions, database fields or variables).
,	Comma	Commas in strings (e.g. "hello, henry") are simply printed as commas. Commas in functions (e.g. COUNTER(1, 50, 2)) are used to separate the parameters used by that function.
.	Decimal point	Decimal points in strings (e.g. "This is a sentence.") are simply printed as a decimal point. Decimal points in numbers (e.g. 529.54) are used to indicate decimal values such as currency.
&	Ampersand	The ampersand is used to concatenate (put together) two strings. For example, "Hello " & "World!" will result in "Hello World!".
¶	New Line	The new line character will create a Carriage Return/Line Feed in a string. This is useful to create an expression that will print out in multiple separate lines in your document. Note that the new line character is added with surrounding ampersands, as it is always concatenated.

Favorite Expressions

You can use the Favorites tab in the Expression Editor to save expressions that you use often in your documents. These favorite expressions will be saved in the software preferences, not your document, so they can be used in any documents you create or edit in the future.

To see your existing favorite expressions:

1. Open the **Expression Editor**.
2. Go to the **Favorites** tab.
3. The favorites are listed in the box on the left.

To add a new favorite expression:

1. Open the **Expression Editor**.
2. Build or write the expression that you want to save as your favorite.
3. Go to the **Favorites** tab.
4. Copy the expression (select your expression then to CTRL+C on Windows or ⌘ + C on Mac OS)
5. Click **New**.
6. Type in a name for the favorite expression in the **Name** field on the right.
7. Paste the expression in the box under the name.
8. Click on **Save**.

To delete an existing expression:

1. Open the **Expression Editor**.
2. Go to the **Favorites** tab.
3. Click on the name of the favorite expression you want to delete.
4. Click on **Remove**.

Inserting a Salutation

You can generate salutations with a conditional **IF** statement. If you have a field in your database that specifies the gender of the person, you can use it to add 'Mr.' or 'Mrs.' to the name.

Example

First Name	Last Name	Gender
John	Abrahams	M
Theresa	Johnson	F
William	Fremont	M

This example uses the **IF** function in combination with the "**&**" operator, which allows you to combine text strings.

```
"Dear" & IF([Gender]="M", " Mr. ", " Mrs. ") & [First name] & " " & [Last name]
```

This will result in a string that always starts with Dear , continues with either Mr. or Mrs. depending on the gender, and always finish with the first name, then a space, then the last name:

First Name	Last Name	Gender	Result
John	Abrahams	M	Dear Mr. John Abrahams
Theresa	Johnson	F	Dear Mrs. Theresa Johnson
William	Fremont	M	Dear Mr. William Fremont

Custom Serial Numbers

PrintShop Mail allows you to create customized serial numbers. You can use these numbers to serialize such items as raffle tickets, coupons or self-mailers. In combination with the barcode functions, you can create serially numbered barcodes.

You do not need to have a database to create serial numbers. You can change the number of Items without a database in the **Preferences** dialog box, from the **Edit** menu, select **Preferences,** or in the Database toolbar, enter the desired number of records and press Enter. From the **PrintShop Mail menu**, select **Preferences (Mac OS)**.

For example

This example creates a Code 39 barcode. The custom serial number starts with "SWA", and ends with a counter, counting from 1 to 1000. The functions used are:
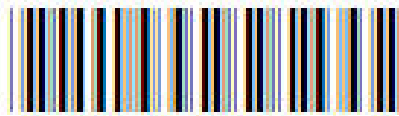
- CODE39
- COUNTER

After a text box with a variable for the barcode is created, the barcode function is attached to the variable.

```
CODE39("SWA" & COUNTER(1, 1000, 1, 4, True))
```

The result in PrintShop Mail:

SWA0001, *SWA0002*, *SWA0003*, etc.

After the correct barcode font is selected, the result is:
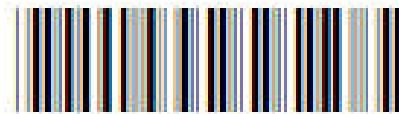
Padding a string

You can use an expression to automatically pad a string or number to a certain number of positions, by using a combination of the RIGHT() function and by concatenating the string with the characters you want to pad with.

Example: Padding a string with dots (periods) to 20 positions:

```
RIGHT("...................." & [DataField], 20)
```

Result (if [DataField] contains "Example"):

.............Example

Example: Padding a 5-digit zip code with zeroes, to 5 positions (this is useful if PrintShop Mail sees the zip code as a number and removes the zeroes automatically):

```
RIGHT("00000" & [ZipCode], 5)
```

Result (if [ZipCode] is 1234):

01234

Functions Overview

You can use the following functions in PrintShop Mail:

Operator	Function
ABS	Returns the absolute value of <Number>.
AND	Returns True if both <Logical value 1> and <Logical value 2> are True.
ASC	Converts the leading character in <Text> to its numeric UNICODE value.
BLANK	Layout action constant. If your layout condition evaluates to BLANK, then the layout will be left blank when the document is printed.
CHANGED	Returns True if the current expression result differs from the result of the previous record.
CHR	Returns the character represented by UNICODE index <Number>.
CODABAR	Computes a CODABAR barcode.
CODE128	Computes a CODE128 barcode.
CODE39	Computes a CODE39 barcode.
CONTAINS	Returns True if <Text> contains <Text to find>, returns False otherwise.
COUNTER	A counter which by default counts from the first to the last record. Arguments are optional.
DATE	Returns the current date, formatted according to <Date string format> (optional) or the system regional settings.
DIV	Returns the integral quotient from dividing <Number> by <Divider>.
EAN13	Computes an EAN13 barcode.
EAN8	Computes an EAN8 barcode.
FALSE	Logical constant False.
FILE_EXIST	Returns True if the file <Filename> exist on disk.
IF	Gives one of two results depending on a condition you specify.
INT	Returns the integral part of a floating point number.
ITF	Computes an ITF barcode.
JAN13	Computes a JAN13 barcode.
JAN8	Computes a JAN8 barcode.
KIX	Computes a KIX barcode.
LAYOUT_COUNT	Returns the number of layouts associated with the current record, taking into account any skipped layouts.
LAYOUT_NR	Layout counter that is reset after every record. It does not count skipped layouts. **Note:** LAYOUT_NR cannot be used in layout conditions.
LEFT	Returns the specified number of characters in the supplied text, counting from the left.
LEN	Returns the number of characters in <Text>.
LOWER	Returns all letters in the given text as lowercase.
LTRIM	Returns the supplied text, stripped of all leading spaces, tabs and newline characters.
MID	Extracts characters from the supplied text, starting at the character position specified by start position and containing the number of characters specified by size.
MOD	Returns the remainder after the specified number is divided by a divisor.
MSI	Computes a MSI Plessey barcode.
NOT	Returns True if <Logical value> is False, and False otherwise.
NW7	Any expression which results in a logical value, example True or False.
OBJECT_	Determines whether a object with the specified name is empty. Returns True or False.

Operator	Function
EMPTY	
ONECODE	Computes a ONECODE barcode.
OR	Returns True if either <Logical value 1> or <Logical value 2> is True.
PAGE_COUNT	Returns the total number of pages at printing for this document.
PAGE_NR	Returns the page number at printing time, or 1 at design time. **Note:** PAGE_NR cannot be used in layout conditions.
POS	Returns the character position of a searched string in text. Returns 0 if not found.
POSTNET	Converts a 5 digit (zip code), 9 digit (zip+4 code), or an 11 digit (delivery point barcode) to a valid POSTNET barcode.
PRINT	Layout action constant, can only be used in layout conditions.
PROPER	Convert the first letter of each word to an uppercase character, and the rest to lowercase.
RECORD_COUNT	Returns the total number of records of the database.
RECORD_NR	Returns the current record number of the database.
REPLACE	Looks for <Text to find> in <Text> and replaces every occurrence with <Replace with text>.
RIGHT	Returns the specified number of characters in the supplied text, counting from the right.
ROUND	Returns the supplied number rounded off to the specified number of decimal places.
RTRIM	Returns the supplied text, stripped of all trailing spaces, tabs and newline characters.
SGN	Returns one of three possible values (-1, 0 or 1), depending whether the number is negative, zero, or positive.
SKIP	Layout action constant, can only be used in layout conditions.
STR	Converts a number to data type Text, for use with functions that expect text arguments.
TEXT_FILE	Returns the contents of the TXT or RTF file <Filename>.
TODAY	Returns the current date, according to the computers internal calender, formatted according to the system regional settings.
TOTALPAGES	Returns the number of pages in a PDF file, or the number of frames in a multi-frame TIFF or GIF file.
TRIM	Returns the supplied text, stripped of all leading and training spaces, tabs and newline characters.
TRUE	Logical constant True.
UPCA	Computes a UPCA barcode.
UPCE	Computes a UPCE barcode.
UPPER	Returns all letters in the given text as uppercase. Use the UPPER function to ensure consistent data entry of such things as state abbreviations or postal codes.
VAL	Converts a string representing a number to data type Number, for use in functions that expect numeric arguments.
YuBar	Computes a YuBar barcode.

Barcode Functions

Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Available Barcode Types in PrintShop Mail:

- Codabar: Codabar (also known as NW7) is generally used in health care, chemical processing, express delivery and government.
- Code 128: The most common use of Code 128 is for shipping labels.
- Code 39: Code 39 is a widely used industrial barcode and is mandated for some automotive industry and Department of Defense labels, because of its ability to represent alphanumeric data. Code 39 is a bidirectional, self-checking, discrete and variable length code.
- EAN/UPC: The EAN (European Article Numbering) and UPC (Universal Product Code) is used through the world to mark physical goods in retail shops.

- ITF (Interleaved 2 of 5): ITF is one of the most popular barcode used by shipping and warehouse industries for identification. It is also used in the medical and automotive fields.
- JAN: The JAN (Japanese Article Numbering) is similar to EAN, used in Japan.
- KIX: KIX barcode is used by the Dutch post office for mail addressing.
- MSI/Plessey: MSI/Plessey (Modify Plessey Code) barcode, are mostly used for marking retail shelves for inventory control. MSI is a variable length symbology, however various applications use fixed length codes.
- NW7: Is used at library, parcel delivery service and various other purposes.
- ONECODE: ONECODE barcode used to sort and track packages from their origins to their destination.
- POSTNET: The POSTNET (Postal Numeric Encoding Technique) symbology was developed in the United States for the automatic sorting of mail. POSTNET is only used for mailing address marking.

Barcode Fonts

The table below reflects an example of which font name can be used with each barcode.

Barcode	PrintShop Mail Font Name	Example
CODABAR	PSMCbar	PSMCbarHrP24DhTt
CODE 128	PSMC128	PSMC128Bwr3P36DhTt
CODE 39	PSMC39	PSMC39HrP24DhTt
EAN 13/ EAN 8	PSMEan	PSMEanBwrP36Tt
ITF	PSMInt	PSMIntHrP72DmTt
JAN 13/JAN 8	PSMJan	PSMJanBwrP36Tt
MSI	PSMMsi	PSMMsiHr72DhTt
NW7	PSMNW7	PSMNW7HrP48DmTt
ONECODE	OneCode Barcode	PSMOneCode
POSTNET	PSMPostNet	PSMPostNetHrTt
UPCA/UPCE	PSMUpc	PSMUpcP72Tt

PrintShop Mail font name description

P = Point size. The Point size refers only to the height of the font. For example if you see C39HrP24DmTt, the P used here refers to the point size of 24.

Dh, Dm and Dl = Density (high, medium and low).The density of a barcode is the number of characters per inch (cpi) of the printed barcode. It is of great practical importance since it determines the minimum barcode length required to print the desired information. The higher the density, the shorter the barcode.

Hr= Human Readable characters. These characters are printed below the barcode.

Bwr = Bar Width Reduction. The font includes technology to reduce the width of the individual bars uniformly across the barcode without changing the center line of the barcodes.

Note: You can install the barcode fonts library from the PrintShop Mail Installers folder on the CD.

The **PSMFimCodesTt** font, used to generate POSTNET barcode, is a special font used by the US Post Office to separate business reply mail from other mail. The FIM font consist of four unique barcodes, each barcode represents a unique reply mail classification.

Font Information

- Each font name starts with the letters "PSM".
- Some fonts come in human readable versions.

- Each font has different densities (thicknesses) depending on printer capability. It is recommended that samples of each density be printed to verify quality and readability.
- Font Style: must always be Regular.

Barcode Setup

Below are the steps for setting up a barcode. A Postnet barcode is used for this example.

1. Click on the text tool on the [Tools](#) toolbar to draw a text box, or from the **Insert** menu, select **Variable Text**.
2. Type a variable name, example @Barcode@.
3. Double click on the Barcode field in the **Variables** panel, to open the **Expression Editor**.
4. Click the radio button titled "Barcode" to display all barcode generators and select the required function from the list. A barcode function translate a numerical code to a text string, which yields the desired barcode when printed with a special barcode font. Select [POSTNET](#) by double clicking on it.
5. As the argument to the barcode function, enter the database field that contains the code that should be translated into a barcode. Some barcode functions require another argument.
6. Click **OK**.
   Note: PrintShop Mail Postnet function and font, only works with 5, 9 and 11 digit number strings. No hyphens can be in the string.
7. Select the variable @Barcode@, and pick the barcode font, that is specified for use with the chosen barcode generator.
8. From the [Text Formatting](#) toolbar or from the **Text** menu, select the desired PrintShop Mail font. Adjust the font size to show the barcode at the specified or desired size.

CODABAR

Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the ["Barcode Object" (page 86)](#) instead.

Syntax	CODABAR(Text, Start character, Stop character, Check digit)
Description	Computes a CODABAR barcode.
Example	CODABAR("123456", "A", "B", True)
Result	

Parameter description

Text	The value represented by the barcode.Codabar barcodes can include numeric characters, special characters (-$:/.+) and spaces.
Start character	One of four special start/stop characters A,B,C and D.
Stop character	One of four special start/stop characters A,B,C and D.
Check digit	True or False. Default value is False.

Codabar is useful for encoding dollar figures and mathematical figures. These barcodes are slightly larger than Interleaved 2 of 5 barcodes.

Codabar requires start and stop characters. The check digit is optional.

CODE 128

> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax   CODE128(Text)

Description Computes a Code128 barcode

Example   CODE128("123456")

Result

Parameter description

Text The string to be represented as barcode. The full (128-character)ASCII character set can be encoded.

This symbology is a very compact barcode for all alphanumeric applications.

The full (128-character) ASCII character set can be encoded in this symbology without the double characters found in extended Code 39.

If the barcode has four or more consecutive numbers (0-9), the numbers are encoded in double density mode (where two characters are encoded into one character position).

Code 128 actually has three different character code subsets. It has two forms of error checking, making it a very stable barcode.

Checksums are not required.

If you have a choice, Code128 is generally the best all round one.

CODE 39

> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax   CODE39 (Text[,Check digit])

Description Computes a Code39 barcode.

Example   CODE39("Example", True)

Result

Parameter description

Text   The string to be represented as barcode. The full (128-character)ASCII character set can be encoded.

[,Check digit] Optional,True or False. Default value is False.

Code 39 (or Code 3 of 9) is the most common barcode in use for custom applications. It is popular because it:

- Supports both text and numbers (A-Z, 0-9, +, -, ., and <space>).
- Can be read by almost any barcode reader in its default configuration.

- Is one of the oldest of the modern barcodes.

Code 39 is a variable width barcode, and it can support any number of characters that the reader can scan.

It is used in many military and government specifications.

Code 39 barcodes are self checking and are not prone to substitution errors.

EAN 13

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax	EAN13(Text)
Description	Computes an EAN13 barcode
Example	EAN13("978123456789")

Result

Parameter description

Text Any text expression or data field containing a text to be represented by the barcode.

EAN **(European Article Number)**

This function prints the variable barcode for the string using the EAN13 standard, which consists of an 12 digit numeric code. To print the barcodes, a special barcode font is needed.

The EAN13 code is used for overseas applications where a country code is required. The UPCA symbology is actually a subset of the EAN13 symbology.

This barcode is composed of 2 numbers for the country code, 10 numbers for the data characters, and a checksum. The checksum is generated automatically.

EAN 8

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax	EAN8(Text)
Description	Computes an EAN8 barcode.
Example	EAN8("9712345")

Result

Parameter description

Text Any text expression or data field containing a text to be represented by the barcode.

EAN **(European Article Number)**

This function prints the variable barcode for the string using the EAN8 standard, which consists of an 7 digit numeric code. To print the barcodes, a special barcode font is needed.

The EAN8 code is similar to the EAN13 barcode. Is used for overseas applications where a country code is required, only five numbers are used.

This barcode is composed of 2 numbers for the country code, 5 numbers for the data characters, and a checksum. The checksum is generated automatically.

ITF

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

(Interleaved 2 of 5)

Syntax	ITF(Text [,Check digit)
Description	Computes an ITF barcode .ITF has the flexibility to encode any even number of digits. If you have an odd number of digits, a leading zero will be added.
Example	ITF("1234567890")
Result	

Parameter description

Text	Any text expression or data field containing a text to be represented by the barcode.
Check digit	Interleaved 2 of 5 is prone to substitution errors, it is advised to use a check digit.

Also known as I2of5, this is a numeric only barcode that prints out a little larger than the UPCA barcode when 10 digits are encoded.

This symbology has the flexibility to encode any even number of digits.

This barcode is an excellent candidate for numeric only applications, and it is the best symbology to use for fixed mount readers.

Because Interleaved 2 of 5 is prone to substitution errors, you should always use a checksum.

JAN 13

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax	JAN13(Text)
Description	Computes JAN13 barcode
Example	JAN13 ("123456789012")
Result	

Parameter description

Text Any text expression or data field containing a text to be represented by the barcode.

JAN **(Japanese Article Number)**

JAN code is most popular barcode for products in the shop. JAN13 is called as standard code.

JAN13 represents fixed length 13 digits number. It requires fixed length 12 digits of numeric characters for input.

MOD10 check digit is automatically calculated and added.

This barcode is composed of 2 numbers for the country code, 10 numbers for the data characters, and a checksum. The checksum is generated automatically.

For JAN barcodes the first two numbers must be 45 or 49 which identifies Japan.

JAN code is equal to EAN code.

JAN 8

> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax   JAN8(Text)

Description Computes JAN8 barcode.

Example   JAN8 ("1234567")

Result

Parameter description

Text Any text expression or data field containing a text to be represented by the barcode.

JAN **(Japanese Article Number)**

JAN code is most popular barcode. JAN8 is called simplified code.

JAN8 represents fixed length 8 digits number. It requires fixed length 7 digits of numeric characters for input.

MOD10 check digit is automatically calculated and added.

This barcode is composed of 2 numbers for the country code, 5 numbers for the data characters, and a checksum. The checksum is generated automatically.

For JAN barcodes the first two numbers must be 45 or 49 which identifies Japan.

JAN code is equal to EAN code.

KIX

> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax   KIX(Postcode, Street address number,Country code)

Description Computes a KIX barcode. KIX barcode are used by the Dutch post office for bulk mail addressing.

Example KIX("3842BX", "Daltonstraat 42-44", "NL")

Result NL3842BX

Parameter description

Postcode	Any text expression or data field containing a text.
Street address number	Any text expression or data field containing a text.
Country code	Any text expression or data field containing a text.

KIX barcode are used by the Dutch post office for bulk mail addressing.

It is imperative that the point size of the KIX code font is 10 point.

MSI Plessey

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax MSI(Text)

Description Computes a MSI Plessey barcode.

Example MSI("1234567890")

Result

Parameter description

Text Any text expression or data field containing a text. Numbers must be provided as text.

The MSI Plessey barcode was designed in the 1970s by the Plessey Company in England and is used primarily in libraries and retail applications.

This is a numeric only code that stands up well to frequent use.

This code is not self checking, a checksum is highly recommended.

The symbology of the MSI Plessey character set consists of barcode symbols representing the numbers 0-9, the start character and the stop character.

NW7

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax NW7 (Text, Start character, Stop character, Check digit)

Description Any expression which results in a logical value, example: True or False.

Example NW7 ("123456", "A", "B", True)

Result

Parameter description

Text	Any text expression or data field containing a text to be represented by the barcode.
Start character	Start character.
Stop Character	Stop character.
Check digit	Optional, True or False. Default value is False.

NW7 is used at library, parcel delivery service and various other purposes.

NW7 supports variable length number up to 100 digits.

When use DR7 / DSR7 / DR9 / DSR9 and if original text includes more than 16 digits of numeric strings, error will be returned.

ONECODE

>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax	ONECODE(BarcodeID, ServiceTypeID, MailerID, SerialNo [,Zipcode])
Description	Computes a ONECODE solution barcode. OnceCode is now named Intelligent Mail Barcode or IMB.
Example	ONECODE("10","042","123456","123456789",[""])
Result	||ǁ|||ı•ı|ı|ı|ı•ı|ıı||ı•ı|ı|ı|ıı•ıı|||ı•ı•||ıı||||ı|

Parameter description

BarcodeID	String of 2 digits. The first digit should be in the range of 0-9, the second digit should be in the range of 0-4.
ServiceTypeID	String of 3 digits
MailerID	String of 6 or 9 digits, depending on the SerialNo length. Both together should total 15 characters.
SerialNo	String of 9 or 6 digits depending on the length of MailerID.
Zipcode	Optional string of 0, 5, 9 or 11 digits corresponding to a zip code. Should not contain dashes (-).

For more information about the ONECODE barcode, which is now named the Intelligent Mail Barcode or IMB, please visit www.ribbs.usps.gov/onecodesolution.

POSTNET

>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax	POSTNET(Text[,Street address number])
Description	Converts a 5 digit (zip code), 9 digit (zip+4 code), or an 11 digit (delivery point barcode) to a valid POSTNET barcode.
Example	POSTNET("12345-6534","152 Oxford Street")
Result	ı••ıı•ı•ıı•ıı•ı•ı•ı•ıı•ıı••ıı•ı•ıı•ı•ı•ıı•ı•ıı••ıı••ıı•ı ·1 2 3 4 5 6 5 3 4 5 2 0·

Parameter description

Text	Any text expression or data field containing a text to be represented by the barcode.
Street address number	Any text expression or data field containing a text to be represented by the barcode. The delivery point number is calculated from this text.

POSTNET **(Postal Numeric Encoding Technique)**

This barcode is the special code that is placed on the lower right portion of an envelope.

It is used to speed mail through the postal service (by automated sorting) and get reduced rates.

Start and stop characters are automatically added by PrintShop Mail.

It is recommended that you have an U.S Postal Service Mailpiece Design Analyst review and approve all POSTNET barcodes generated from PrintShop Mail. The Mailpiece Design Analyst is trained to analyze POSTNET barcodes and determine whether or not they meet the U.S Postal Service's technical requirements. Output can be send to them via email (digital file) fax or mail. Point your Web browser to: http://pe.usps.gov/mpdesign/mpdfr_mda_lookup.asp to find the name and contact information for the Mailpiece Design Analyst that is assigned to your geographical area.

UPCA

Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax	UPCA(Text, System number)
Description	Computes a UPCA barcode
Example	UPCA("123456789", 0)

Result

Parameter description

Text	Any text expression or data field containing a text to be represented by the barcode.
System number	Numeric expression or data field containing a number which results in a one digit system number (0-9).

UPC is the standard barcode for items for sale to the public. It is the code seen on items at the local supermarket. UPCA is a fixed length, numeric only barcode.

It contains:

- 1 digit for a system number
- 5 digits for the manufacturer number
- 5 digits for the product number
- One checksum digit

The position and value of the digits is standardized by a grocery industry committee. UPCA and UPCE also allow two or five digit supplemental numbers.

UPCA and UPCE codes have an automatic checksum.

Only tags with the system character of 0 can be encoded with this symbology.

 PRINTSHOP MAIL SUITE

UPCE

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Syntax UPCE(Text)
Description Calculates an UPCE barcode
Example UPCE("123456")

Result

Parameter description

Text Any text expression or data field containing a text to be represented by the barcode.

UPCE is ideal for small packages, because it is the smallest barcode available. This symbology contains the same information as UPCA, except that at least four zeros are suppressed.

The position and value of the digits is standardized by a grocery industry committee. UPCA and UPCE also allow two or five digit supplemental numbers.

UPCA and UPCE codes have an automatic checksum.

Only tags with the system character of 0 can be encoded with this symbology.

YUBAR

>>> Barcode functions and fonts are deprecated in PrintShop Mail 7.0 for Windows. We strongly advise using the "Barcode Object" (page 86) instead.

Rolan barcode consists of YUBAR.

YUBAR is for Japanese postage barcode defined by Postal Services Agency.

Syntax YUBAR(Address code, Postal code)
Description Computes a YUBAR barcode
Example YUBAR("1-1-11", "1030013")
Result

Parameter description

Address code Any expression or text field to represent the address code.
Postal code Any expression or text field to represent the address code.

YUBAR is Japanese postal barcode named Yusei Customer Barcode.

Layout Functions

You can use the following layout functions in PrintShop Mail:

- Blank
- Print
- Skip

Use these functions to specify which layout should be printed, left blank, or skipped.

PRINT and BLANK commands won't influence the amount of printed pages.

To edit layout conditions

1. Go to the layout for which you want to change the expression.
2. From the **Layout** menu, select **Edit Condition** or select the layout in the **Layout panel,** in the properties click on **Action**.
3. Select one of the layout functions.

Example

A specific page must go to clients of a specific sales representative ("John"). This field is called 'SALES REP' in the database.

The expression used is:

IF([SALES_REP] = "John", Print, Skip)

When PrintShop Mail encounters the name "John" in the "SALES REP" field, it prints the page. In all other cases, the page will be skipped.

Note: Fiery FreeForm does not support the SKIP function. BLANK is used instead.
Fiery FreeForm 2 uses BLANK instead of SKIP when Layout Conditioning is used in combination with Layout Repetition.

Related Topics

"OBJECT_EMPTY" (page 141)

"Use Layout Conditioning" (page 92)

BLANK

Syntax	BLANK
Description	Layout action constant. If your layout condition evaluates to Blank, then the layout will be left blank when the document is printed.
Example	IF(VAL([AGE])<55,Print,Blank)

PRINT

Syntax	PRINT
Description	Layout action constant. If your layout condition evaluates to Print, then the layout will be printed.
Example	IF([SALES_REP] = "John", Print, Blank)

In this example, the layout is printed when PrintShop Mail finds the name "John" in the "SALES_REP" field of the database.

SKIP

Syntax	SKIP
Description	Layout action constant. If your layout condition evaluates to Skip, then the layout will be skipped.
Example	IF([SALES_REP] = "John", Print, Skip)

In this example, the layout is skipped when PrintShop Mail finds anything else but the name "John" in the "SALES_REP" field of the database.

Logical Functions

You can use the following logical operators to define conditions in PrintShop Mail:

- AND
- FALSE
- FILE_EXIST
- IF
- NOT
- OBJECT_EMPTY
- OR
- TRUE

AND

Syntax	(Logical value 1) AND (Logical value 2)
Description	Returns True if both <Logical value 1> and <Logical value 2> are True.
Example	False AND True => False

Parameter description

Logical value 1 Logical expression.

Logical value 2 Logical expression.

CHANGED

CHANGED returns True if the current expression result differs from the result of the previous record.

Syntax	CHANGED(Expression)
Description	Determines if the result of <Expression> has changed compared to the previous record. The previous record is the current record minus one. CHANGED will return False for record 1.
Examples	CHANGED([Customer]) IF (CHANGED([zipcode]), Print, Skip)

Parameter Description

Expression Expression to evaluate for the current record and the previous record.

FALSE

Syntax	False
Description	Logical constant False
Example	(1<10) = False => False

The result of the example is "False", "1<10", which is True, does not equal "False".

FILE_EXIST

Syntax	FILE_EXIST (Filename)
Description	Returns True if the <filename> exist on disk.

Example   FILE_EXIST([Image])

Checks whether a resource, for example an image file exists on your computer. This function returns "True", if the image exist on disk.

Parameter description

Filename Filename of file to check the existence of. Any text expression or data field containing a text.

IF

This function manipulates the database output without changing the content. Its purpose is to make a conditional selection from the database.

Syntax   IF(Logical test, Value if True, Value if False)

Description Gives one of two results depending on a condition you specify. Returns <Value if True> when <Logical test> is True, and <Value if False> otherwise.

Example   IF([GENDER]="M", "Mr.", "Mrs.")

In this example, the IF function checks the database field [GENDER], if it contains "M", it returns the string "Mr.". If the database field contains anything else, it returns "Mrs".

Parameter description

Logical test   Logical expression that determines which of the 2 parameters values will be returned.

Value if True Any expression of fieldname. Will be returned if test condition evaluates to True.

Value if False Any expression of fieldname. Will be returned if test condition evaluates to False.

You can use the IF function, for example, to create a salutation. See "Inserting a Salutation".

NOT

Syntax   NOT(Logical value)

Description Returns True if <Logical value> is False, and False otherwise.

Example   NOT(True)=>False

Parameter description

Logical value Any expression which results in a logical value, example: True or False.

OBJECT_EMPTY

(**Windows only**)

Syntax   OBJECT_EMPTY(Object name)

Description Determines whether an object with the specified name is empty. Returns True or False.

Example   OBJECT_EMPTY("Text1")

Parameter description

Object name Name of the object to check.

Checks whether the name of an object exist, even when moving objects backward or forward on the same layout or to another layout.

This function can also be called upon via the menu **Layout**>**Skip if Object is Empty**.

OR

Syntax	Logical value 1 OR Logical value 2
Description	Returns True if either <Logical value 1> or <Logical value 2> is True.
Example	True OR False => True False OR True => True True OR True => True False OR False => False

Parameter description

Logical value 1 Logical expression.

Logical value 2 Logical expression.

TRUE

Syntax	True
Description	Logical constant True
Example	(1<10) = True =>True

This example returns "True", because the logical test (1<10) is true.

Number Functions

You can use the following functions to manipulate numbers and values in PrintShop Mail:

- ABS
- CHR
- COUNTER
- DIV
- INT
- LAYOUT_COUNT
- LAYOUT_NR
- MOD
- PAGE_COUNT
- PAGE_NR
- RECORD_COUNT
- RECORD_NR
- ROUND
- SGN
- VAL

ABS

Syntax	ABS(Number)
Description	Returns the absolute value of <Number>.
Example	ABS(-2.3) => 2.3

Parameter description

Number Numeric expression or data field containing a Number.

CHR

Syntax	CHR(Number)
Description	Returns the character represented by UNICODE index <Number>.
Example	CHR (97) => "a"

Parameter description

Number UNICODE index of character to represent.

Notes

- CHR produces a UTF-16 encoded UNICODE character consisting of 2 bytes.
- You can find the code point for any character using Microsoft's Character Map application, which you can access by going in Start, Run , typing *charmap* and click OK.
- The output of CHR should not be used in the data input for a Data Matrix barcode. Instead, the Encoding properties of the barcode object should be set to Hexadecimal and a hex-encoded string should be used.

COUNTER

Syntax	COUNTER([Start value][,End value] [,Step size] [,Number of positions] [,Leading zeroes])
Description	A counter which by default counts from the first to the last record. Arguments are optional.
Example	COUNTER (1,100) COUNTER (1,100, 5, 3, True) COUNTER (1, 100, 0.5, 3, False)

Parameter description

Start value	The start value of the counter. Default 1 .
End value	The end value of the counter. If no value is specified, the counter is never reset and will go until the end
Step size	The step size to the next number. Default 1.
Number of positions	The number of characters the counter will create. By default no extra characters will be added. Default 0.
Leading zeroes	True for leading zeroes, False for no leading zeroes (default).

You can use a counter when printing tickets or numbering your mailing. You do not need to open a database within PrintShop Mail when using a COUNTER, if this is the only variable.

Example 1

The first example creates numbers, starting with 1 and ending with 100.

Code:

COUNTER (1,100)

Result:

1, 2, 3, 4, [...] , 99, 100, 1, 2, 3, [...]

>>> The counter restarts once it has reached the end, in this case 100.

Example 2

The Second example has a step of 5, meaning it will only display every 5th number. The parameters step size, number of positions and leading zeroes have been added.

Code:

COUNTER (5,100, **5**, 3, True)

Result:

005, 010, 015, [...] , 090, 100, 005, 010, [...]

Example 3

The third example has a fraction for the step size. This means that the counter increases by 0.5.

Code:

COUNTER (1, 100, 0.5, 3, False)

Result:

1, 1.5, 2, 2.5, 3, [...] , 99.5, 100, 100.5, [...]

Example 4

The last example, COUNTER() starts with 1 and ends at whatever number is set in **Items without database** (Program settings in the **Preferences**).

DIV

Syntax	DIV(Number,Divider)
Description	Returns the integer quotient from dividing <Number> by<Divider>.
Example	DIV (25, 3) => 8

Both may be a floating point number, and an integer result is returned.

Parameter description

Number Numeric expression or data field containing a number.

Divider Numeric expression or data field containing a number.

INT

Syntax	INT(Number)
Description	Returns the integral part of floating point number <Number>.
Example	INT(2.78) => 2

Parameter description

Number Numeric expression or data field containing a number.

LAYOUT_COUNT

Syntax	LAYOUT_COUNT()
Description	Returns the total numbers of layouts for the current record of the database.
Example	LAYOUT_COUNT()=>10

LAYOUT_NR

Syntax   LAYOUT_NR()

Description Returns the current layout number.

Example   LAYOUT_NR()=>3

Note: When using layout conditions, the function LAYOUT_NR will respect the SKIP argument. When using PRINT and BLANK, the LAYOUT_NR function will return the number for those layouts.

MOD

Syntax:

```
MOD(number, divider)
```

Attributes:

- **number**: Numeric expression or data field containing a number.
- **divider**: Numeric expression or data field containing a number.

Returns:

The remainder of the first number divided by the divider.

Example Uses

```
MOD(20, 9) => 2        // Returns true
MOD(5,3)               // Returns 2
MOD(5.5,3)             // Returns 2.5
```

PAGE_COUNT

Syntax   PAGE_COUNT()

Description Returns the total numbers of pages at printing for this document.

Example   PAGE_COUNT()=>10

PAGE_NR

Syntax   PAGE_NR ([Reset after each record])

Description Returns the page number at printing. If <Reset after each record> equals TRUE, the page number will be reset to "1" after each record.

Example   PAGE_NR()=>10

Parameter description

Input number value   True to reset to 1 after each record. Leave empty to increment the page number continuously throughout all printed records.

This function can also be called upon via the menu:

Insert>**Page Numbers**

Entire Job: Prints the page number for the entire job.

Reset After Each Record: Prints the layout number within a record set.

RECORD_COUNT

Syntax   RECORD_COUNT()
Description Returns the total number of records of the database.
Example   RECORD_COUNT()=>10

RECORD_NR

Syntax   RECORD_NR()
Description Returns the current record number of the database.
Example   RECORD_NR()=>10

The function RECORD_NR() yields the current record number. It has no arguments and it does not perform any calculations.

When no records are filtered out and no BLANK is used as a layout expression, it simply increases 1 at a time.

ROUND

Syntax   ROUND(Number, Precision)
Description Returns the supplied number rounded off to the specified number of decimal places.
Example   ROUND (1.678,2) => 1.68

Parameter description

Number   Numeric expression or data field containing a number.
Precision Number of decimal places. Numeric expression or field containing a numeric expression.

SGN

Syntax   SGN(Number)
Description Returns one of three possible values (-1,0 or 1), depending whether the number is negative, zero, or positive.
Example   SGN (-345) => -1

Parameter description

Number Numeric expression or data field containing a number.

TOTALPAGES

Syntax   TOTALPAGES(Filename)
Description Returns the number of pages in a PDF file, or the number of frames in a multi-frame TIFF or GIF file.
Example   TOTALPAGES("Example.pdf") => 10

Parameter Description

Filename Path to a PDF, TIFF or GIF file.

VAL

Syntax   VAL(Text)
Description Returns number in text as data type Number, for use with formulas involving numbers or numeric functions.
Example   VAL ("123") => 123

Parameter description

 Text Any text expression or data field containing a text to be converted to a numeric value.

You can use this function to convert text fields to fields that hold a value.

If you have a text field that holds number characters, you can convert that field so you can do calculations with it.

Example:

The field [COUPON] holds a text, (for example, "7")

VAL([COUPON])/365 => 0.02

String Functions

You can use the following functions to manipulate strings in PrintShop Mail:

- ASC
- CONTAINS
- DATE
- LEFT
- LEN
- LOWER
- LTRIM
- MID
- POS
- PROPER
- REPLACE
- RIGHT
- RTRIM
- STR
- TEXT_FILE
- TODAY
- TRIM
- UPPER

ASC

Syntax	ASC(Text)
Description	Converts the leading character in <Text> to its numeric UNICODE value.
Example	ASC ("abc") => 97

Parameter description

Text	String from which to get UNICODE code from first character.

CONTAINS

Syntax	CONTAINS(text,Text to find)
Description	Returns True if<Text> contains<Text to find>, returns False otherwise.
Example	CONTAINS("PrintShop", "Mail")=>False

Parameter description

text	Any text expression or data field containing a text.

Text to find Any text expression or data field containing a set of characters you want to verify the existence of.

Searches for a given text in another given text. This example returns "False", because the text ("PrintShop"), does not contain the text to find ("Mail").

DATE

Windows

Syntax	DATE(Input date string[,Date string format])
Description	Returns the current date, formatted according to <Date string format> (optional) or the system regional settings.
Example	DATE(database field, "DD MMMM YYYY") or DATE("19740227", "").

Parameter description

Input date string Date in "YYYYMMDD" format (Example: 20070206).

Date string format Enter the output date format. Use the D, M and Y symbols to represent the date.

You can use the following parameters for "date string format":

d	Number of the day, no leading zero	1
dd	Number of the day, with leading zero	01
ddd	Short weekday name	Mon
dddd	Long weekday name	Monday
m	Number of the month, no leading zero	6
mm	Number of the month, with leading zero	06
mmm	Short month name	Jun
mmmm	Long month name	June
yy	Short year notation	01
yyy	Long year notation	2001

Mac OS

It is possible to specify the format of the expression with format specifiers as shown below. These can be used with the DATE and the TODAY function.

Format Specifier	Result
%%	A"%" character
%a	Abbreviated weekday name
%A	Full weekday name
%b	Abbreviated month name
%B	Full month name
%c	Shorthand for "%X %x", the locale format for date and time
%d	Day of the month as a decimal number (01-31)
%e	Same as %d but does not print the leading 0 for days 1 through 9 (unlike strftime(), does not print a leading space)

Format Specifier	Result
%F	Milliseconds as a decimal number (000-999)
%H	Hour based on a 24-hour clock as a decimal number (00-23)
%I	Hour based on a 12-hour clock as a decimal number (01-12)
%j	Day of the year as a decimal number (001-366)
%m	Month as a decimal number (01-12)
%M	Minute as a decimal number (00-59)
%p	AM/PM designation for the locale
%S	Second as a decimal number (00-59)
%w	Weekday as a decimal number (0-6), where Sunday is 0
%x	Date using the date representation for the locale, including the time zone (produces different results from strftime())
%X	Time using the time representation for the locale (produces different results from strftime())
%y	Year without century (00-99)
%Y	Year with century (such as 1990)
%Z	Time zone name (such as Pacific Daylight Time; produces different results from strftime())
%z	Time zone offset in hours and minutes from GMT (HHMM)

Examples:

You can use the format specifier to generate different results.

DATE() - Yields a date according to the specified format or according to the date preferences (specify format:"")

DATE("20020701", "") => 2002-07-01 00:00:00 +0000

DATE("20020701","%m-%d-%y") => 07-01-02

DATE("20020701","%m-%d-%y") will give 07-01-02

DATE("20020701","%b-%A-%Y") will give Jul-Monday-2002

DATE("20020701","%B-%w-%Y") will give july-1-2002

TODAY() - Yields today's date according to the specified format or according to the date preferences (if format="")

TODAY("") => "2002-11-07 12:40:10 +0100"

TODAY("%A %d-%m-%Y %H:%M:%S") => Thursday 07-11-2002 12:40:10

LEFT

Syntax	LEFT(Text, Number of characters)
Description	Returns the specified number of characters in the supplied text, counting from the left.
Example	LEFT ("Personalized Printing", 6) => Person

Parameter description

Text	Any text expression or data field containing a text.
Number of characters	Numeric expression or data field containing the number of characters to get.

This function allows you to print a number of characters, counting from the left side of the value in the defined database field.

You can use this function to separate field content or to create a unique code with parts of someone's name.

LEN

Syntax   LEN(Text)
Description Returns the number of characters in <Text>.
Example   LEN ("Personalized Printing") => 21

Parameter description

Text Any text expression or data field containing a text.

You can use this function to calculate the length (the number of characters) of the database field. For example, certain ZIP codes or barcodes might need to have a specific number of characters to print correctly.

LEN is often used in combination with other functions, such as LEFT, RIGHT, MID and IF, where it can be used to determine exactly how many characters are printed of a selected database field.

In the following example, IF and LEN are combined to calculate the length of the "gender" database field. It also ensures that fields without text, but with spacing, are recognized and eventually the correct output is generated.

First Name Last Name Gender

First Name	Last Name	Gender
John	Abrahams	M
Theresa	Johnson	F
William	Fremont	M
Tom	Cooper	

IF(LEN([GENDER]) = 0, "Dear Sir, Madam", IF([GENDER] = "m", "Dear Mr." & [Name], "Dear Ms" & [Name]))

The result is:

Dear Mr John Abrahams

Dear Ms Theresa Johnson

Dear Mr William Fremont

Dear Sir, Madam

LOWER

Syntax   LOWER(Text)
Description Returns all letters in the given text as lowercase.
Example   LOWER ("Personalized Printing") => personalized printing

Parameter description

Text Any text expression or data field containing a text.

This function allows you to print the selected database fields in lowercase.

For example, if your database is filled out with information in capitals, you could use this expression to amend this.

LTRIM

Syntax	LTRIM(Text)
Description	Returns the supplied text, stripped of all leading spaces, tabs and newline characters.
Example	LTRIM (" 12") => "12"

Parameter description

Text Any text expression or data field containing a text.

This function removes extra spacing (at the left side of the word) in a combination of variables (for example, when the database has set a defined number of characters for each particular database field or when a database field is left empty).

MID

Syntax	MID(Text, Start position,Size)
Description	Extracts characters from the supplied text, starting at the character position specified by start position and containing the number of characters specified by size.
Example	MID ("Personalized Printing", 5, 4) => onal

Parameter description

Text	Any text expression or data field containing a text.
Start position	Any numeric expression or data field containing a number (start position to get characters from).
Size	Any numeric expression or data field containing the number of characters to get.

This function allows you to print a number of characters of the value in the defined database field.

With MID, you can decide which character you want to start with and how many characters from that point onwards you want to print.

POS

Syntax	POS(Text, String to find, Start position)
Description	Returns the character position of a searched string in text. Returns 0 if not found.
Example	POS("Personalized Printing", " ", 1) => 13

Parameter description

Text	Any text expression or data field containing a text.
String to find	String to search for.
Start position	Position to start search from.

This function allows you to search for certain character in the value of a database field. The result will be the position of the character you are searching for.

PROPER

Syntax	PROPER(Text)
Description	Converts the first letter of each word to an uppercase character, and the rest to lowercase.
Example	PROPER ("PERSONALIZED printing") => Personalized Printing

Parameter description

Text Any text expression or data field containing a text.

This function allows you to clean up improperly filled out databases or to amend all lowercase or all uppercase information.

REPLACE

Syntax	REPLACE(Text, Text to find, Replace with text)
Description	Looks for<Text to find> in <Text> and replaces every occurrence with <Replace with text>.
Example	REPLACE("PrintShop Mail", " ", "") => PrintShopMail

Parameter description

Text	Any text expression or data field containing a text.
Text to find	Any text expression or data field containing a text.
Replace with text	String to replace occurrences of <Find string>. Any text expression or data field containing a text.

RIGHT

Syntax	RIGHT(Text, Number of characters)
Description	Returns the specified number of characters in the supplied text, counting from the right.
Example	RIGHT ("Personalized Printing", 8) => Printing

Parameter description

Text	Any text expression or data field containing a text.
Number of characters	Numeric expression or data field containing the number of characters to get.

Use this function to separate field content or create a unique code with parts of someone's name.

RTRIM

Syntax	RTRIM(Text)
Description	Returns the supplied text, stripped of all trailing spaces, tabs and newline characters.
Example	RTRIM ("12 ") => 12

Parameter description

Text Any text expression or data field containing a text.

This function removes extra spacing (at the right side of the word) in a combination of variables. For example, you can use this function when the database sets a defined number of characters for each particular database field or when a database field is left empty.

STR

Syntax	STR(Number)
Description	Returns the supplied number as data type Text, for use with formulas involving text or text functions.
Example	STR (123.55) => 123.55

Parameter description

Number Numeric expression or data field containing a number.

TEXT_FILE

(Windows only)

Creating variable text blocks, such as paragraphs and bodies of letters is easier with the TEXT_FILE function. The ability to read .RTF (Rich Text Format) and .TXT files eliminates the need to copy and paste text strings into Expression logic formulas.

Syntax	TEXT_FILE(Filename)
Description	Returns the contents of the TXT or RTF file<Filename>
Example	TEXT_FILE("TEST.TXT")

Parameter description

Filename Any text expression or data field containing a text which holds the Filename of TXT or RTF file.

Allows you to link variable (external) text files in .RTF or .TXT text format to your PrintShop Mail document.

TODAY

Syntax	TODAY([Number])
Description	Returns the current date, according to the computers internal calender, formatted according to the system regional settings.
Example	TODAY() => 20070208

Parameter description

Number The amount of days added to the current date. Numeric expression or field containing a number.

This function takes no arguments. It returns the current system date (at the time the current record is printed).

The date format depends on the preferences defined in regional settings.

TRIM

Syntax	TRIM(Text)
Description	Returns the supplied text, stripped of all leading and training spaces, tabs and newline characters.
Example	TRIM (" 12 ") => 12

Parameter description

Text String to remove leading and trailing spaces, tabs and newline characters from.

This function removes extra spacing in a combination of variables (for example, when the database has set a defined number of characters for each particular database field or when a database field is left empty).

TRIM removes any extra spacing at the left and at the right side of the word in the database field that has been selected.

UPPER

Syntax	UPPER(Text)
Description	Returns all letters in the given text as uppercase. Use the UPPER function to ensure consistent data entry of such things as state abbreviations or postal codes.
Example	UPPER ("Personalized Printing") => PERSONALIZED PRINTING

Parameter description

Text Any text expression or data field containing a text.

You can use this function to print the selected database field in capital letters.

If you are creating a mailing for which you need to print the names in capitals, although the names in the database are in lower-case, perform the conversion with UPPER.

📚 **License Agreement**

PrintShop Mail User Guide

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