## General Concept

MindMap offers the ability to print the internal documentation of an application built with MindMap. This is helpful, if other persons are to review, modify, or maintain the application. This documentation is continuously generated and can be output in various formats. MindMap is shipped with a collection of templates for printing the documentation. These templates are contained in a file named STANDARD.MMP (*MMP* = MindMap *Printer Layout*).

The standard templates themselves are, technically, little MindMap applications and have been created using MindMaps own tools.

Conceptually, a printer layout is a blank sheet of paper onto which MindMap components can be placed (*graphical primitives, graphic file imports, text, data table, and printer components*). You can then access most attributes of the components you place on the sheet, just as though they had been placed on a MindMap page. By defining the various components on the page, MindMap is instructed how to eventually display the documentation.

Lets start out by loading the standard templates and viewing how they have been constructed. Start by opening the appropriate file using the menu option File | Open. This will result in the following screen.
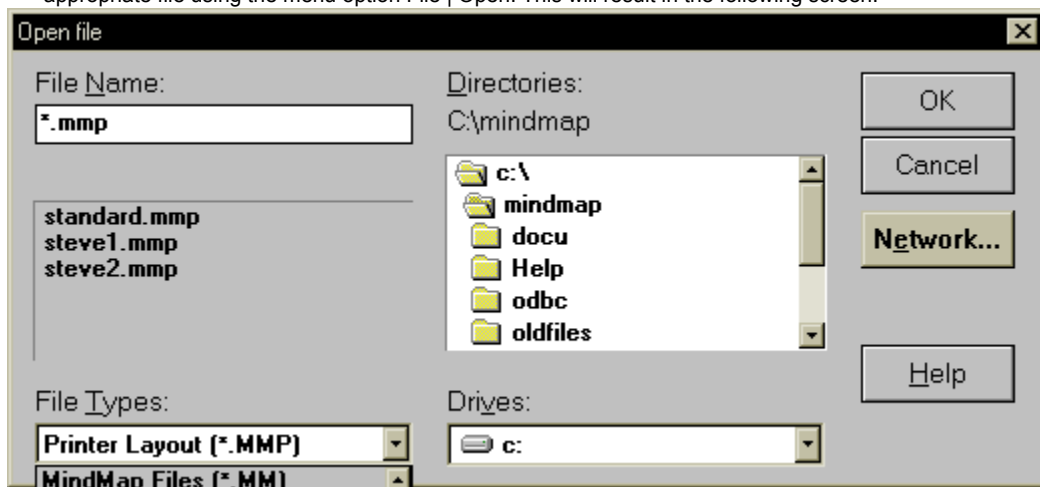
In the lower left hand corner, you will see a drop down list which offers a selection of various file types. Select the entry:

Printer Layout (*.MMP)

The list in the top left hand corner of the dialog box will subsequently display all files in the current directory corresponding to the .MMP extension. Now open the file:

STANDARD.MMP

by either double-clicking on it or by selecting it and then clicking on the OK button. This will open the printer layout file.

On the left side of the MindMap page, you will now see a white rectangle. This rectangle represents a sheet of paper. A rectangle is also visible on the page, along with a horizontal line.

You will also notice that the MindMap page itself has a name - MindMap Page (graphical). If you leaf to the right, you will observe additional pages. There are five pages in this file:

> MindMap Page (graphical)
>
> Page Overview and Links
>
> Component List
>
> Component, Links and Annotations
>
> Component and Annotations

Each page has a somewhat different layout.

The template MindMap Page (graphical) is used to print a MindMap page, as a user would see it in run mode. The Page Overview and Links template will produce a representation of the MindMap page and all links placed on the page. The

Component List template lists all components on a page. The **Components, Links and Annotations** template displays all components on a page, along with their links and any annotations. The last template outputs the components and their annotations in a page orientation.

Changing an Existing Template

The first step in understanding and using the Printer Layout facility is to change some parts of an existing template.

Assuming that the template file STANDARD.MMP is still open, scroll to the third page, which is entitled **Component List**.

You should see the following screen:
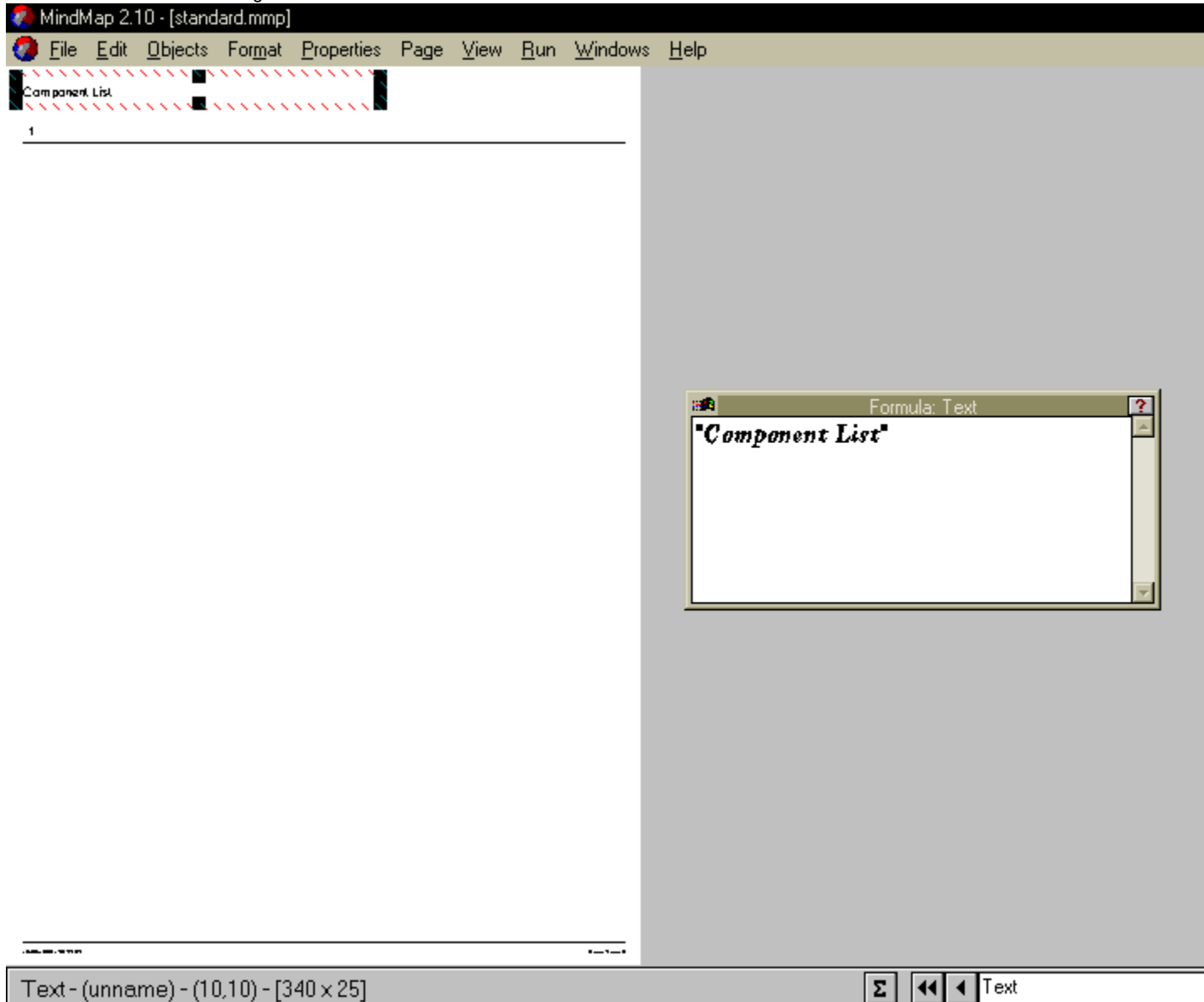
Selected in the top left corner of the page, you can see the page header, which in this case is Component List. This is a simple text component and it has received its value by an entry in the parser field. Please note that string entries must always be enclosed in …. Use the cursor to select the other components on this template page, these being horizontal lines (*at top and bottom respectively*). A footer which contains two text components, one of which displays date and time of printing, the other a page number reference.

Lets add your name to the header:

1. Click on the text component on the toolbar or select it via the menu. Place the cursor on the top right hand section of the template and drag it open.

2. Next, assuring that the text component is still selected, click on the parser button on the status bar on the bottom of the MindMap page. This will pop open the parser window.

3. Assuring that the newly placed text component is still selected (*it should have a red hatched border*), click inside the parser window.

4. Now type in your name, making sure that your name is enclosed in double quotes. As soon as you place the focus outside the parser window, the newly created text component will reflect the text entry.

5. Follow this by selecting a font for your name. Again, this is exactly the same procedure as though you were to select a font for any other component placed on a MindMap page. Bring up the attribute toolbox on the text component containing your name, and proceed to make the font selection.

6. Finally, save these changes back to the STANDARD.MMP file.

Using the standard MindMap procedures for placing components and defining their attributes, you can now change the appearance of any of the existing templates.

Before you start to use your templates though, you might want to check that the correct page settings have been made. To do this, double-click on any section of the template, this means you shouldnt be clicking on any of the components, since you dont want to set their attributes. If you hit the template page, this will result in the following dialog box:
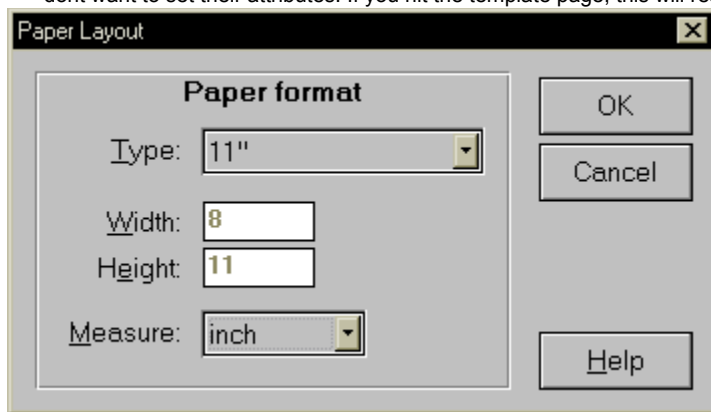

Use this dialog box to make the necessary adjustments. In case you did make some changes in this step, save the file again.

Adding a New Template to STANDARD.MMP

The existing template file can always be expanded to include new, user-defined templates. In order to do this, you have to follow the steps outlined below:

1. Create a new MindMap page by either using the menu option Page | New Page, or by going to page number 5 in the standard file, and then simply attempting to go one more page.
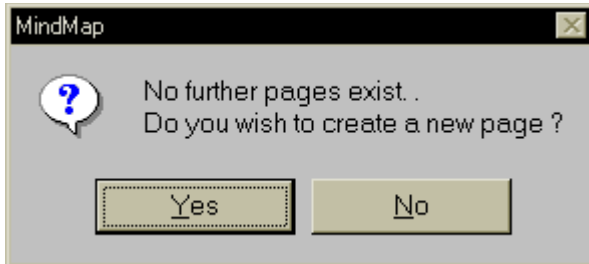

You will be prompted, in which case you should answer with yes.

2. You will be presented with an empty ´sheet of paper´ on the left side of the MindMap page. This is the basis for the new documentation template.

3. Now you need to place a new type of a component on the template, which is the container for the aspects of MindMap you wish to print. This component is called Printer Object. You can only access it via the menu option Objects | Printer Object. It has no representation on the toolbar, as it is infrequently used. Select it from the menu and drag it open on the template.

4. Once you have done this, a rectangle will represent the new component.

5. Now you need to specify what it is to actually contain - what you want to fill it with. To do this, activate its attribute toolbar.
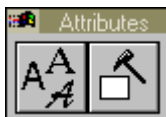
Click on its specific attributes and a dialog box offering a selection of options will appear
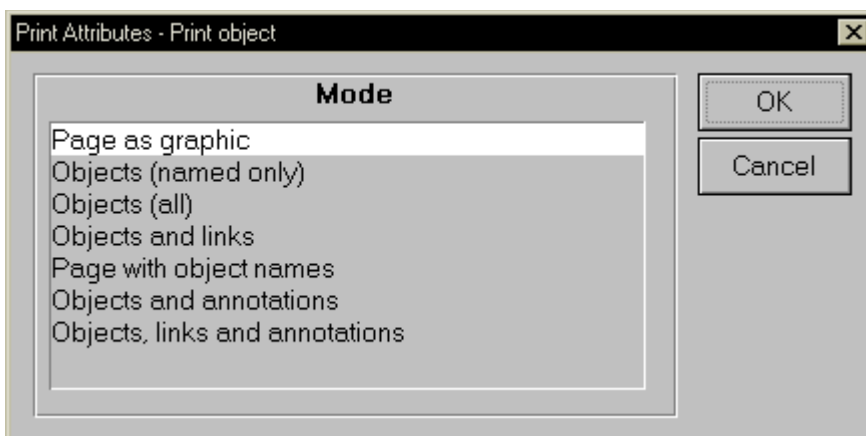
6. Pick one of the seven options and acknowledge the selection by clicking on the OK button.

7. Next, you can start to enhance the general appearance of the page. You can define a header and a footer, add textual comments, etc.

8. Finally, give the MindMap page a name. This requires that none of the components be selected. This name will become the template´s name.

9. Save the file to STANDARD.MMP

Close the file completely and then reopen it. At the end of the file, you should now have the previously created template.

Open a MindMap application (.*MM*) and go to File | Print Preview. The list of templates should now display the newly created template, which should be at the bottom of the list. Print the documentation for the loaded .MM file and see how it looks.

If you dont like the appearance of the results, reload the STANDARD.MMP file. Go to the page in the file containing your new template, make the adjustments and save the template file, again.

Creating a New Template File

We have just discussed how the existing template file can be expanded. In addition to this, you can also create any number of new Printer Layout files. MindMap will search for these (*files with the .MMP extension*) in its working directory and load them along with the STANDARD.MMP file. All templates will then appear in the selection list, when you start to print the documentation.

To create such a template file, select the menu option File | New. This will result in the following dialog box:
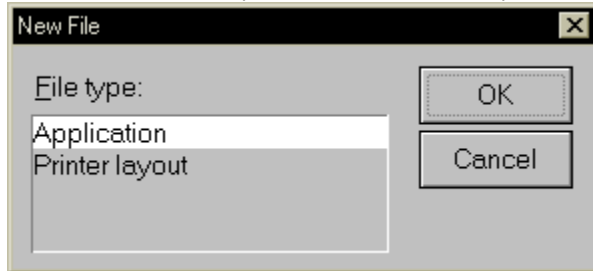
When creating a new application you are prompted to select the desired type

Select the second option, **Printer layout**. This will open a new MindMap application file, which has a ´sheet of paper´ on each MindMap page. Now, proceed to place the Printer Objects on the pages, adding any additional components you desire.

Dont forget to name each page, so that you can recognize them later in the selection list.

When all has been done, save the file with the extension .MMP. Make sure that you are saving it to the working directory, so that MindMap will automatically load it.