

Chapter 8

Making an Executable File

General Concepts

`mindmap` enables you to create a set of distribution media containing the `mindmap` application you wish to deploy to other computers. The distribution media will include all the `mindmap` files, associated modules such as databases, graphics, etc., and a setup routine.

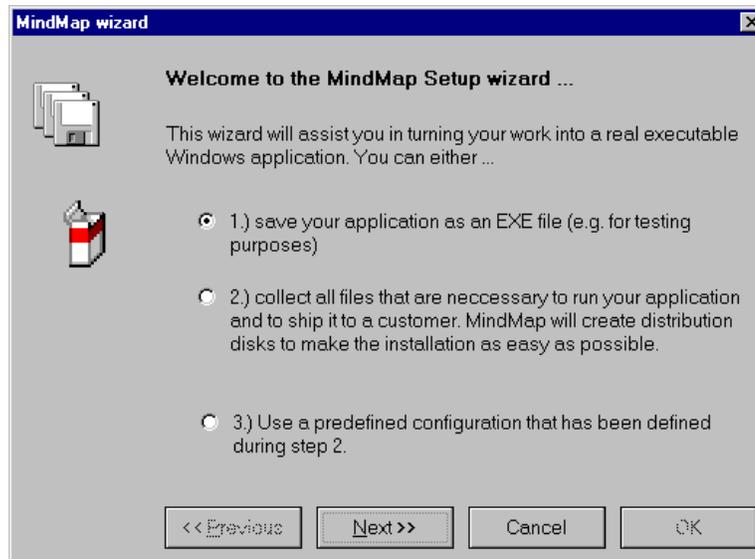
`mindmap` applications, when stored as `.MM` files, are editable by the developer as well as anyone else with a valid version of `mindmap` installed on their system. Under certain conditions, it is necessary to wrap an application up so that it can be run on machines other than those which have a copy of `mindmap` installed on them. In addition, it is often desirable to make the application executable-only, meaning that the user cannot modify the application.

Technically, `mindmap` takes an application (`.MM` file) and wraps it up, together with the `MINDMAP.EXE` itself, into a new file. It then automatically determines all necessary `mindmap` files required and offers you the opportunity to include any other files you wish to make available on the distribution media. The result of the process is an installable set of media, including a standalone, executable version of your application.

Test it First

When you are ready to deploy your application, it usually makes sense to first test the resulting EXE file. In order for you to do this, access the menu option **File | Make EXE file**

You will be presented with the following dialog box:



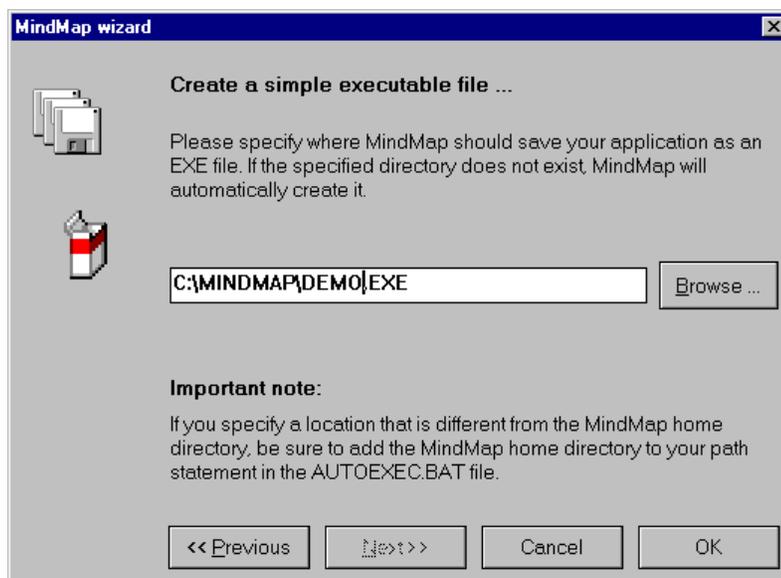
Create an executable file and test it first

The first option, which should be checked, gives you the opportunity to store your current .MM file as an .EXE file. This allows you to do a preliminary test of the application.

Press the Next>> button and mindmap will suggest a path and a file name - based on the name you have given to the current application (as an .MM file).



If you decided to store the application in a directory other than the default mindmap directory (where MINDMAP.EXE reside), please make sure that an entry in the PATH environment variable points to the mindmap directory. To accomplish this please use a text editor to open the AUTOEXEC.BAT file and add a line such as `PATH C:\MINDMAP` or modify an existing path definition.



Specify where to store the application

If you do not wish to store the .EXE file under the suggested name, either type in a new file name or browse to a new location on your hard drive.

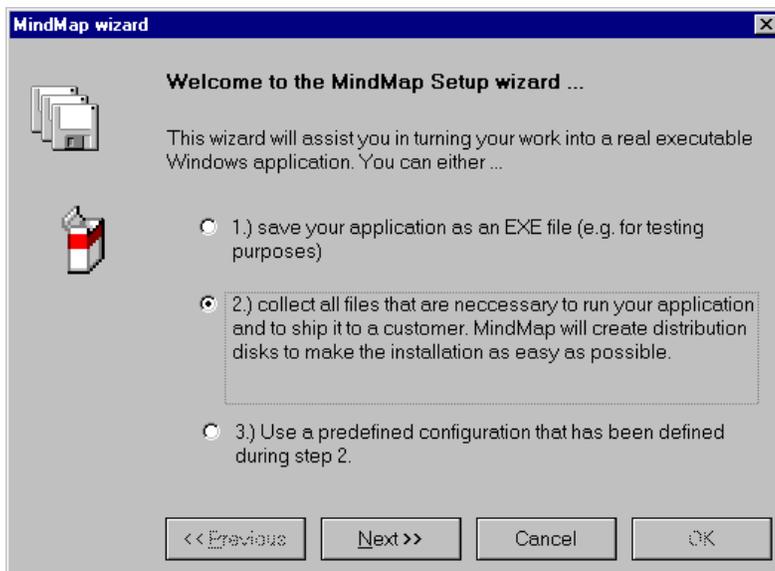
Now, exit mindmap and execute the newly created .EXE file, just as you would start any other application.

You will see that, once the application has started, you will only be able to minimize it or terminate it. You can no longer toggle into edit mode.

Building the EXE

Collecting the Files

If you actually intend to build a deployable EXE file (and associated files), then you should select the second option in the dialog box.



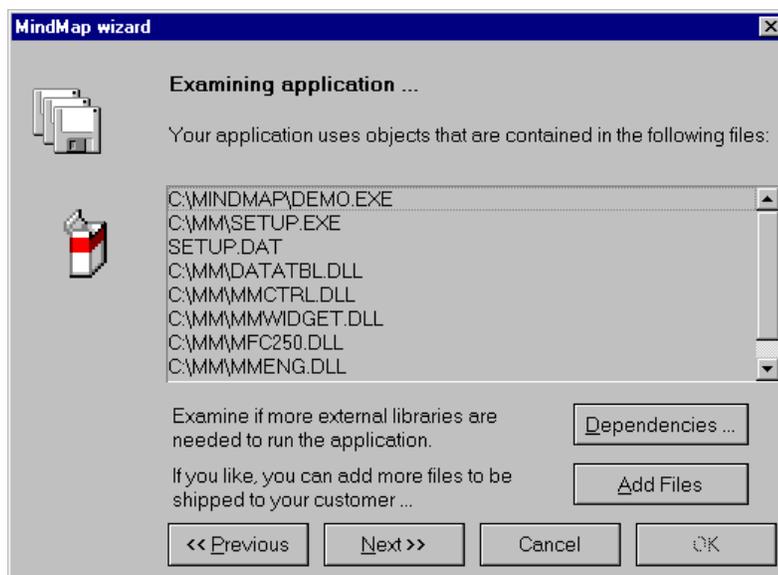
Build an installable set of disks from your application

When you instruct mindmap to collect all the necessary files, it will, by default, include a number of files which are required to run the system, regardless of the contents of your application. These include MINDMAP.EXE, the .MM file, and various libraries. Depending on which components were used in the application, additional files are added to the list.

Examining the Application

Default

The deployment routine will display the complete set of files required to make a standalone, executable version of your application.



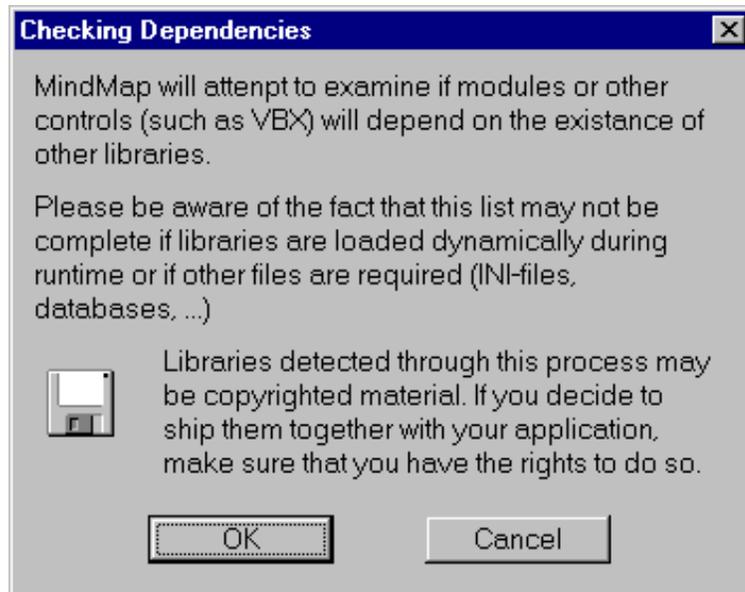
See which files are necessary to execute your application

All collected files are displayed in the list.

Dependencies

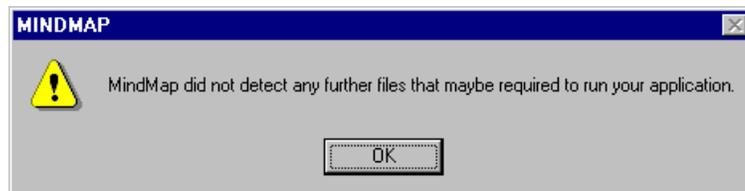
In some cases it might be necessary to manually augment this list with additional files. This might be the case for licensed materials (such as VBXs, third party libraries, etc.), or data files which are utilized in the application.

Click on the Dependencies button and you will see the following dialog box:

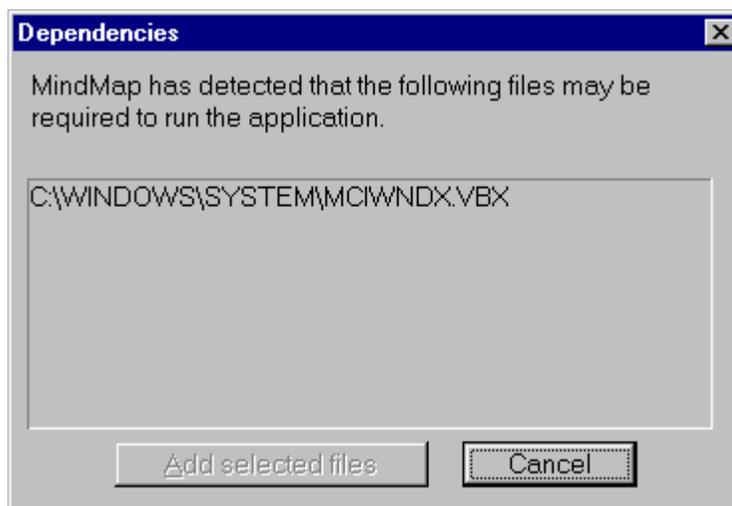


Make sure that no third party rights are violated by shipping certain components

If you have not included any external files in your application, mindmap will inform you accordingly and display the subsequent dialog box.



If on the other hand, mindmap has detected dependent files, these will be displayed in a separate dialog box.

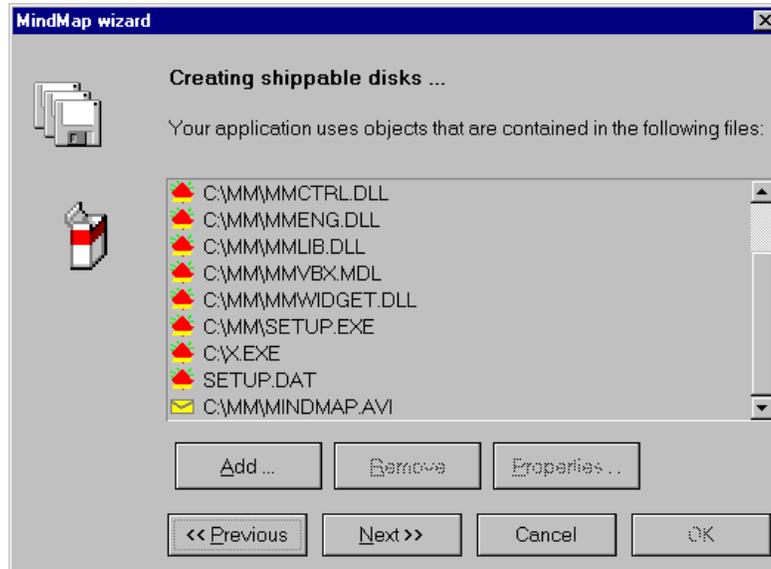


mindmap has found a VBX control that is used in your application

Please take note that such files might be licensed materials and their transfer may thus be governed by accompanying copyright agreements.

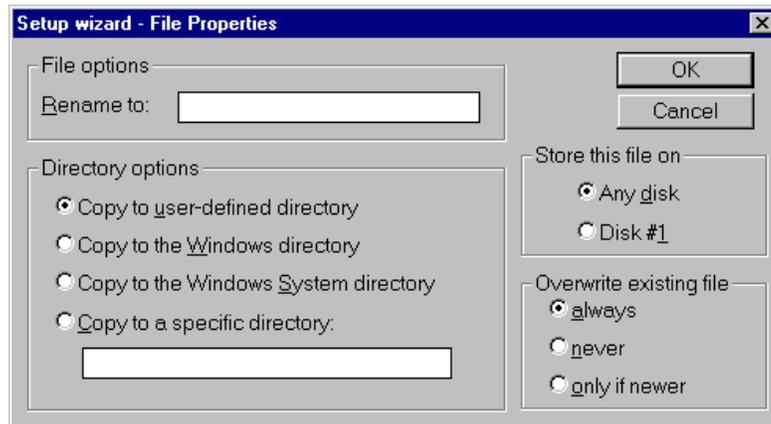
Adding Files

In some cases, you might wish to include additional files on the shippable disks. In this case, click on the Add button and navigate the resulting dialog box until you have located the file you wish to add. Once you have clicked on the appropriate button, control will be returned to the following dialog box, which will now display the newly added file.



Specify additional files to be shipped

You may now set some of the properties of the added file(s). In order to do this, click on the Properties button.



This dialog box gives you various options.

You might choose to rename the newly added file. You can also specify a definite location on the user file system into which

you want the file to be copied. You can also choose to overwrite the file, in case it might already exist on the target machine. You can use this feature to assure that the newest version of a particular file is always installed on the target machine. Also, note the option of selecting on which disk you wish the file to be copied.

Installation Directory

After having collected all the files, the deployment wizard will prompt you for a directory into which it is to install the application. The wizard suggests a directory \MM-APP on your default drive. You may either accept this suggestion or offer a different path.



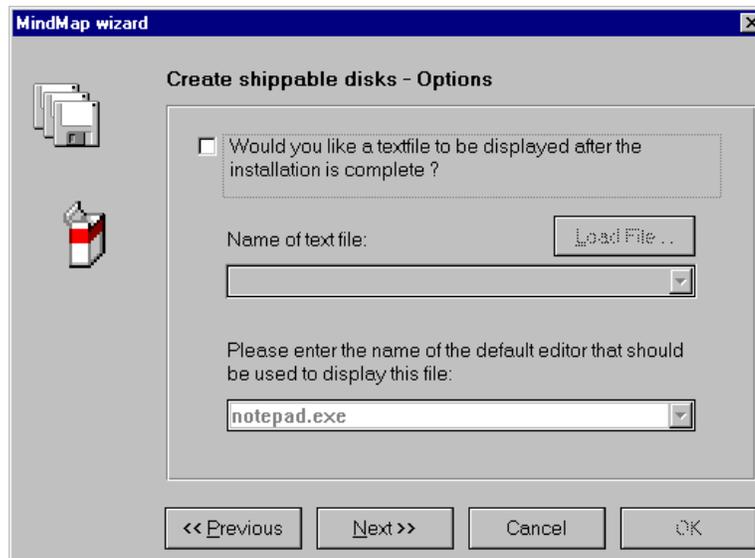
Enter a directory to which the application files will be installed

In either case, you may also offer the user the option of selecting his/her own directory of choice at the time of the installation.

Text File at Installation

Often it is desirable to display a text file after the installation process, informing your user about how to use your application or which other requirements he/she has to take into consideration. Such a text file might contain instructions regarding the installation, or it might include other information relevant at that time, such as copyright notices.

You can choose to display such a text. Specify the file and the viewer with which you wish to have it displayed:



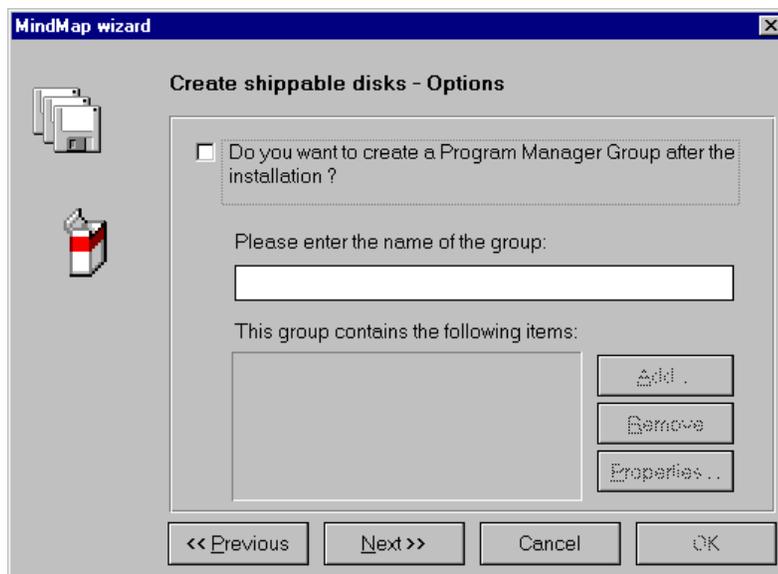
Is there anything your user has to take into account - present a text file

Please note that it is your responsibility to assure the availability of the specified viewer on the users' system. You might either make the assumption that the viewer is available by default (such as `NOTEPAD.EXE`) or you might choose to include it in the set of files you are shipping. Again, please take caution, that you do not neglect potential copyrights.

Program Manager

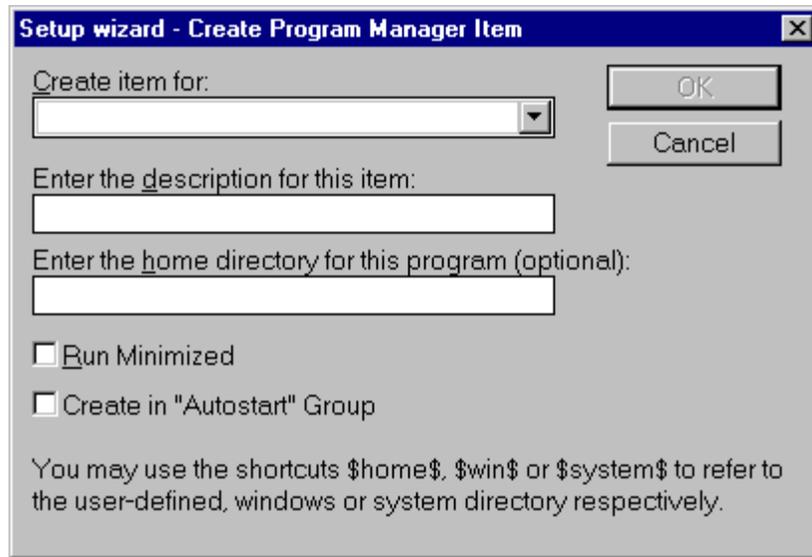
The next step in this process of creating deployable disks is that of specifying possible entries into the Program Manager.

If you wish to have the deployment wizard create such an entry, click on the check box. Next, enter the name which is to appear in the title bar of the program group. Follow this by selecting the files which are to be included in the program group.



Create some icons in the program manager so that the user can quickly start your application

Once you decide to include a file in the group, you will be presented with a dialog box permitting the selection of various properties:



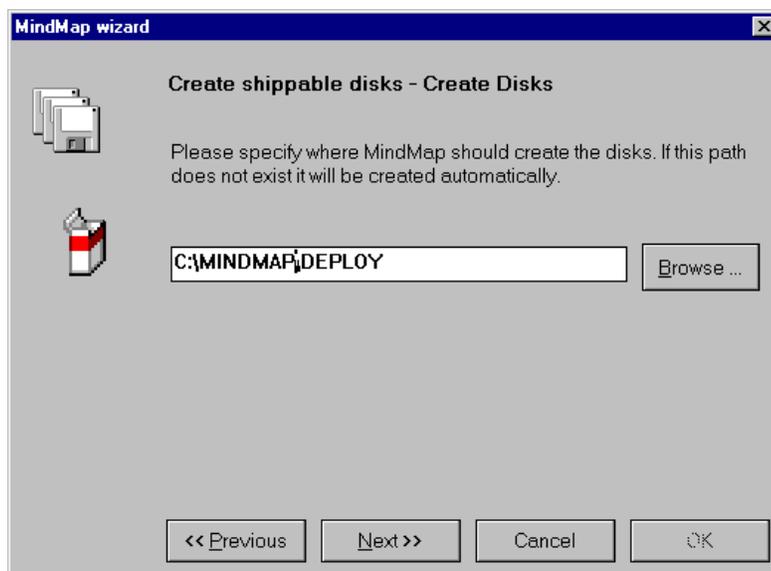
Specify which icons you want to create in the program manager window

The drop down list at the top of the dialog box permits you to specify for which of the files an item will be created. The list is filled with the files that are included in the shipping list created before. Next, enter a description for the file, followed by a specification of the home directory. Please note that you can enter relative paths, by adhering to the conventions listed at the bottom of the dialog box.

In addition, you can also specify that the application is to run when starting Windows and this, either in full screen mode (in which case it resides in foreground), or minimized as an icon on the desktop.

The Temporary Directory

In preparation for actually creating the disks, `mindmap` will temporarily designate a directory into which it will process the files on your system.



This is the location where your shippable disks will be created

The wizard will suggest creating a directory within the mindmap home directory. Again, feel free to override the suggestion and enter any other path.

This directory will contain the shippable disks which will be created in the next steps.

The Script File

If you intend to step through this identical setup procedure more than once, the wizard offers an option by which the individual steps can be stored in a script file.



Optionally save your settings in a script file for future use



Note that the script files are binary and cannot be processed in any manner outside of mindmap.

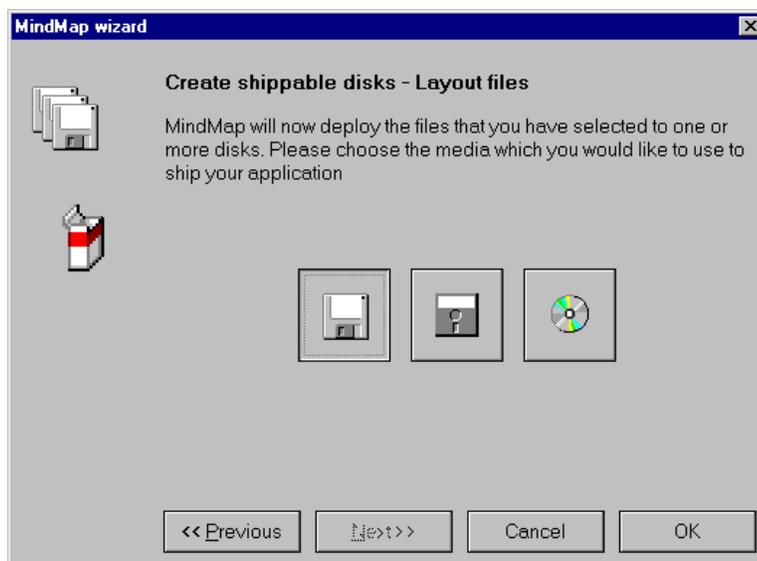
Again, the suggested name for the file is based on the name given to the application, as such. Feel free to override and enter a different file name.

If you do choose to save the script file, the wizard will recognize the existence of such a file when it is next invoked and prompt you to select the appropriate script file to utilize.

Media Selection

The final step in preparing for the actual creation is the selection of the media on which the application is to be deployed. This decision is necessary to determine the number of media required.

The wizard offers one of three selections:



The last step: which media do you want to have created

The wizard will create the appropriate number of directories. These directories are named DISK1, DISK2, etc. and the deployment wizard will assure that no more files are copied into these directories than will fit on the disk. It will create only a single directory if the option CD-ROM was chosen.

During the compression process, a directory named COMPRESS will automatically be created. This directory contains the compressed versions of the files to be shipped. This directory will not be removed after the wizard has completed. Therefore subsequent creations of shippable disks will be sped up. Anyway, feel free to remove this directory any time, if you want to free the disk space.

Once the media has been selected, the wizard will compress all the selected files, and rearrange them such that a maximum number of bytes will fit onto each piece of distribution media. Then, it will copy these designated files into the directories corresponding to each media and report upon completion of the task.



mindmap lets you know where the disks have been created

If you did not select to create a CD-ROM image, you may now choose to use the wizard to copy the contents of the displayed directories to the media (by actually specifying the drive). Alternatively, you can leave the wizard and transfer the contents of the directories to the distribution media using any other utility, at this time or in the future, as you wish.