## **Technical Information**

## Mirror Image Backup

When Drag'nBack backs up files, it copies source files and the hierarchical folders in which they reside to the backup disk. That is, you will find a backup file in the same folder as the original.

When you back up the source files again, only the source files that have changed since the last backup will replace the older backup files. Thus, the mirror images relationship is maintained after the update.

## Naming Backup Disks

Each time a new disk is used for backup, Drag'nBack will ask you whether to delete all files in it and to rename it. Drag'nBack will supply a default name for you— this name is appended with a space and the number from within the sequence of backup disks. You can also use your own name—Drag'nBack will use it as the default name for the next backup disk.

It is important that you give a different name to each disk. If two disks have the same name, you will not be able to tell which is which. It is also wise to physically label disks.

### **Backup Strategies**

We recommend that you use two templates to back up important files twice. Alternate between these two templates with each backup. There are at least two advantages of using this method. First, when you need to restore a file and one backup is corrupted, you can use the other backup. Second, the two backups are usually different versions of the source file, thus providing you the ability to go back to an older version.

We recommend that you use one template to back up the hard disk, one template to back up the System folder, and one template to back up your documents.

# Backing up New Files

Before backup starts you need to decide three options: Source Folder option, Compress option, and Encrypt option. These options are set using the Preferences dialog. After these files are backed up, these options are remembered in the template. When any of these files needs to be updated because of the source file is changed, the backup file will be updated using these three options. If you later want to change any of these three options, you have to remove it from the template. You can use one of the following three methods: use the Clear Disk Name command, delete file from template, delete backup file. Then back up the file with different options.

# Renaming or Moving a File or a Folder

If you rename or move a file or a folder, the backup template will be updated as well as the backup file on the backup disk. This is only done when you do a backup. In System 7, Drag'nBack will look for the missing file automatically. In System 6, Drag'nBack will ask you to identify the missing file through a standard open file dialog.

## Deleting a File from the Desktop

If you delete a file, Drag'nBack will not be able to find it. Drag'nBack will mark the file as excluded from backup. You can use the Delete Backup option to delete the backup file as well.

## Version Backup

If you want to do a version backup for a project with files you can do one of three things. First, you can create a new template and back up the new version to a new set of disks. Second, you can rename the backup file or folder. Note, however, that you can not rename the source file or folder as Drag'nBack will look for the source file and make corresponding changes to the backups. Third, you can use the Archives option. See the Preferences topic for more details.

## Drag'nBack Actions on the Desktop

If you drag icons to Drag'nBack, Drag'nBack will back up files associated with the icons, then quit. If Drag'nBack is open and you drag icons on the desktop over it again, it will not quit. If you have used Drag'nBack before, Drag'nBack may present the template dialog asking you to select a template to open.

If you double-click on Drag'nBack, it may present a dialog asking you to select templates to back up. It will quit after all templates are processed. If Drag'nBack can not find a template to open, it will present a dialog asking you to choose to back up the startup disk or a certain number of folders.

You can choose not to see the dialog when the program starts. After you choose not to display the dialog, you can still force the dialog to appear by pressing the Control key when starting the program.

If you double-click on a template, Drag'nBack will open the template and then display the files in it. You can use the Backup command from the Drag'nBack menu to initiate a backup.

If you work with AppleScript, the Run command will backup a template again after it is open. Furthermore, dragging icons over Drag'nBack is translated into the Open Document Apple event which in turn is interpreted by Drag'nBack as the Backup command. Thus, any application can ask Drag'nBack to back up a file by dispatching an Open Document Apple event to Drag'nBack.

If the Shift key is held down when opening Drag'nBack or dragging icons for backup, Drag'nBack will restore the files instead of backing them up.

# Using Drag'nBack as a Finder Companion

You can open a folder window of a file by selecting the file in the template and then choosing the Reveal command from the Special menu. The folder window will open and the file will be selected in the folder. Similarly, you can open the Finder "Get Info" window of a file using the Get Info command. You can open a file using the Open command. You can make an alias file in any disk and folder you choose using the Make Alias... command. You can copy files to any disk and folder you choose using the Copy

#### Files command.

These commands can be applied to multiple selected files simultaneously. Also, when the Shift key is held down, these commands will apply to the backup files instead of the source files.

## Use Drag'nBack as an Application Launcher or Document Opener

You can open a document or launch an application directly from a template by double-clicking on the line of the document or application. The document or application on the source disk will open immediately.

This works like opening a file from a Finder window while viewing by name. The difference is that in a template you can mix files from different directories. You can literally place any number of files in one window in order to launch them later.

To open the document or application of a backup file, hold down the Shift key and then double-click.

The first time you open a file, a menu called Open will appear. You can use this menu to reopen a file, saving you from locating the file in the template first. You can even edit this menu.

#### Oversized Files

If a source file is too large to fit onto a single backup disk, it will be segmented and copied onto multiple backup disks.

Drag'nBack will create multiple lists of the same file name in the template. Drag'nBack will use this information to rejoin the segmented files into a single large file. A sequence number will appear before the backup disk name in the template window.

The backup files are copied as Drag'nBack documents. You can double-click on the first backup file to initiate restoration of the original file.

# Restoring a System Folder

Restoring a System Folder is a little harder than restoring a file. Each disk contains information about which folder contains the System file. After a disk crash, you need to fix the System file first. Install a temporary System Folder onto the startup disk so you can boot from it. After booting up, rename the System Folder. Copy the Drag'nBack application and a backup template containing the System Folder to the disk. Open the template and then choose the Restore... command from the Drag'nBack menu. Restoring source files from the backup disks is the reverse process of backup. You will be asked whether to set the System Folder you are restoring as the new System folder. Click the OK button.

### File Overflow

The following situation may happen during a file update. If a source file grows and there is not enough free disk space on the backup disk, the source file will be copied to another backup disk. Afterward, the older version of the backup file will be deleted. Just follow the instructions to swap the backup disks.

# **Deleting Files**

Sometimes you want to purge files from the disk. This can be done as follows.

Select the files from the catalog and then choose the Delete... command from the Special menu. A dialog will guide you through the deletion process. If you hold down the Shift key before selecting the command, the backup files will be deleted instead. The pause option is preselected, so you have to confirm the deletion of each file.

To quickly delete multiple files without confirmation, disable the Confirm option in Preferences.

### **Backup Devices**

Since the backup files are mirror images of the source files, the backup device you use should be "Finder mountable". That is, its icon should show up on the Finder desktop.

### Older Systems

Drag'nBack works in System 6. Use the Catalog command to add files to the template.

### Network Backup

System 7 provides the ability to do file sharing among networked computers. You can back up files to a shared volume. A network volume can be designated as a backup server. A user in a work group can back up to the backup server. Conversely, a network administrator can back up all networked volumes to the server volume for a whole group.

In System 7, you use the Chooser in the Control Panels folder to mount a remote volume on the desktop first. This is a multi-step process. After a remote volume appears on the desktop, you can make an alias of it. Double-clicking on the alias will mount the volume. This can save a few steps.

When a remote volume is used in backup, Drag'nBack will mount it when needed. When a remote volume is no longer needed, Drag'nBack will dismount it automatically. This will also let a user or a network administrator perform backup with minimal interaction.