

# **SOHO Back-up**

## **Overview of the SOHO Back-up software**

### **Introduction**

Welcome to the SOHO Back-up suite of software programs that are specifically designed to meet the needs of a small office/home office making data back-ups to 100MB (and higher) removable disks.

This document provides an overview of the SOHO Back-up software. It describes the complete system in enough detail to allow you to start using the software without having to read the rest of the documentation. Although reading the rest of the documentation will enable you to get more out of this product.

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## Features at a glance

- Complete set of software to create and maintain back-up plans, make back-ups to a destination disk according to the back-up plan, and recover data from the back-up.
- Reclaims space from the back-up disk by removing superseded files from older back-up sets. This space management allows the same back-up disk to be used for extended periods of time without any intervention from you.
- Compares each file copied to the back-up disk with the original to ensure data integrity during the back-up. This is known as read after write verification.
- Stores a specific back-up plan on each back-up disk and keeps a catalog of what has been backed-up to the disk on the back-up disk itself.
- Supports multiple copies of back-ups of the same data to be made to different back-up disks. As the catalog is held on the back-up disk, each back-up copy is entirely independent of the others.
- Supports different back-up plans to be used on the same back-up disk, with the data from each back-up held isolated from the other back-ups.
- Refined user interface to make configuration and use of back-ups plans simple.
- Small amount of screen space used during back-ups allowing you to continue working while the back-up continues.
- Multiple combinations for when full and incremental back-ups are made.
- Multiple options to determine if files have changed since the last back-up.
- Registered version allow back-ups to be made to hard disks and optionally networked disks in addition to removable disks.
- Developed and tested to run under both Windows 95 and Windows NT 4.0, or later. It is 32bit software, making maximum use of your computer's resources.
- Ample documentation describing how to organize yourself to make effective back-ups, and how this software can be used to achieve your back-up needs.
- Year 2000 compliant.

## Description of this software

SOHO Back-up is a simple to use but highly powerful back-up tool that, coupled with good organization of your back-up approach, will meet the majority of small office/home office needs. The product exploits the ability of the removable disk to be able to delete files and reuse the space freed up. SOHO Back-up manages the space used on the removable disk, always keeping a current back-up set on the disk, but removing older back-ups on the disk to make space for future back-up sets. In this way a given disk can be used continuously to back-up your data without your further involvement.

The removable disk is configured with a back-up plan that you define using the supplied editor. This editor has an explorer like interface to allow you to determine what does and does not become backed-up to the removable disk. Once the disk is configured then the stored plan is interpreted by the supplied automatic back-up program. The back-up program interprets the back-up plan, determines what has already been backed-up to the removable disk and then deduces what now needs to be backed-up to the disk.

The back-up plan can be configured to determine the frequency of full and incremental back-ups. There are many options for when full and incremental back-ups are performed such as “always do a full back-up”, “do a back-up on each Monday, incremental back-ups in between, up to a maximum of 5 incremental back-ups before taking the next full back-up,” etc.

Information about what has been backed-up in each session is stored on the removable disk itself. This allows you to have more than one back-up disk with the same data backed-up to it. This provides the ability to have more than one physical copy of your data. For example you could keep two copies of your data, one stored at a different location for safety and one stored locally for convenience of recovery.

The SOHO Back-up suite of programs includes a recovery program. This program allows you to browse the back-up sets stored on a removable disk, allows you to select a back-up set and then allows you to select which back-up sessions are to be recovered back to your hard disk.

The overriding principal behind the SOHO Back-up programs is that data back-up is very important and that simple foolproof user interfaces are required when configuring back-up plans and when recovering lost data. The actual back-up should be as unobtrusive as possible, allowing you to continue with your work while the back-up is happening. As each file is copied to the back-up disk a 32 bit cyclic redundancy check (CRC) is made to ensure that the data copied to the back-up disk is the same as that on the source disk.

## Making a back-up using this software

The installation program creates Start Menu items to run the SOHO Back-up programs. These programs are used in the following manner to create and use back-up plans.

1. Create a back-up plan using the editor that accurately describes what data should be backed-up and how often you want it to be backed-up.
2. Take a new removable back-up disk and save the back-up plan to this disk. You might also want to store a copy of the plan on your hard disk.
3. Use Explorer to select the back-up plan file on the back-up disk and invoke the back-up by double clicking the icon, or by using the “open” choice in the right mouse menu within Explorer.
4. The back-up program interprets your back-up plan and takes the appropriate actions. A progress bar is displayed across the bottom of your screen (above the task bar) to provide a visual indication of how much longer the back-up will take.
5. Finally a summary of the actions taken, including the files actually copied to the back-up disk is presented to you. This final display is optional with registered versions of the software.

Note that the back-up program will make the back-up to the **same** disk that the back-up plan resides on. Copy the back-up plan to each destination disk as required.

If the back-up program is started from the Start Menu then you will be prompted for the name of the back-up plan file to use. This is accomplished using a standard file open dialog box, tailored to look for back-up plan configuration files.

## How data is stored on the destination back-up disk

The SOHO Back-up software assumes that it can use all of the available space on the selected disk. It creates directories as necessary to accomplish its mission. Registered versions of the software allows you to restrict the amount of space used by the software, and to store all back-up data in a separate sub-directory on the disk.

A directory called “Database” is created. This directory stores the catalogs for each complete back-up set. A back-up set is defined as a full back-up followed by the succeeding incremental back-ups until the next full back-up starts the next back-up set. The current back-up set’s catalog is stored in a text file called something like “backup.sbd” - the exact file extension depends on whether the installation program detected a conflict with some other software installed on your computer.

The catalogs for previous back-up sets are also stored as text files in the “Database” directory. The names of the files use the same file extension; they are named according to the name of the full back-up that started the back-up set.

Each separate back-up is stored in a separate sub-directory. The name of the directory contains the time stamp of the back-up and the type of back-up made. The source directory structure is maintained for each file copied into the back-up.

The information stored in the catalog identifies where each backed-up file can be found. The recovery program relies on this information to be accurate to accomplish its task. If it detects an inconsistency then the recovery will be aborted. In short, manual manipulation of the data in the catalog or the backed-up files is discouraged.

### ***Making multiple back-ups to the same disk***

Registered versions of the software allow the back-up plan to name a root directory on the destination disk. This feature allows you to store the results of more than one back-up plan on the same physical disk. A separate root directory must be specified for each back-up that will be made to the same physical back-up disk in order to keep the catalog and back-up directories separate from each other.

For example you can have a separate back-up plan for each of your projects. Let us assume that you have two projects, one called “Alpha” and the other called “Beta.” You could create two separate back-up plans on the same destination disk, probably named after the associated projects.

The “Alpha” plan would specify a root directory of “Alpha” while the “Beta” plan would use a root directory of “Beta.” Assuming that the “D:” drive is the destination back-up disk when the “Alpha” back-up plan is used then the directories created would be:

D:\Alpha\Database	The directory containing the catalogs associated with the “Alpha” back-up plan.
D:\Alpha\199803102100F.ful	The directory containing the files copied during the full back-up that was made on March 10 <sup>th</sup> 1998 at 9pm at night.
D:\Alpha\199803120900I.inc	The directory containing the files copied during the incremental back-up that was made on March 12 <sup>th</sup> 1998 at 9am in the morning.

The corresponding directories created when the “Beta” back-up plan is used would be:

D:\Beta\Database	The directory containing the catalogs associated with the “Beta” back-up plan.
D:\Beta\199803132200F.ful	The directory containing the files copied during the full back-up that was made on March 13 <sup>th</sup> 1998 at 10pm at night.
D:\Beta\199803210800I.inc	The directory containing the files copied during

the incremental back-up that was made on  
March 21<sup>st</sup> 1998 at 8am in the morning.

## The supplied documentation

The SOHO Back-up suite of programs comes with a comprehensive set of documentation. The documentation is divided according to the task that you need to perform with the software. It describes what you need to accomplish and then describes how this is achieved using the software. Along the way you are informed of how the programs can be used to accomplish your specific back-up tasks. The documentation is **not** just a series of screen shots with pithy explanations of each button, checkbox, etc. The documentation files are to be found in the “Documentation” sub-directory of the directory in which you installed the software.

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|--------------|---|
| Install.doc  | How to install the software, step by step. Each installation option presented is explained so that you are aware of the implication of your choices.  |
| Strategy.doc | How to use the software to accomplish the most suitable type of back-up for your data needs. The document discusses different techniques such as how to use full and incremental back-ups, how to use multiple back-up plans on a single removable disk, and how to configure disk space reclamation so that the removable disk can be continuously used to back-up your data without running out of space. |
| Editor.doc   | How to create and manage back-up plans using the SOHO Back-up editor. This document guides you through the process of creating a back-up plan, explaining the different options available to you. This document builds upon the strategies developed in the document described above; it can however be used in isolation if you are already comfortable with backing up your software                      |
| Recovery.doc | How to recover backed-up files from the removable disk. This document takes you through the process of defining what files to recover and where they are recovered to. It examines the steps you should take before and after recovering your files from the back-up.   |

## Shareware license

This software is initially supplied in its shareware version. The shareware copy is a fully functional back-up system, but has some restrictions. The concept of shareware allows you to try out the product at no charge for a limited trial period of time. Should you decide to use the product after the free trial period then you are required to purchase the software according to the information held in the “order.txt” file.

The SOHO Back-up shareware version has no built in time limits. If you choose to break the terms of the shareware license by using the software beyond the licensed trial period, it will continue to function in its restricted manner. However, the purchase and registration of the software brings advantages such as technical support, several additional features that make the product more effective, and free upgrades for a limited period.

### ***Shareware limitations***

The specific shareware limitations are recorded in each separate document. The supplied documentation is the full set, it covers every feature of the full version of this software. Appendices at the end of each document list the limitations imposed by the shareware license.

If the registered version of this software is purchased, the following list of shareware restrictions will no longer be present.

- Only two named directories can to be included in the back-up plan, and only two directories can be excluded from the back-up. Sub-directories of included and excluded directories are automatically included in the back-up plan.
- The valid types of source and destination disk types are defined in the following table for each type of software release:

<u>Type of software</u>	<u>Valid source disks</u>	<u>Valid destination disks</u>
Shareware	Hard disk	Removable disk
Registered	Hard disk	Removable disk Hard disk
Network enabled	Hard disk Network disk	Removable disk Hard disk Network disk

- A sub-directory cannot be defined on the destination disk to store the back-up data. All back-ups are made into the root directory of the destination disk.
- Can only use one back-up plan per removable disk. Multiple back-ups to the same destination disk are not supported. This is a consequence of the previous restriction.
- The amount of space used on the destination disk cannot be limited. The back-up program will always fill the destination disk before it starts to reclaim space.
- The verbose back-up results screen is always displayed after a back-up has completed. You will need to explicitly exit the program from this screen.
- Long archive names will always be used. You will not be given the opportunity to use short 8.3 MS-DOS compatible archive names.