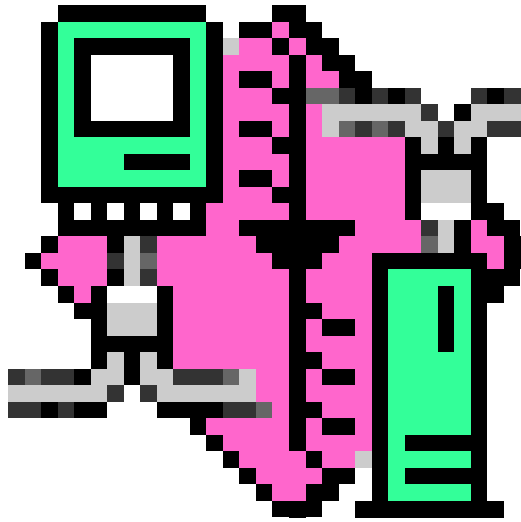


SmartSaver 1.8

the

SmartSaver™

backup system for the Macintosh™



Licence Agreement & Manual

SmartSaver 1.8

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Welcome to SmartSaver

Please read this manual before using SmartSaver. It will help you understand and enjoy the features that SmartSaver offers. Use it now to install SmartSaver in the way that fits your needs best, and to begin using SmartSaver. Use it later as a reference for day-to-day routines and for troubleshooting.

SmartSaver runs on Macintosh™ computers that use system software version 7.0 or later. To use this manual, basic knowledge of operations and vocabulary is required.

How to use this manual

To install SmartSaver and start using it, read chapter 1 and 2. To make optimal use of SmartSaver, read chapter 3.

- Use chapter 1, “Installing SmartSaver,” to install SmartSaver on your hard disk.
- Chapter 2, “Setting up SmartSaver,” describes the backup options that SmartSaver offers, and how to use them.
- Chapter 3, “Using SmartSaver,” covers the logging system, the different ways of making a backup, and the network features.

About SmartSaver

SmartSaver was designed and programmed by Berent Daan of Quality Works Software. However, its development was strongly influenced by a group of users, whose suggestions were essential in making SmartSaver a success.

SmartSaver helps you to back up changed and added files in your file system. It can use DiskDoubler™ to make compressed backups and to optimize speed. You have to specify source and destination locations and choose the appropriate settings. Then you can make SmartSaver trace the source and destination, and copy items on the source that are new or have been modified, to the destination.

If you want programming information or additional technical information, write to Quality Works:

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6828 GE Arnhem,

SmartSaver 1.8

The Netherlands.

+31 (0)85 515641

e-mail: berent@kgs.twi.tudelft.nl

Warning

Backing up your data is a very serious matter. That's why SmartSaver was developed in the first place. However, being selective when you back up is also important.

SmartSaver is equipped with two features that help you to limit garbage collection in backups and on the source location. These features are explained in "Move source files to the Trash" in chapter 2 and "Cleaning up the destination" in chapter 3. Please read those sections before using these features. Improper use can cause loss of data.

Installing SmartSaver

In this chapter you will find how to install SmartSaver on your hard disk. You'll find instructions for

- Installing SmartSaver on your hard disk
- Personalizing SmartSaver
- Making SmartSaver start up automatically

Installing SmartSaver on your hard disk

Positioning the SmartSaver icon

Basically, SmartSaver can reside on any place in your file system.

However, to be able to use all the features that SmartSaver offers, the SmartSaver icon, or an alias of it, has to be visible on your desktop. See “Controlling SmartSaver from the Finder” in chapter 3 if you want to know why.

So the best place for the SmartSaver icon is somewhere on your desktop. (It fits nicely beside the trash icon.)

Memory partition size

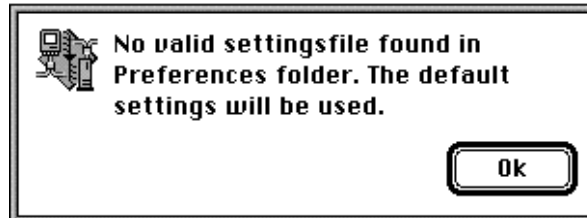
The partition size is the amount of memory that the system reserves for SmartSaver when it is running. SmartSaver's minimum partition size is set to 150 Kbytes. Usually this is enough, but SmartSaver can run out of memory. It will alert you when that happens, and it will suggest that you increase its partition size. See the manual that came with the system software for details on changing an application's partition size.

A bigger partition size will speed up SmartSaver when it is not using DiskDoubler compression.

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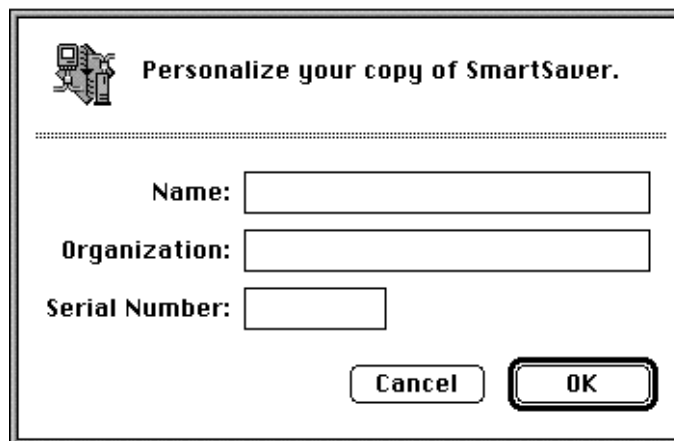
Personalizing SmartSaver

The first time that you start up SmartSaver, the following alert will appear:



This dialog just notifies you that SmartSaver was not set up yet. Click on the *OK* button.

If you have not personalised your copy of SmartSaver, first a shareware dialog will appear. If you choose the *Cancel* button, you can continue your trial period. When the 30 day trial period has passed, and you have registered your copy, you can click the *Register* button. After you have clicked the *Register* button, this dialog will appear:



The image shows a classic Windows-style dialog box. At the top left is a small icon of a computer monitor and keyboard. To its right is the title text "Personalize your copy of SmartSaver." Below the title is a horizontal dotted line. Underneath the line are three text labels with corresponding input boxes: "Name:" followed by a wide text box, "Organization:" followed by a wide text box, and "Serial Number:" followed by a narrower text box. At the bottom right of the dialog are two buttons: "Cancel" and "OK". The "OK" button is highlighted with a double border.

Fill in your name, organization and serial number. The serial number can be found on the label of your distribution disk.

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If the shareware startup dialog does not appear, your copy was already personalized. Usually, this means that you obtained your copy from another user. In this case, you should contact the author and get your own registration number. Read the licence agreement carefully before using the software.

Making SmartSaver start up automatically

If you want SmartSaver to remind you of saving your work before shutting down your computer, it has to be active when you choose the *Shut Down* menu command from the Finder's *Special* menu.

The best way to make sure SmartSaver is always active when the computer shuts down, is to have a SmartSaver settings file in the system's *Startup Items* folder. In this way, SmartSaver will always start up at boot time, and load the appropriate settings. Also, it will notify you immediately if something went wrong during the last save.

For details on creating a settings file, see "Creating a settings file" in the next chapter.

Setting up SmartSaver

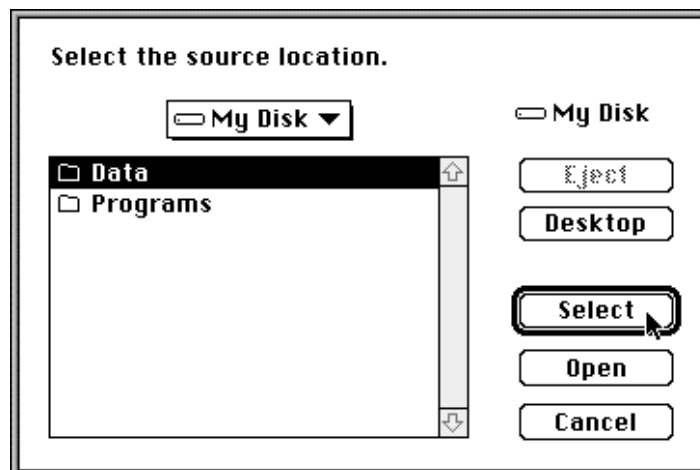
This chapter will show you how to set up SmartSaver. You can find instructions for

- Selecting source and destination locations
- Using the Settings dialog
- Creating a settings file

Selecting source and destination locations

Making a new selection

To select the source location, choose the *Source* menu command from the *Set* menu. The following dialog will appear:



Select the folder or disk you want to back up, and click on the *Select* button. In this case, the folder *Data* on the disk *My Disk* is selected to be backed up.

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To select the destination location, choose the *Destination* menu command from the *Set* menu. A similar dialog will appear.

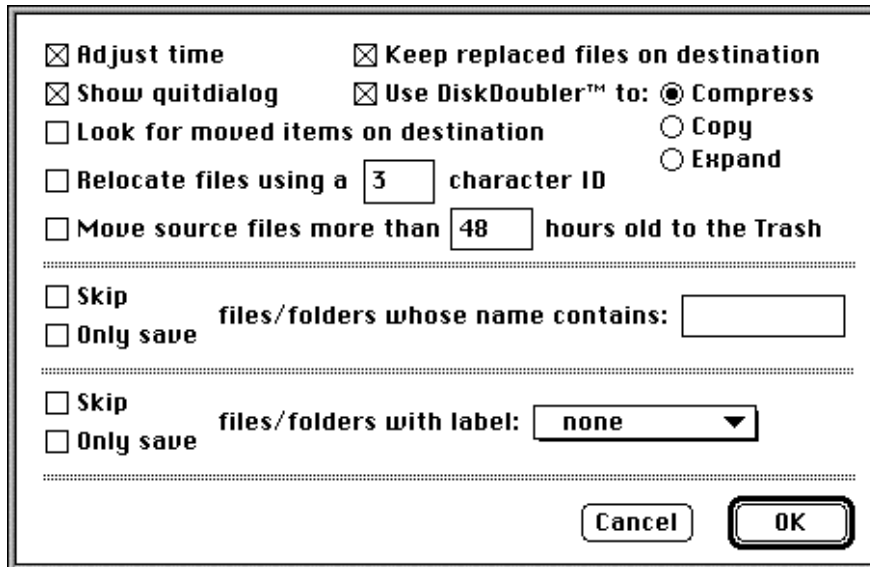
Finding out what the current selection is

When a location selection dialog is opened, SmartSaver tries to select the location that is currently set. You can easily find out what the current source or destination location is by opening the appropriate dialog, and clicking the *Cancel* button.

When you have previously selected a location on a volume that is not mounted when you open the location selection dialog, SmartSaver will try to mount that volume. If it does not succeed in mounting the volume, it can not show you what the last location setting was. The setting is still active though, and will not be changed until you click on the *Select* button.

Using the Settings dialog

When you choose the *Settings* menu command from the *Set* menu, the following dialog will appear.



The screenshot shows a settings dialog box with the following options and controls:

- Adjust time
- Keep replaced files on destination
- Show quitdialog
- Use DiskDoubler™ to: Compress
- Look for moved items on destination
- Copy
- Relocate files using a character ID
- Expand
- Move source files more than hours old to the Trash

Skip files/folders whose name contains:

Only save

Skip files/folders with label:

Only save

In this section, each option that can be controlled with the settings dialog will be discussed.

Adjust time

SmartSaver does not change the attributes of the files it saves.

It will work even if the clock on the computer you're saving to is set to a different time.

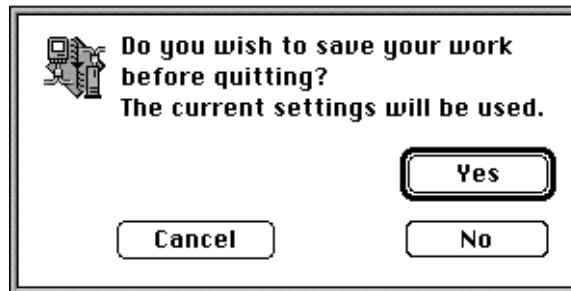
The *Adjust time* option is only relevant when the files you want to backup are edited on multiple computers in a network environment. When these files are backed up on the same destination location, it is important that the clocks on the different computers are properly synchronised. This is necessary in order to make sure that the backup of every file is always the latest version of that file.

If you switch on the *Adjust time* option in the settings dialog, SmartSaver will change the time on your system when it differs more than five minutes from the time on the computer that the destination location is on. SmartSaver will check the time before executing a save command. SmartSaver will notify you when it changes the time on your system.

Δ Note that some Unix servers return Greenwich Mean Time (unlocalised time). The *Adjust time* option can not be used when the destination is on these servers. This will be fixed in future versions of SmartSaver.

Show quit dialog

When this option is switched on, SmartSaver will show the following dialog before quitting.



When you click the *Yes* button, SmartSaver will perform a save using the current settings before quitting.

When you shut down your Macintosh and SmartSaver is active, you can make SmartSaver save all your work to the destination folder before letting your Mac shut down.

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You don't have to wait until SmartSaver is finished. Your computer will automatically shut down when the save is completed.

SmartSaver will only show the quit dialog when it receives a *Quit Application Apple Event* (usually from the Finder). So you won't see the dialog when you quit SmartSaver using its *Quit* menu command.

Keep replaced files on destination

While copying a file, SmartSaver moves the old version of the file, if present, to a folder named *SS Replaced* on the destination location. If not already present, the *SS Replaced* folder is created.

If an error occurs during copying, e.g. when the destination disk is full, SmartSaver tries to delete the incomplete file, and places the old version back from the *SS Replaced* folder.

You can make SmartSaver keep the old versions of the replaced files in the *SS Replaced* folder, by switching on the *Keep replaced files on destination* option. If the option is switched off, SmartSaver will delete the old versions after replacing them successfully.

Use DiskDoubler™ to Compress, Copy or Expand files

If the *Use DiskDoubler*[™] option in the settings dialog is switched on, SmartSaver will use DiskDoubler to perform the operation selected with the *Compress*, *Copy* and *Expand* radio buttons. The *Expand* operation can be used to restore a backup. The *Copy* operation is added to allow AutoDoubler[™] users to use optimal copy procedures. When the *Compress* operation is selected, SmartSaver will order DiskDoubler to compress the files it saves to the destination. This is done before the file is copied, so that the compressed version is transferred to the destination location. This does not only reduce the size of your backup. It also speeds up transfer times considerably.

If DiskDoubler is not active, the *Use DiskDoubler*[™] check box in the settings dialog will be disabled.

Relocate files

SmartSaver supports a powerful feature: File relocation.

File relocation is based on the idea that files can be classified using the first characters of their name as an identifier. You can set the number of characters used as an identifier in the settings dialog.







If the *Relocate files* option is switched on, SmartSaver will group the files by their identifier in separate folders on the destination. A folder with a name identical to the identifier is created on the destination, if a folder with the identifier in its name does not already exist.






For example, you have chosen a 3-character identifier and selected the following locations:

Source:

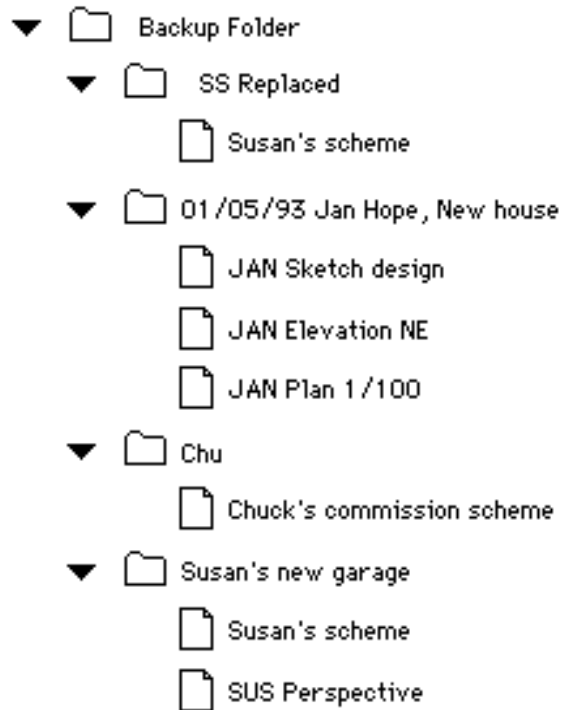
Destination:

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- ▼  My Data Folder
 -  JAN Elevation NE
 -  JAN Plan 1/100
 -  SUS Perspective
 -  Susan's scheme
 -  Chuck's commission scheme

- ▼  Backup Folder
 - ▼  Susan's new garage
 -  Susan's scheme
 - ▼  01/05/93 Jan Hope, New house
 -  JAN Sketch design

After saving with SmartSaver your backup will look like this:



In this particular case, the file *Susan's scheme* was replaced, and the old version was kept in the *SS Replaced* folder.

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Relocating is not case-sensitive: an A is considered equal to an a .

Move source files to the Trash

To trash outdated files during a save command, you have to specify a time limit in the settings dialog. If a file on the source has not been modified since the specified time limit, and an up-to-date version of the file already exists on the destination, the file is moved to the system's *Trash* folder.

Files that are used as templates or databases tend to end up in the trash in this way. If you want to use this option and have such files that are rarely modified in your source, give them a particular label or name, and make SmartSaver skip them using the selection options. (See next section: "Selecting files")

Look for moved items on destination

When the *Look for moved items on destination* option is switched on, SmartSaver will start every save command with building a list of all the items in the destination. This list will be used to look for moved items on the destination location.

SmartSaver assumes that a file was moved when a file does not exist on the destination, and a single file with the same name and creation date was found on an other location on the destination, which does not exist on that location on the source. When such a moved file is found, it is moved to the new location on the destination.

Using this option, you can freely move files on the source, and make SmartSaver do the same thing for you on the destination.

Selecting files

SmartSaver can skip files with a name containing or not containing a specified string, or files which have a specified label.

Strings For example, if you don't want to save backup files made by Microsoft Word™, you can make SmartSaver skip all files with a name containing the string "Backup of". This way, only the original documents will be saved, because Word uses this string for naming its backup files.

Δ Note that the string comparison is case-sensitive: an *A* is not considered equal to an *a*.

Labels Using labels, you have the possibility to dynamically select the items you want to save. For example, you have a list of folders containing data grouped by project, and want to save a selection of these folders. You can label the folders you don't want to save, and make SmartSaver skip items with that label.

Δ Please note that the Finder tends to update the label information of files and folders after you close the Finder window they are listed in. So if you change labels in the Finder, close and reopen the window before relying on SmartSaver to notice the changes.

Creating a settings file

Once you have set up SmartSaver according to your wishes, you are ready to create a settings file.

When you quit SmartSaver, the last settings are automatically saved in the system's *Preferences* folder. And when you open SmartSaver later, these settings are recovered. However, if you want to use SmartSaver for more than one configuration, it is useful to create your own settings file.

You can create a settings file by choosing the *Save settings* menu command from the *File* menu.

If you want SmartSaver to open when you start up your Macintosh, just save a settings file in the system's *Startup Items* folder. In this way, you will be sure that the right settings are loaded at startup time.

Using SmartSaver

If you have read the first two chapters, you now know how to make a backup with SmartSaver. But there is more. This chapter tells you about

- The log window
- Controlling SmartSaver from the Finder
- Cleaning up the destination
- SmartSaver network features

The log window

SmartSaver provides you with a log window. All actions and messages are reported in the log window. The log window can be hidden by clicking its close box, and you can make it visible again by selecting the *Show log window* menu command from the *Set* menu.

The contents of the log window are kept in the file *SmartSaver Log* in the system's *Preferences* folder. This file is of type 'TEXT', and can be opened in TeachText or any other word processor.

You can save, open and print log files using the appropriate *File* menu commands.

Controlling SmartSaver from the Finder

There are two ways to control SmartSaver from the Finder.

- By dragging and dropping files on the SmartSaver icon
- By giving a save command from the finder

Dragging and dropping

Settings & log files When you drop a settings or log file on the SmartSaver icon, or double click it, that file is opened. If needed, SmartSaver will automatically mount the volume(s) on which the selected locations reside when you choose the *Save smart* menu command from the *File* menu. See the next section, “Printing settings files” if you want SmartSaver to automatically perform a save after the settings file is opened.

Other files When you drop an other file on the SmartSaver icon, this file is saved to the current destination. SmartSaver tries to find the right location for it on the destination. The source in the settings remains the same.

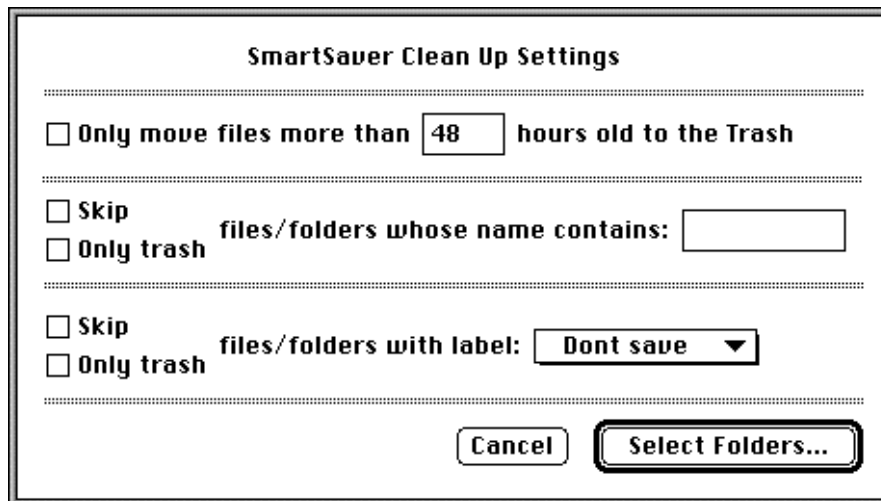
Folders When you drop a folder on the SmartSaver icon, this folder is considered the source folder, and SmartSaver starts to save it to the current destination. Again, the settings remain unchanged.

Giving a save command from the Finder

When you select one or more settings files in the Finder, and choose the *Print* menu command from the Finder's *File* menu, SmartSaver will load all the selected settings files, and perform a save for each one of these.

This can be handy when you want to make SmartSaver save a set of sources to a set of destinations. You can make a settings file for each source/destination combination, and give a print command for them from the Finder.

Cleaning up one location compared to another
The *Clean up* menu command from the *File* menu can be used to remove all files from one directory tree which do not exist on the same spot in an other directory tree. When you choose *Clean up* from the *File* menu, the following dialog will appear.



You can use this dialog to prevent files that have recently been modified from being moved to the trash.

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The selection options work the same way as the file selection options in the settings dialog. See “Selecting files” in chapter 2 for details.

When you click on the *Select folders* button, two more dialogs follow, that allow you to select the location to clean up and the location to compare to. SmartSaver will try to select the destination and source locations from the settings in these dialogs for you. You only have to click the *Select* button, or press the return key. An other dialog will appear finally, giving you a last chance to cancel the operation.

Δ Note that items are not really deleted until you choose the *Empty Trash* menu command from the Finder's *Special* menu.

When to use clean up?

For example, you have cleaned up your data manually. You have reorganised its structure here and there, and removed some files. It is a waste of time to repeat all that work on your backup, or to make a whole new backup. Choose *Clean up* from the *File* menu, and SmartSaver will clean up your backup for you.

Δ Note that this feature should not be used when file relocation has been used to make the backup, because source and destination can have a different structure then.

The Trace command

When you keep the option key pressed, the *Clean Up* command changes to a *Trace* command. The *Trace* command lets you select a location, and then lists all the files which occur more than once in the selected location. This can be used to find undesired doubles of files.

SmartSaver network features

From SmartSaver, you can order any other copy of SmartSaver running on a computer in the network to perform certain tasks. In the *Send* menu you will find five commands:

- Save
- Save using settings
- Shut down
- Send message
- Start remote SmartSaver

Save Send a save command to a SmartSaver

Save using settings Send a combined open settings and save command to a SmartSaver.

Shut down Send a SmartSaver a command to shut down the computer it is running on. With the option key depressed, this command changes to a *Quit* command, which will just quit the remote SmartSaver.

Send message Send a message to a user who has a SmartSaver active on his computer

Start remote Send the Finder on a computer in the network a command to start a SmartSaver, using a certain settings file.

Δ Note that you have to activate *Program Linking* in the *Sharing Setup* control panel, and set the appropriate privileges in the *Users & Groups* control panel to enable the commands under the *Send* menu.