



User's Manual



Intego Personal Backup X for Macintosh

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www.intego.com

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Personal Backup X uses the MülleCipher framework by Mülle kybernetik..



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1- About Intego Personal Backup X

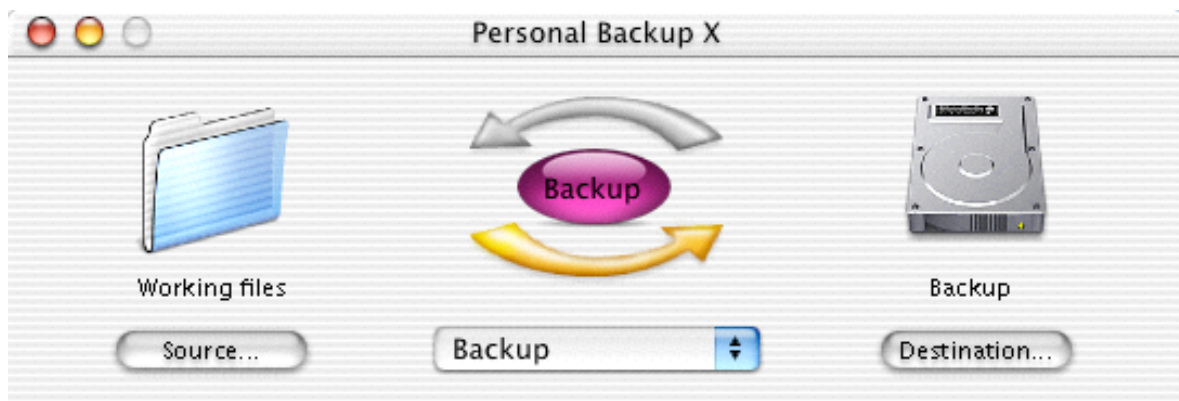


What is Intego Personal Backup X?

Intego Personal Backup X is the backup solution for Macintosh computers running Mac OS X. It offers a full range of backup function to ensure that your data, files, applications and system are fully protected.

Intego Personal Backup X backs up your files automatically or manually, to removable media (such as recordable CD-Roms or Zip cartridges), to partitions on your hard disk, to network volumes, to external hard drives (USB, Firewire or SCSI) or to disk image files. Intego Personal Backup X also restores backups, synchronizes data between two computers (such as a desktop computer and an iBook or PowerBook), and clones your Mac OS X volume.

Backing up files with Intego Personal Backup X can be as simple as just dragging and dropping a source folder and a destination folder on the Intego Personal Backup X window, then clicking the Backup button. But Intego Personal Backup X's advanced mode lets you make your own backup scripts, with just a few clicks, and unleashes all the power of Intego Personal Backup X.



Intego Personal Backup X's Features

Intego Personal Backup X has a full range of backup and restoration features, to protect your data simply and easily.

Backup

Intego Personal Backup X backs up your data, either automatically or manually, to removable media (such as recordable CD-Roms or Zip cartridges), to partitions on your hard disk, to network volumes, to external hard drives (USB, Firewire or SCSI) or to disk image files. You can choose to backup specific folders or entire volumes or hard disks, and run each backup with a single mouse-click.

Restore

If you lose data, Intego Personal Backup X lets you restore your backup with just a click. This replaces all your files exactly as they were when you last ran a backup. Or, if you need to find just one file that you backed up, you can copy it individually from the Finder—Intego Personal Backup X saves files in standard file and folder format, and does not use a special file that you can only access with the program.

Synchronize

If you work with two computers, such as a desktop Mac and an iBook or PowerBook, you know how complicated it can be to make sure you have the latest versions of all your files on both computers. Intego Personal Backup X lets you synchronize files between two computers with a single mouse-click—it copies the



latest version of each file to both computers, so, after the synchronization is completed, they both contain the exact same data.

Clone

To back up an entire volume, partition or hard disk under Mac OS X, you cannot simply copy it to another location. Mac OS X has many invisible files that the user cannot access, which the Finder does not copy. Intego Personal Backup X lets you clone a volume, partition or hard disk to another volume. This makes an exact duplicate of the original volume that you can even use as a startup volume. You can use this, for example, if you want to use an external hard drive which contains your Mac OS X system to boot on more than one computer. Or, clone your Mac OS X volume to make sure you have a bootable backup at all times.

Custom Backup Scripts

While backing up data with Intego Personal Backup X can be done with just a mouse-click, Intego Personal Backup X's advanced mode lets you define custom backup scripts. You can choose from a wide range of options, such as which files to copy or to exclude, how Intego Personal Backup X reacts when confronted with changed files in both the source and destination folders, or automatic schedules so you don't even need to remember to run backups. Intego Personal Backup X's advanced mode gives you full control over every option available for your backups, restorations, synchronizations, and clones.



Using this User's Manual

Intego Personal Backup X is so easy to use that most people, who only want to run simple backups, can start using it in just a few seconds. Read chapter 4, **Quick Start**, and learn how you can backup up your data with a single mouse-click.

To have a better understanding of why you should back up your data, and some ideas on backup strategies, read chapter 2, **Introduction to Backups**, and then go on to chapter 3, **Installation**. If you feel you have learned enough, you can stop there—Intego Personal Backup X lets you back up, restore and synchronize data with unprecedented ease.

To learn how to make your own backup scripts, read chapter 6, **Creating Backup Scripts**. This chapter tells you how to unleash all the power of Intego Personal Backup X, how to run scheduled backups, run backups with certain files excluded, how to mount network volumes automatically, and much more.

A glossary at the end of the manual defines the specific terms used.



2 - Introduction to Backups



Why You Need to Protect your Data

Whether you use your Mac for work or for play, you devote a lot of time to creating and editing files, installing applications, and installing and maintaining your Mac OS X system. If you use your computer at home, you may have banking records, e-mail archives, databases of your collections, school reports or digital pictures of your family. At work, you certainly have documents and files that are essential for your job or business—reports, spreadsheets, databases and more. All these files are valuable and many of them, such as the pictures of your last vacation, or your latest accounting report, are irreplaceable.

If you don't back up your files, you may have an unpleasant surprise some day. When you look for your files and find they are missing, there is usually little you can do, except feel guilty about not being more prudent, and make a resolution to back up your files more often. Backing up your data is so easy with Intego Personal Backup X that you can just drag and drop folders, click the mouse, and make sure that your data is safe and sound.

How You Can Lose Data

There are many ways you can lose data, and each one is a reason why you should regularly back up your files. Other than just accidentally erasing a file or folder, here are some of the ways that data can disappear:

- If a program crashes while a file is open, the file can become corrupted, and you can lose its contents,
- If you have a power outage, and do not have a backup power supply, you can not only lose the files you were working on at the time, but you may



have more serious problems with your hard disk, affecting some or all of your files,

- If your hard disk crashes, or if its directory is damaged, you can lose some or all of the files it contains,
- If you have other hardware problems, with other components of your computer, your data may be affected as well,
- If a virus infects your computer, or certain files it contains, they may become corrupted and you may not be able to recuperate their contents (Intego VirusBarrier X protects against all known viruses, and can help protect your data—if you have Intego VirusBarrier X installed, it checks all your files while Intego Personal Backup X copies them during backups),
- If a hacker attacks your computer, they may erase some or all of its files, or corrupt them (Intego NetBarrier X blocks all types of hacker attacks, protecting your computer and its data),
- If someone steals your computer, or if you lose or misplace it, all your data is lost,
- If you suffer from a disaster, such as a fire, flood, or earthquake, it is likely that you will lose some or all of your data,
- Finally, if you erase a file by accident, you may not be able to retrieve it, even with file recovery programs.

Backup Frequency

The frequency at which you should back up your files and data depends on how often you make changes to your files. One of the basic rules for backing up data is determining how much time it will take to restore lost files. For people working 9 to 5 who change files constantly during the day, the loss of a file at, say, 12 noon will probably mean they need 3 hours to get the file back to its condition when it was lost (if it is possible to do so).



Chapter 2 – Introduction to Backups

The safest way to ensure that you don't lose data is to regularly make copies of your files. First, if you are working on something critical, it doesn't hurt to copy it once every hour or two to another disk or partition, or to a network volume if you are on a network. Then, at least once a day, you should make a more complete backup of your working files. Again, this backup can be to another disk or partition, or to removable media, such as a CD-Rom or Zip cartridge.

It is useful to make weekly backups of all your files, whether you have worked on them or not—using Intego Personal Backup X, you can make incremental backups, replacing only those files that have changed and copying new files. In addition, these weekly backups can be taken off-site, to protect against theft, fire or other disasters, to ensure that your data is always available.

You can back up your Applications folder, which can save you from having to reinstall many of your applications if you have a disk problem. Not all applications will work if you restore them in this manner, though; some applications install files in other areas on your disk, but many do not.

Some people like to back up their entire operating system before making any upgrades. With Intego Personal Backup X, you can clone your entire startup volume, ensuring that if something goes wrong with an upgrade you can replace the entire system and get back to work without having to reinstall it. It can be useful to back up your Mac OS X startup volume occasionally, just as insurance, in case you suffer major disk problems or cannot start up your computer for other reasons. If you back up your startup volume to an external hard drive, such as a USB or Firewire drive, you can restart your Mac from this disk, and restore the system easily.

In any case, you should back up your data regularly, and develop a backup strategy that corresponds to the way you work. If you have a Mac at home, you



Chapter 2 – Introduction to Backups

may not need much more than a Zip drive to back up all your data; but if you are in a company, you may need several CD-Roms, or an external device such as a hard drive, tape drive, or other network storage system.

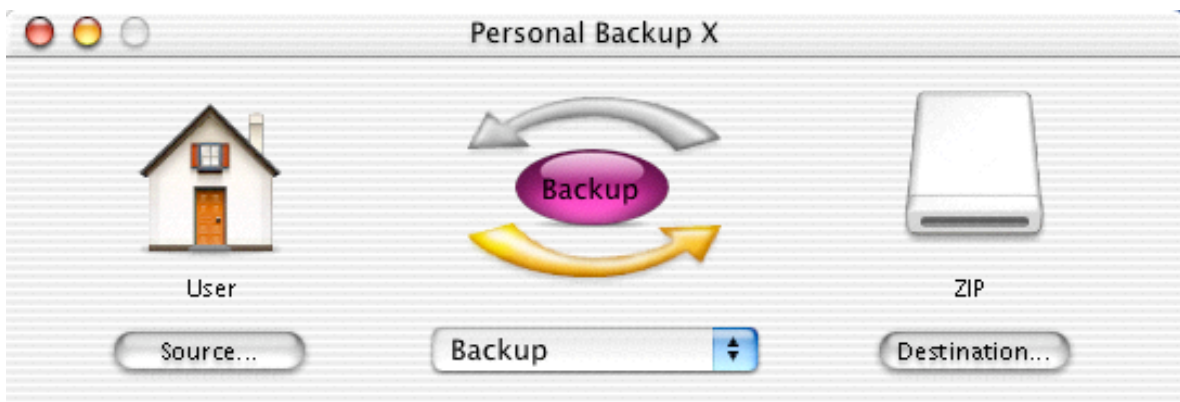


Some Examples of Backup Scenarios

Different uses lead to different backup strategies. Whether you are a home user, an educational user, or work in a large corporation, you have different needs for backing up your data. Intego Personal Backup X can handle all of your needs, from the simplest to the most complex. The following are a few examples of how you can use Intego Personal Backup X.

Backing up Data to an External Medium

If you are a home user, you probably don't have too much data to back up, and a Zip cartridge or CD-Rom (either writeable or rewritable) may be the ideal choice for you. You can use Intego Personal Backup X to copy your Home folder (which should contain all your important data) by simply dragging its icon onto the Source section of the Intego Personal Backup X window, and dragging your Zip cartridge or CD-Rom onto the Destination section of the window.



Just click the Backup button, and Intego Personal Backup X will copy your entire Home folder to the Zip cartridge or CD-Rom. (CD-Roms hold 650 or 700



Chapter 2 – Introduction to Backups

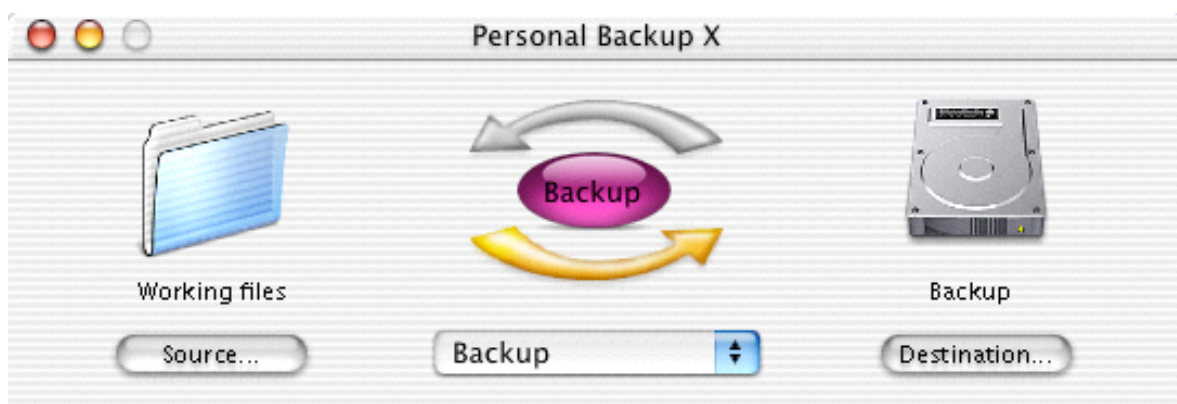
megabytes of data, and Zip cartridges hold 100, 250 or 750 megabytes. Choose what best corresponds to the amount of data you have to back up.)

Backing up Data to an Internal or External Volume

If you work in a small business, you have important data that you need to back up on a regular basis. You should do this at least daily, though backing up twice a day is even safer. Remember, if you lose your files, you may need to do your work all over again, and this costs you time and money.

For this type of usage, a good strategy is to back up your data on two different media: if you have more than one hard drive in your Mac, or if your drive is partitioned, you can back up your data first internally, to a different volume, then externally, to either a network volume, an external hard drive, tape drive, or other medium.

Just as in the above scenario, you can simply drag the folder containing your working files onto the Source section of the Intego Personal Backup X window, and drag the destination volume onto the Destination section.



Chapter 2 – Introduction to Backups

Click the Backup button, and Intego Personal Backup X starts running your backup.

But if you want more power, you can take advantage of Intego Personal Backup X's backup scripts, and create one or several scripts that automatically back up your data. You don't even need to be reminded— Intego Personal Backup X runs in the background at the appointed time. (For more on creating and using backup scripts, see chapter 6, **Creating Backup Scripts**.)

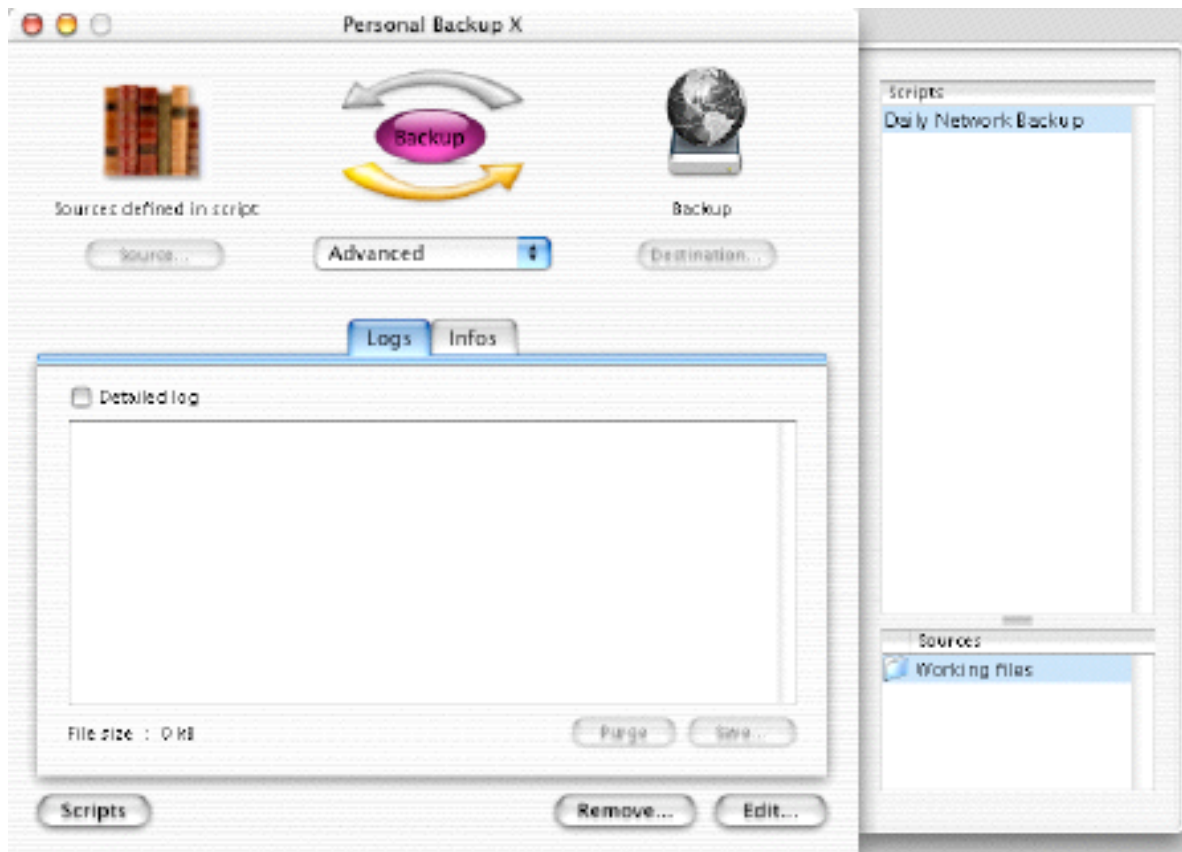
Running a Daily Backup Cycle

In larger companies, where there is much more data to back up, and where the files are worth much more, a daily backup cycle is one of the best strategies. In addition to backups during the day, you can have Intego Personal Backup X run a daily backup at the end of each day to a network volume. A good way to do this is to create a disk image file for each day of the week and to back up your data to these disk images. In this way, on Mondays, last week's Monday disk image is replaced by the new one, but, in case your backup becomes corrupted, you still have the previous four days' backups as extra safekeeping.

Using Intego Personal Backup X's advanced mode, you can create a series of scripts that automatically create a disk image for each day, mount the network volume, and copy all your files.



Chapter 2 – Introduction to Backups



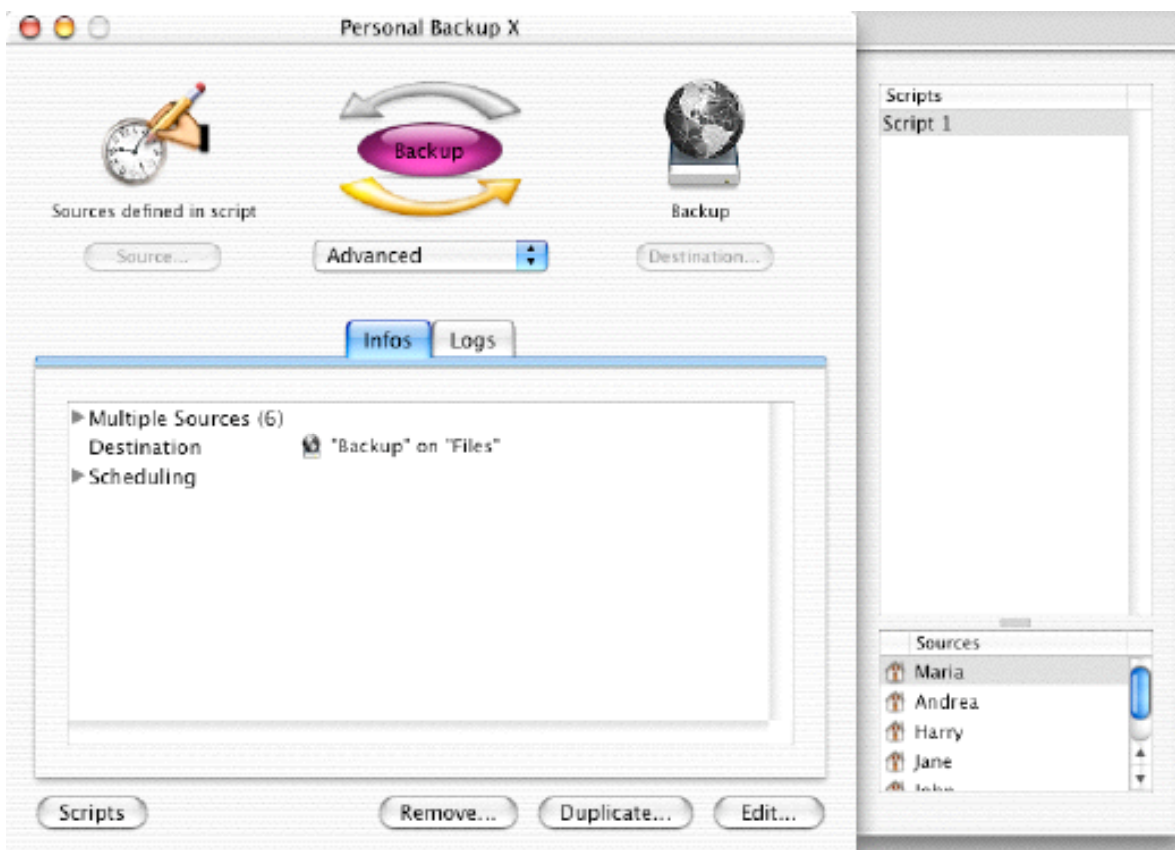
(For more on creating and using backup scripts, see chapter 6, **Creating Backup Scripts**.)



Backing Up a Group of User Folders

Since Mac OS X is a multi-user operating system, each user has their own Home folder, which contains their documents, preferences, and any applications that only certain users can access. If you manage a network with many users, you may need to back up these user folders regularly.

Using Intego Personal Backup X's advanced mode, you can create a script that—manually or automatically—copies all your users' Home folders at once, onto any volume you wish. After you have created the script, just one click the Backup button, and Intego Personal Backup X takes care of the rest.



Chapter 2 – Introduction to Backups

(For more on creating and using backup scripts, see chapter 6, **Creating Backup Scripts**.)

While these backup scenarios may not correspond exactly to the type of data you have to protect and the way you work, they give you an idea of what Intego Personal Backup X can do. Chapter 6, **Creating Backup Scripts**, looks at these scenarios in detail, but also shows you all the other options available with Intego Personal Backup X. Whatever your backup needs, Intego Personal Backup X protects your world.



3 - Installation



System Requirements

- Any officially-supported Mac OS X compatible computer
- Mac OS X 10.1.1 or higher, or Mac OS X Server 10.1.1 or higher
- 10 MB free hard disk space
- Minimum screen resolution 800 x 600

Installing Intego Personal Backup X

Installing Intego Personal Backup X is very simple. Insert the Intego Personal Backup X CD-ROM in your computer's CD-ROM drive. (If you have purchased Intego Personal Backup X by download, you will have a disk image file, called Intego Personal Backup X.dmg. Double-click this file to open the disk image, which will mount on the desktop.) A window will open, containing the Intego Personal Backup X installer, the Read me file, the Intego Personal Backup X manual (this file), and an Acrobat Reader installer.

First, read the Read me file, for any late-breaking changes.

Then, double-click the Intego Personal Backup X installer.



Personal Backup X Install



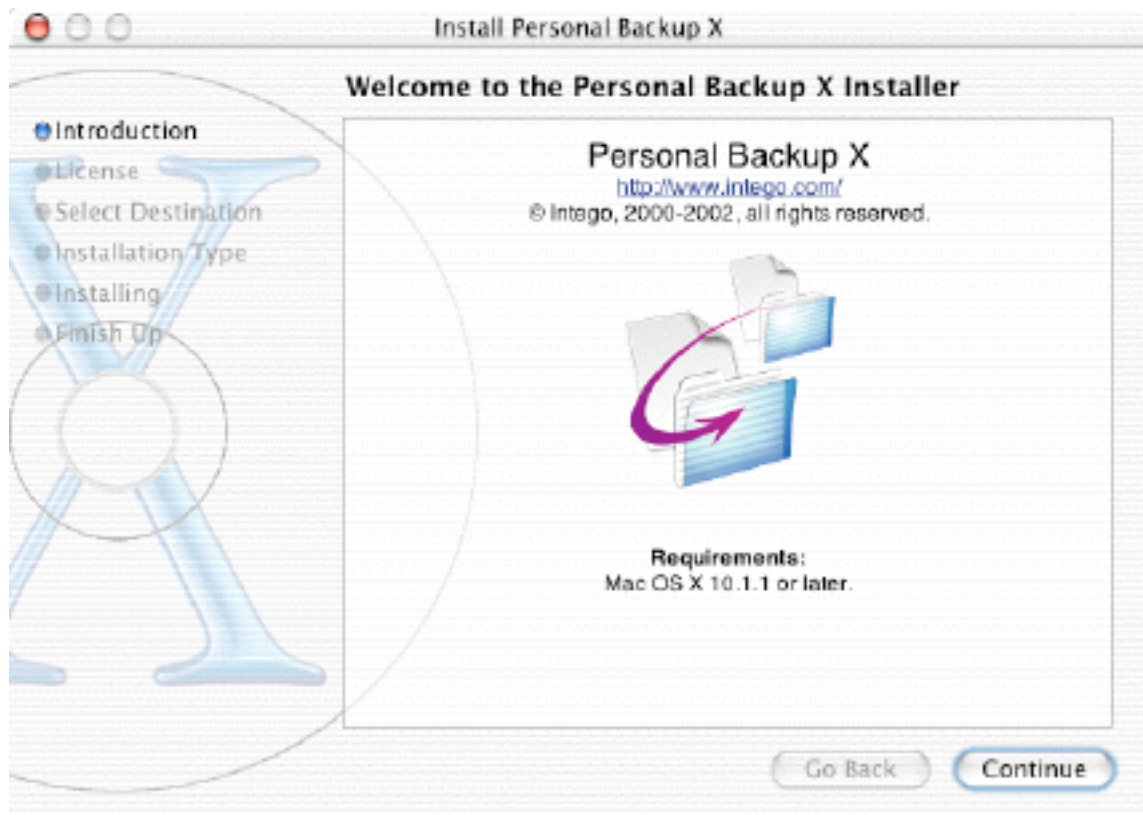
Chapter 3 – Installation

A window will present you with two options: Install and Uninstall. Click Install to install Intego Personal Backup X. If you ever need to uninstall the program, use the Uninstall button.



Chapter 3 – Installation

You will see a window informing you that you must enter an administrator's password to install Intego Personal Backup X. Click the lock to enter your password, or enter your password in the dialogue that is displayed (OS X 10.2 or later). Enter your password, then click OK. The following window will be displayed:



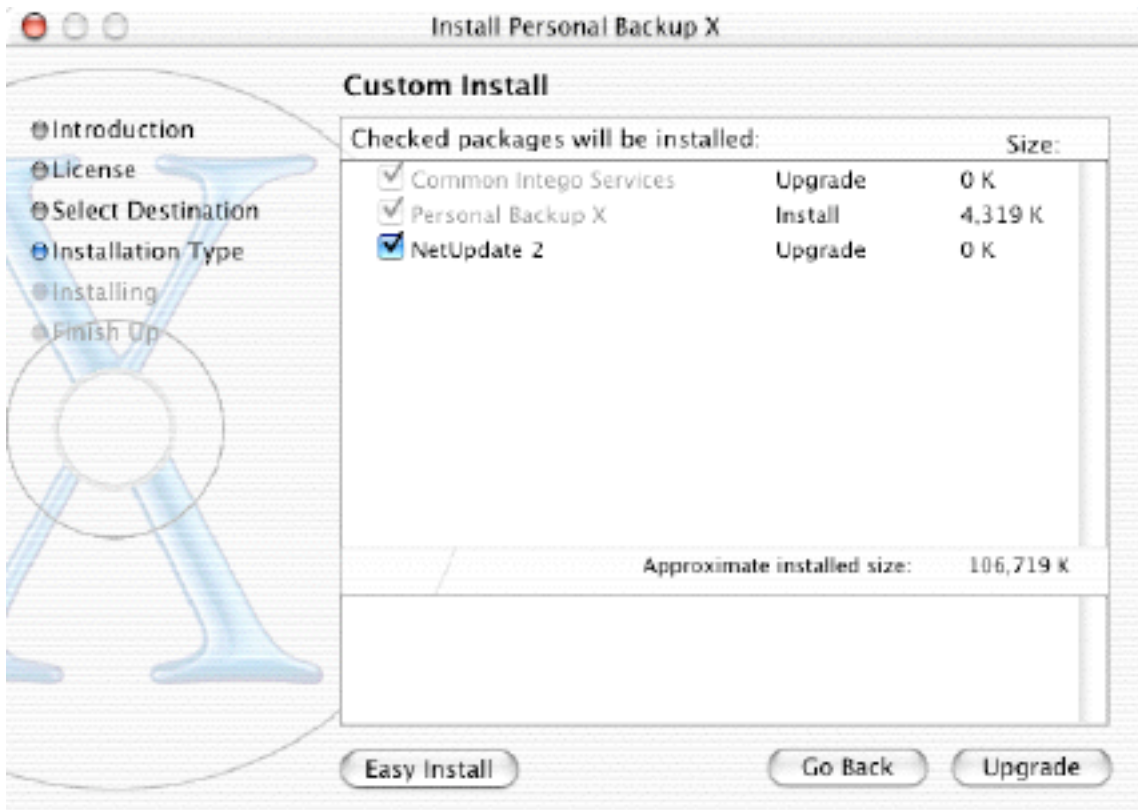
Click continue to proceed with installation. The Intego software license will be displayed. Click Continue, then click Agree if you accept this license; if not, click Disagree, and the installer will quit.

The next window will show all the available disks or volumes on your computer. Select the disk or volume where you want to install Intego Personal Backup X then click Continue.



Chapter 3 – Installation

Click Install to install Intego Personal Backup X. This will perform a basic installation. If you wish to perform a custom installation, click Customize. The following window will be displayed:



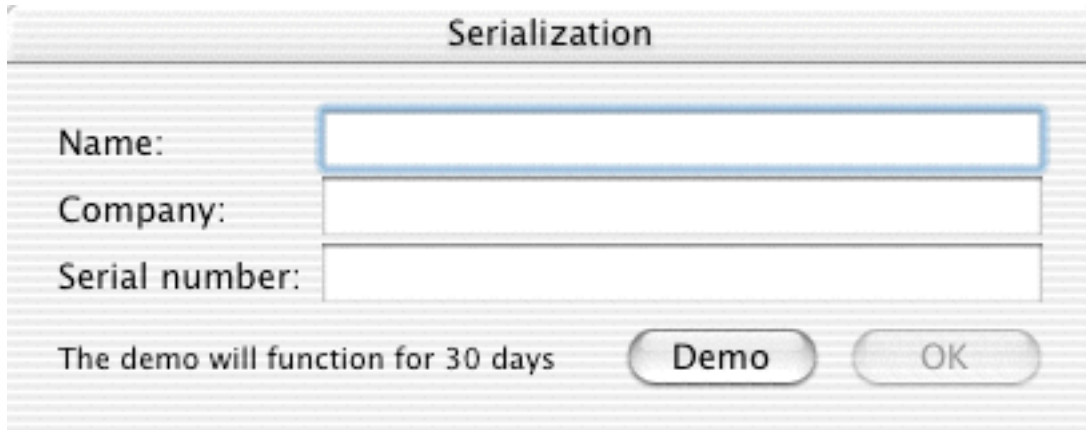
This window lets you choose which items will be installed. As you can see, the Common Intego Services check box is grayed out, because this must be installed. You have the choice of installing Intego Personal Backup X, NetUpdate or both. If you already have other Intego programs installed on your computer, you will see the option to Upgrade the installation—this means that certain components used by all Intego programs will not be reinstalled.

After installation, you will have to restart your computer.



Registering Intego Personal Backup X

When you restart your computer, open Intego Personal Backup X - it is found in your Applications folder. Intego Personal Backup X will open its Registration program, and display the following window:



The screenshot shows a window titled "Serialization" with three input fields: "Name:", "Company:", and "Serial number:". Below the fields, there is a status message "The demo will function for 30 days" and two buttons: "Demo" and "OK".

You must enter your name, company, if any, and your serial number. The serial number is found on a sticker on the Intego Personal Backup X CD. When registration is completed, Intego Personal Backup X will open.



Using Intego Personal Backup X in Evaluation Mode

Intego Personal Backup X offers an evaluation mode, to allow you to discover how it works before purchasing the program. To use Intego Personal Backup X in evaluation mode, click Demo when the registration screen displays.

When Intego Personal Backup X runs in evaluation mode, it functions for 30 days. At the end of this period, you can either purchase a license for Intego Personal Backup X, or delete the program.

You can find out how much time is left in your evaluation session by choosing **Serialization...** from the Intego Personal Backup X menu. This screen tells you that the program is in evaluation mode, and shows the time remaining. When you purchase a license, you can enter your serial number here to run the program normally.



4 - Quick Start

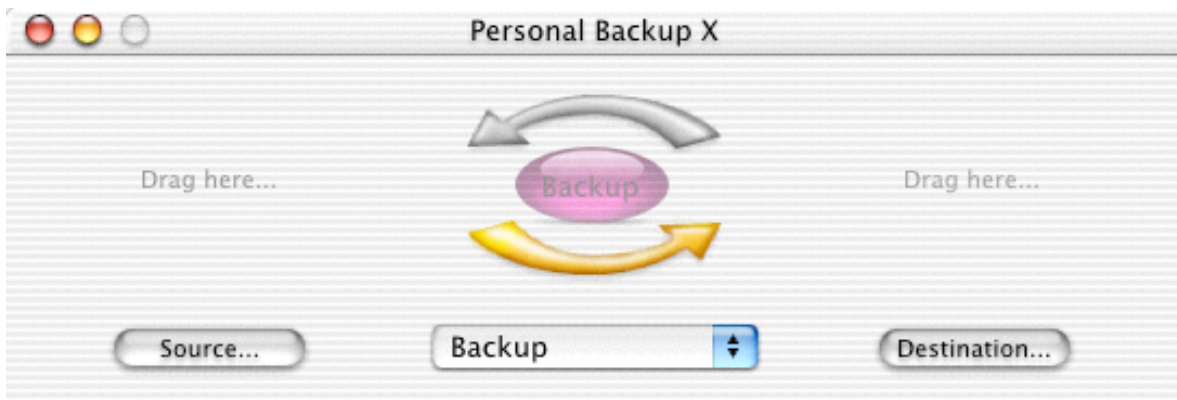


Your First Backup with Intego Personal Backup X

Intego Personal Backup X is installed in your Applications folder. If you go to that folder, you will see the program's icon:

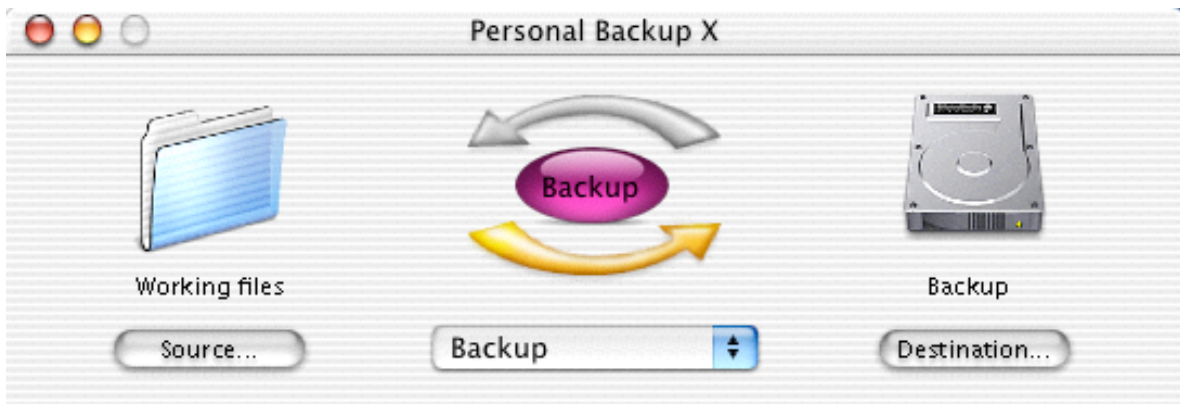


Double-click this icon to open Intego Personal Backup X, and you will see the Backup window. The first time you open Intego Personal Backup X, the window will look like this:



To run your first backup, just drag a folder containing the files you want to back up on the left side of the window, over the words Drag here..., and drag the destination folder or volume to the right section. Your window will look something like this:





To run your backup, just click the Backup button. Intego Personal Backup X will back up all the files in the source folder to the destination folder or volume. By default, all files are copied, except invisible files and files that you do not have permission to copy (system files). When you update a backup, and files in the source have been updated, Intego Personal Backup X automatically replaces the same files in the destination by the newer versions. If files in the source have been deleted, Intego Personal Backup X leaves them in the destination.

For more detailed information on using Intego Personal Backup X, including how to restore files, how to synchronize two volumes, and how to clone a volume, see chapter 5, **Using Intego Personal Backup X**. To learn how to write your own backup scripts, and unleash all of Intego Personal Backup X's functions and options, see chapter 6, **Creating Backup Scripts**.



5 - Using Intego Personal Backup X



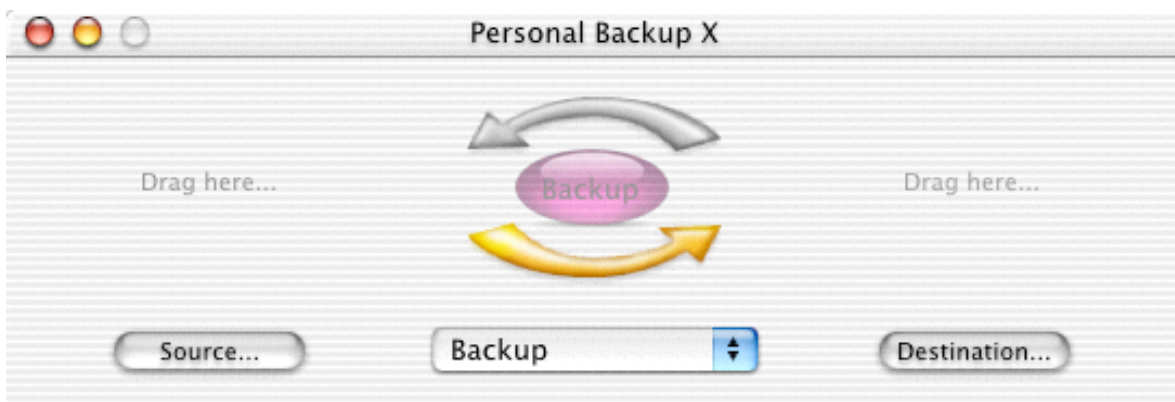
Chapter 5 - Using Intego Personal Backup X

Intego Personal Backup X is a powerful, easy-to-use program that lets you back up, restore and synchronize data, and also lets you clone volumes. Intego Personal Backup X backs up your files automatically or manually to removable media (such as recordable CD-Roms or Zip cartridges), to partitions on your hard disk, to network volumes, to external hard drives (USB, Firewire or SCSI) or to disk images. Intego Personal Backup X also restores backups, synchronizes data between two computers (such as a desktop computer and an iBook or PowerBook), and clones your Mac OS X volume.

Intego Personal Backup X is installed in your Applications folder. If you go to that folder, you will see the program's icon:

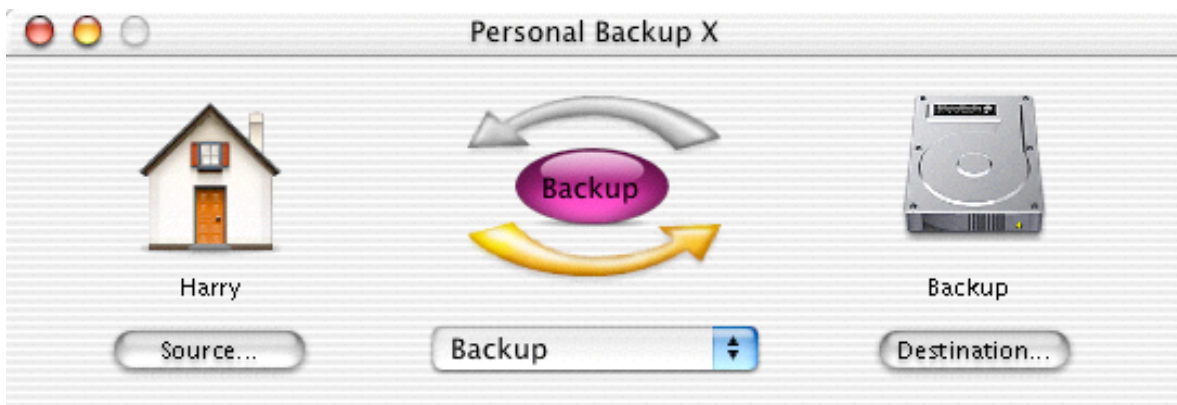


Double-click this icon to open Intego Personal Backup X, and you will see the Backup window. The first time you open Intego Personal Backup X, the window will look like this:



Backing Up Data

To set up a backup, just drag a folder containing the files you want to back up on the left side of the window, over the words Drag here..., and drag the destination folder or volume to the right section. Your window will look something like this:



You can also select the source and destination folders or volumes by clicking the Source... and Destination... buttons. When you click one of these buttons, a standard Mac OS X file navigation dialogue will open. Select the folder or volume you wish to use, then click Open. The folder or volume will be selected as the source or destination.

Note: when selecting a source folder or volume, select the folder or volume containing the files you want to back up. When selecting a destination, select the folder or volume that will **contain** the source folder or volume. In the above example, a user's Home folder will be backed up in the Backup volume. When running subsequent backups, Intego Personal Backup X will replace the new files in the user's Home folder which is in the Backup volume.



Chapter 5 - Using Intego Personal Backup X

The most important folder to back up under Mac OS X is your Home folder, as shown in the screen shot above. This contains all the files that are specific to your user account, such as your documents and preferences. But this folder can be very large, especially if it contains music, movies and pictures.

Another key folder is your Documents folder, which is found inside your Home folder. If you store all your personal documents here, this is an important folder to back up.

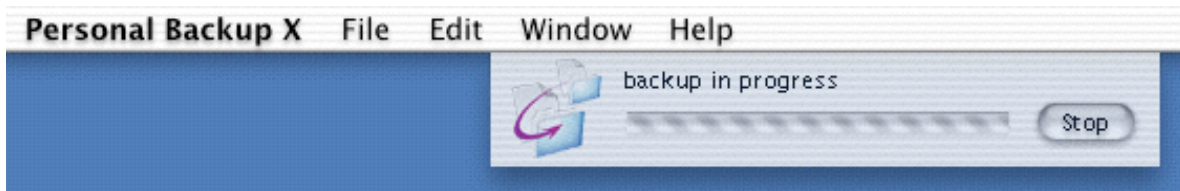


To run your backup, just click the Backup button. Intego Personal Backup X will back up all the files in the source folder to the destination folder or volume. By default, all files are copied, except invisible files, files in the trash, and files that you do not have permission to copy (system files). When you update a backup, and files in the source have been updated, Intego Personal Backup X automatically replaces the same files in the destination by the newer versions. If files in the source have been deleted, Intego Personal Backup X leaves them in the destination.

When Intego Personal Backup X begins executing the backup, the main window minimizes, leaving a small window at the top of your screen.

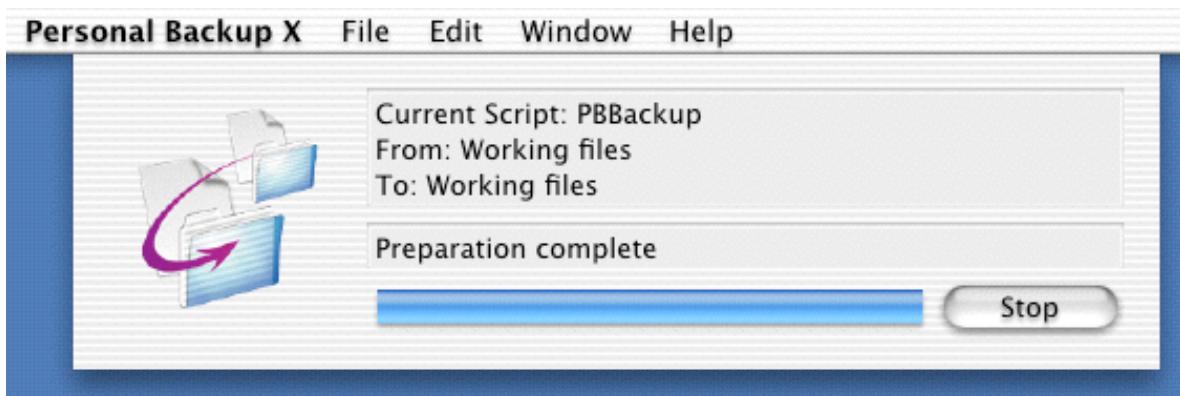


Chapter 5 - Using Intego Personal Backup X



The progress bar in this window shows the progression of your backup.

If you click anywhere in this window, it expands to show you more detailed information on the progress of your backup.



You can stop your backup at any time by clicking the Stop button in either of these windows.

When you quit Intego Personal Backup X, the program remembers the last backup run. The next time you run the program, the window display will be the same as when you quit: if you have only one backup to run, you won't need to drag or select the source and destination again. Just click Backup and Intego Personal Backup X does the rest.



Restoring Data

Intego Personal Backup X lets you restore data as easily as you back it up. If a hard disk crash or other problem causes you to lose your files, Intego Personal Backup X can restore all your files as they were the last time you backed them up. (Note: you will still lose any new files or any changes made to existing files since your last backup. One more reason to back up your data often.)

To restore files, open Intego Personal Backup X. If the last backup, which Intego Personal Backup X remembers and displays in its window, is the one you want to restore (if the same source and destination are shown in the Intego Personal Backup X window), then select Restore from the popup menu.



Click the Restore button, and Intego Personal Backup X copies all your files from the destination to the source. By default, all files are copied, except invisible files or files that you do not have permission to copy (system files). When you restore a backup, Intego Personal Backup X automatically replaces all the files in the source by those backed up to the destination.



Chapter 5 - Using Intego Personal Backup X

Note: if you have backed up a folder, and lost some of your files because of a crash or because they were deleted accidentally, Intego Personal Backup X's restore function will replace those files, but will **also replace all other files in the source folder or volume**. If you have updated other files in the source folder, these files will be replaced by older versions. Therefore, if this is the case, remove the updated files before restoring your backup, then replace them, over-writing the restored files. If you need to just restore one or two files from a backup, you can use the Finder and copy the file(s) in question. Intego Personal Backup X saves your data in file and folder form, so you can copy or move any of the files in your destination folder or volume.



Synchronizing Data

If you work with two computers, such as a desktop Mac and an iBook or PowerBook, you know how complicated it can be to make sure you have the latest versions of all your files on both computers. Intego Personal Backup X lets you synchronize files between two computers with a single mouse-click—this copies the latest version of each file to both computers, so, after the synchronization is completed, they both contain the exact same data.

To synchronize files between two computers, the computers must be connected to each other. There are two ways this can be done: either the two computers are connected over a network (a local area network, or via a crossover cable connected to each computer's Ethernet port—if you need information on setting up a network, see the Mac OS X Help), or connected directly via a Firewire cable, with one computer started up in Target Mode.

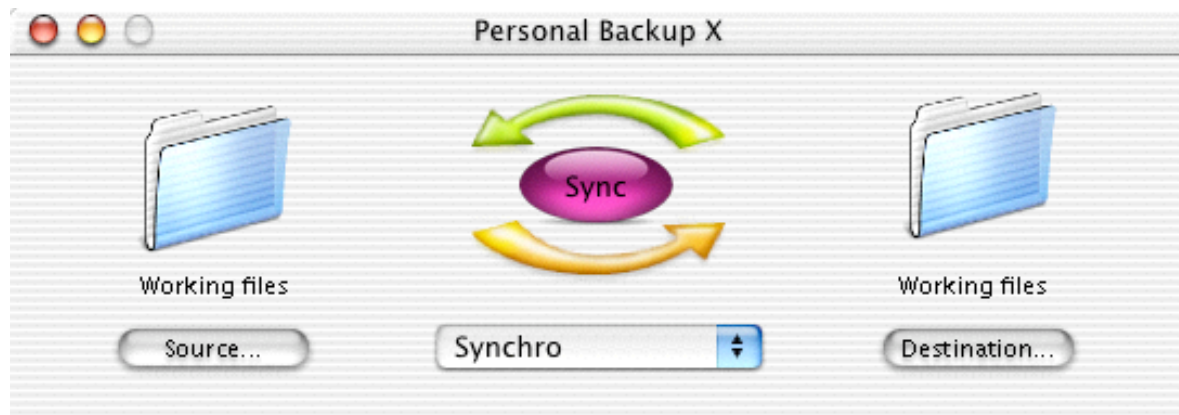
Note: All recent Macintosh computers can start up in Target Mode; this is a way for one computer to be mounted as a hard disk on another computer. To do this, connect the two computers with a Firewire cable. The computer you will startup in Target Mode should be off. When you start it up, hold down the T key on its keyboard. You will see a Firewire symbol on its screen, and it will mount on the other computer as if it were an external hard drive. You can then select any of its volumes or folders to synchronize.



Synchronizing Folders

To synchronize two folders on two different computers (across a network or connected directly), begin by choosing the source folder. Either drag this folder to the Drag here... section above the Source... button, or click the Source... button and navigate to select the source folder.

Drag a folder from the other computer to the Drag here... section above the Destination... button, or click the Destination... button and navigate to select the destination folder.



Click the Sync button to begin the synchronization. Intego Personal Backup X begins by checking each folder for its contents and compares each item, choosing which has the more recent modification date. Files or folders that are newer on one side are copied to the other; files or folders that have been erased from one side are deleted. The synchronization process provides two folders that are exact copies of each other.

Note: synchronization produces two identical copies of the same folder. The first time you synchronize two folders, Intego Personal Backup X records the names of



Chapter 5 - Using Intego Personal Backup X

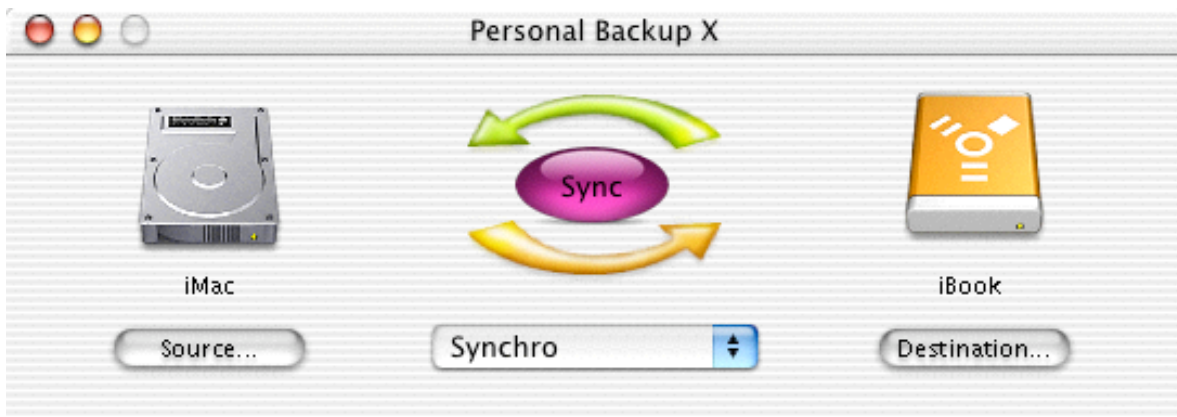
all the files and folders in the source and destination folders. To make sure that no files are deleted accidentally, Intego Personal Backup X copies all existing files into both folders. However, during each subsequent synchronization, Intego Personal Backup X knows which files have been created and deleted, and only copies those which are new or which have been changed. If a file is deleted on one side, Intego Personal Backup X deletes it on the other side. If a file is created on one side, Intego Personal Backup X copies it to the other side.



Synchronizing Volumes

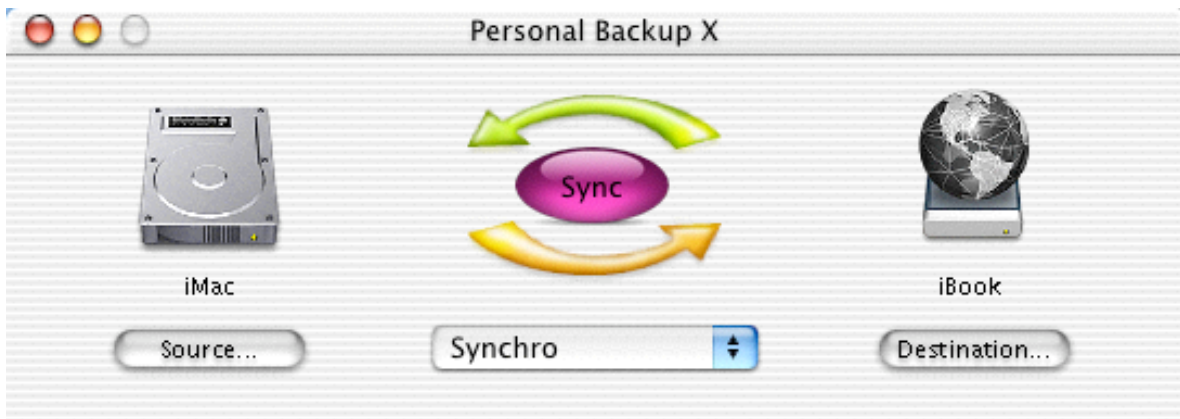
To synchronize two volumes on two different computers (across a network or connected directly), begin by choosing the source volume. Either drag this volume to the Drag here... section above the Source... button, or click the Source... button and navigate to select the source volume.

Drag a volume on the other computer to the Drag here... section above the Destination... button, or click the Destination... button and navigate to select the destination volume.



In the above screen shot, the source volume selected is a hard drive on an iMac, and the destination a hard drive on an iBook which was started up in Target Mode. (See above, at the beginning of this section, for an explanation of Target Mode.)





In the above screen shot, the source volume selected is a hard drive on an iMac, and the destination a hard drive on an iBook which is connected to the iMac over a network.

Click the Sync button to begin the synchronization. Intego Personal Backup X begins by checking each volume for its contents and compares each item, choosing which has the more recent modification date. Files or folders that are newer on one side are copied to the other; files or folders that have been erased from one side are deleted. The synchronization process provides two volumes that are exact copies of each other.

Note: synchronization produces two identical copies of the same volume. The first time you synchronize two volumes, Intego Personal Backup X records the names of all the files and folders in the source and destination volumes. To make sure that no files are deleted accidentally, Intego Personal Backup X copies all existing files into both volumes. However, during each subsequent synchronization, Intego Personal Backup X knows which files have been created and deleted, and only copies those which are new or which have been changed. If a file is deleted on one side, Intego Personal Backup X deletes it on the other side. If a file is created on one side, Intego Personal Backup X copies it to the other side.



Cloning Volumes

Under Mac OS X, you cannot simply copy your startup volume to another volume or disk. Because of the many invisible files it contains, copying the volume in this way would result in an incomplete copy and you would not be able start up your computer from this volume. Cloning a volume, such as your startup volume, gives you an exact backup of the volume. This serves two purposes:

- You can start up your Mac from this cloned volume by holding down the Option (or Alt) key at startup and selecting it (whether it is an internal or external volume). You can use an external hard drive as a startup volume for several Macs in this manner.
- You can use it as a backup before installing any major upgrades or applications, if you are worried about your system becoming damaged. In the event of a problem, you can start up your Mac from this cloned volume, and clone it back to your startup volume, so your Mac is exactly as it was before installing the upgrade or software.

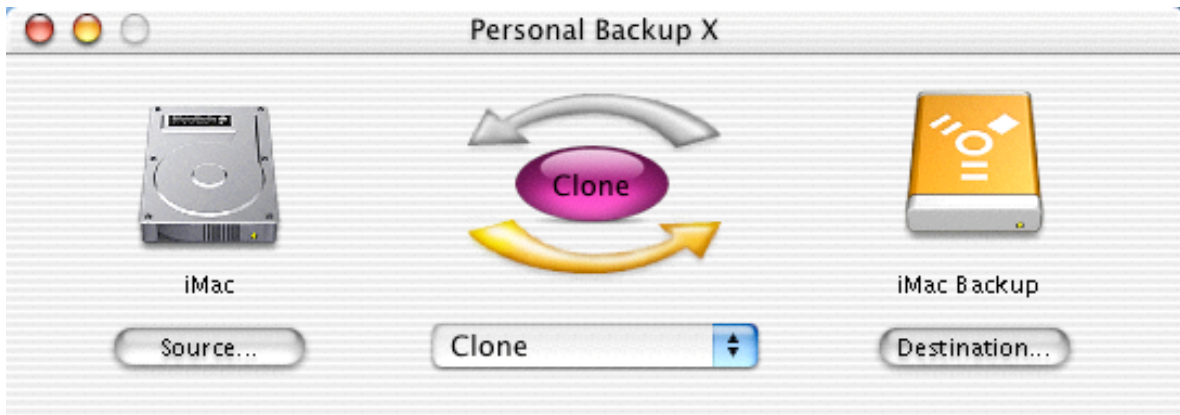
Note: you must have administrator privileges to clone a volume. Intego Personal Backup X asks you to enter your administrator password when beginning the clone process.

To clone a volume to another volume, either on the same computer or on two different computers (across a network or connected directly), begin by choosing the source volume. Either drag this volume to the Drag here... section above the Source... button, or click the Source... button and navigate to select the source volume.



Chapter 5 - Using Intego Personal Backup X

Drag the destination volume on the other computer to the Drag here... section above the Destination... button, or click the Destination... button and navigate to select the destination volume.



The above screen shot shows a clone prepared from an iMac to an external Firewire hard drive.

To begin the clone, click the Clone button. Intego Personal Backup X displays a message saying that you will need to enter an administrator password.



If you have this password, click Authenticate... You will then enter the password in the following dialogue. If you do not have this password, click Cancel, and the clone will stop.

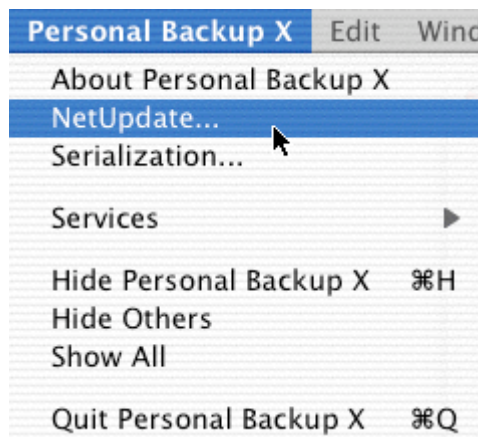


Updating Intego Personal Backup X

NetUpdate

NetUpdate is an application that Intego's programs can use to check if the program has been updated. This application is installed at the same time as Intego Personal Backup X or other Intego programs. It checks updates for all of these programs at the same time, and downloads and installs those for the programs installed on your computer.

To open NetUpdate and check for updates to Intego Personal Backup X, select NetUpdate in the Personal Backup X menu.



For more on using NetUpdate, see the NetUpdate User's Manual.



About Intego Personal Backup X

If you select About Personal Backup X... from the Personal Backup X menu, a window will be displayed showing some information about Intego Personal Backup X, such as the version number, your support number (a number you will need for technical support), clickable links to Intego's web site and e-mail address, and Intego's address and telephone number.

If you haven't yet registered online, you can do so quickly and easily by clicking the Register online... button. This will take you to the registration page on the Intego web site.



6 - Using Backup Scripts

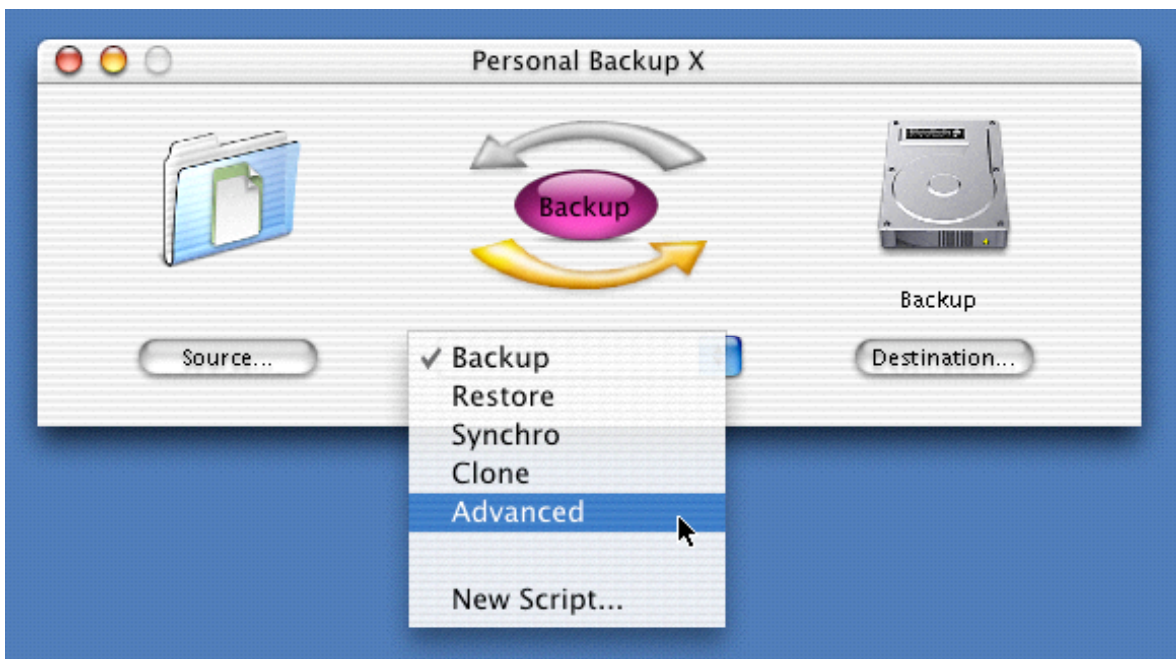


Using Intego Personal Backup X's Advanced Mode

While Intego Personal Backup X lets you back up, restore and synchronize data, and clone volumes with just a mouse-click in its basic mode, its advanced mode lets you create your own backup scripts using the full power of Intego Personal Backup X and the many options available.

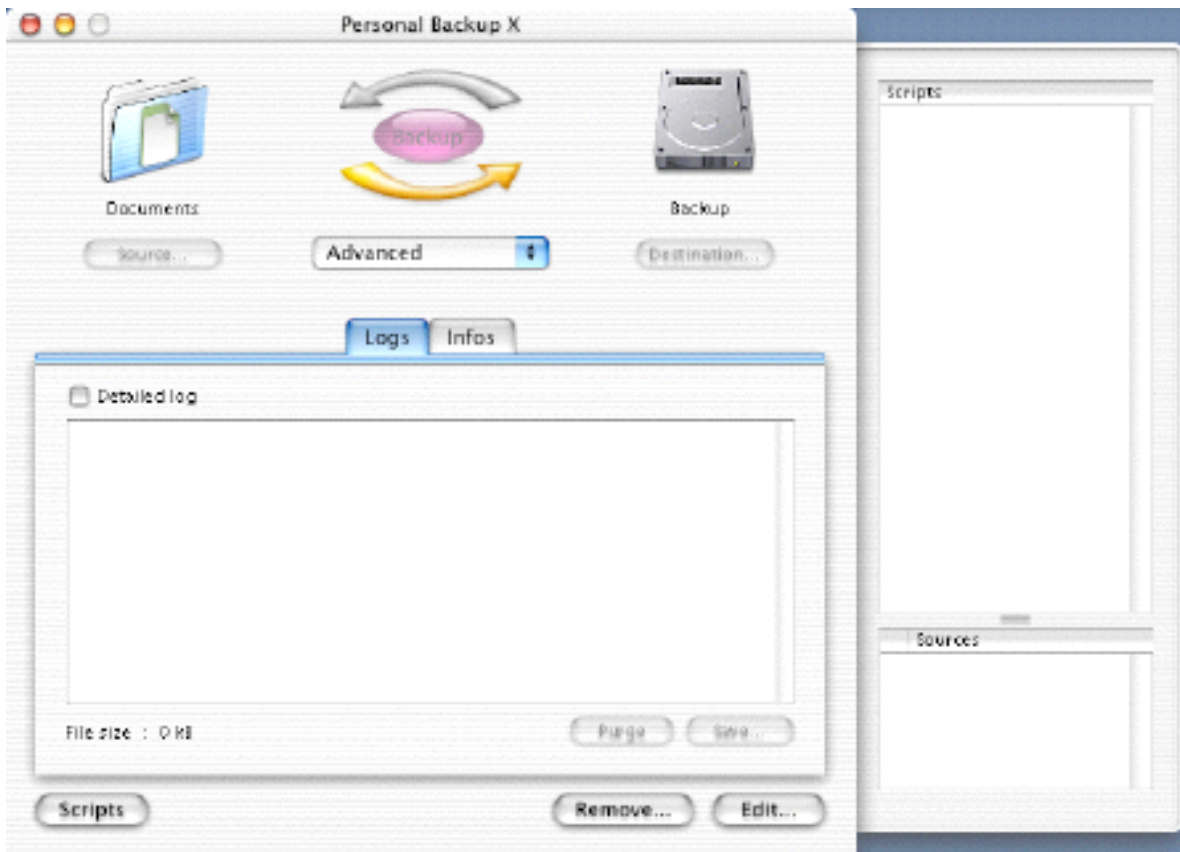
Intego Personal Backup X's advanced mode not only lets you choose multiple sources (several folders, files or volumes), choose files to exclude from your backups, create disk images automatically during backup, but it also lets you create scheduled scripts that handle backups, synchronizations and clones automatically.

To access Intego Personal Backup X's advanced mode, click the popup menu in the Intego Personal Backup X window and select Advanced.



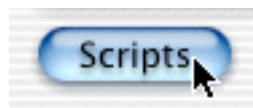
Chapter 6 – Using Backup Scripts

Intego Personal Backup X displays its Advanced Mode window:



This window has two sections: to the left is the main window, which has the source and destination sections, the Backup button, the popup menu to choose the type of backup, and Logs and Info tabs at the bottom. To the right is a drawer that shows all the scripts that you define.

You can show or hide the Scripts drawer by clicking the Scripts button.



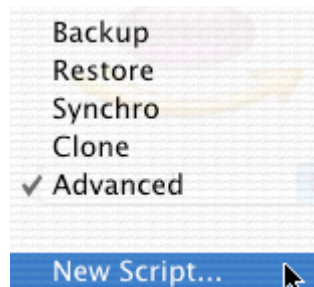
Creating New Backup Scripts

A backup script is a set of instructions that tells Intego Personal Backup X how to run a backup, synchronization or clone. Many options are available for backup scripts, and Intego Personal Backup X has a built-in assistant that makes it easy to create even the most complex backup scripts.

The Intego Personal Backup X Backup Script Assistant walks you through a series of steps to create your script:

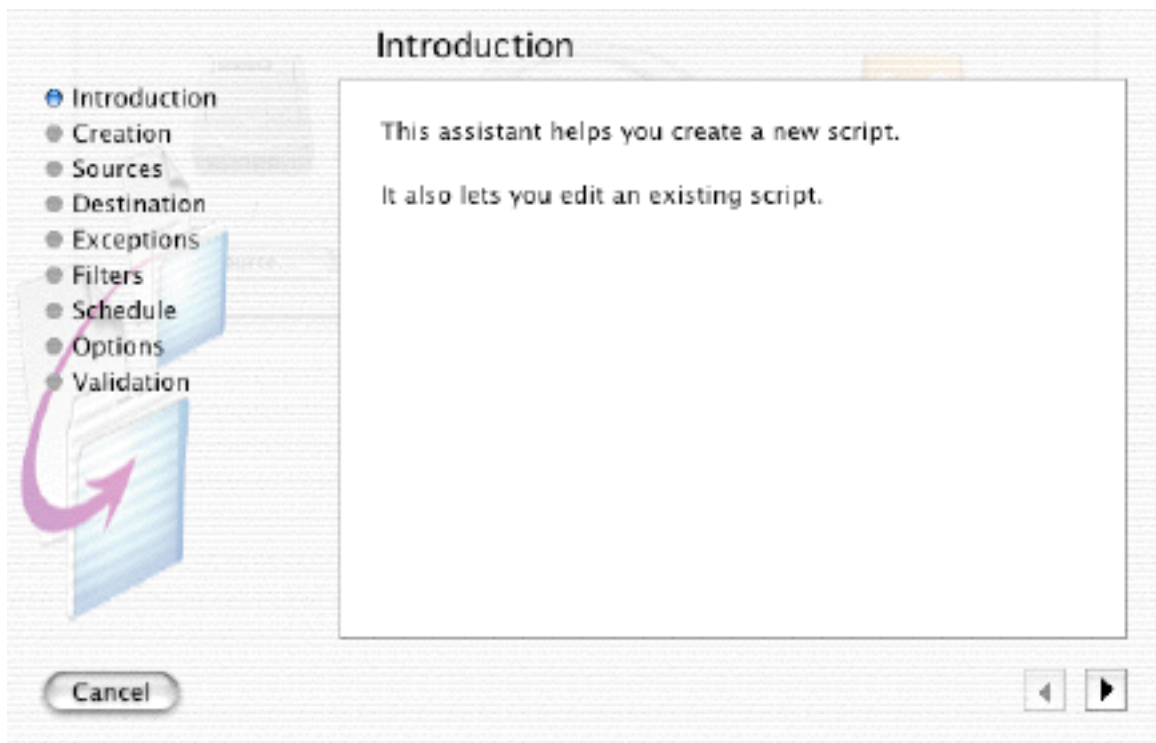
- **Creation**
- **Sources**
- **Destination**
- **Exceptions**
- **Filters**
- **Schedule**
- **Options**
- **Validation**

To create a new backup script, select New Script from the popup menu.



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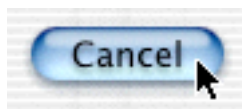
The Intego Personal Backup X Script Assistant opens.



Click the right arrow to begin creating a new script. You can click the left arrow at any time to return to previous screens.

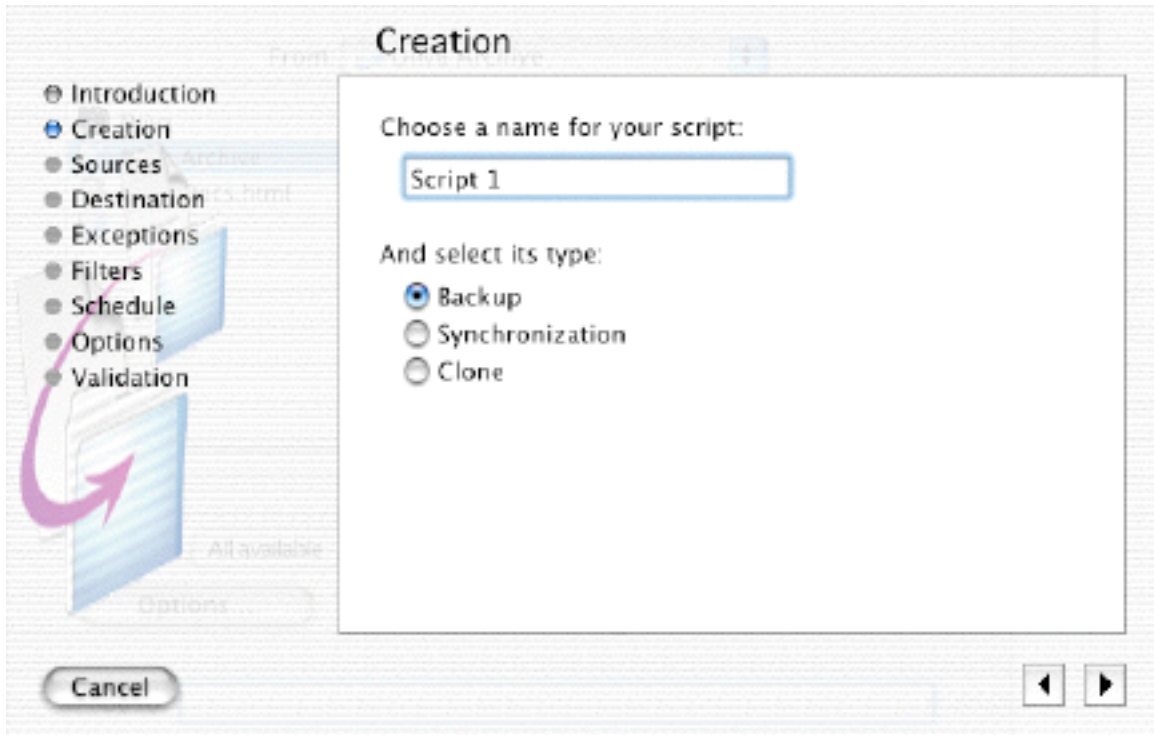


Or click Cancel to exit the Script Assistant.



Creation

The second screen of the Script Assistant lets you choose a name for your script, and choose the type of script.



Enter a name for your script in the name field, then select the type of script: Backup, Synchronization or Clone. You will not be able to change your script's name or type later.

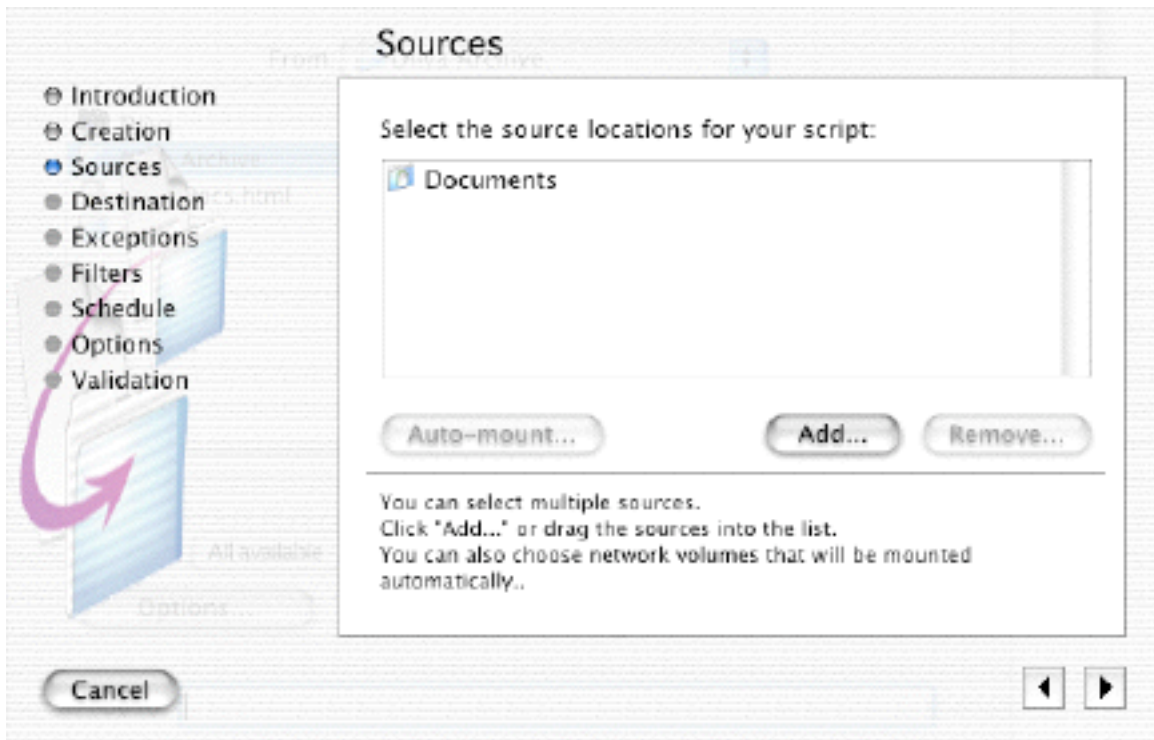
Click the right arrow to go to the next screen.



Sources

This screen lets you choose one or several sources for your script.

If you have chosen to create a backup script, you can select several sources. Synchronizations and clones can only have one source.



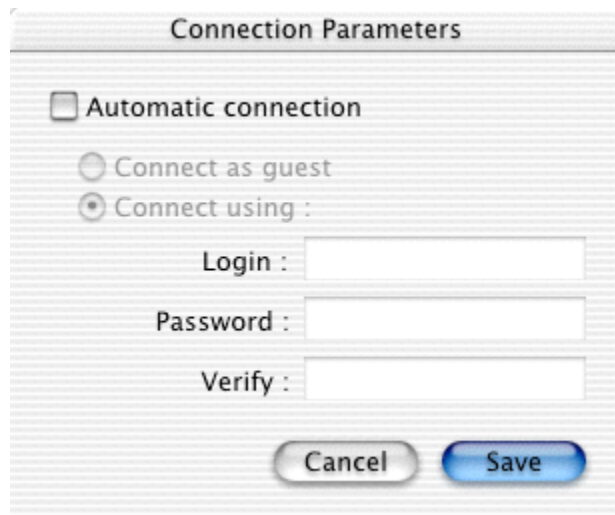
To add a source, either drag the source folder or volume to the Sources field, or click Add... and navigate to the folder or volume you wish to use.



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If one of your sources is on a network volume, you can choose to have it mounted automatically.

To do this, click on the source to select it, then click Auto-Mount... The following screen is displayed:



Check Automatic connection, then check Connect as guest, if your Mac will be connecting as a guest to the server, or Connect Using: if you have a user name and password. Enter your user name in the Login field, and your password in the Password field. Enter the password a second time in the Verify field, and click Save.

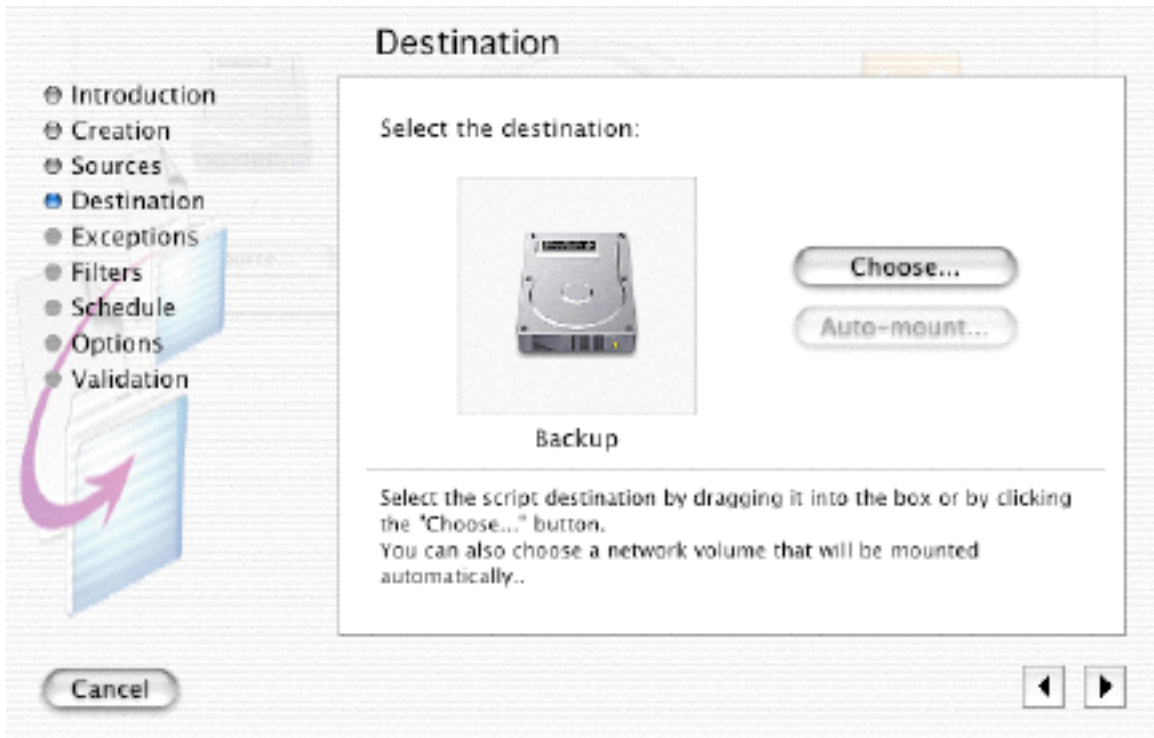
If you decide to remove any of your sources, click the source to select it, then click Remove... Click OK to remove the source, or click Cancel to keep it.

When you have finished, click the right arrow to go to the next screen.



Destination

This screen lets you choose a destination for your script.



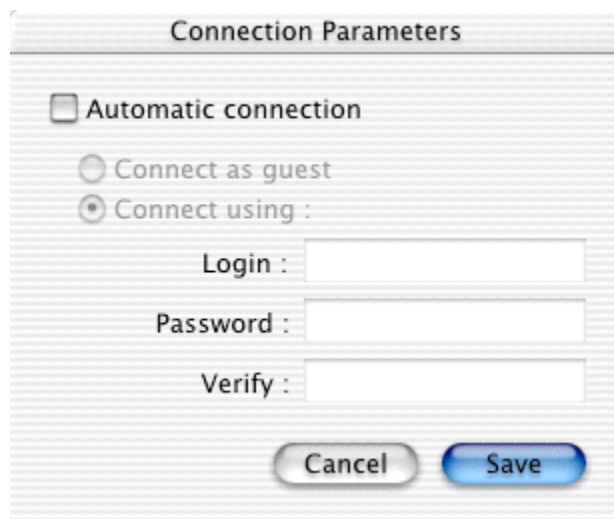
To add a destination, either drag the destination folder or volume to the Destination field, or click Choose... and navigate to the folder or volume you wish to use.



Chapter 6 – Using Backup Scripts

If your destination is on a network volume, you can choose to have it mounted automatically.

To do this, click Auto-Mount... The following screen is displayed:



The image shows a dialog box titled "Connection Parameters". It contains the following elements:

- An unchecked checkbox labeled "Automatic connection".
- Two radio button options: "Connect as guest" (which is selected) and "Connect using :".
- Three text input fields labeled "Login :", "Password :", and "Verify :".
- Two buttons at the bottom: "Cancel" and "Save".

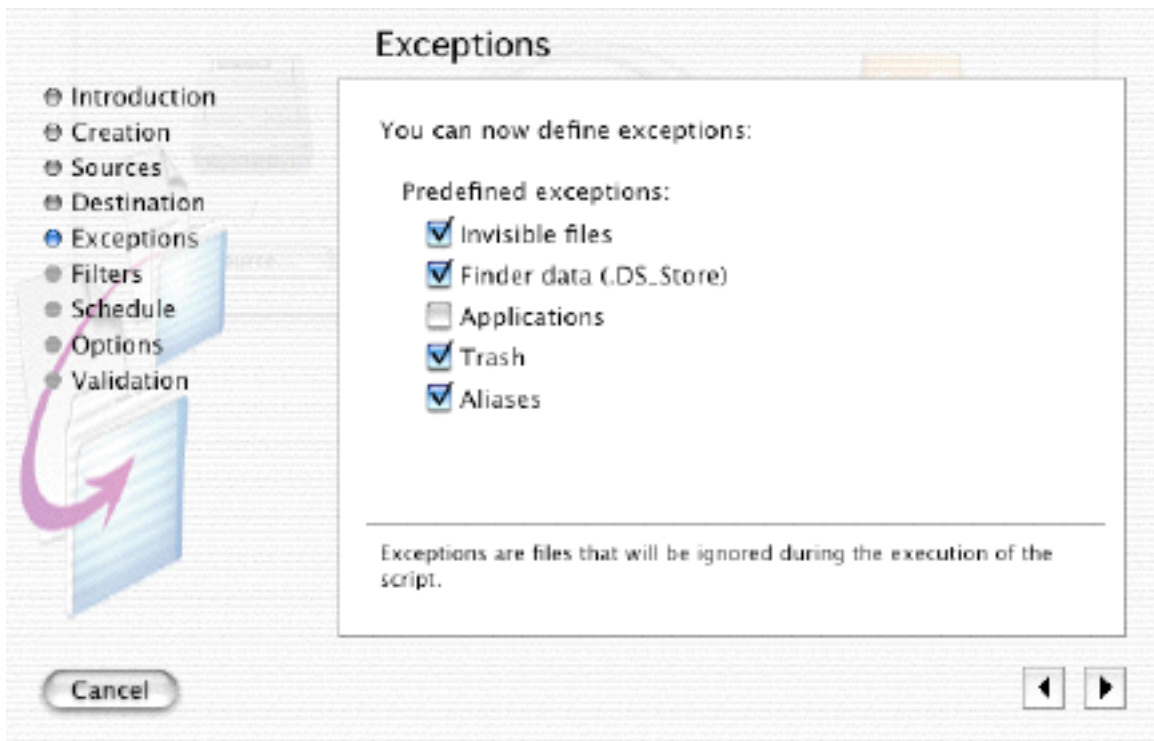
Check Automatic connection, then check Connect as guest, if your Mac will be connecting as a guest to the server, or Connect Using: if you have a user name and password. Enter your user name in the Login field, and your password in the Password field. Enter the password a second time in the Verify field, and click Save.

When you have finished, click the right arrow to go to the next screen.



Exceptions

This screen lets you define exceptions, files that Intego Personal Backup X ignores when running scripts.



There are five predefined exceptions:

- Invisible files
- Finder data (.DS_Store)
- Applications
- Trash
- Aliases

Checking any of these checkboxes will tell Intego Personal Backup X to not copy its type of file.



Invisible files

Invisible files are files that are used by Mac OS X, or by certain applications, that you do not need to access. If you are merely backing up or synchronizing your personal files, you don't need to copy these files. However, if you are cloning a volume, you will need to copy these files. Most invisible files require administrator privileges to access, so, if you wish to copy invisible files, Intego Personal Backup X may ask for your administrator's password before beginning the copy, and you must be present to run a script which copies these files, even if you have set a schedule for it to run automatically. (For more on copying files and privileges, see the Options screen below.)

Finder data (.DS_Store)

These files are a special kind of invisible file that the Finder writes in every folder on your computer. They store the window layout for each folder. If you wish to retain the window layout during your backup or synchronization, do not check this.

Applications

If you check this box, Intego Personal Backup X will not copy any applications in the folders or volumes you have selected as sources. Applications can take up a lot of disk space, and, if lost, can always be reinstalled. If you don't have a lot of room in your destination, it is useful to check this.

Trash

If this is checked, Intego Personal Backup X will not copy any files that are in the Trash. However, if you have a habit of putting files into the Trash and later removing them, it is safer to not check this and copy them.



Chapter 6 – Using Backup Scripts

Aliases

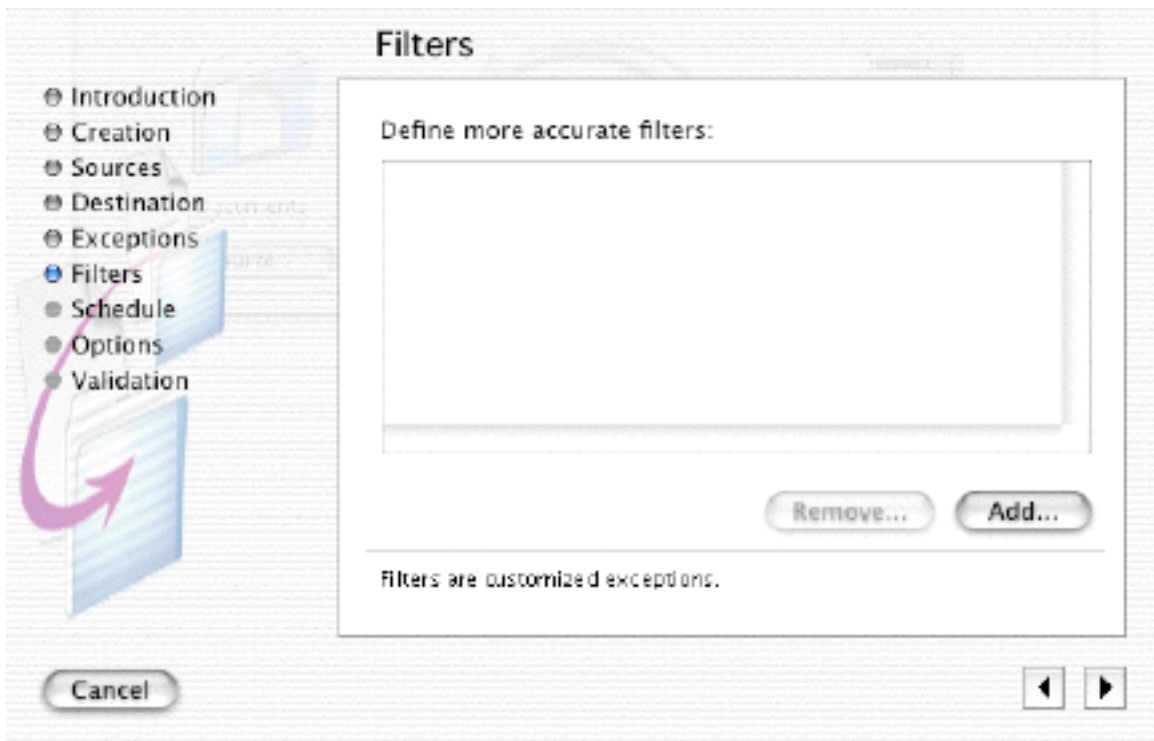
If this is checked, Intego Personal Backup X will not copy any aliases that are in the selected sources.

When you have finished, click the right arrow to go to the next screen.

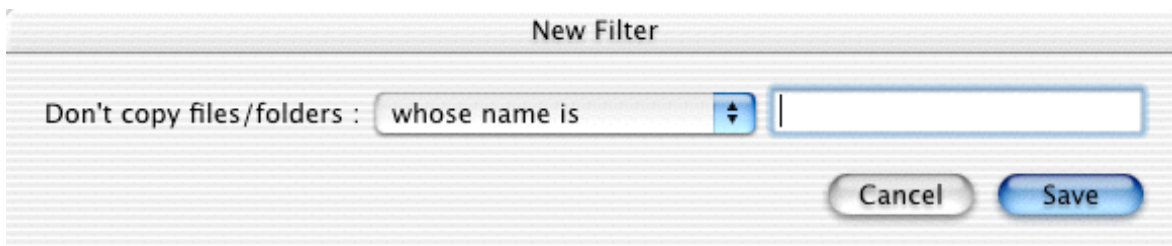


Filters

The Filters screen lets you define precise filters for types of files you wish to exclude from your backups, synchronizations or clones.

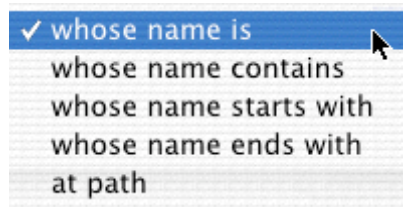


To create a new filter, click Add... The New Filter window displays.



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To create a new filter, select one of the options from the popup menu:



Then enter a text string in the text field:



For example, if you have a series of monthly reports, and each file begins with the name of the month, you can choose to not copy certain months (if they have already been archived, for example). In this case, you could choose to not copy files **whose name starts with** May, for example. These files will not be copied.

You can also choose to exclude files with certain extensions. Create a filter to not copy files **whose name ends with** .doc, for example, to not copy Word documents.

If you wish to change a filter before moving on to the next screen, double-click it to edit it.

After you have finished creating your filter, click OK, or click Cancel to cancel it. You can create as many filters as you want.

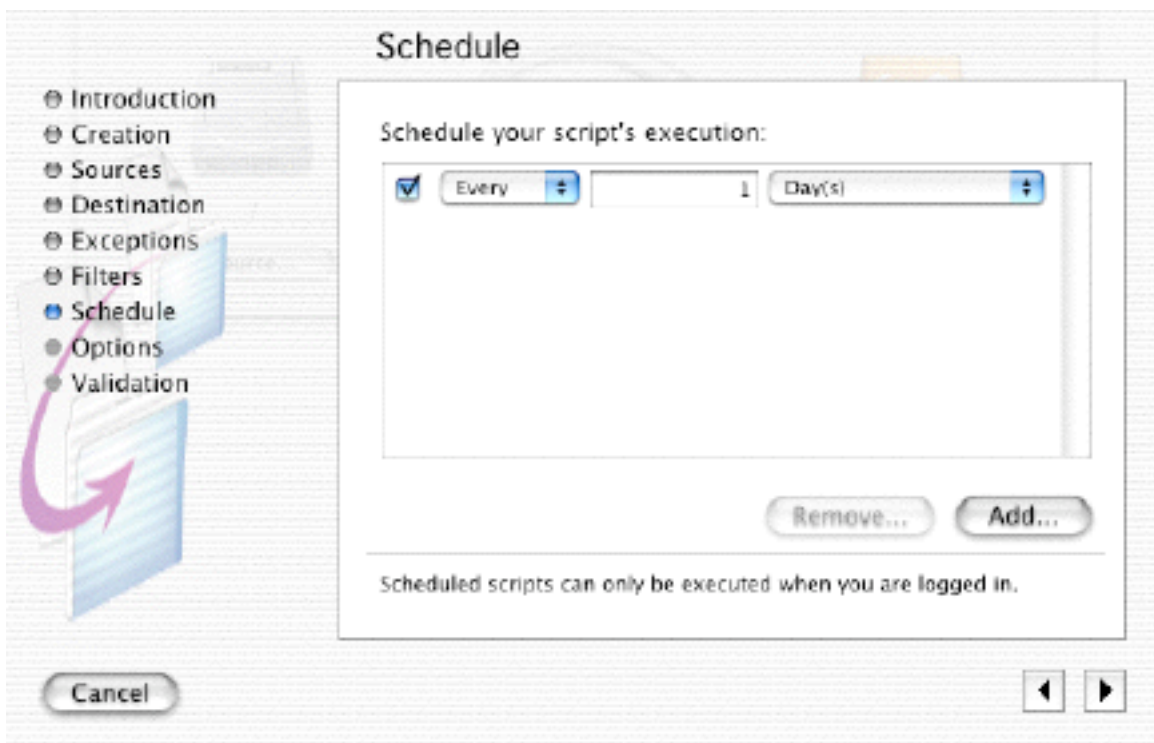
If you decide to remove any of your filters, click the filter to select it, then click Remove... Click OK to remove the filter, or click Cancel to keep it.

When you have finished, click the right arrow to go to the next screen.



Schedule

Intego Personal Backup X lets you set a schedule for your script. You can set it to run at a given time, on a given day, or at a given frequency. Intego Personal Backup X is always watching your computer, and, if you schedule a script, you will be able to ensure that it runs when you want. Note that you must be logged in for a scheduled script to be run. If another user is logged in, your scripts will not be executed.



To schedule your script, first add a schedule by clicking Add... A new schedule line is added. Make sure the box at the left of the schedule is checked to activate it. Choose either At or Every from the first popup menu.



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If you choose Every, you can enter a number in the text field, and choose Minute(s), Hour(s) or Day(s). This will run your script at a frequency corresponding to your choice.

Each Hour

If you choose At, you can enter a time in the text field (in 24-hour format, such as 18:00), and choose either Every day from the second popup menu, or choose a given day.

At On friday

You can have as many schedules as you want for your script. To add a new schedule, click Add... and follow the instructions above.

You can combine both At and Every schedules as well. Say you want to back up data every two hours, but you also want to make sure that a backup is run at a given time, say at the end of the day. You can set up two schedules like this:

Each Hour
 At On each day

A backup will run every two hours, and another at 18:00 (6 p.m.) every day, to make sure that your data is backed up before you leave the office.

Note: if you schedule scripts in Intego Personal Backup X, these scripts will only run when the program is not open. If the program is open—if you are doing a



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manual backup, or if you are creating or editing a script—Intego Personal Backup X will wait until you quit the program, and run the scheduled script shortly afterwards.

When you have finished, click the right arrow to go to the next screen.



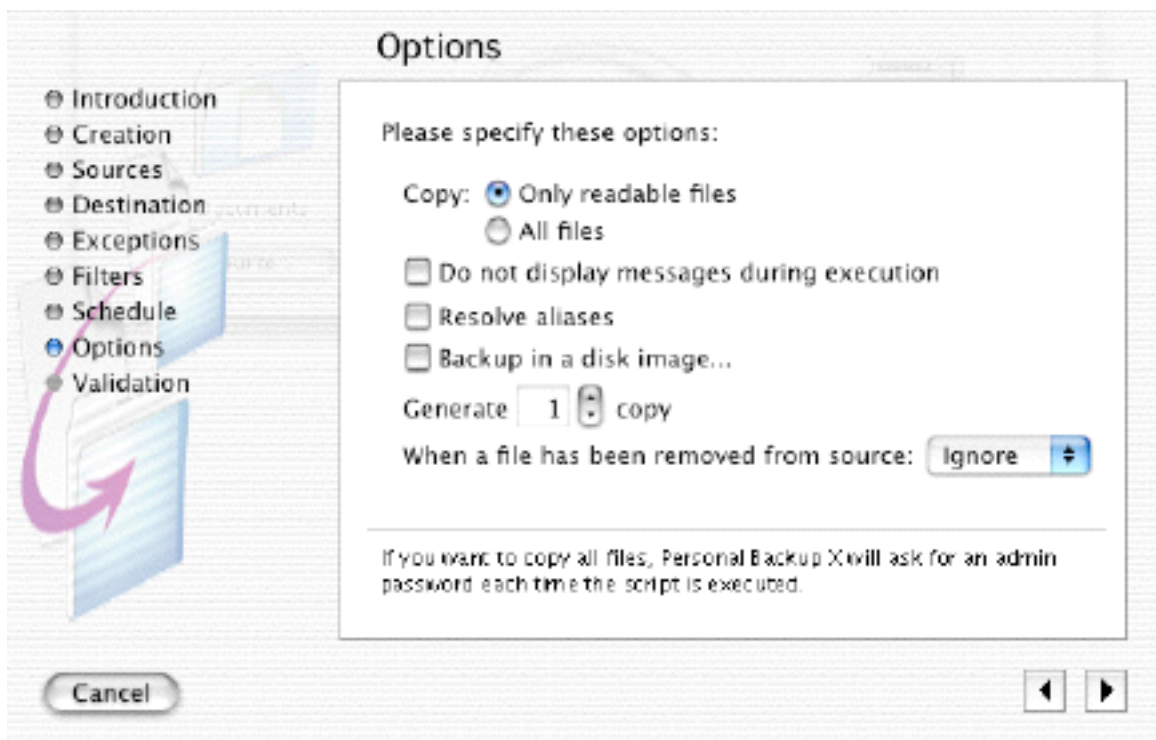
Options

Intego Personal Backup X gives you a series of options that control how your script is run, what kinds of files are copied, how many copies are made, how deleted files are handled, and more.

The options available are different for each type of script: Backup, Synchronization and Clone.

Backup Options

The following options are available for Backup scripts.



Copy options

You can choose between Only readable files or All files.

Only readable files

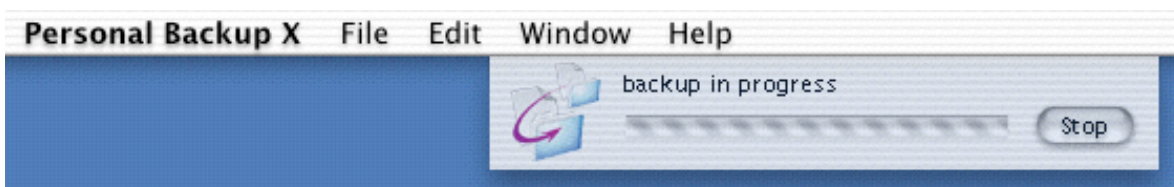
If you choose Only readable files, Intego Personal Backup X will only copy those files for which you have privileges. This means that some files may not be copied, but these are files that you cannot access according the privileges for your user account. For example, if you want to copy your computer's Users folder, which contains your Home folder and that of the other users who have accounts on this computer, Intego Personal Backup X will only copy the files in your Home folder.

All files

If you choose All files, Intego Personal Backup X will copy every file in the selected source(s) (with the exception of those excluded on the Exceptions screen). However, this may require that you enter an administrator password so Intego Personal Backup X can access certain files that do not belong to your user. Bear in mind that if this is the case, a scheduled script will not run until this password has been entered, so you must be present to execute the script.

Do not display activity window

If this is checked, Intego Personal Backup X will not display its activity window at the top of your screen. You will not be able to see the progression of the script.

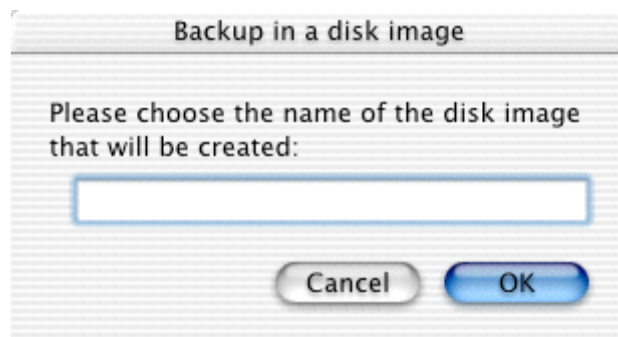


Copy originals instead of aliases

If this is checked, Intego Personal Backup X looks at the aliases in your source(s), and finds their originals. If the originals are not elsewhere in the source(s), Intego Personal Backup X copies the originals and replaces the aliases.

Back up in a disk image...

If you check this, Intego Personal Backup X will back up your source(s) in a disk image, which will be saved in your destination. When you check this checkbox, Intego Personal Backup X displays a dialog asking you to choose a name for the disk image.



The first time the script is run, Intego Personal Backup X creates this disk image in the destination. This is a dynamic disk image, which is initially the size required for your source(s). The next time the script is run, Intego Personal Backup X mounts the disk image, and writes any changed files to it, changing the size of the disk image if necessary.

Generate X copy

Intego Personal Backup X can save several copies of your source(s) so you have backups of different versions of your files. If you run a daily backup script, for example, and choose to have Intego Personal Backup X save 3 copies of your files, there will be 3 complete backups. Each one will be in a folder called



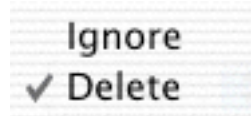
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Script_Name_X, where Script_Name is the name of the script, and X is the number of the folder. So, if your script is called Daily Backup, there will eventually be three folders, named Daily Backup 1, Daily Backup 2, and Daily Backup 3.

When Intego Personal Backup X has generated the number of copies you have chosen, it updates the oldest copy—after the three backups have been made, Intego Personal Backup X updates Daily Backup 1, then, the next day, Daily Backup 2, and so on. To find which is the most recent backup if you need to recover files, select each of the folders in the Finder, then select Show Info from the File menu (or press Command+I). The most recently modified folder is the latest backup.

When a file has been removed from source:

There are two options for this choice. Select one from the popup menu:



Ignore

If you choose Ignore, Intego Personal Backup X will ignore any files or folders that have been removed from the source and which are found in the previous backup. They will remain in the backup.

Delete

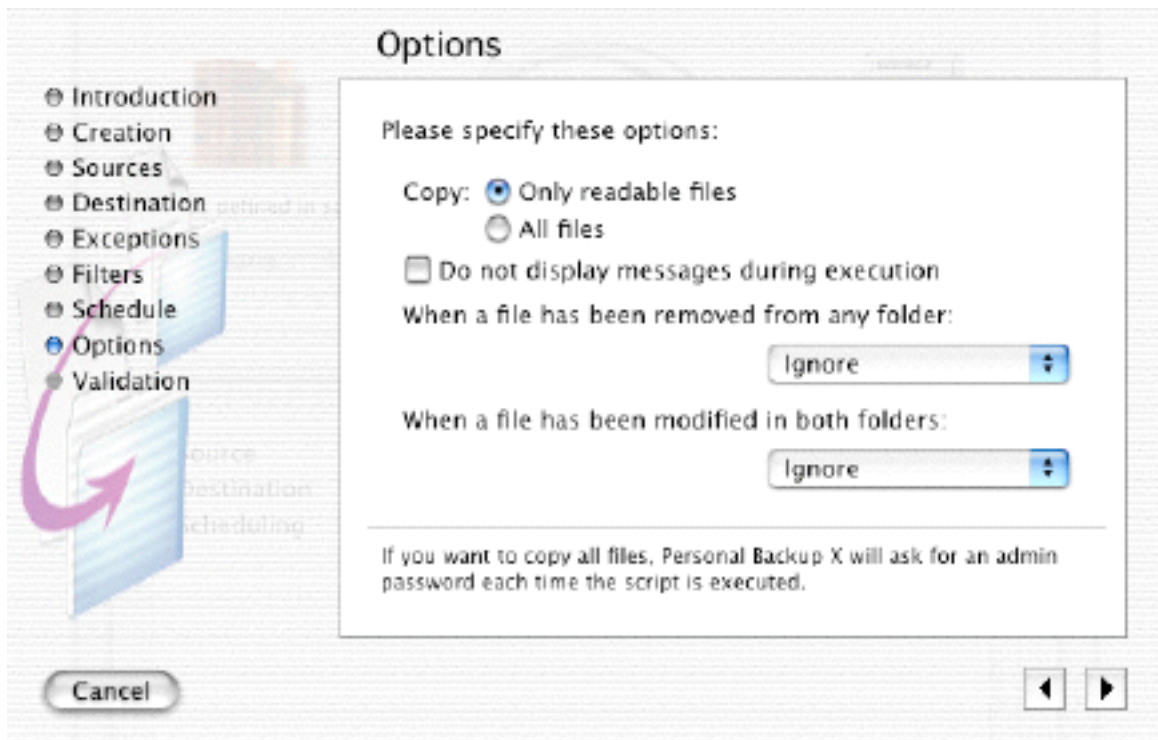
If you choose Delete, Intego Personal Backup X will delete any files or folders that have been removed from the source and which are found in the previous backup. This will result in the backup being an exact copy of the source.

When you have finished, click the right arrow to go to the next screen.



Synchronization Options

The following options are available for Synchronization scripts.



Copy options

You can choose between Only readable files or All files.

Only readable files

If you choose Only readable files, Intego Personal Backup X will only copy those files for which you have privileges. This means that some files may not be copied, but these are files that you cannot access according to the privileges for your user account. For example, if you want to copy your computer's Users folder, which contains your Home folder and that of the



Chapter 6 – Using Backup Scripts

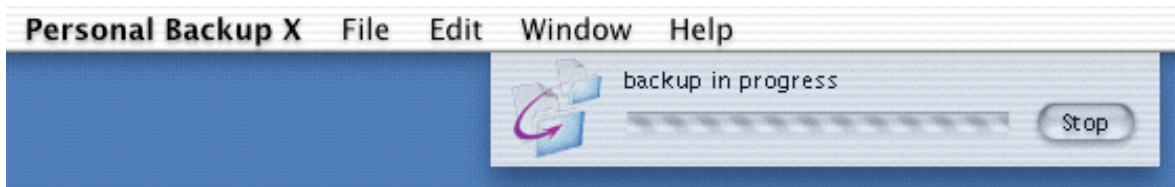
other users who have accounts on this computer, Intego Personal Backup X will only copy the files in your Home folder.

All files

If you choose All files, Intego Personal Backup X will copy every file in the selected source(s) (with the exception of those excluded on the Exceptions screen). However, this may require that you enter an administrator password so Intego Personal Backup X can access certain files that do not belong to your user. Bear in mind that if this is the case, a scheduled script will not run until this password has been entered, so you must be present to execute the script.

Do not display activity window

If this is checked, Intego Personal Backup X will not display its activity window at the top of your screen. You will not be able to see the progression of the script.



When a file has been removed from any folder:

There are three options for this choice. Select one from the popup menu:



Ignore

If you choose Ignore, Intego Personal Backup X will ignore any files or folders that have been removed from either folder and exist in the other. The existing files or folders will remain where they are. At the end of the synchronization, there will be differences between the two folders; one folder will contain copies of files or folders that have been deleted from the other.

Delete

If you choose Delete, Intego Personal Backup X will delete any files or folders that have been removed from either folder. This will result in both folders being exact copies.

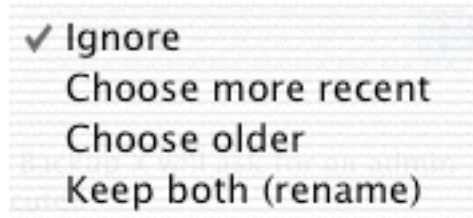
Recover

If you choose Recover, Intego Personal Backup X will copy any files or folders that have been removed from either folder to the other folder. No files will be deleted, no matter which folder they are in. At the end of the synchronization, both folders will contain the same files.



When a file has been modified in both folders:

There are four options for this choice. Select one from the popup menu:



Ignore

If you choose Ignore, Intego Personal Backup X will ignore any files or folders that have been modified in both folders. The existing files or folders will remain where they are. At the end of the synchronization, there will be differences between the two folders; each folder will contain several different files.

Choose more recent

If you select Choose more recent, Intego Personal Backup X will compare the modification dates of the two files and keep the more recent version, and copy it to the other folder. Both folders will contain the most recent versions of all files.

Choose older

If you select Choose older, Intego Personal Backup X will compare the modification dates of the two files and keep the older version, and copy it to the other folder. Both folders will contain the older versions of all files that were found in both folders.



Keep both (rename)

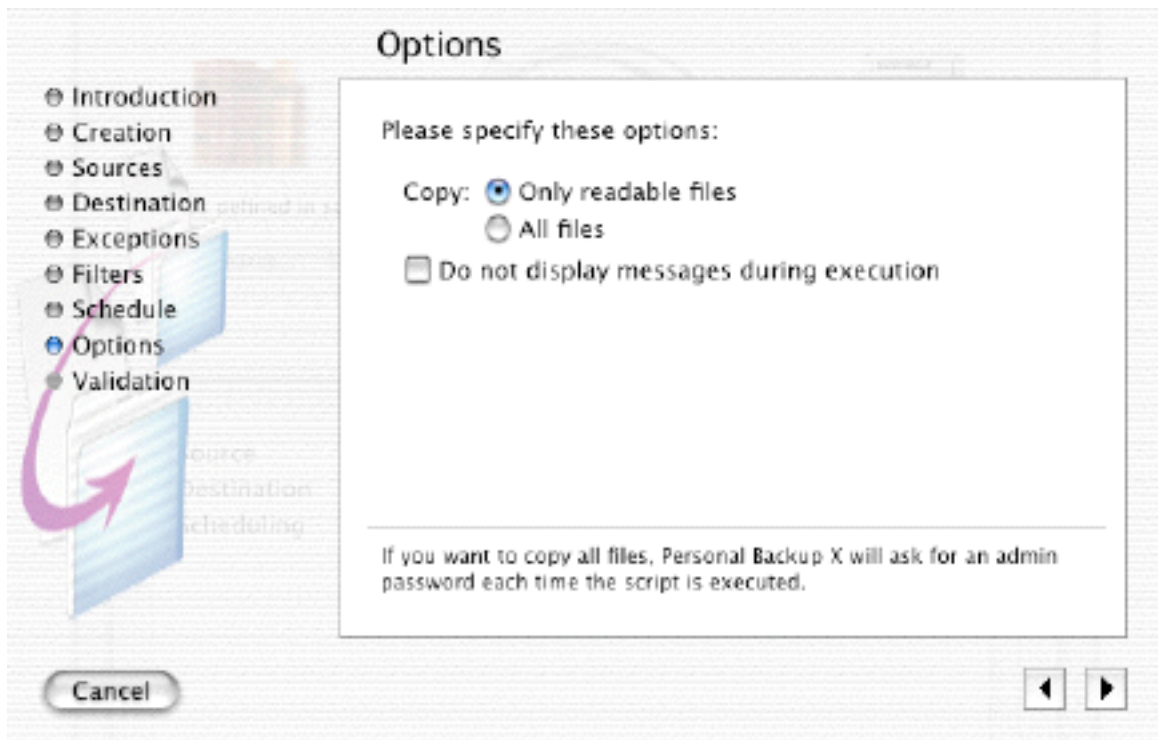
If you choose Keep both (rename), Intego Personal Backup X will keep both versions of the file or folder, renaming them with VERS1 and VERS2 in their names. Both versions are copied to each folder. This is the safest choice, which ensures that no files are deleted.

When you have finished, click the right arrow to go to the next screen.



Clone Options

The following options are available for Clone scripts.



Copy options

You can choose between Only readable files or All files.

Only readable files

If you choose Only readable files, Intego Personal Backup X will only copy those files for which you have privileges. This means that some files may not be copied, but these are files that you cannot access according to the privileges for your user account. For example, if you want to copy your computer's Users folder, which contains your Home folder and that of the



Chapter 6 – Using Backup Scripts

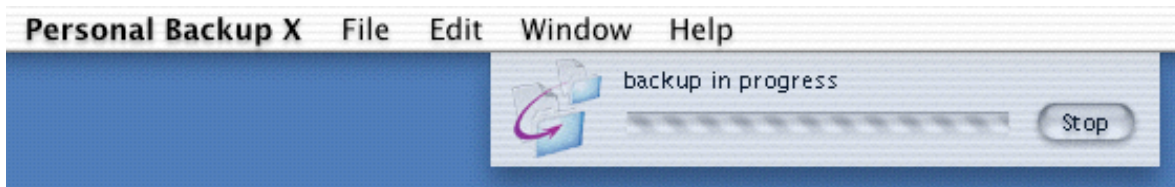
other users who have accounts on this computer, Intego Personal Backup X will only copy the files in your Home folder.

All files

If you choose All files, Intego Personal Backup X will copy every file in the selected source(s) (with the exception of those excluded on the Exceptions screen). However, this may require that you enter an administrator password so Intego Personal Backup X can access certain files that do not belong to your user. Bear in mind that if this is the case, a scheduled script will not run until this password has been entered, so you must be present to execute the script.

Do not display activity window

If this is checked, Intego Personal Backup X will not display its activity window at the top of your screen. You will not be able to see the progression of the script.

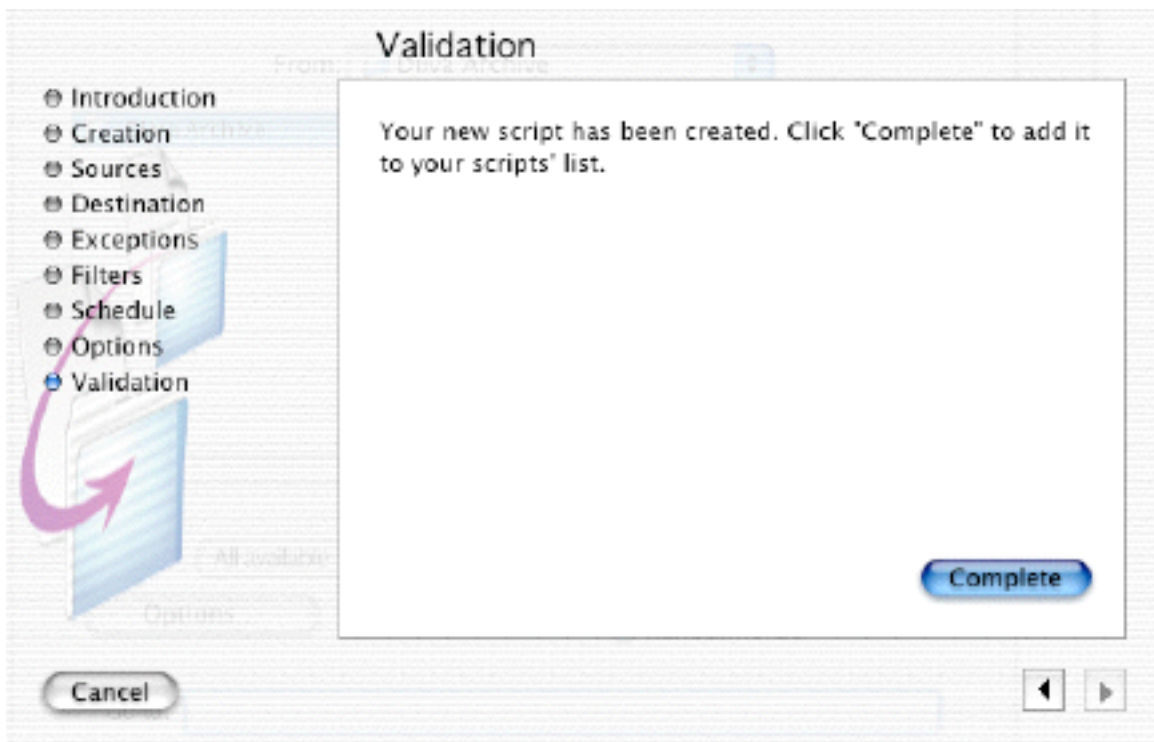


When you have finished, click the right arrow to go to the next screen.



Validation

After you have chosen all the options for your script, this screen lets you validate your options. If you want to make any changes, click the back arrow button to return to one of the previous screens. You can change any of the elements in your script except its name and type.

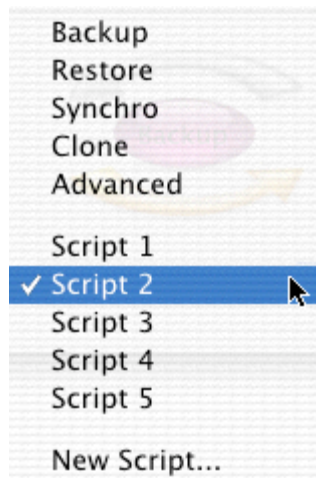


Click Complete to save your script.

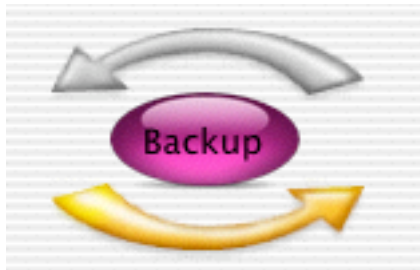


Running Scripts Manually

To manually run any of your scripts, select a script from the popup menu of the Intego Personal Backup X window.

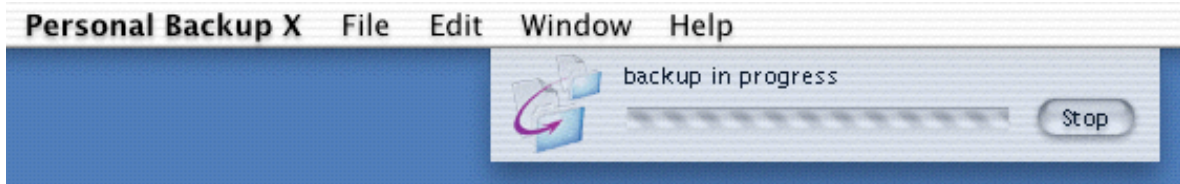


Then click the Backup, Restore, Synchro or Clone button (depending on the type of script you have selected).



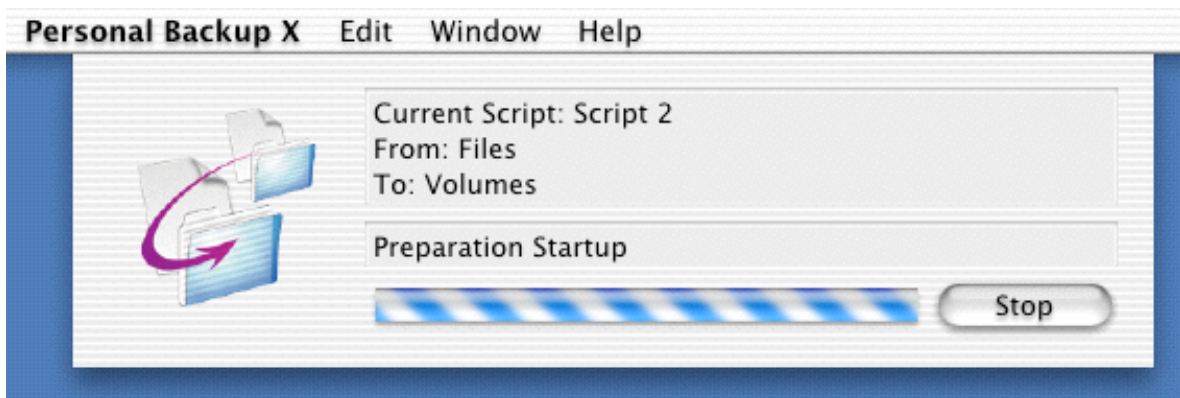
Chapter 6 – Using Backup Scripts

When Intego Personal Backup X begins executing the backup, the main window minimizes, leaving a small window at the top of your screen.



The progress bar in this window shows the progression of your backup.

If you click anywhere in this window, it expands to show you more detailed information on the progress of your backup.



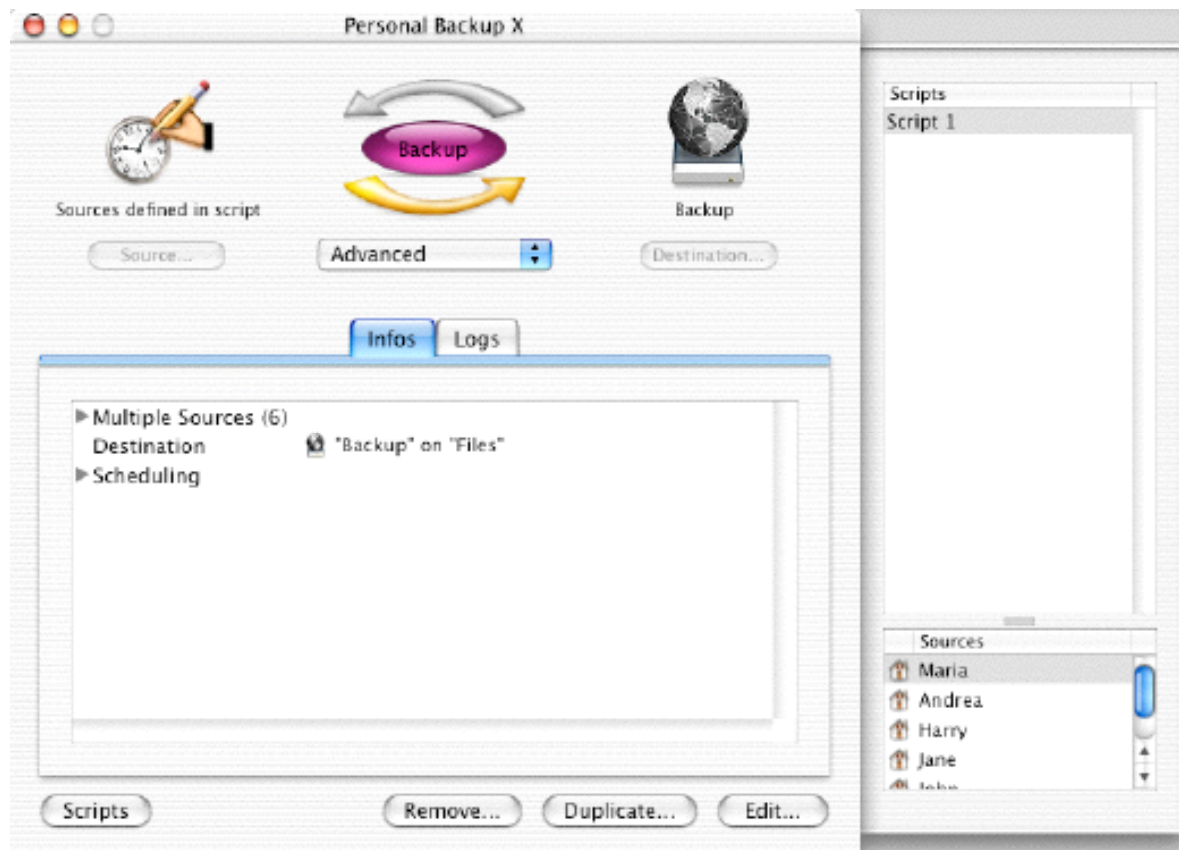
You can stop your script at any time by clicking the Stop button in either of these windows.



Editing Scripts

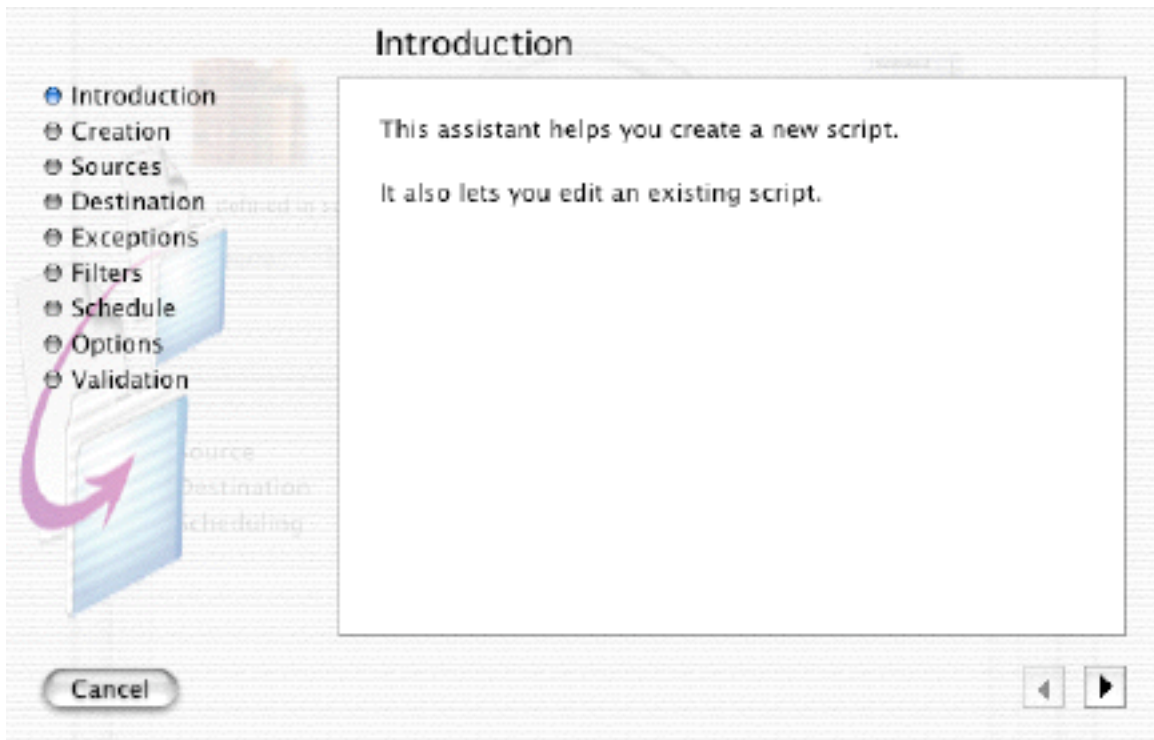
After you have created a script, you can edit it if you wish to change some of its elements. The only things you cannot change are the script's name and its type (Backup, Synchronization or Clone).

To edit a script, first choose Advanced from the Intego Personal Backup X popup menu. This displays the Advanced mode window, with a drawer to one side containing all the scripts you have defined.



Chapter 6 – Using Backup Scripts

Click on one of the scripts in the top part of the drawer. Its source(s) will be displayed in the bottom part of the drawer. Click the Edit... button, and the Script Assistant will open. This is the same assistant you used to create the script.

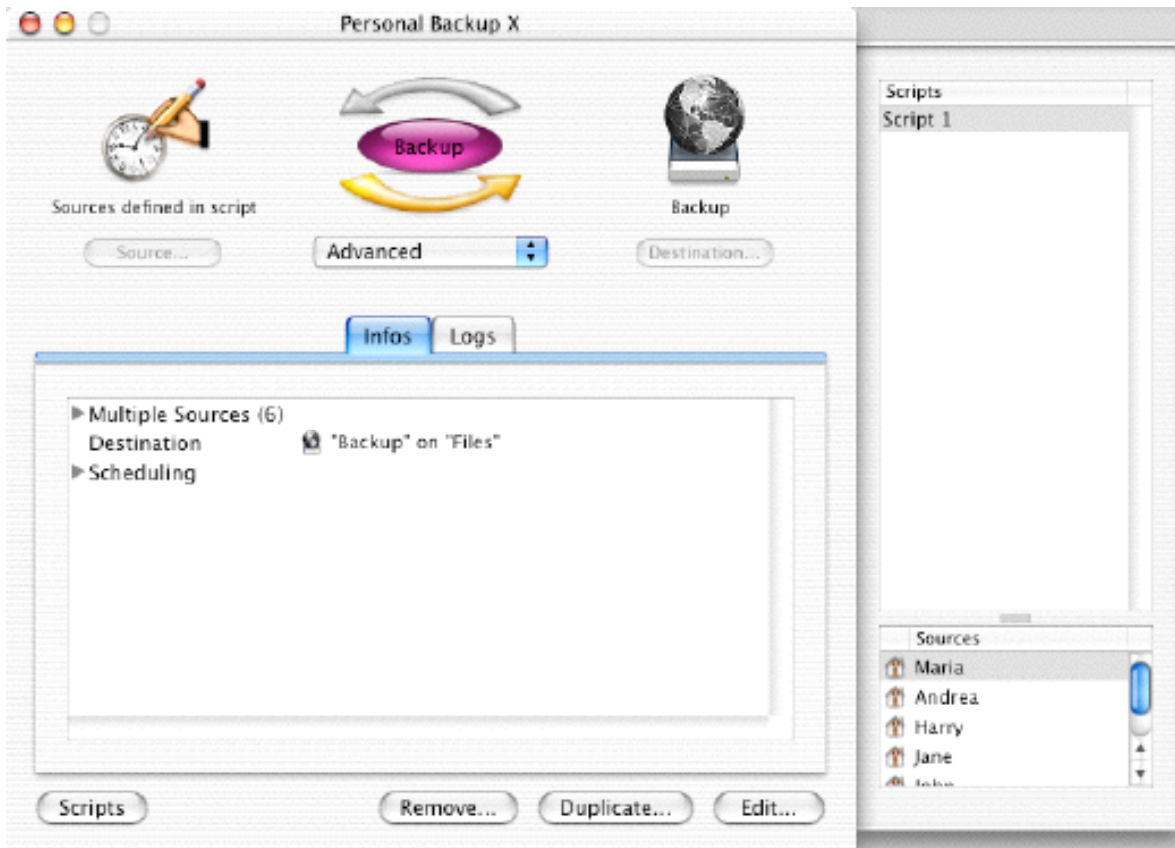


To change any of the script's elements (except the name and type of script), either click the right arrow to move through the screens, or click directly on the name of the screen you wish to change. If you want to change the schedule, for example, click on Schedule in the list at the left of the screen. The Schedule screen will open. Make your changes, click the right arrow until you get to the Validation screen, then click Complete. This will update your script.



Script Info

If you choose Advanced from the popup menu in the Intego Personal Backup X window, the Advanced Mode window displays.

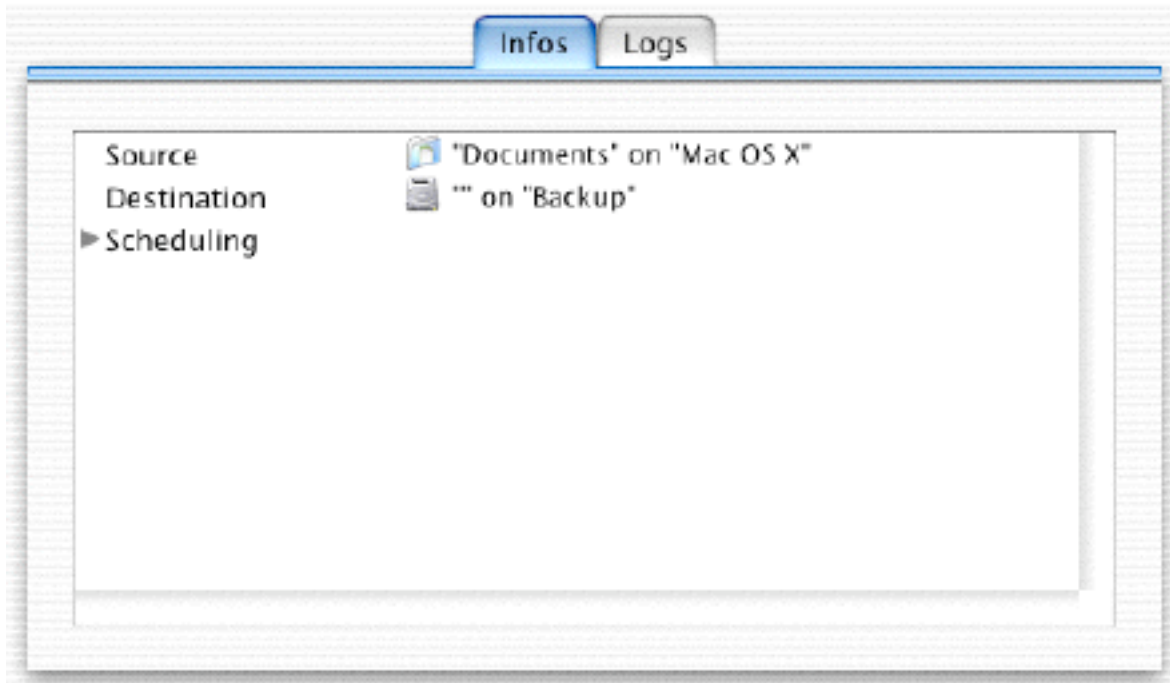


This window contains information on your script in the Info tab. To view this information, click on one of your scripts in the Scripts drawer, then click the Info tab, if it is not visible.

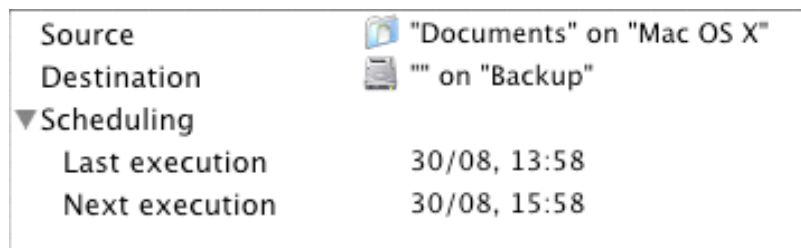


Chapter 6 – Using Backup Scripts

This tab shows the source and destination for your script, and also shows a schedule (if you have defined one).



To view the schedule, click the triangle next to the word Schedule.



The date and time of the Last and Next executions are shown.



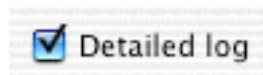
Script Logs

Intego Personal Backup X records a log for each time it runs a script. The Logs tab shows the information contained in the log. To view the log for a script, click on one of your scripts in the Scripts drawer, then click the Logs tab, if it is not visible.

Intego Personal Backup X offers two types of logs: simple logs and detailed logs. Simple logs show the date and time a script is run, the source and destination, and indicate whether the script was run successfully. If there are any problems during the execution of the script, the log shows them. Logs are especially useful to check that automatic scripts are executed correctly.

Detailed logs show the same basic information as simple logs, but also give a list of every file that is backed up or copied (depending on the type of script).

To have Intego Personal Backup X record detailed logs, select a script in the Script drawer, and check Detailed log in the Log pane.

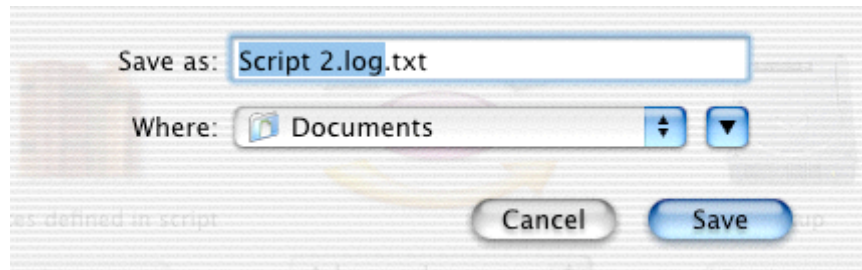


Saving Logs

You can save the contents of the visible log by clicking the Save... button.



A sheet will appear at the top of the window, and you can choose a name and a location for the file. Logs are saved as text files and can be opened by any word processor or text editor.



Deleting Logs

To delete the currently visible log, click the Purge... button.



An alert will ask you to confirm this deletion. Click OK to purge the log, or click Cancel to keep it.



Showing and Hiding the Script Drawer

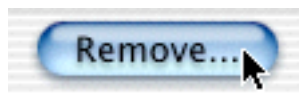
To show or hide the script drawer, click the Scripts button at the bottom of the Advanced Mode window.



If the Script Drawer is visible, this will hide it. If it is not visible, this will open it on the side of the window where there is the most space.

Deleting Scripts

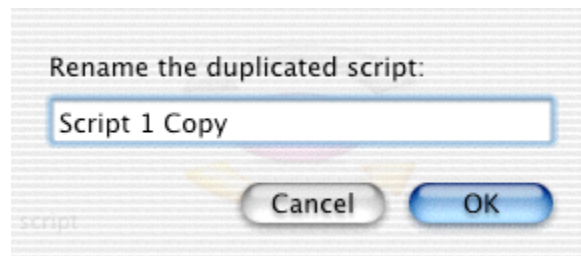
To delete a script, click on one of your scripts in the top part of the drawer to select it, then click Remove... Click OK to remove the script, or click Cancel to keep it. If you remove a script, both the script and its log will be deleted.



Duplicating Scripts

If you wish to create a script that is similar to an existing script, and avoid setting all its options, you can duplicate the script and give it a new name. (But you cannot change the type of script: Backup, Synchronization or Clone.)

To do this, click on one of your scripts in the top part of the drawer to select it, then click Duplicate... Intego Personal Backup X displays a sheet at the top of its window, asking you for a name for the duplicated script.



Enter a new name, then click OK, or click Cancel to cancel the duplication.



7 - Technical Support



Chapter 7 – Technical Support

Technical support is available for registered purchasers of Intego Personal Backup X.

By e-mail

support@intego.com

From the Intego web site

www.intego.com



8 - Glossary



Glossary

Administrator: Mac OS X is a multi-user operating system, and at least one user is an administrator who can decide when certain system-level tasks or changes are made. They must enter their administrator's password to authorize such changes, which include installing new software or copying certain files under Intego Personal Backup X.

Backup: A backup is a copy of files and folders made from one location, usually your active computer, to another for safekeeping. Backups can be made to other computers, to other disks or partitions, or to removable media, such as CD-Roms or Zip cartridges.

Clone: A clone is an exact copy of a volume such as a hard disk. The only way to safely back up a Mac OS X startup disk is to clone it. The clone can then be used to start up a computer, or can be used as a backup to protect against losing any system files. If you do have system problems, you can copy the clone back to your startup disk and avoid having to reinstall Mac OS X.

Crash: A crash is the last thing you want to happen to your computer. It means that the computer has a problem, which could be caused by software or hardware. Crashes can damage files and cause you to lose data.

Disk image: A disk image is a volume that is created as a file. You can copy disk images from one volume to another, and, when you double-click them, they open as if they were separate disks.

Restoration: A restoration is the process of copying files from your backup to your active computer, after the files on the computer have been lost, erased or damaged.

Synchronization: A synchronization is the process of comparing two folders, volumes or disks, and creating exact copies on both of them. Any files changed on one side are copied to the other, so both sides have exactly the same files. This is especially useful for ensuring that you have the same files on two computers you work on, such as a desktop computer and a PowerBook or iBook.



Target mode: Target mode is a way for one computer to be mounted as a hard disk on another computer. To do this, connect the two computers with a Firewire cable. The computer you will startup in Target Mode should be off. When you start it up, hold down the T key on its keyboard. You will see a Firewire symbol on its screen, and it will mount on the other computer as if it were an external hard drive.

Volume: A volume is a hard disk, or a partition on a hard disk, a disk or partition on a network, or a removable disk, such as a CD-Rom or Zip cartridge. For all intents and purposes, computers see all of these as volumes, which are the same as hard disks.

