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1—About Intego Backup Assistant and Intego Backup Manager Pro
What are Intego Backup Assistant and Intego Backup Manager Pro?

Intego Backup Assistant and Intego Backup Manager Pro are comprehensive backup solutions for Mac OS X, protecting you from data loss by systematically making copies of your documents, applications, and system files. These programs are provided with hard disks and network storage devices purchased from LaCie. Depending on which disk or storage solution you purchase, you will receive either Intego Backup Assistant or Intego Backup Manager Pro. In addition, certain network storage solutions may include multiple licenses for Intego Backup Manager Pro.

In addition to the ability to make backups to any kind of hard disk or storage device, Intego Backup Manager Pro also offers a number of advanced functions that are not available in Intego Backup Assistant. These functions are indicated in this manual by the following icon:

The remainder of this manual will discuss Intego Backup Manager Pro, but all functions that are not preceded by the PRO icon above are available in both programs.

Intego Backup Assistant can only make backups to LaCie hard disks and network storage devices. Intego Backup Manager Pro can back up your files to most media, including:

- Partitions on your hard drive
- External hard drives (USB, FireWire or SCSI)
- Removable media (such as USB key drives)
- Optical media (such as recordable CDs or DVDs)
- Network volumes
- AirPort disks (hard disks connected to Apple’s AirPort Extreme base station)
- An iDisk
- An iPod
- Disk images

At its simplest, backing up files with Intego Backup Assistant and Intego Backup Manager Pro requires dragging and dropping a few folders and clicking the Back Up button. For more-complex
tasks, Intego Backup Assistant and Intego Backup Manager Pro have an advanced mode that lets you create backup scripts that perform multiple actions, and that can run on predetermined schedules.

Intego Backup Assistant and Intego Backup Manager Pro can also synchronize data between two folders, volumes or Mac computers (such as a desktop Mac and a MacBook or MacBook Pro), and Intego Backup Manager Pro can create a bootable backup of your entire Mac OS X volume. And, of course, both programs can restore files to your computer as easily as they back them up.

If you are using Intego Backup Assistant and wish to upgrade to Intego Backup Manager Pro, you can do so by opening the application, then choosing Intego Backup Assistant > Upgrade to Pro Version. This will take you to a web page where you will enter your personal information and payment information. You will then be able to download a copy of Intego Backup Manager Pro, and you will receive a serial number by e-mail.
How Intego Backup Manager Pro Protects Your Files

Intego Backup Manager Pro works by preparing a list of files to be copied, based on your selections, then copying them intelligently to the destination you have chosen. There is a wide range of rules and copying options; we’ll go over them in chapter 4 (Script Options). But rules and options generally fall into three categories: backups, synchronizations, and bootable backups. A fourth category, restorations, is when you return files that had previously been copied to their original locations.

A backup copies specific files and folders, or the contents of entire volumes or hard drives, from one location to another. The location that contains files at the beginning of the process is called the source; the one receiving the copied files is the destination. To keep the backup files safe, the destination files should be stored and never modified, and should be on a different storage device from the source. For example, you might back up files from your MacBook onto an external hard disk that you keep at home: then, if the MacBook gets stolen, you still have copies of your files on the external disk.

A full backup contains everything on your hard drive—not just your documents, but also all applications and system files. While a full backup takes a lot of space, it can also save you from having to reinstall applications after a crash, and offer an insurance policy when installing unknown software or a new version of Mac OS X.

One common backup strategy is to make a complete copy of all your files when you first run Intego Backup Manager Pro. Then on each subsequent run, you direct the program to copy only those files that have changed since the last backup. This is called an “incremental” backup. (Don’t worry—Intego Backup Manager Pro makes these easy.)

Restoring is the opposite of backing up, and is usually performed when the source files have disappeared or become damaged. You copy files from the destination disk back to the original source. (In our example above, these files would go from the external disk to your MacBook.) Of course, these files will only be current as of the last time you performed a backup: if you’ve
modified those files since then, that subsequent work will be lost—hence the need to make regular backups.

**Synchronization** twins a source’s contents so both the source and destination are identical. The first time you run a synchronization, Intego Backup Manager Pro may copy many files to ensure that both the source and destination contain the same elements. But after that, only those files that are changed on one side are copied to the other side, and, by default, items removed from one side are deleted from the other. Since you may update some files on, say, your Desktop Mac and others on your laptop, a synchronization can keep both of these Macs up to date with the latest versions of each file. Changing file A on your desktop Mac and file B on your laptop means that, when synchronizing the two Macs, file A will be copied to the laptop and file B to the desktop Mac. The result is that the source and destination are always maintained as exact duplicates of each other.

**PRO** A bootable backup copies a volume with Mac OS X on it to a second hard disk so the new location can act as a startup disk. The bootable backup process creates an exact replica of the source, so that destination can function exactly as the source. If you have a system problem on your Mac, you can connect the backup disk, restart your Mac while holding down the Option key, select the backup disk and start up your Mac. You can copy all the user files on your Mac to a safe location, then “restore” the bootable backup to your Mac by performing a bootable backup in the opposite direction. You’ll then be up and running without having to reinstall Mac OS X, its system updates, and your own applications.
Why You Need to Protect your Data

Whether you use your Mac for work or at home, you devote a lot of time to creating and editing files, installing applications, and maintaining your Mac OS X system. If you use your computer at home, you may have banking records, e-mail archives, databases listing your possessions, 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 are irreplaceable.

If you don’t back up your files, you may have the unpleasant surprise of looking for some of them and discovering them missing or damaged. At that point there’s little you can do except feel guilty about not being more prudent—and make a resolution to back up your files more often.

That’s where Intego Backup Manager Pro comes in. It protects you from such loss by making copies of your files so you can recover from losses caused by theft, error, disaster, or data corruption. And it continues to protect you through automated schedules that ensure you always have an up-to-date backup.
How You Can Lose Data

There are many ways you can lose data, and each is a reason to regularly back up your files. Here are some ways that data can disappear from your Mac:

- A program corrupts open files when it crashes.
- A power outage destroys the files you were working on at the time, possibly damaging the hard drive as well, destroying other files in the process.
- Your hard drive crashes or becomes damaged.
- Other computer components experience problems, indirectly affecting the contents of the hard drive.
- A virus infects your computer, irrecoverably destroying affected files. (Intego VirusBarrier X5 offers protection against this danger, and can also check your files while Intego Backup Manager Pro copies them during backups).
- A hacker attacks your Mac, erasing some or all of its files, or corrupting them (Intego NetBarrier X5 provides protection against such attacks.)
- Someone steals your computer, and all its data.
- A fire, flood, earthquake, or other natural disaster destroys data on your hard drive.
- You erase a file by accident.
Backup Decisions

Before you implement your backup plan, determine four things:

- **Source**: Which files will I backup?
- **Destination**: Where will these backup files be stored?
- **Schedule**: How often will I perform these backups?
- **Archives**: How long will I keep backup files?

If you can’t make up your mind right away, don’t worry: you can have several backup strategies running concurrently. For example, you might decide to make daily backups of important business files to DVDs that are then delivered to an offsite location (such as a safe-deposit box) once a week. On the other hand, perhaps you consider photos and videos of office renovations much less important, so you back them up only once a month to a server in the office.

Two criteria help you make decisions regarding which **source** files to backup: the files’ importance, and the amount of space available for backup. If, for example, you have an 80 GB hard drive in your MacBook, and a 500 GB external hard drive available for backups, your decision is easy: back up everything, since there’s no reason to save a few megabytes when you have so many to spare.

If you’re short on space, your decisions are more complicated. Which files will cause the most inconvenience if lost? Which are irreplaceable? For most people, personal and business documents come first; think of all your family photos and videos. Then, if there’s additional space, applications and system files are important. On Mac OS X, most of your personal documents are stored in the Documents folder of your home folder. But if you have room, don’t forget the Pictures, Movies, and Music folders! These are also in your home folder, next to your Documents folder.

The **destination** for your backups could be on the same device as the source, although we recommend you use an external device for all backups except the most casual (and insecure). The problem with the source and destination existing on the same device is that an issue with that device could easily destroy both your originals and your backups, leaving you with nothing.
Instead, we recommend you make backups to another device, such as a CD, DVD, iPod, or external hard drive. (Note that external hard drives that connect to your Mac by USB or FireWire are relatively inexpensive.)

**PRO** If you have a MobileMe subscription, you can use Intego Backup Manager Pro to back up selected folders to your iDisk. To save space (and copying time over a network), Intego Backup Manager Pro can make incremental backups that replace only those files that have changed or been created since the last backup.

We recommend you take the total size of your source files and budget at least twice as much space on your destination disk. Many people make the mistake of backing up (for example) a 100 GB hard drive to a 120 GB external disk—and then run out of space the third or fourth time they perform an incremental backup, as more than 20 gigabytes of files had changed since the first backup.

**PRO** When you use removable media (such as CDs or DVDs), Intego Backup Manager Pro will let your backups span multiple discs, asking you to insert a new disc as each one fills up. In this way you have a (theoretically) infinitely big destination: all you need is more discs! However, such media can become inconvenient for very large backups, such as those of your entire Mac, as you’d have to attend to the backup and switch out disks every few minutes.

Your backup schedule depends on how often you change the original files. Ask yourself: how long will it take to recreate changes made to lost files? For example, let’s say you start working intensively on a file at 9 am. If you lose it due to a crash or power outage at noon, you’ll probably need three hours to restore the file—if that’s even possible.

To ensure that you don’t lose such data, you should regularly back up your files. For critical data, a backup of working files to external media (or a network location) every few hours is wise. Then, complete daily or weekly backups provide additional protection to cover all files, whether you have worked on them or not.
Again, scheduling decisions will depend on the amount of space available on your destination device. If you have plenty of space compared to the total size of your source files, and are able to perform backups conveniently, there’s no reason not to do them every day. Consider how long you’ll want to keep **archives** of your backups. A financial-services company might be required by law to retain computer data for several years: such a company would want to ensure that it always has a definitive copy of each file stored away in case auditors come around. However, it probably won’t need to access those old files frequently, or at all: therefore, it would probably store them in a compressed format (to save space), at an offsite location.

On the other hand, home users might want to make backups only to ensure that they can recover the most-recent versions of their files, not caring about older versions. For them, the best solution might be to back up their Macs to external drives, automatically discarding old versions as they go.

Finally, it’s a good idea to create a bootable backup of your Mac OS X startup volume on an external hard drive in case you suffer major disk problems or cannot start up your Mac for other reasons. Then, if problems occur, you can restart your Mac from this disk and get to work immediately.

In any case, you should develop a backup strategy that corresponds to the way you work—and perform regular backups.
Using Scripts to Automate Backups

Regardless of whether you create a backup, synchronization, or bootable backup, the specific details of your session are called a “script”. (You don’t need a script to restore files, as you’ll see in chapter 5, Backing Up, Synchronizing, and Restoring).

There are three advantages to using scripts. First, they ensure that you back up the same files, in the same way, every time; second, scripts can trigger actions from other programs and Mac OS X; third, Intego Backup Manager Pro lets you schedule scripts to run periodically without requiring your attention.

For example, you might create a script that does the following, every day at 5 pm:

- Selects all spreadsheet documents that are under 20 MB;
- Scans them with Intego VirusBarrier X5;
- Backs them up, keeping only the two latest versions, then;
- Shuts down your Mac.

We’ll discuss scripts in detail in chapter 4 (Script Options).
Getting the Most From This User’s Manual

If you simply want to backup your entire hard drive, read chapter 2 (Quick Start). Intego Backup Manager Pro will help you protect your data with just a few clicks.

Chapter 3 (Managing Scripts) teaches you how to set up all of Intego Backup Manager Pro’s actions, from the simplest to the most complex. Every operation, whether a backup or synchronization, is based on a script, so understanding this short chapter will be of great help.

Chapter 4 (Script Options) and chapter 6 (Preferences) cover advanced functions, allowing you to customize your backups and synchronizations. It’s not required reading, although advanced users and network administrators will get a lot from it.

Chapter 5 (Backing Up, Synchronizing, and Restoring) tells you what happens during and after a script has run. If you see anything you don’t understand during backups or synchronizations, you’ll find the answers here. You’ll also find out how to use the Intego Backup Manager Pro Dashboard widget to launch your scripts easily.

Finally, a glossary at the end of the manual defines technical terms, while a technical support directory tells you where to go for help if you run into a problem that can’t be solved by reading this manual.
System Requirements

- Any officially-supported Mac OS X compatible computer
- Mac OS X 10.4 or higher, or Mac OS X Server 10.4 or higher
- A LaCie hard disk or network storage device for Intego Backup Assistant

Installing Intego Backup Assistant or Intego Backup Manager Pro

In most cases, you will install your software using the LaCie Setup Assistant, which you will find on your LaCie hard disk or network storage device.

Double-click the LaCie icon, and follow the Setup Assistant’s instructions.
In some cases, you’ll receive a CD with your LaCie hard disk containing software. Insert the CD and double-click the Intego Backup Assistant or Intego Backup Manager Pro installer icon. The installer will launch, and you’ll see the following screen:

![Intego Backup Manager Pro Installer](image)

Click Continue to proceed with installation. The Intego end user license displays. Click Continue, then click Agree if you accept this license; if not, click Disagree, and the installer will quit.

The next window lets you perform a standard installation. Click Install to install the software on your startup volume. After installation, you will have to restart your computer.
Serializing Intego Backup Manager Pro

When you first launch Intego Backup Manager Pro the program will display its serialization window:

![Image of Serialization Window]

You must enter your name, company, if any, and your serial number. You can find your serial number on a sticker in your drive’s box, or on the sleeve of the software’s CD. If you upgrade from Intego Backup Assistant to Intego Backup Manager Pro, you will have received a serial number by e-mail after your purchase. When you have entered your information, click OK. The program will now open.
Using Intego Backup Manager Pro in Evaluation Mode

To use Intego Backup Manager Pro in evaluation mode, click Evaluate when the Serialization window displays. You can use the software for 30 days. At the end of this period, you can either purchase a license for the program or uninstall it from your computer.

You can find out how much time is left in your evaluation session by displaying the About screen for the program. To do this, choose Intego Backup Manager Pro > About. This screen tells you that the program is in evaluation mode, and shows the time remaining in evaluation mode.
2—Quick Start
Your First Backup

To launch Intego Backup Assistant or Intego Backup Manager Pro, navigate to your Applications folder in the Finder, then double-click the Intego Backup Assistant or Intego Backup Manager Pro icon.

The first time you launch the program it displays a dialog offering to create a script. You can choose from three types of scripts: a backup, bootable backup, and a synchronization script (Intego Backup Assistant only allows you to create a backup or a synchronization script.)

To create a first backup, click the “untitled backup script” to select it. Next, add your source. To do this, drag its folder—that is, the one containing files you want to back up—from the Finder to the area labeled “Click to choose Source”. (You can also click in that area and navigate to the source folder through Mac OS X’s file selection window.)

Do the same for the backup’s destination.
The window will now show which folder you intend to back up, and where it’s going.

![Folder Selection](image)

Then click the Play button, which looks like a right-pointing triangle labeled “Back Up”.

![Play Button](image)

Intego Backup Manager Pro will back up all the files from the source folder to the destination folder or volume, except for those you don’t have permission to copy.

That’s it! You now have a spare copy of all files in the source, ready in case any of the original files disappear.

But Intego Backup Manager Pro does much more than the simple backup described here; the next chapter details all the options that give it the power to satisfy everyone’s backup needs, from the single-Mac home user to the corporate administrator of thousands of computers.
3—Managing Scripts
Getting Started With Scripts

Regardless of whether you use Intego Backup Manager Pro for backups, bootable backups or synchronizations, you’ll tell the program what you want it to do by creating a script. A script consists of two parts:

1. Indication of the source of files to copy and their destination.
2. Options that control such matters as when a backup will run, what happens before and after it runs, what to do with duplicate files, and so forth

The first time you launch the program it displays a dialog offering to create a script. You can choose from three types of scripts: a backup, bootable backup, and a synchronization script (Intego Backup Assistant only allows you to create a backup or a synchronization script.)

You can create a script now from this screen. To create other scripts later, either choose File > New Script, or press Command-N.

Or, click the + button.

By the way, you might have noticed a small yellow box with explanatory text that appears after you let your cursor rest on the + button for a couple of seconds.
Such “help texts” appear throughout Intego Backup Manager Pro. If you ever get stuck, or wonder what will happen when you click something, try moving the cursor around the window and letting it sit above various controls for a moment.

But back to our backup. Let’s assume you launched Intego Backup Manager Pro, selected Backup, then clicked Create. You’ll have a new script, called “untitled backup script”:

If you do the same thing again, you’ll notice a second script underneath the first one, titled “untitled backup script 2”.

Depending on your Mac’s screen settings, you might not see the script’s full name. But you can fix that if necessary. First, hover the cursor over the vertical dividing line between the list of scripts and the rest of the window, or over the tiny vertical lines next to the word “script” at the top of the script
list. You’ll know it’s in the right place when it turns into a thick vertical line with two small arrows on either side. Then, drag it to the right until you can see all your scripts’ full names.

Let’s say you want to delete that second script. The first way is to click it once and then click the – button; the second is to press the Control key while clicking the script’s name until a menu appears, then choosing Remove. (Such “contextual menus” occur throughout Intego Backup Manager Pro.)

In either case, a dialog box will ask you to confirm your choice.

Now you have just one script called “untitled backup script”. To change this name, highlight it where it appears at the top of the window and type in its new name.
Or, double-click its name in the left column, then type in its new name. Once you hit the tab, enter, or return key, the two locations will reflect the new name.

You can also change the icon that represents a script by clicking the current one at the top of the main window and selecting a new icon.

You set up synchronization and bootable backup scripts in exactly the same way as backup scripts, although with different default icons to help you differentiate them with a glance.

Once you’ve created a script, you might want to make another one almost exactly like it, with just a few small changes. To do this, press the Control key, click the script that you wish to copy, then select Duplicate.

A new script appears with the same name as the one you just duplicated, but with the word “copy” at the end. You can then change its name to whatever you like in the manner described above.
Sources and Destinations

So now you have one or more scripts set up: the next step is to determine which files will be copied, and where they’ll go. The process is similar for backups, bootable backups, and synchronizations; however, there are enough differences among them that we’ll look at each separately.

As used here, a “source” is the location of files to be backed up, put into a bootable backup, or synchronized. A “destination” is where copies of the files will go.

Backups are the most flexible in terms of sources and destinations. You can define multiple backup sources, for example to duplicate the contents of several folders, or even several network volumes, to one destination. Backup sources don’t have to be on computers running Mac OS X: in fact, they don’t have to run any operating system at all. That means you can back up from an external disk, network volume, memory stick, iPod, or any other Mac OS X-readable medium in addition to computer drives. Further, you can back up to any Mac OS X-writable medium.

You can synchronize from any folder or volume to any folder or volume. But unlike in a backup, you can’t synchronize individual files, or synchronize from multiple sources.

**PRO** A bootable backup is the most specific type of action, as its source must be an entire disk or volume that contains a bootable copy of Mac OS X, and its destination must be a medium that can be booted. (Intego Backup Manager Pro does not create bootable backups on DVDs.)
Creating Sources and Destinations

Regardless of whether you’re making a backup, bootable backup, or synchronization, you define sources and destinations through the top section of Intego Backup Manager Pro’s window.

There are five ways of indicating sources and destinations:

- **Dragging and dropping** items from the Finder to their locations in Intego Backup Manager Pro.

- **Clicking** in the source or destination area of the window, finding an item you want to use, and clicking Select.
• Selecting **menu options** under the Script menu, Choose Source... or Choose Destination....

![Script Menu](image)

• Using **command keys**: press Control-Option-Command-S to select a source, and Control-Option-Command-D to select a destination (as is shown in the above menu).

PRO • Using **popup menus** that appear the source and destination areas of Intego Backup Manager Pro’s main window. These only appear when creating bootable backups.

![Popup Menus](image)
Other Sources and Destinations

In addition to using folders and volumes as sources and destinations, Intego Backup Manager Pro offers other options. If you click on the Source or Destination areas, you’ll see a window where you can choose a source. By default, the Kind menu shows Local File or Folder. Click that menu, and you’ll see the other options available. The sources available are the following:

And you can choose from the following destinations:
**Network Drives**

You can use any network drive as a source or destination with Intego Backup Manager Pro; Intego Backup Assistant can only use a LaCie drive as a network destination. To do this, select the network drive in the Kind menu. A dialog displays where you can enter information for your network drive:

First, enter an address. This can be a local address (such as iMac.local), which you can find in the Sharing pane of System Preferences on the Mac you want to mount; a Windows share (such as smb://servername); an FTP or SFTP server, identified by its address (ftp://ftp.example.com); or a network volume on a remote computer, identified by its IP address. In each of these cases, you must enter a full address, including any volume and/or folder name. You can add any type of network volume that you can mount in the Finder: in fact, in most cases, the easiest way is to mount the volume in the Finder, then drag its icon onto the Address field in the above dialog.

If you check Connect automatically as, and enter a name and password, Intego Backup Manager Pro will not prompt you for this information when running its script. And if you check Wake computer if needed, Intego Backup Manager Pro will attempt to wake the computer containing the network volume. (Note: this does not work with all computers.)

You can click Test Settings to check to make sure your settings are correct.
**Spotlight Search**

You can use a search from Spotlight, Mac OS X's search technology, as a source for your scripts. To do this, select Spotlight Search from the Kind menu: you’ll see a sheet where you can set up a Spotlight search.

To create a search, first choose a location from the Search in menu. This can be Computer (your Mac), Home Folder (your home folder) or other. If you choose other, you can select any folder or volume you would like to search.

Next, choose criteria for your search. For example, you could choose Content Modified from the first menu, then After from the second menu, and enter a date in the text field. Or you could choose a specific type of file (Other > Kind > Contains > Word to find all Microsoft Word documents). For more on using Spotlight to create searches, see Mac OS X's help documentation.

Note that you can also drag a smart folder, which is a way of saving a Spotlight Search, from the Finder onto the Source section of the Intego Backup Manager Pro window to add that search as a source. If the smart folder is in the Finder sidebar, click the folder, then drag its “proxy” icon—the icon in the title bar of the window—onto the Source section of the Intego Backup Manager Pro window.
**iDisk**

Intego Backup Manager Pro allows you to choose an iDisk as either a source or destination. Using it as a source allows you to back up its contents on a local Mac; if you choose it as a destination, you can back up some of your files to your iDisk to have off-site backups easily. Note that iDisk storage space is limited, so you might not be able to back up all your files without purchasing additional space from Apple.

If you select iDisk from the Kind menu, Intego Backup Manager Pro mounts your iDisk (if it is not currently available in the Finder), and displays a sheet where you can select a subfolder for your source or destination:

![Choose a Source](image)

If you wish to back up a folder, or use a folder as destination, click it and click Select. To choose your entire iDisk as a source, hold down the Command key and click on the selected folder to deselect it, then click Select.
**Optical Discs**

You can use an optical disc—a CD or DVD—as either a source or destination. To use an optical disk as a source, insert it into your Mac’s drive, wait a moment for it to mount, then select it in the Choose a Source dialog. Alternately, drag it on the Source area of the Intego Backup Manager Pro window. To use one as a destination, select Optical Disc from the Kind menu of the Choose a Destination sheet. You’ll see the following:

If your Mac has more than one optical drive, select it from the Preferred drive menu. If you want Intego Backup Manager Pro to verify the disc after running your backup script, leave the Verify disc after backup option checked. It’s a good idea to do this; it only takes a few minutes, and ensures that your disc is readable. If you uncheck this option, you’ll save time, but you may not have a working backup.

When you use an optical disc as a destination, you will have different Backup Options from other destinations. The Mode menu of the Backup Options offers two choices:

You can only choose between copying only changed files or copying all files each time you run your backup. If you copy everything each time you run the backup, each backup disc (or set of
discs) will contain all your files. If you need to restore any files, you can do so from any of your backup discs (or sets of discs).

If you choose to copy only changed files, you can make incremental backups, each new disc (or set of discs) containing only those files that have changed since the previous backup. In this case, Intego Backup Manager Pro will ask you to insert the last disc of your previous backup before copying files to new discs. (For example, if your backup spanned three DVDs, you will need to insert the third of these discs into your Mac.) This is done so Intego Backup Manager Pro can read information regarding the files that have already been backed up, so the program will know which files to copy.

Note: Intego Backup Manager Pro can create multi-session backups on CDs, but not on DVDs; this is because the Mac OS X framework for writing optical discs cannot write multiple sessions on DVDs. This allows you to use empty space on CDs for incremental backups. If you back up to CDs, and have only used half the capacity of a CD, Intego Backup Manager Pro will be able to use the remaining space for your next backup.
**PRO Disk Images**

You can use a disk image as either a source or destination. To use a disk image as a source, mount it in the Finder and select it in the Choose a Source dialog, or drag the mounted disk image (not the .dmg file) on the Source area of the Intego Backup Manager Pro window. To use one as a destination, select Disk Image from the Kind menu of the Choose a Destination sheet. You’ll see the following:

In this sheet, choose a name for your disk image, and select a location by clicking Change... or by dragging a folder or volume into the Location field. If you wish your disk image to be compressed, choose a form of compression, and if you want to encrypt your backup, choose from two levels of encryption.

When you run the script the first time, Intego Backup Manager Pro creates the disk image. Each subsequent time, Intego Backup Manager Pro mounts the existing disk image if it is in the same location. If you move it, though, Intego Backup Manager Pro will create a new disk image with the same name, so you should make sure to leave the .dmg file in the appropriate location.

Intego Backup Manager Pro doesn’t ask you to choose a size for the disk image; Intego Backup Manager Pro determines the appropriate size. If you run a subsequent backup, Intego Backup Manager Pro enlarges the size of the disk image if necessary. You therefore don’t need to worry about how big it is.
Changing Sources and Destinations

Once you’ve chosen a source or destination, you can change it by clicking it and selecting an option from the large popup menu that appears. Options vary depending on whether you’re working on a backup, bootable backup, or synchronization.

<table>
<thead>
<tr>
<th>Type of script</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Backup source</strong></td>
<td>• Edit the current choice by clicking the pencil icon, then selecting a new choice.</td>
</tr>
<tr>
<td></td>
<td>• Remove the current choice by clicking the – icon.</td>
</tr>
<tr>
<td></td>
<td>• Add an additional source by choosing Add Source... and selecting the desired source.</td>
</tr>
<tr>
<td>A backup source can be pretty much anything. You can create a script that backs up a single file, a folder, a volume, or entire drive, or combinations of any of these, spread among multiple devices.</td>
<td></td>
</tr>
<tr>
<td><strong>Backup destination</strong></td>
<td>• Same as backup source, except that Change Destination... replaces Add Source.... This is the same as clicking the pencil icon. (You can only select one backup destination.)</td>
</tr>
<tr>
<td>A single location—folder, volume, or drive—on any Mac OS-writable medium.</td>
<td></td>
</tr>
<tr>
<td><strong>Synchronization source</strong></td>
<td>• Same choices as backup source, above, except that Add Source... has become Change Source...; selecting it is the same as clicking the pencil icon. (You can only select one synchronization source.)</td>
</tr>
<tr>
<td>A single folder, volume, or drive, on any Mac OS-readable medium.</td>
<td></td>
</tr>
</tbody>
</table>
### Synchronization destination

A single folder, volume, or drive, on any sort of Mac OS-writable medium.

- Same choices as synchronization source, except that Change Source... has become Change Destination....

### Bootable backup source

- Shows all volumes that contain a bootable copy of Mac OS X.

### Bootable backup destination

- Shows all currently mounted volumes that are capable of containing Mac OS X, plus the option “ASR Disk Image”, which creates a single file that contains the full contents of the bootable backup’s source. This file is portable, and can be used to produce multiple copies of the source disk, for example to standardize the contents of all Macs on a network.

- Obviously, a bootable backup’s destination can’t be the same as its source. If you attempt to make them the same, Intego Backup Manager Pro intelligently changes the previously chosen one so they’re not the same.
Locking, Exporting, and Importing Scripts

So far, we’ve considered Intego Backup Manager Pro from the point of view of lone Mac users who don’t need to share or protect their backup scripts. But if you share your computer, you might want to protect your scripts from the itchy fingers of others. And if you know others who also have Intego Backup Manager Pro, you might want to share copies of your scripts with them so they can see what you did.

Intego Backup Manager Pro includes a very simple system that prevents accidental changes to your scripts. Since the scripts themselves aren’t valuable information, the “lock” is more of a deterrent than a security measure: for example, no password is needed to unlock scripts. But it’s an effective tool to prevent scripts’ accidental deletion or changing.

To lock a script, either:

- Hold the Control key while clicking the script in the script list, then select Lock Settings from the contextual menu that appears;

- Choose Script > Lock Settings; or

- Press Command-L.
To unlock the script, either select Unlock Settings in the contextual menu, choose Script > Unlock Settings, or press Command-L again.

To export a script, click it in the script list, then either choose File > Export Script... or press Command-Shift-S. To import a script that’s been exported, whether from your copy of Intego Backup Manager Pro or someone else’s, either choose File > Import Script..., press Command-O, or double-click the scripts icon in the Finder.

Exported scripts are plain-text XML files that store all the script’s options, including the locations of sources and destinations. If you move the script to a Mac that doesn’t have the source or destination in the same location, the script will open but not run.

At this point you know how to set up Intego Backup Manager Pro scripts to create backups, bootable backups, and synchronizations; how to show which files should be backed up; how to protect those scripts; and how to transfer them among Macs where Intego Backup Manager Pro is installed. You can run any of these scripts by clicking the one you want in the left column and pressing the Play button in the lower-right corner (that is, the right-pointing triangle).

But Intego Backup Manager Pro gives you much, much more control over operations than you’ve seen so far. The next chapter shows you what your options are—and how to access them.
4—Script Options
Overview of Intego Backup Manager Pro’s Script Options

Virtually all of Intego Backup Manager Pro’s custom options—such as when a script runs, what happens before and after it runs, what it does when it encounters duplicate files, and so forth—are set in the script’s options, which appear as a row of five buttons at the bottom of Intego Backup Manager Pro’s window. They are:

- **Schedule.** You can make a script run periodically, wake up your Mac (if it’s asleep), or run even if you’re not logged in. Schedules can have several parts, so for example you could direct Intego Backup Manager Pro to run a backup every Monday and Wednesday at 5pm, then again on the first of every month.

- **Preparation.** You can set Intego Backup Manager Pro to run another program before starting its script. Most commonly, the program will be Intego VirusBarrier X5, to identify dangerous files before copying them (and possibly infecting other files). However, you can also direct Intego Backup Manager Pro to run any program, including a custom AppleScript that, in turn, runs several other programs.

- **Exceptions.** Intego Backup Manager Pro has selectors that give you wide-ranging control over which files are copied. You can choose to back up (or not back up) files based on their visibility, name, kind, path, size, date created, date modified, label, or any combination of these criteria.

- **Options.** Each of the three types of script—backup, bootable backup, and synchronization—offers a set of choices specific to that script. These involve the number of backups to keep; whether to copy aliases or the files to which they point; what to do when a file has been changed on both the source and the destination disk; and so forth.

- **Finishing.** Like the Preparation option, Finishing lets you direct Intego Backup Manager Pro to run a program (or AppleScript) after the script is finished. It also lets you choose whether to unmount the destination disk, quit the program, run another Intego Backup Manager Pro script, put Mac OS X to sleep, or shut down your Mac entirely.

You can view each of these five sets of options in any of three ways: by clicking its button, by choosing its menu item, or by pressing its command-key combination. Each set of options shows up in its own section of the Options part of Intego Backup Manager Pro’s main window. But you don’t
need to specify any of these options: if you don’t, the script will simply run using Intego Backup Manager Pro’s default options.

There are three ways to remove a set of options from the Options section of the window, and therefore use the default options:

- Click the small X in the upper-right corner of that section of the Options window;

- Press the same command-key combination that causes the option to appear; or

- Select the same menu item that causes the option to appear.

In any case, a dialog box will ask you to confirm your choice.
Schedules

You can run an Intego Backup Manager Pro script at any time by pressing the Play button in the main window’s bottom-right corner. But much of the convenience of backup and synchronization operations is in setting them to run periodically, without your intervention or attention. For example, you might want a backup script to run automatically whenever you plug in an external hard drive, or synchronize two folders, one on your Mac and one on an external hard disk, when the disk is turned on. Schedules make this possible.

To access Intego Backup Manager Pro’s Schedule options, either:

• Choose Script > Options > Schedule
• Press Command-1
• Click the Schedule button at the bottom of Intego Backup Manager Pro’s main window.

The Schedule options display.
The “Run script” section lets you direct Intego Backup Manager Pro to run the selected script periodically. To do so, click the checkbox labeled “Run script”. Then, select how often you want the script to run by selecting a period from the popup menu. The choices are:

<table>
<thead>
<tr>
<th>Period</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Every Day</td>
<td>Select the time of day.</td>
</tr>
<tr>
<td>Every Week</td>
<td>Select the day of the week, and the time on that day.</td>
</tr>
<tr>
<td>Every Month</td>
<td>Select the day of the month, and the time on that day.</td>
</tr>
<tr>
<td>Every ______</td>
<td>Select the number of periods and the length of the period (minutes, hours, days, weeks, months). For example, you could make the script run every 20 minutes, or every three months.</td>
</tr>
</tbody>
</table>

You can set up complex schedules by clicking the + button to add more lines to the Run script section. For example, here we’ve set a script to run every week on Monday and Friday at 11pm, then on the first day of every month at 1am. The cursor is positioned to add another criterion.

To remove any criterion, click the – button to its right; to disable all schedules in this script (without deleting them), uncheck the Run script checkbox.

The other three controls in this section are:

- “Wake up computer if necessary” allows you to put your Mac in its power-saving “sleep” mode, yet still be confident that Intego Backup Manager Pro will perform its scheduled script. Once the script is completed, the computer will remain on—unless you also turn on an option in the Finishing section to put the computer back to sleep when done. (To learn
how to do this, see **Finishing: Postprocessing Files**.) Note that this option will **not** turn on your computer if it’s fully turned off, rather than merely asleep.

- “Run this script even if you’re not logged in” allows the script to execute even if no-one, or another person, is logged on at the time it’s set to run.
- “Run script when volume ____ is ready” automatically starts the script when the specified volume is visible to your Mac—for example, whenever you connect to a network, or turn on or plug in an external hard drive. Except for your Mac’s startup drive, all volumes that are given as sources or destinations for this script are available in the popup menu; if both the sources and destination are on your Mac’s startup drive, this option will not be available.
**PRO Preparation: Preprocessing Files**

To access Intego Backup Manager Pro’s Preparation options, either:

- Choose Script > Options > Preparation,
- Press Command-2, or,
- Click the Preparation button at the bottom of Intego Backup Manager Pro’s main window.

This option lets you run a program before Intego Backup Manager Pro makes its copies. Because a virus checker is what Mac users most often want to run before backing up or synchronizing, the first checkbox is dedicated to Intego VirusBarrier.

The second checkbox lets you direct the script to run any application first. That program could be an Mac application with a graphical interface, an AppleScript, a shell script, an Automator workflow, or even a sound file that you want to play when the script begins. When you check this box, you’ll see a dialogue box asking you to select the program to be run; to change it later, click the Choose... button.
Exceptions

To access Intego Backup Manager Pro’s Exceptions options, either:

- Choose Script > Options > Exceptions,
- Press Command-3, or,
- Click the Exceptions button at the bottom of Intego Backup Manager Pro’s main window.

The first two popup menus let you specify whether you want to copy—or not copy—any of the conditions you give, or all of them. For example, changing this selection could make the difference between copying only files with “cache” in their names, none of them, or those files together with others.

The next section lets you specify the type of information that you want the filter to find. The choices are: Visibility, Name, Kind, Path, Size, Created (i.e., the date the file was “born”), Last Modified, and Label. After choosing one of these, you’ll have the opportunity to specify filter details.

As in the Schedule section, clicking the + button at the right of the window adds an additional condition, while clicking the – button next to a condition removes it from the list. You can also modify filter conditions by simply changing their popup menu options or typing new data into the data fields.
In the example below, files will only be copied if they:

- Are Microsoft Office files (such as Word documents), or
- Are in a certain folder named “Documents to back up”, or
- Have the name “Finances”.

Options

Regardless of whether you’re running a backup, bootable backup, or synchronization, you access the script’s options in the same ways. (Available selections change depending on which type of script you’ve clicked in the script list in the left column.)

<table>
<thead>
<tr>
<th>Script type</th>
<th>Ways to access the script’s options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Backup</strong></td>
<td>• Choose Script &gt; Options &gt; Backup Options,</td>
</tr>
<tr>
<td></td>
<td>• Press Command-4,</td>
</tr>
<tr>
<td></td>
<td>• Click the Backup Options button at the bottom of Intego Backup Manager Pro’s main window.</td>
</tr>
<tr>
<td><strong>Bootable backup</strong></td>
<td>• Choose Script &gt; Options &gt; Bootable Backup Options,</td>
</tr>
<tr>
<td></td>
<td>• Press Command-5,</td>
</tr>
<tr>
<td></td>
<td>• Click the Bootable Backup Options button at the bottom of Intego Backup Manager Pro’s main window.</td>
</tr>
<tr>
<td><strong>Synchronization</strong></td>
<td>• Choose Script &gt; Options &gt; Synchronization Options,</td>
</tr>
<tr>
<td></td>
<td>• Press Command-6,</td>
</tr>
<tr>
<td></td>
<td>• Click the Synchronization Options button at the bottom of Intego Backup Manager Pro’s main window.</td>
</tr>
</tbody>
</table>

We’ll look at each of these individually.
Backup Options

Mode: This section defines how many versions of copied files you wish to keep. (The “Backup Decisions” section in chapter 1 will help you decide the best strategy for you.) By default, Intego Backup Manager Pro saves all old versions of your files until your backup disk is full; however, you can choose to save only a specific number of old versions.

The other option in the Mode popup menu is “Keep the latest version of each file only.” Selecting that reveals three different options.

- “Remove files deleted from source” ensures that your backup doesn’t contain copies of any files that you removed in the source location. In this case, your backup precisely reflects the current contents of your source.
- “Overwrite destination files, even if they are more recent than in source” makes the backup truly one-way: it assumes the source contains the definitive versions of a file that you want to keep, no matter what. This could be useful if (for example) you use files at the backup location for testing purposes while those at the source location are used for “real” business.
- “Back up to root level of destination when only one source is defined” produces a “mirror” of the source that could be less complicated than other backup schemes.
The Permissions section asks whether you want Intego Backup Manager Pro to copy only those files that you have permission to read, or whether it should use administrator authority to copy all files. If you choose the latter, you’re given the choice of either entering an administrator’s password just before the script runs (“Ask for authentication before running script”) or ahead of time (“Do not ask for authentication”).

To copy all files, you must enter a user name and password belonging to someone with administrator-level permissions. To determine who that is on your Mac, choose the Apple menu > System Preferences... > Accounts: users with such power will have “Admin” under their names.

The Advanced options section contains a single checkbox, “Resolve aliases”. If you leave this unchecked, each alias file will be copied to the destination location without any changes; check it, and the file to which the alias points will be copied instead.
**PRO** Bootable Backup Options

Bootable backups have four options.

- “Do not ask for an administrator password” makes Intego Backup Manager Pro ask for the administrator password when you define the script, saving you from having to enter it later. If you leave it unchecked, you’ll have to enter the password just before the script runs.
- “Never remove anything in destination”: if you leave this unchecked, Intego Backup Manager Pro will make a perfect clone of the source volume, erasing everything on the destination in the process. By checking it, you’re saying that you want a perfect clone of the source to be created on the destination volume in addition to content that’s already there. Note that checking this box could cause trouble with your bootable backup. If you simply want to keep a folder from being deleted, you can add it as an exception.
- “Repair permissions on _________” examines the permissions on system files. Intego Backup Manager Pro will attempt to fix any errors it finds.
- “Repair _________” examines the destination volume after running the bootable backup to make sure that it’s in good shape. Intego Backup Manager Pro will attempt to fix problems it finds, such as directory errors.

Note: when running a bootable backup, you don’t need to back up your startup volume to a hard disk the same size as the original. For example, you may have a Mac with a 250 GB hard disk, but only 80 GB of its space is used. In this case, you could create a bootable backup on, say, a 120 GB hard disk, and still have room for that backup to grow. You do need to have several GB of free space on the destination, however, or you may not be able to use the backup to start up your Mac in case of problems. (Your Mac uses invisible virtual memory files that can take up several GB of space.)
Synchronization Options

A synchronization coordinates the files contained in two folders or volumes so they both have the same versions of all files. Intego Backup Assistant can run synchronization scripts of folders or volumes to a LaCie hard disk, but not to another Mac.

A question arises when the same file has been changed on both the source and destination volumes: which one should be copied? The first popup in the synchronization options window lets you decide.

The first option ("Ask") displays a window whenever it encounters a file that’s been changed in both places.
On the left you see details about the document in its source location; on the right, the same
document in its destination. In the bottom right of each section is a small magnifying glass icon:
clicking it shows the file in Quick Look (Mac OS X 10.5, Leopard) or in the Finder (Mac OS X
10.4, Tiger). If you’re running Leopard, you can show the file in the Finder by pressing the Option
key when you click the magnifying glass.

You have two options for this file: either make the version on the source location the “official” one
that gets copied, or copy the version that was changed most recently, then click the Continue button.
Or, you could choose to ignore all such conflicts by checking Resolve other conflicts then choosing
one of the elements in the popup menu. Later button. If you make no choice within 60 seconds,
Intego Backup Manager Pro will act as though you clicked the Resolve All Later button.

The popup menu labeled “When files have changed on both sides since last sync” also has
selections to make Intego Backup Manager Pro act consistently whenever it runs into such
synchronization conflicts. Besides “Ask”, its other four options are: Copy from Source; Copy from
Destination; Copy newest, and Copy oldest.

Whatever you choose, Intego Backup Manager Pro will erase previous versions so that only one
version will remain on both the source and destination volumes. However, you can override this
behavior and save all previous versions by checking the “Never delete anything” checkbox.

The Permissions section asks whether you want Intego Backup Manager Pro to copy only those
files that you have permission to read, or whether it should use administrator authority to copy all
files. If you choose the latter, you’re given the choice of either entering an administrator’s password
just before the script runs (“Ask for authentication before running script”) or ahead of time (“Do not
ask for authentication”).

To copy all files, you must enter a user name and password belonging to someone with administrator-level permissions. To determine who that is on your Mac, choose the Apple menu >
System Preferences... > Accounts: users with such power will have “Admin” under their names.
**Finishing: Postprocessing Files**

To access Intego Backup Manager Pro’s Finishing options, either:

- Choose Script > Options > Finishing
- Press Command-7
- Click the Finishing button at the bottom of Intego Backup Manager Pro’s main window.

The first Finishing option is similar to one you read about in the Preparation section: it lets you run another program once the script has finished. As before, this program can be any application, AppleScript, shell script, Automator workflow, or sound file that you want to play when the script completes. When you check this box, you’ll see a dialogue box asking you to select the program to be run; to change it later, click the Choose... button.

The next option, which is checked by default, directs Intego Backup Manager Pro to unmount the destination volume when the script is complete. Here a popup menu gives you two options: either unmount the volume only if it was mounted by Intego Backup Manager Pro (a network volume, for example), or always.

The last option allows you to tell Intego Backup Manager Pro to quit, put your Mac to sleep, shut your Mac down, or run another script. If you select “Run script”, you’ll see another popup menu, listing all available scripts. In this way you could have Intego Backup Manager Pro perform a series of scripts, one after the other, and finally shut down.
5—Backing Up, Synchronizing and Restoring
What Happens When You Click “Play”

At this point everything’s set: you’ve chosen which files to copy, what Intego Backup Manager Pro will do with those files, how it will handle exceptions, and what it will do before and after the script is complete. Now it’s time for action!

To run a script, click it in the left column, then click the right-pointing triangle in the lower-right corner (called the Play button, as it resembles that button on a tape recorder or CD player.) The label on this button will vary, depending on whether you’re performing a backup, bootable backup, or synchronization.

For the most part, Intego Backup Manager Pro will run without your intervention: once a script’s scheduled time arrives, or you press the Play button, the program does exactly what you directed, every time. However, there is one notable exception: if you’re making a backup to removable media such as DVDs, you may have to watch the process and insert new media as needed.

Intego Backup Manager Pro provides ways to inspect a backup or synchronization before, during, and after it has run. The Preview button shows you exactly which files will be copied; you can see how the process is humming along in three different ways by clicking the Summary, Chart, and Details buttons; and the Log keeps a record of past scripts, both successful and failed.

A backup is useless without a way to recover lost files. Intego Backup Manager Pro’s Restore function lets you choose not only which files to return to their original places, but which versions of those files to keep. Of course, since it stores files in their native format, you can also just drag them from one folder to another in Mac OS X.
So now you’ve set up your backup or synchronization script. But what, exactly, will happen? How many files will be copied? In which direction? What if you want to make a temporary exception? With its Preview function, Intego Backup Manager Pro answers all these questions.

Click your script in the script list, then click the Preview button at the bottom right of Intego Backup Manager Pro’s main window.

Alternately, you can enter Preview mode by choosing the menu selection Script > Preview, or pressing Command-Option-Return.

The bottom part of the window will look something like this:
The left column shows the name of the file or folder to be copied; the center column shows what will happen to it; and the third column shows where the item will end up in the destination location. Note that even invisible files appear in this list, so you’ll see some (such as .DS_Store in the above example) that don’t appear in the Finder.

Want to see more information? Clicking the gear icon in the window’s bottom-left corner lets you display two additional columns of information for each item in the list: its modification date, and creation date. Further, selecting Complete Path shows not only the name of the source file, but where it is on the source volume. A checkmark appears next to those that are showing: to hide them, simply select them from the gear menu again.

Here’s the same window, with all information visible.
Depending on which options you selected, your Mac’s screen might be too small to see everything. You can change the width of columns to better see those that are most important to you. To do so, hover your cursor over the line to the right of the column head you want to expand or contract until it turns into a “double-arrow” cursor. Here, we’re about to expand the Source column:

Here it is, fully expanded so you can see each file’s complete path.

Double-clicking any portion of the file path reveals the file in the Finder.

What if you see an item that you don’t want copied? Of course you could create a rule in the Exceptions (see Exceptions), but Intego Backup Manager Pro gives you a much faster way to make individual exceptions: simply click the action for that item in the Change To column: you’ll see a popup menu, from which you can choose to disable that item from being copied.
Once you’ve confirmed that the backup or synchronization script will go as you like, you can run it by pressing the Play button, or go back to the main window by clicking the Edit Mode button in the window’s lower-right corner.
Running Scripts

A backup or synchronization script starts when:

- Its scheduled time arrives,
- You click the Play button,
- You choose Script > Run, or

In any case, you might see that Intego Backup Manager Pro is “Preparing to copy” your files, while it analyzes them to determine whether they do, in fact, need to be copied. (If your script involves a small number of files, you probably won’t notice anything because the program checks them so quickly.)

A small icon also appears next to the script’s name.

Once preparation is complete, this icon changes to show that the script is copying files.
The main section of Intego Backup Manager Pro’s window also changes to look something like this:

![Summary view of Intego Backup Manager Pro](image)

This is the Summary view. At the top is a progress bar, showing how much has been copied, how much in total is to be copied, and an estimate of how much time the script will take to complete. The center section shows an animation of two hard drives at work.

Clicking the Chart button changes the view to one that shows a timeline of how quickly the files have been copied so far. In this case, our copy speed peaked at about 9MB/s, or nine megabytes per second. Moving the slider at the bottom lets you see a longer or shorter time period.
The Details view gives specifics about which file is being copied right now, in addition to some other useful information, such as the script’s average speed. This view also gives you the opportunity to skip certain files by pressing the Skip button when they appear next to the text “Current Action” at the top. Generally, only large files can be skipped, because small ones would already be copied by the time you click the button.

Finally, you can stop a script at any time by pressing the Stop button in the lower-right corner. However, it will continue until you respond to a dialog box confirming your choice. (If you want the script to stop immediately in the future when you press the Stop button, check the box labeled “Do not show this message again for this script”.)
After a few moments, the main window will confirm that the script was successfully halted.

![Backup Stopped](image)

To temporarily stop a script, press the Pause button. It will turn into a button labeled Resume, which you can click to continue the script where it left off.

![Backup Succeeded](image)

If you let a script run to its conclusion, you’ll see a message in the main window to that effect.

If Intego Backup Manager Pro encountered any problems, such as a file that couldn’t be copied for some reason, information about the issue will appear in this concluding message. The icon next to the script’s name will also change to an alert signal, which will remain until the next successful run.

![My backup script](image)

Two additional buttons appear at the bottom of the window, replacing the Play and Pause buttons. The first, Show Logs, lets you review what just happened (and the success or failure of past scripts). The Reveal Destination button is a handy way to look at the newly copied files in the Finder.

![Show Logs Reveal Destination](image)

Click the Edit Mode button to continue working with Intego Backup Manager Pro scripts.
Logs: Reviewing What Happened

There are four ways to examine past backups and synchronizations you’ve run.

- Click the Log button at the bottom-right of the main window. (It resembles a magnifying glass held over a page.)
- Choose Window > Logs
- Press Command-Option-L
- Click the small alert icon, if any, next to the script’s name. (See “Other Notifications”.)

A window appears, listing every script you’ve run.

![Logs Window](image)

The first column shows when the script started; the second, which script was run; the third, its result. By default the list is sorted with the most recently run script at the top; to re-sort them in reverse order, click the Date & Time column header (shown with blue highlighting in this example).
You can also sort the list by script name and status by clicking the headers of each of those columns, respectively.

Clicking any line in the log displays some details on that script.

![Image of log window]

You may want to save this information to a file. To do so:

- Select the log entry you want to save. To select multiple entries that are next to one another, click the first one, hold down the Shift key, and click the last one. To select multiple entries that aren’t next to each other, press the Command key and click each entry you want to save. You can also select all entries by clicking once in the window, then either choosing Edit > Select All, or pressing Command-A.
- Click the Export... button.
- Choose a format to which the details should be saved: your choices are Plain text (to examine in a text editor such as TextEdit or in any word processor); HTML (to view in a Web browser); or a Intego Backup Manager Pro archive (which adds the log entry to the log window, which could be useful in team situations where your colleagues are also running Intego Backup Manager Pro).

To remove entries from the log window, first click them, then either click the – button, or press the Delete key. In either case a dialog box will ask you to confirm your choice.
**Restoring: Recovering Lost Files**

Let’s say a disaster happens: you look for a file or folder on your Mac, and it’s gone. No problem! Since you’ve been diligently running backups, you have a copy. (We’ll discuss how to recover files from synchronizations below.)

For backup scripts, there are several ways to replace the missing items. The most obvious is to simply copy them in the Finder: unlike some backup programs, Intego Backup Manager Pro stores files in their Mac OS X-native file format. However, this plan only works if you know which files are missing or out of date, and where they are. Often if one file is missing, several are, and it’s very easy to miss important files when you copy them one by one from various locations in the Finder.

A faster and more-thorough method is to use Intego Backup Manager Pro’s Restore function, which you access by first clicking the script that created the files you wish to restore, then by either choosing Script > Restore or clicking the Restore button at the bottom-right corner of Intego Backup Manager Pro’s main window.

![Restore](image)

You’ll see a window that shows a list of past scripts in the left column, and the files affected in the main section. The most-recent run is at the top, and is selected by default. However, you can choose any of the script’s past runs by clicking it: the main section’s contents will change to reflect files affected during that run.

At first you’ll only see the script’s top level, in this case the folder labeled “My backup script”: click the disclosure triangle at its left to reveal all the sources that are part of this script; click again to display its contents.
If you’re looking for a specific file, you can keep browsing in this manner, or you can type part of the file’s name in the box labeled Search Files at the bottom of the window: only files whose names contain that text will remain in the window above. To return to the full list of files, click the X button in the search box.

To restore items from a previous backup, simply click the desired item and either click the Restore to... button in the window’s lower-right corner, or hold Control while clicking the folder and select Restore to.... (The other option in the contextual menu, “Reveal in Finder”, will display that item on the script’s destination volume—that is, the volume from which you’ll retrieve the backup copy.) In the example below, we’re restoring the contents of the entire backup.
After indicating where you want Intego Backup Manager Pro to put the restored files, you’ll see a progress bar that shows how long the process will take.

If you choose the top-level folder (i.e., the name of the script), your files will be placed at the location you chose in a folder labeled with the date and time of the backup from which you restored, in the format Year/Month/Day Hour-Minute-Second. For example, “07/10/29 12-41-50” means that Intego Backup Manager Pro restored files from a backup made on the 29th of October, 2007, at 12:41:50.

**PRO** To restore files from backups made to optical discs, you may need one or all of the discs you used for your backup. If you chose to copy all files each time you ran your backups (see “Optical Discs” in the Sources and Destinations section above), each disc or set of disc will contain all of your files. However, if you chose to copy only changed files, you may need all your backup discs to restore files. You will need to insert the last disc when running a restoration, at which point Intego Backup Manager Pro will examine the information contained on this disc, regarding which files were backed up and where, then ask you to insert the disc or discs needed to perform the restoration.

Note: if you have deleted a script, you can still restore items from its backup folder. To do this, choose File > Restore from Backup, then select the top-level folder containing the backup you wish to restore. Since Intego Backup Manager Pro records an invisible file containing backup information at this location, you will then see a restoration interface, such as that shown earlier. You can proceed with the restoration as explained above.
To leave Restore mode, click the Edit Mode button at the bottom-right corner of Intego Backup Manager Pro’s main window.

The Restore function isn’t available for synchronization scripts; if you need to recover files that were deleted on your source but exist still on your destination, you should do so manually, by copying them from the destination back to the source.

**PRO** Bootable backup scripts don’t offer the Restore function, as their purpose is to create a precise copy (“clone”) of a computer volume. To restore a bootable backup, run a new bootable backup in the other direction: choose your destination as the source, and the source as destination.
Using the Intego Backup Manager Pro Widget

Intego Backup Manager Pro installs a Dashboard widget that displays information about your scripts and let you control them from Dashboard. The Intego Backup Manager Pro widget looks like this:

![Intego Backup Manager Pro Widget](image)

This widget shows all the scripts you have set up in Intego Backup Manager Pro, and their last execution (if you have run them previously), as well as the next scheduled execution for scheduled scripts.

You can launch any of your scripts from the Intego Backup Manager Pro widget by moving your cursor over one of them to display a play button, then clicking that button.

![Intego Backup Manager Pro Widget in action](image)

The script launches, and the widget changes to show its progress:

![Intego Backup Manager Pro Widget showing progress](image)

If you need to, you can pause or stop the script by clicking the appropriate buttons.
The Intego Backup Manager Pro widget also shows if any of your scripts had errors. If this occurs, there will be a red dot to the right of the script name; you’ll need to open Intego Backup Manager Pro and check the script’s logs to find out what the errors were.

Finally, the popup menu at the top of the widget lets you choose what to display: the previous script run, the next script to run, or a list of all scripts:
6—Preferences
Log Preferences

Intego Backup Manager Pro offers several options for customizing how you view logs and schedule scripts. To access the program’s preferences, either choose Intego Backup Manager Pro > Preferences..., or press Command-comma. A window will appear, showing the preferences.

In the Logs preferences, the Recording section lets you show more—or less—information in the log window. The first option, “Record exceptions”, keeps track of the selection criteria you made in the Exception options when you set up the script. (See the Exceptions section in chapter 4, Script Options.) The second option, “Record successful deletions”, keeps track of files that a script deleted from either the source or destination. The third option, “Record all successful operations”, augments the second option by tracking not only deletions, but everything a script does, such as copying a file or creating a folder.

If any of these first three checkboxes is selected, a new Show Details button appears in the log window. Clicking it displays as many details as you specified in the preferences; clicking it again hides these details.
The last option, “Only keep the last ___ logs of each script” allows you to keep the log window more manageable by not saving irrelevantly old information. (By default, Intego Backup Manager Pro retains only the last five logs of each script.)

You can also have Intego Backup Manager Pro send copies of the log to recipients of your choosing after a script completes. To do so, check the “Send logs by e-mail” box, then click the Configure... button. In the window that appears, fill in details of the message’s origination and destinations, plus details needed by your mail server to send the message. (For specifics, contact your e-mail administrator.) You can test your e-mail setting to ensure that mail will actually be sent using the configuration you gave by clicking the Test Settings button. You may have to wait as much as a minute for the results, which will appear in a dialog box.
To add recipients, click the + button below the Recipients box. You can add as many recipients as you like. To remove a recipient, click it, then click the – button.

**Schedule Preferences**

Clicking the Schedule button at the top of the preferences window brings up options in four categories.

**Activation**: The “Disable Scheduled Scripts...” button stops all schedules from running. Until they’re re-enabled again (by clicking the button again, now labeled “Enable Scheduled Scripts...”), the only way to run backups and synchronizations is to open Intego Backup Manager Pro, select a script, then click the Play button, or choose a script from the Intego menu. A schedule that fails to run, or that runs unexpectedly, could cause security issues: therefore, you must enter your password to change this setting. In any case, all schedules will be re-enabled when you restart your Mac.

**Edited scripts**: The “Always skip execution when a scheduled script is being edited” checkbox ensures that a script doesn’t suddenly spring into action while it’s selected in the Edit Mode. If you check this checkbox, it’s wise to quit Intego Backup Manager Pro whenever you’re not editing a script. Otherwise, you might accidentally leave a schedule-enabled script selected, and the script will not run as expected.
**Display**: The first option, “Warn me when no backup has been made for ___ day(s)”, displays a warning dialog if the specified number of days has passed without a backup. The second option, “Display scheduled scripts in ____” has two options: Intego Backup Manager Pro, and Task Manager. If you check the first option, Intego Backup Manager Pro opens when scheduled scripts run; you can follow their progress in the Intego Backup Manager Pro window. If you check the second option, only the small Task Manager window displays.
About Intego Backup Manager Pro

If you choose About Intego Backup Manager Pro from the Intego Backup Manager Pro menu, a window displays showing information such as the program’s version number and your support number (which you’ll need for technical support).

Clicking the Support # link launches your e-mail program with a message addressed to Intego Technical Support, with information in the Subject line that will help Intego’s support staff respond to your problem. Clicking the version number tells you the program’s build number, which might also be helpful for Intego’s support staff.
7—Technical Support
Technical support is available for registered purchasers of Intego Backup Assistant and Intego Backup Manager Pro.

**By e-mail**

support@lacie.intego.com

**From the Intego web site**

http://lacie.intego.com/support

**Updating Intego Backup Assistant or Intego Backup Manager Pro**

To check for updates to Intego Backup Assistant or Intego Backup Manager Pro, choose the application menu (Intego Backup Assistant or Intego Backup Manager Pro), then choose Check for Updates... If an update is available, a dialog displays asking you if you want to go to the update web page where you can download the new version.

**Upgrading Intego Backup Assistant to Intego Backup Manager Pro**

If you are using Intego Backup Assistant and wish to upgrade to Intego Backup Manager Pro, you can do so by opening the application, then choosing Intego Backup Assistant > Upgrade to Pro Version. This will take you to a web page where you will enter your personal information and payment information. You will then be able to download a copy of Intego Backup Manager Pro, and you will receive a serial number by e-mail.
8—Glossary
<p>| 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. You must enter the administrator’s password to authorize such changes, which include installing new software or copying certain files under Intego Backup Manager Pro. |
| Backup | A backup is a copy of files and folders made from one location, usually your active Mac, to another for safekeeping. Backups can be made to other computers, to other disks or partitions, or to removable media, such as CD-ROMs, DVDs or memory sticks. |
| Bootable backup | A bootable backup (or “clone”) is an exact copy of a startup disk, including all invisible files and components necessary to start up your Mac. If you have system problems, you can copy the clone back to your startup disk and avoid having to reinstall Mac OS X. |
| Destination | The device or location to which files will be copied. In a typical backup, that would be the backup disk or other medium (such as a DVD). Synchronizations have no “source” or “backup” because both sides are equal: by default, a file could be copied in either direction, depending on which volume contains the most-recent version. |
| Device | Generally speaking, any computer hardware. As is used in this user’s manual, a device is a piece of computer equipment that can store files. Your Mac’s hard drive, an iPod, a memory stick, and a DVD drive with a DVD in it are all devices. |
| 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. |
| Image file | See “Disk image”. |
| Incremental backup | A strategy whereby you perform a complete backup once, and then on each subsequent backup copy only files that have changed. |</p>
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounted volume</td>
<td>A volume that appears as a separate storage area in Mac OS X. The main hard drive in your Mac is a mounted volume; when you plug in an external hard drive, Mac OS X automatically mounts all visible, valid volumes on it. By default, mounted volumes display on the Desktop and in the Finder window sidebar. (You may change these options to not display all volumes.)</td>
</tr>
<tr>
<td>Restoration</td>
<td>Restoration is the process of copying files from your backup to your active Mac, after files on the computer have been lost, erased or damaged.</td>
</tr>
<tr>
<td>Source</td>
<td>The device that contains the files to be copied. In a typical backup, this would be your Mac’s hard drive; in a restoration, it’s the backup medium (for example, an external hard disk or a DVD).</td>
</tr>
<tr>
<td>Synchronization</td>
<td>Synchronization is the process of comparing two folders, volumes or disks, and ensuring that both contain exactly the same files; any files changed on one side are copied to the other. This is especially useful for ensuring that you have the same files on two computers you work on, such as a desktop Mac and a laptop.</td>
</tr>
<tr>
<td>Volume</td>
<td>A volume is a hard drive, a partition on a hard drive, a disk or partition on a network, or a removable disk, such as a CD, DVD, iPod or memory stick. For all intents and purposes, computers see all of these as volumes, which are the same as hard drives.</td>
</tr>
</tbody>
</table>
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