

CASPER SECURE[™] DRIVE BACKUP USER GUIDE ∨4.0



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Casper Secure[™] Drive Backup is designed specifically for users of drive encryption technologies looking for a safe, secure, and dependable backup, recovery, and data migration solution.

Casper Secure Drive Backup offers you these unique advantages:

- Designed Specifically for PGP® Whole Disk Encryption (WDE) and Windows® BitLocker® Drive Encryption (BDE) Technologies — completely eliminates the unnecessary downtime and security and compliance risks associated with other backup and recovery products.
- Safe, Secure, Fully Encrypted Backup and Recovery ensures all of your data remains in its original encrypted state during and after the backup and recovery processes. Unlike other backup and disk imaging solutions that can create and restore only an *unencrypted* backup of an encrypted system drive, Casper Secure Drive Backup will create, maintain, and restore a backup that retains all of the encrypted data in its original encrypted state. With Casper Secure Drive Backup, your data is never placed in an exposed or unencrypted state.
- Complete PC Backup Protection maintains a complete, instantly bootable backup replacement or image file backup for your encrypted Windows system drive, including the operating system, applications, personal settings, and all of your data. You have peace of mind knowing that you are prepared for any data disaster whether your drive has failed, files have become corrupted or you have regrets about that new operating system.
- Fast, Fully Updatable Encrypted Backups creates an encrypted copy of an encrypted drive in a single step, which can be updated and maintained in the same amount of time required by other backup and drive imaging solutions to perform a partial or incremental *unencrypted* backup. Other backup and disk imaging solutions require two separate, time-consuming steps to accomplish the same goal.
- Rapid Recovery eliminates the arduous data restoration and lengthy re-encryption steps required by other drive imaging and backup solutions. In the event of a hard disk failure, a bootable backup created by Casper Secure Drive Backup can be used as an immediate and permanent replacement for the failed hard disk or restored to a new drive in a single step. Casper Secure Drive Backup can even produce a backup of an encrypted Windows system drive that can boot and run directly from an external USB drive.
- Effortless Restoration provides easy, one-step support for restoring a failed Windows system drive from a backup. Casper Secure Drive Backup automatically locates available backups, you choose which backup to restore, and Casper Secure does the rest. Casper Secure will even seek out your backups from multiple locations.
- Ensures Compliance with Existing Security Directives since all data is backed up in its original encrypted state, there are no new passwords to manage, and more importantly, there are no new security protocols or encryption technologies to vet. With Casper Secure, the backup is guaranteed to be as secure as the original.

- Absolute Confidence makes a bootable backup of a Windows system drive that can be tested immediately after its creation by simply configuring the computer to boot from it completely eliminating any worry about the integrity of the backup. And Automatic Copy Verification ensures a Casper Secure backup has not been compromised during the imaging process by faulty RAM, a defective cable, failing disk or bad controller interface.
- Easy Upgrades quickly duplicates an encrypted drive to another drive without requiring a laborious, time consuming and unsecure backup, restore, and re-encryption process. Casper Secure Drive Backup makes it extraordinarily easy to safely and securely replace your encrypted system drive with a larger hard drive for increased capacity or with a faster Solid State Drive (SSD) for improved system performance.

Getting Started

This User Guide is intended to provide you with an overview of the basic operations of Casper Secure Drive Backup. Additional information regarding Casper can be found in the help file or in one of the following supplementary guides:

Casper Secure SmartStart™ Guide: This guide provides an overview of Casper SmartStart. You should refer to this guide when you want to maintain a complete backup for your computer's system disk or when you want to replace your computer's system disk with a new disk to increase speed or storage capacity.

Casper Secure SmartRestore™ Guide: This guide provides an overview of Casper SmartRestore. You should refer to this guide when you need to restore a backup.

Casper Secure Startup Disk Creator Guide: This guide provides instructions for creating a Casper Secure Startup Disk, which may be required to restore a backup to the primary system drive.

System Requirements

- Windows 8, Windows 7, Windows Vista, Windows XP, or Windows 2000 Workstation
 - NOTE: The Casper disk imaging feature is supported only on Windows 7 and later. Background copying not supported on Windows 2000.
- Windows BitLocker Drive Encryption or PGP Desktop version 9.6x or later
- 500MB available disk space
- 512MB RAM (1GB or more recommended)
- Backup device (additional internal or external hard disk drive)

Installing Casper Secure Drive Backup

The installation process takes just a few minutes and an automated Wizard will guide you through the process. The instructions below outline in detail the steps for installing Casper Secure Drive Backup.

1. Start the Casper Secure Drive Backup Setup program.

The Welcome to the Casper Secure Drive Backup 4.0 Setup Wizard dialog will appear.

2. At the Welcome to the Casper Secure Drive Backup 4.0 Setup Wizard dialog, click Next.

The **Read the Future Systems Solutions, Inc. License Terms** dialog will appear. In order to proceed with the installation of Casper Secure Drive Backup, you must agree to the terms of the license that is displayed.

3. Read the License Agreement, select I accept the terms of this agreement, and then click Next.

The Choose the installation you want dialog will appear.

4. Click Install Now.

The Casper files are added to your system.

5. Click Run Casper Secure Drive Backup 4.0 to begin using Casper Secure Drive Backup.

Running Casper Secure Drive Backup

In Windows 8, select **Casper Secure Drive Backup** from the Windows **Start** screen. In Windows 7 and earlier versions, follow this procedure

- 1. Click the Start button.
- 2. Click All Programs.
- 3. Point to the Casper Secure Drive Backup 4.0 menu.
- 4. Click Casper Secure Drive Backup.

Getting Help

For additional assistance, including troubleshooting information, please refer to the help file included with the program. To access help when running Casper Secure Drive Backup, select **Contents** from the **Help** menu, or press **F1**.

Additional support for Casper Secure Drive Backup is also available on the Future Systems Solutions Web site at <u>http://support.fssdev.com</u>.

Casper Secure Drive Backup makes it easy to upgrade or maintain a backup of your Windows system hard disk, as well as other hard disks used on your computer.

When you use Casper Secure Drive Backup to clone a hard disk, Casper creates a snapshot, representing a single point-in-time view of the disk, and then copies it to another hard disk. The result is another hard disk that can be used as an immediate and complete replacement for the original hard disk.

When you use Casper Secure Drive Backup to create an image of a hard disk, Casper creates a snapshot of the disk and then copies it to a file. The result is a file representing a point-in-time image of the disk, which can be used later to restore the disk to the same state it was in when the image was created.

Casper SmartSense[™] technology will begin the process of upgrading or creating a backup of your Windows system hard disk automatically when you attach a new hard disk to your computer. If the new disk is installed internally, or if Casper SmartSense is unable to detect the new disk, you can manually launch Casper SmartStart[™] to begin the process. For more information about using Casper SmartStart to upgrade or maintain a backup of your Windows system disk, please refer to the **Casper Secure SmartStart Guide**.

To upgrade or maintain a backup for another hard disk on your computer, or customize the upgrade or backup process of your Windows system hard disk, you should refer to this Casper Secure User Guide or the Casper Secure Help file included with the program. See **Getting Help** for more information.

You can use Casper Secure Drive Backup to maintain bootable backups and restore-point backups for your computer. Both provide unique recovery capabilities that you should consider before proceeding.

Bootable Backups

A bootable backup represents a separate backup device that you can use to temporarily boot and run your computer in an emergency or that you can use as an immediate and permanent replacement for your computer's Windows system disk. A bootable backup is sometimes referred to as a clone backup because it maintains a duplicate copy ("clone") of your Windows system disk.

Bootable backups provide the advantage of instant recovery because a separate data restoration process is unnecessary. Recovery is simply a matter of restarting your computer from the bootable backup. For example, if your Windows system disk fails or becomes corrupted, you can permanently replace it with your bootable backup or temporarily change your computer's boot sequence to designate your bootable backup as the preferred boot device.

Bootable backups also provide you with immediate access to all of your files and data. For example, you can use Windows Explorer to retrieve a specific file or folder directly from your backup without having to separately mount your backup or extract files or folders from the backup.

Because a bootable backup is a copy of your entire system hard disk made to another disk, it provides you with the ability to recover only a single point-in-time. For example, the backup will contain only those files and folders that were present on your Windows system disk when the backup was created or last updated. Each time you update a bootable backup, the prior contents of the backup are replaced with the current contents of your Windows system disk.

Using two or more separate disks to maintain additional bootable backups in a backup rotation is necessary when additional point-in-time backups are desired. This practice is also recommended to provide redundancy from backup corruption, which can occur when a bootable backup is interrupted during an update.

When relying strictly on a bootable backup to protect your computer, it is good practice to rotate the backup disk between each successive backup. For example, if you update your bootable backup weekly, you might use two separate disks to maintain two independent bootable backups for your computer. On the first week, you would back up your computer to your first backup disk. On the second week, you would back up your computer to your second backup disk. On the third week, you would back up your computer to your second backup disk. On the third week, you would back up your computer to your first backup disk again, and so on. In this way, should a problem develop with one of the backups, you can still fall back to the older backup to recover.

Using Casper to create and maintain a bootable backup for your computer system requires a hard disk large enough to accommodate all of the data on the current Windows system hard disk. For a desktop system, using a second internal hard disk, or one mounted in a removable (mobile) drive bay for the backup hard disk is ideal. If the desktop system supports booting from eSATA or USB hard disk type devices, using an external hard disk for the backup is also ideal. For a notebook computer, a secondary media bay or external USB, Firewire, or eSATA hard disk enclosure designed specifically for a 2.5" notebook hard disk is recommended to mount and attach the backup hard disk to the notebook. Using a 3.5" external desktop hard disk as the backup for a notebook is not recommended unless the notebook supports booting from eSATA or USB hard disk type devices.

NOTE: For a hard disk attached as an external USB device, booting from the backup hard disk may require the selection of additional BIOS or EFI Firmware options to completely enable booting. By default, some BIOS implementations disable USB boot support, or have it configured for floppy or ZIP drive emulation rather than hard disk drive (HDD) emulation. *If the computer's BIOS or EFI Firmware does not support booting from external USB hard disk type devices, a bootable backup hard disk must be removed from its external enclosure and installed as a replacement for the internal hard disk in order to boot from it. Alternatively, a restore may be performed by using the Casper Startup Disk to copy the external backup hard disk to the computer's internal hard disk.*

Restore-Point Backups

A restore-point backup represents a collection of separate backups stored on a single storage device that you can use to restore your computer's Windows system disk to a previous point-intime. A restore-point backup is also known as an image backup because it consists of one or more image files, each corresponding to the state of your Windows system disk at the time the image was created. Because multiple restore-points may be maintained on a single backup device, restore-point backups provide additional recovery options that are not available when using a bootable backup. For example, if your Windows system disk fails or becomes corrupted, you can restore your Windows system disk to any one of the restore-points you have created. Likewise, when only a specific file or folder needs to be restored, you can choose a specific restore-point from which to retrieve the file or folder.

Unlike a bootable backup, a restore-point backup will not overwrite or replace any other data stored on the backup device. For example, the backup device for a restore-point backup can be almost any disk, including a disk that already contains other data such as photos, documents, music, etc.

Using Casper to create and maintain a restore-point backup for your computer system requires a storage device with free space that is at least several times greater than the amount of used space on your Windows system hard disk. An external USB or eSATA connected storage device with the prerequisite amount of free space is often ideal for maintaining restore-point backups. While the exact amount of free space depends on several factors, usually about three times the amount of used space on your Windows system hard disk is enough free space for Casper to create and maintain multiple restore-points for a restore-point backup. For example, if 150GB represents the current amount of used space on your Windows system disk, using a storage device with approximately 450GB of free space is generally sufficient to maintain a restore-point backup with a good variety of restore-points.

As with a bootable backup, when relying strictly on restore-point backups to protect your computer, it is good practice to rotate the backup device between successive backups. This will help to ensure a viable backup exists in the event one of your backup devices suffers an untimely mechanical failure or data corruption, which might otherwise prevent you from restoring a backup.

Unlike a bootable backup, recovery using a restore-point backup requires a separate restoration step from the Casper Secure Startup and Recovery Environment. For example, to restore your Windows system disk from a restore-point backup, you must boot your computer from a Casper Secure Startup Disk to perform the restore. Alternatively, when the Casper Secure Startup and Recovery Environment has been added to your backup device, you can boot your computer directly from your backup device to perform the restore. In most instances, Casper's SmartRestore™ technology will fully automate the restoration process for you. For details on creating a separate Casper Secure Startup Disk, please see the **Casper Secure Startup Disk Creator Guide**.

Choosing a Backup Type

For the greatest level of protection, maintaining a combination of bootable backups and restorepoint backups on multiple devices in rotation is ideal. When this is not possible, the type of backup you choose to maintain will depend greatly on your specific situation and recovery needs.

If minimizing downtime is of utmost importance, maintaining two or more bootable backup disks in rotation will be preferable to a restore-point backup. On the other hand, if you frequently create or update content on your system, maintaining a restore-point backup might be a better choice. Your travel habits may also influence your decision. For example, if you frequently travel with your computer, you may find it difficult to carry multiple backup disks. In this case, a restore-point backup might be the better choice because it can maintain multiple recovery points on a single backup disk.

The following table summarizes the differences between the two backup types.

	Casper Bootable Backup	Casper Restore-Point Backup	
Contains a complete backup of your Windows system disk?	Yes	Yes	
Can be used to boot and run computer if necessary?	Yes	No	
Can be used to recover just one or more files?	Yes	Yes	
Provides multiple restore points?	No	Yes	
Type of storage device required	Dedicated internal or external hard disk device	Internal or external storage device	
Other data can be stored on the backup storage device	No. Backup completely replaces existing content of storage device.	Yes. Backups can coexist with other new and existing files and folders on storage device.	
Size of storage device required	Large enough to accommodate all of the data currently on Windows system disk	he Free space equal to three times the amount of used space on current Windows system disk	

Comparison of Bootable Backups and Restore-Point Backups

NOTE: Restore-Point Backups require the Casper Disk Imaging feature, which is available only on computers running Windows 7 and later.

Creating and Maintaining a Bootable System Backup

Using Casper Secure Drive Backup to create and maintain a bootable backup for your computer system requires a hard disk large enough to accommodate all of the data on the current Windows system hard disk.

For a desktop system, using a second internal hard disk, or one mounted in a mobile drive rack for the backup hard disk is ideal. If the desktop system supports booting from eSATA or USB hard disk type devices, using an external hard disk for the backup is also ideal. For a notebook computer, a secondary media bay or external USB, Firewire, or eSATA hard disk enclosure designed specifically for a 2.5" notebook hard disk is recommended to mount and attach the second (backup) hard disk to the notebook. Using a 3.5" external desktop hard disk as the backup for a notebook is not recommended unless the notebook supports booting from eSATA or USB hard disk type devices.

The following examples illustrate various ways to create and maintain a bootable backup of your Windows system disk.

Example 1: Creating a Bootable Backup. This example demonstrates how to initialize a new disk for use as a complete backup replacement for your Windows system disk.

Example 2: Updating a Bootable Backup. This example shows how to manually update an existing bootable backup of your Windows system disk.

Example 3: Automating a Bootable Backup. This example illustrates how to fully automate a bootable backup.

Example 4: Automating a Bootable Backup to a Portable Device. This example shows how to automate a bootable backup maintained on a portable device such as a USB, Firewire, or eSATA connected disk.

Example 5: Performing a Bootable Backup On-Demand. This example demonstrates how to create a desktop shortcut to maintain a bootable backup on-demand.

Example 1: Creating a Bootable Backup

Assuming the backup hard disk is currently installed or attached to the system, the following procedure illustrates how to clone the Windows system hard disk to the backup hard disk to produce a bootable backup on either a desktop or notebook system.

1. Select Copy Drive.

	CASPER SECURE [™] DRIVE BACKUP Future Systems VERSION 4.0 SOLUTIONS		
_2	Copy Drive	Copy Drive	
	Create Image	Select Copy Drive when you want to upgrade a hard disk, create and maintain a backup hard disk, or restore from a backup hard disk.	
_	Restore Image		
۹	Explore		
7	Exit		

2. Select the hard disk to backup (e.g., the hard disk on which Windows is installed) as the source, and click **Next**..

Casper Secure Drive Select the source Select a disk to copy the disk partition or volume to copy o	Backup - Copy Drive layout and content of all partitions defined on the disk. Se nly the selected partition or volume.	ect an individual
Name	Description	Size
🗉 📊 Disk 1	Samsung SSD 840 PRO Series	119.24 GB
Disk 2	EXT USB 3.0 Samsung SSD 840 PRO Seri	119.24 GB
		Next Can

3. Select the backup hard disk as the destination, and click **Next**.

📀 凝 Casper Secure Driv	re Backup - Copy Drive	- ×
Select the destination Casper will copy Disk 1 [Sar destination hard disk will b disk.	n hard disk msung SSD 840 PRO Series] to the hard disk. Any existing da e lost, including the layout and content of any partitions def	ta on the fined on the hard
Name	Description	Size
Disk 2	EXT USB 3.0 Samsung SSD 840 PRO Seri	119.24 GB
		Next Cancel

4. If the selected destination hard disk defines a partition or contains data, Casper will warn you that the contents will be overwritten. Confirm you have selected the correct hard disk to receive the backup, and click **Next** to proceed.



5. When selecting an external hard disk as the destination, Casper will prompt you to assign a name to the disk. A name is optional. If you use multiple external hard disks, a name can make it easier to identify which external hard disk is being used for a Casper backup. Click **Next** to proceed.

- 🗆 🗙 Casper Secure Drive Backup - Copy Drive
Would you like to assign a name to Disk 2? Disk 2 [EXT USB 3.0 Samsung SSD 840 PRO Seri] is a removable disk whose unit number is subject to change depending on the order in which disks are identified by the Windows operating system. To avoid confusion, Casper can refer to this disk using a name of your choosing.
✓ Yes, use the following name when referring to Disk 2 Name: My Portable Backup
Next Cancel

6. If the source hard disk is encrypted using drive encryption technology, Casper will offer the option of creating an unencrypted copy unless prohibited by administrative policy settings. Click **Create an encrypted copy**



7. When prompted to specify how the space on the backup hard disk is to be used, retain the default selection and click **Next**. If the destination hard disk is the same size or smaller than the source hard disk, Casper will ask you to manually configure how the space is to be used.

			- 🗆 🗙
📀 🏅 Casper Secure Driv	e Backup - Copy Drive		
Specify how you wou Select and specify the size f	Ild like to use the space on or each partition on Disk 2 [My Poi	n Disk 2 rtable Backup].	
Partition		Original size	Size of copy
Disk 1, Partition 1 [Systematics]	em Reserved]	350.00 MB	350.00 MB
🖃 Local Disk (C:)		118.90 GB	118.90 GB
– Disk 1, Partition 1 [System Minimum size: Mavimum size:	Reserved] 350.00 MB	Disk 2:	119.24 GB
New size:	350 🌪 MB 🗸	Unallocated space	e: 0.00 bytes
		Ν	lext Cancel

When the destination hard disk is larger than the source, the default option will be *Give all* of the space to the partition, or *Proportionally distribute the space to all partitions* if there is more than one partition defined on the source disk.

			- 🗆 🗙
📀 🐉 Casper Secure Drive Backu	ıp - Copy Drive		
How would you like to use t When copying the partitions from D space to the partitions. This will incr files and folders. Proportionally distribute the spac Leave the additional space unallo Let me specify how the additional	he additional spac isk 1 [Samsung SSD 840 ease the amount of free e to all partitions (recom cated I space is to be allocated	e on Disk 2? PRO Series], Casper can give th space available on the partitior umended)	e additional is for new
Partition ➡ System Reserved ➡ Local Disk (C:)	Disk 2 usage 350.00 MB 465.42 GB	Disk 2	465.76 GB
		Nex	t Cancel

Simply clicking **Next** to accept the default selection or value is generally best. For additional help with making a selection, press **F1**.

8. Click **Perform the copy now** to begin the cloning process.

- 🗆 🗙
📀 🐉 Casper Secure Drive Backup - Copy Drive
When would you like the copy performed?
Casper can copy Disk 1 [Samsung SSD 840 PRO Series] to Disk 2 [My Portable Backup] at a later time or automatically on a routine basis.
Perform the copy now
Schedule it for later or as a routine backup
Perform it as a backup whenever I connect my portable drive
Create a desktop shortcut to perform it on demand
More information
Cancel

9. When Casper has completed the cloning process, click **Close**.

X
🍒 Casper Secure Drive Backup - Copy Drive
The copy completed successfully
Disk 1 (Samsung SSD 840 PRO Series) was copied to Disk 2 (Mv Portable Backup).
Elapsed time: 2 minutes.
An activity report providing additional details has been saved to the Casper History. <u>View this report</u> now.
✓ Save the settings for this copy as:
Copy System Disk to My Portable Backup
Close
Close

Example 2: Updating a Bootable Backup

You can manually update a bootable backup by repeating the procedure used to create the backup. When the settings for the copy have been saved as shown in the final step of the preceding example, Casper makes this process even easier. Assuming the backup hard disk is currently installed or attached to the system, the following two procedures illustrate how a prior copy may be quickly repeated to update an existing bootable backup.

Updating a Bootable Backup via Perform this copy again

1. Select Copy Drive.



2. Select the copy to be repeated from the list provided and click **Perform this copy again**.

- 🗆 🗙
Would you like to perform this copy again?
 Perform this copy again Choose this to perform a copy using previously saved settings. Copy System Disk to My Portable Backup
Perform a different copy Choose this to select a different source or destination, or when other options need to be selected.
A Should I disable my antivirus, anti-spyware, or personal firewall software?
Cancel

3. Click **Perform the copy now** to begin the cloning process.

🕤 🍒 Casper Secure Drive Backup - Copy Drive	
When would you like the copy performed? Casper can copy Disk 1 [Samsung SSD 840 PRO Series] to Disk 2 [My Portable Backup] at a later time or automatically on a routine basis.	
Perform the copy now	
Schedule it for later or as a routine backup	
Perform it as a backup whenever I connect my portable drive	
Create a desktop shortcut to perform it on demand	
More information	
Cancel	

4. When Casper has completed the cloning process, click **Close**.



Updating a Bootable Backup via the Casper Taskbar Icon (Windows 7 and later)

- 1. Right-click the Casper icon appearing on the Windows taskbar to display the icon's taskbar menu.
- 2. Click the copy to be performed again from the Recent list.



3. Click **Begin now** to begin the cloning process.

📀 🍒 Casper Secure Drive Back	up - Copy Drive	•	- - ×
Casper is ready to copy the Casper will copy Disk 1 [Samsung St	hard disk SD 840 PRO Series] 1	to Disk 2 [My Portal	vle Backup].
✓ Notify me when completed:		Always	~
Additional notification option	5		
Send a SmartAlert			
Email address:			✓ ► New
Description:	System Disk Back	cup	
☐ Turn off computer when fini ☐ Prepare Disk 2 [My Portable I	shed: Backup] for safe rer	Hibernate	v
			Begin now Cancel

4. When Casper has completed the cloning process, click **Close**.

×
🐉 Casper Secure Drive Backup - Copy Drive
The copy completed successfully
Disk 1 [Samsung SSD 840 PRO Series] was copied to Disk 2 [My Portable Backup].
Elapsed time: less than 1 minute.
An activity report providing additional details has been saved to the Casper History. <u>View this report</u> now.
Close

Example 3: Automating a Bootable Backup

You can fully automate the process of creating and maintaining a bootable backup for your computer by scheduling Casper to run on a routine basis. The procedure outlined below is the same whether you are performing an initial backup as demonstrated in Example 1 or updating an existing backup as demonstrated in Example 2.

1. When prompted by the Copy Drive wizard, click **Schedule it for later or as a routine backup**.

X
🕤 🐉 Casper Secure Drive Backup - Copy Drive
When would you like the copy performed? Casper can copy Disk 1 [Samsung SSD 840 PRO Series] to Disk 2 [My Portable Backup] at a later time or automatically on a routine basis.
➔ Perform the copy now
Schedule it for later or as a routine backup
Perform it as a backup whenever I connect my portable drive
Create a desktop shortcut to perform it on demand
More information
Cancel

2. Select the schedule you would like Casper to follow to maintain the backup, and click **Next**. For help with the schedule, press **F1**.

				- 🗆	×
📀 🥻 Casper Secure	Drive Backup - Copy Drive				
How often woul	d you like the backup perfo	rmed?			
Select how often you	want the backup performed:	Weekly	y	>	
Weekly Backup Sch	edule				1
Every:	Wednesday, Friday 🗸 🗸 🗸	At:	02:00 AM	▲ ▼	
Beginning:	Monday , July 1, 2013				
Power Managemen	t				
✓ Wake the co	omputer to perform the backup				
			Ne	kt Car	icel

3. Select the desired completion options, and click **Next**.

	×
📀 🍒 Casper Secure Drive Back	up - Copy Drive
Select completion options	
✓ Notify me when completed:	Always 🗸
,	
Additional notification options	5
Send a SmartAlert	
Email address:	V New
Description:	JETSON System Disk Backup
Turn off comparison	Hibarnata V
	Thoenate v
Turn off computer even i	f user activity detected
Prepare Disk 2 [My Portable Back	up] for safe removal
_ , , ,	
Help me decide	
	Next Cancel
	Concer

4. Enter a name for the schedule, or retain the name suggested by Casper, and then click **Create schedule** to add the copy schedule to your Windows Scheduled Tasks.

		×
📀 🐺 Casper Secure Drive Backup - Copy Drive		
What would you like to name the schedule?		
The name will be used by the Task Scheduler to uniquely identify the backup schedule. A de can assist with identifying the purpose of the backup schedule. Example: "Weekly computer	scription backup."	
Name:		
My System Disk Backup		
Description (optional):		
Create schedul	e Cancel	

5. Click **Close** to return to the Casper console.

-	•		>	×
🐉 Casper Secure Drive Backup - Copy Drive				
You have successfully scheduled the backup				
Casper will back up Disk 1 [Samsung SSD 840 PRO Series] to Disk 2 [My Portable Backup]:				
At 2:00 AM every Wednesday, Friday of every week, starting 7/13/2013.				
To confirm that the schedule is working correctly, you can perform the scheduled backup now.				
Paris school dad have a series				
begin scheduled backup now				
		Clo	ose	

Example 4: Automating a Bootable Backup to a Portable Device

When using a portable device such as an external USB, Firewire, or eSATA drive for your backup, you can configure Casper to automatically perform a backup whenever you attach your backup drive.

Configuring a SmartSense Backup

The procedure outlined below is the same whether you are performing an initial backup as demonstrated in Example 1 or updating an existing backup as demonstrated in Example 2.

1. When prompted by the Copy Drive wizard, click **Perform it as a backup whenever I** connect my portable drive.

X
📀 🐉 Casper Secure Drive Backup - Copy Drive
When would you like the copy performed? Casper can copy Disk 1 (Samsung SSD 840 PRO Series) to Disk 2 (My Portable Backup) at a later time or
automatically on a routine basis.
Perform the copy now
Schedule it for later or as a routine backup
Perform it as a backup whenever I connect my portable drive
Create a desktop shortcut to perform it on demand
More information
Cancel

2. Select the desired completion options, and click Next.

Saper Secure Drive Backu	p - Copy Drive
Select completion options	
✓ Notify me when completed:	Always 🗸
Additional notification options	
Send a SmartAlert	
Email address:	V New
beschpation	
Turn off computer:	Hibernate 🗸
🗌 Prepare Disk 2 [My Portable Backu	ıp] for safe removal
Help me decide	
	Next Cancel

3. Enter a name to uniquely identify the backup, or retain the name suggested by Casper, and then click **Save** to register the backup with the Casper SmartSense Service.

		×
€	🐺 Casper Secure Drive Backup - Copy Drive	
	How would you like to identify this backup?	
	The name will be used by the Casper SmartSense Service to identify the backup. A description can assist with identifying the purpose of the backup. Example: "Secondary backup for offsite storage."	
	Name:	
	My System Disk Portable Backup	
	Description (optional):	
	Save	el

4. Click **Close** to return to the Casper console.



Starting a SmartSense Backup

Once your portable backup drive has been registered with the Casper SmartSense Service, the backup can be started by simply attaching the portable drive to the computer.



The backup will start automatically after a short delay. You can begin the backup immediately by selecting **Begin the backup now**. Click **Cancel the backup** to skip the backup, or **Disable the backup** to skip the current backup and prevent future backups from beginning automatically.

Example 5: Performing a Bootable Backup On-Demand

You can create a desktop shortcut to perform a bootable backup on-demand.

Creating a Desktop Shortcut for a Bootable Backup

The procedure outlined below is the same whether you are performing an initial backup as demonstrated in Example 1 or updating an existing backup as demonstrated in Example 2.

1. When prompted by the Copy Drive wizard, click **Create a desktop shortcut to perform it on demand**.



2. Enter a name for the shortcut, or retain the name suggested by Casper, and click **Create shortcut**.

X
📀 🐺 Casper Secure Drive Backup - Copy Drive
What would you like to name the shortcut?
The name will appear as the title of the shortcut on your desktop. A description can assist with identifying the purpose of the shortcut or provide additional instructions for its use. Example: "Use this shortcut to back up the computer."
Name:
Back up System Disk to My Portable Backup
Description (optional):
Create shortcut Cancel

3. Click **Close** to return to the Casper console.

- 🗆 🗙
🐉 Casper Secure Drive Backup - Copy Drive
You have successfully created a desktop shortcut
A new shortcut to Casper has been created on your desktop to back up Disk 1 [Samsung SSD 840 PRO Series] to Disk 2 [My Portable Backup].
Name: Back up System Disk to My Portable Backup
To confirm that the shortcut is working correctly, you can perform the backup now.
Perform backup now
Close

Performing a Bootable Backup On-Demand

After creating a desktop shortcut, you can use the Casper shortcut appearing on your desktop to begin the backup. Click **Begin now** to start the backup.

			- 🗆 🗙
📀 🍒 Casper Secure Drive Backı	up - Copy Drive	•	
Casper is ready to copy the	hard disk		
C 11 D1 1 10 00	0.0000000000000000000000000000000000000		
Casper will copy Disk 1 [Samsung SS	D 640 PRO Series]	to Disk 2 [iviy Portable	васкирј.
_			
Notify me when completed:		Always	~
Additional notification options	5		
Send a SmartAlert			
Email address:			V New
Description:	JETSON System [Disk Backup	
Turn off commuter where first		Hibernate	
	sneu:	Themate	*
Prepare Disk 2 [My Portable E	Backup] for safe rer	noval	
			Begin now Cancel
			current

Creating and Maintaining a Restore-Point System Backup

Using Casper Secure Drive Backup to create and maintain a restore-point backup for your computer system requires a storage device with free space that is at least several times greater than the amount of used space on your Windows system hard disk. An external USB or eSATA connected storage device with the prerequisite amount of free space is often ideal for maintaining restore-point backups. While the exact amount of free space depends on several factors, usually about three times the amount of used space on your Windows system hard disk is enough free space for Casper to create and maintain multiple restore-points for a restore-point backup. For example, if 150GB represents the current amount of used space on your Windows system disk, using a storage device with approximately 450GB of free space is generally sufficient to maintain a restore-point backup with a good variety of restore-points.

The following examples illustrate various ways to create and maintain a restore-point backup of your Windows system disk.

Example 6: Creating a Restore-Point Backup. This example demonstrates how to create a restore-point backup for your Windows system disk.

Example 7: Updating a Restore-Point Backup. This example shows how to manually update an existing restore-point backup by creating a new restore point.

Example 8: Automating a Restore-Point Backup. This example illustrates how to fully automate a restore-point backup.

Example 9: Automating a Restore-Point Backup to a Portable Device. This example shows how to automate a restore-point backup maintained on a portable device such as a USB, Firewire, or eSATA connected disk.

Example 10: Performing a Restore-Point Backup On-Demand. This example demonstrates how to create a desktop shortcut to maintain a restore-point backup on-demand.

Example 6: Creating a Restore-Point Backup

Assuming the backup hard disk is currently installed or attached to the system, the following procedure illustrates how to create an image of the Windows system hard disk to produce a restore-point backup on either a desktop or notebook system.

1. Select Create Image.

	CASPER SECUR VERSION 4.0	E™ DRIVE BACKUP Future Systems soluTioNs
_2	Copy Drive	Create Image
<u></u>	Create Image	Select Create Image when you want to create and maintain a disk image backup that can be stored on a drive containing other data or on a network
	Restore Image	attached drive.
۲	Explore	
7	Exit	

2. Select the hard disk to backup (e.g., the hard disk on which Windows is installed) as the source, and click **Next**.

🕘 🍒 Casper Secure Driv	e Backup - Create Image	
Select the source Select a disk to copy the di partition or volume to copy	sk layout and content of all partitions defined on the disk. y only the selected partition or volume.	Select an individual
Name	Description	Size
🗉 📊 Disk 1	Samsung SSD 840 PRO Series	119.24 GB
e Disk 2	EXT USB 3.0 Seagate FreeAgent GoFlex	465.76 GB
		Next Cancel

 Enter a name for the restore-point backup, or retain the name suggested by Casper, and then select the location where the image file(s) will be stored. To allow future restore-points to be managed by Casper, choose Create using backup semantics and click Next. For additional help, press F1.

	- 🗆 🗙
📀 🍒 Casper	Secure Drive Backup - Create Image
Select the	e destination image file
Disk 1 [Sams	ung SSD 840 PRO Series] will be copied to the image file.
Name:	JETSON System Disk Backup 🗸
Location:	E\Casper Backups v
Туре:	Create using backup semantics
	Choose this to allow incremental updates to be stored and managed by Casper within separate image files.
	○ Create as standard image file
	Choose this to create a single image file exactly as specified.
	Next Cancel

4. When using backup semantics, Casper will prompt you to specify the storage and retention policy for the backup. This policy governs how restore-points are created and managed. It also defines what happens when additional storage space is needed to create a new restore-point. Click **Next** to proceed.

5 📥 days
4 🔹 weeks
6 🛖 months
100 🔹 backups
No limit 🛋 GB
nt space exists to maintain policies

5. If creating an image of the Windows System disk on a disk that can be used to boot the Casper Startup and Recovery Environment, Casper will offer to add the Casper Startup and Recovery Environment. This eliminates the need to create and use a separate Casper Startup Disk to restore the image. Click **Yes, add the startup environment**.

X
📀 🐉 Casper Secure Drive Backup - Create Image
Do you want to add the Casper Startup Environment?
The Casper Startup Environment will enable you to restore the image without the need for a separate Casper Startup Disk.
Yes, add the startup environment. I want to add the Casper startup environment to my backup disk so that I can boot my computer and restore the image without using a separate Casper Startup Disk.
No, I already have a Casper Startup Disk for this computer.
Cancel

6. Click Create the image now to begin the imaging process.


7. When Casper has completed the imaging process, click **Close**.

- 🗆 🗙
🐉 Casper Secure Drive Backup - Create Image
The image was created successfully
Disk 1 [Samsung SSD 840 PRO Series] was copied to JETSON System Disk Backup.
Overall transfer rate: 2187 MB per minute. Elapsed time: 11 minutes.
An activity report providing additional details has been saved to the Casper History. <u>View this report</u> now.
Save the settings for this image as:
Create JETSON System Disk Backup
Close

Example 7: Updating a Restore-Point Backup

You can manually update a restore-point backup with a new restore-point by repeating the procedure used to create the initial restore-point backup. When the settings for the image have been saved as shown in the final step of the preceding example, Casper makes this process even easier. Assuming the backup hard disk is currently installed or attached to the system, the following two procedures illustrate how to quickly create the image again to produce a new restore-point.

Updating a Restore-Point Backup via Create this image again

1. Select Create Image.



2. Select the image from the list provided and click **Create this image again**.



3. Click Create the image now to begin the imaging process.

	- 🗆 🗙
📀 🍒 Casper Secure Drive Backup - Create Image	
When would you like the image created? Casper can copy Disk 1 [Samsung SSD 840 PRO Series] to JETSON System Disk Backup at a la automatically on a routine basis.	ter time or
Create the image now	
Schedule it for later or as a routine backup	
Perform it as a backup whenever I connect my portable drive	
Create a desktop shortcut to perform it on demand	
More information	
	Cancel

4. When Casper has completed the imaging process, click **Close**.



Updating a Restore-Point Backup via the Casper Taskbar Icon

- 1. Right-click the Casper icon appearing on the Windows taskbar to display the icon's taskbar menu.
- 2. Click the image to be created again from the Recent list.



3. Click **Begin now** to begin the imaging process.

) Secure Drive Back	up - Create Ima	ige	- - ×
Casper is ready to create the image Casper will copy Disk 1 [Samsung SSD 840 PRO Series] to JETSON System Disk Backup.			
✓ Notify me when completed:		Always	¥
Additional notification option	s		
Send a SmartAlert			
Email address:			V New
Description:	JETSON System [Disk Backup	
Turn off computer when fini:	shed: Backup for safe rer	Hibernate noval	~
			Begin now Cancel

4. When Casper has completed the imaging process, click **Close**.

- ×
🐉 Casper Secure Drive Backup - Create Image
The image was created successfully
Disk 1 [Samsung SSD 840 PRO Series] was copied to JETSON System Disk Backup.
Elapsed time: less than 1 minute.
An activity report providing additional details has been saved to the Casper History. <u>View this report</u> now.
Close

Example 8: Automating a Restore-Point Backup

You can fully automate the process of creating and maintaining a restore-point backup for your computer by scheduling Casper to run on a routine basis. The procedure outlined below is the same whether you are performing an initial backup as demonstrated in Example 6 or updating an existing backup as demonstrated in Example 7.

1. When prompted by the Create Image wizard, click **Schedule it for later or as a routine backup**.

×
📀 🐉 Casper Secure Drive Backup - Create Image
When would you like the image created?
Casper can copy Disk 1 [Samsung SSD 840 PRO Series] to JETSON System Disk Backup at a later time or automatically on a routine basis.
Create the image now
Schedule it for later or as a routine backup
Perform it as a backup whenever I connect my portable drive
Create a desktop shortcut to perform it on demand
More information
Cancel

2. Select the schedule you would like Casper to follow to maintain the backup, and click **Next**. For help with the schedule, press **F1**.

	- 🗆 🗙
📀 🐉 Casper Secure Drive Backup - Create Image	
How often would you like the backup performed?	
Select how often you want the backup performed: Daily	r 🗸
Daily Backup Schedule	
	1 1 0 0 0 0 F
At: 02:00 AM 💌 Beginning: Monday	, July 1,2013 ₪♥
Power Management	
	Next Cancel

3. Select the desired completion options, and click **Next**.

	×		
👄 🍱 Casper Secure Drive Backup	- Create Image		
Select completion options			
 Notify me when completed: 	Only if unsuccessful 🗸 🗸		
Additional notification options			
Send a SmartAlert			
Email address:	V 🕨 New		
Description:	JETSON System Disk Backup		
_			
Turn off computer:	Hibernate V		
Turn off computer even if u	ser activity detected		
Dranara IFTSON System Dick Backup for cafe removal			
Prepare JETSON System Disk Backup for safe removal			
Help me decide			
	Next Cancel		

4. Enter a name for the schedule, or retain the name suggested by Casper, and then click **Create schedule** to add the copy schedule to your Windows Scheduled Tasks.

	×
📀 🐉 Casper Secure Drive Backup - Create Image	
What would you like to name the schedule?	
The name will be used by the Task Scheduler to uniquely identify the backup schedule. A description can assist with identifying the purpose of the backup schedule. Example: "Weekly computer backup."	
Name:	
My System Disk Backup	
Description (optional):	
Create schedule Cance	el

5. Click **Close** to return to the Casper console.



Example 9: Automating a Restore-Point Backup to a Portable Device

When using a portable device such as an external USB, Firewire, or eSATA drive for your backup, you can configure Casper to automatically perform a backup whenever you attach your backup drive.

Configuring a SmartSense Backup

The procedure outlined below is the same whether you are performing an initial backup as demonstrated in Example 6 or updating an existing backup as demonstrated in Example 7.

1. When prompted by the Create Image wizard, click **Perform it as a backup whenever I** connect my portable drive.

-		×
📀 🍹 Casper 8.0 - Create Image		
When would you like the copy performed? Casper can copy Disk 1 [Samsung SSD 840 PRO Series] to JETSON System Disk Backup at a later tir automatically on a routine basis.	ne or	
Perform the copy now		
Schedule the copy for later or routine basis		
Perform the copy whenever I connect my portable backup drive		
Create a desktop shortcut to perform the copy on demand		,
More information		
	Can	cel

2. Select the desired completion options, and click Next.

📀 羄 Casper Secure Drive Backu	p - Create Image
Select completion options	
✔ Notify me when completed:	Always
-Additional notification options	
Send a SmartAlert	
Email address:	V New
Description:	JETSON System Disk Backup
Turn off computer: Prepare JETSON System Disk Back	Hibernate V
Help me decide	
	Next Cancel

3. Enter a name to uniquely identify the backup, or retain the name suggested by Casper, and then click **Save** to register the backup with the Casper SmartSense Service.

		×
€	🐺 Casper Secure Drive Backup - Create Image	
	How would you like to identify this backup?	
	The name will be used by the Casper SmartSense Service to identify the backup. A description can assist with identifying the purpose of the backup. Example: "Secondary backup for offsite storage."	
	Name:	
	My System Disk Portable Backup	
	Description (optional):	
	Save	el

4. Click **Close** to return to the Casper console.



Starting a SmartSense Backup

Once your portable backup drive has been registered with the Casper SmartSense Service, the backup can be started by simply attaching the portable drive to the computer.



The backup will start automatically after a short delay. You can begin the backup immediately by selecting **Begin the backup now**. Click **Cancel the backup** to skip the backup, or **Disable the backup** to skip the current backup and prevent future backups from beginning automatically.

Example 10: Performing a Restore-Point Backup On-Demand

You can create a desktop shortcut to perform a bootable backup on-demand.

Creating a Desktop Shortcut for a Restore-Point Backup

The procedure outlined below is the same whether you are performing an initial backup as demonstrated in Example 6 or updating an existing backup as demonstrated in Example 7.

1. When prompted by the Create Image wizard, click **Create a desktop shortcut to perform it on demand**.



2. Enter a name for the shortcut, or retain the name suggested by Casper, and click **Create shortcut**.

×	
📀 🐉 Casper Secure Drive Backup - Create Image	
What would you like to name the shortcut?	
The name will appear as the title of the shortcut on your desktop. A description can assist with identifying the purpose of the shortcut or provide additional instructions for its use. Example: "Use this shortcut to back up the computer."	
Name:	
Back up System Disk to JETSON System Disk Backup	
Description (optional):	
Create shortcut Cancel]

3. Click **Close** to return to the Casper console.

X
🐉 Casper Secure Drive Backup - Create Image
You have successfully created a desktop shortcut
A new shortcut to Casper has been created on your desktop to back up Disk 1 [Samsung SSD 840 PRO Series] to JETSON System Disk Backup.
Name: Back up System Disk to JETSON System Disk Backup
To confirm that the shortcut is working correctly, you can perform the backup now.
Perform backup now
Close

Performing a Restore-Point Backup On-Demand

After creating a desktop shortcut, you can use the Casper shortcut appearing on your desktop to begin the backup. Click **Begin now** to start the backup.

			- 🗆 🗙
📀 🍒 Casper Secure Drive Back	kup - Create Ima	age	
		Ĩ	
Casper is ready to create th	ne image		
Casper will conv Disk 1 (Samsung S	SD 840 PRO Series]	to IETSON System I	Disk Backup.
casper win copy black i (authoung o	is the first series	to serio or ogsterni	o lok backapi
A Notify mowhen completed		Always	J
Inotity the when completed.	i	Amoys	
Additional notification option	ns		
Send a SmartAlert			
Email address:			✓ ▶ New
Description:	JETSON System	Disk Backup	
Turn off computer when fin	ished:	Hibernate	~
Deserve IETCON Custom Dial	. D l ((
Prepare JE I SOIN System Dis	к backup for safe rei	moval	
			Begin now Cancel

If you have used Casper Secure Drive Backup to create a backup of your computer's Windows system disk, and the disk fails or its contents become corrupted, you can restore your computer to working order by using your Casper backup.

If you created a bootable backup, you can run your computer directly from your backup either by replacing your computer's existing Windows system disk with the backup hard disk or by temporarily reconfiguring your computer to boot and run directly from the backup hard disk. For details, please see **Booting from a Bootable Backup**.

If you are unable to boot your computer to your bootable backup, or if you created a restorepoint backup, you must boot the computer to the Casper Secure Startup and Recovery Environment and restore the backup. Restoration may be made to either the existing Windows system disk or a replacement disk (e.g., when the existing disk is no longer operable). For details, please see **Restoring a System Backup**.

If you created a restore-point backup and added the Casper Secure Startup and Recovery Environment to the backup disk, you can boot your computer directly from the backup disk to perform the restore. When restoring a bootable backup, or when the Casper Secure Startup and Recovery Environment has not been added to the backup disk, the Casper Secure Startup Disk can be used to boot the computer to perform the restore. For details on creating and using a Casper Secure Startup Disk, please see the **Casper Secure Startup Disk Creator Guide**.

The following table summarizes the available system recovery options for each type of backup.

Casper Bootable Backup	Casper Restore-Point Backup
Permanently replace existing system disk with backup disk.	If Casper Secure Startup and Recovery Environment was added to backup disk, boot computer to backup disk and restore backup.
Temporarily configure computer to boot and run from backup disk, and optionally restore backup.	Boot computer to Casper Secure Startup Disk and restore backup from backup disk.
Boot computer to Casper Secure Startup Disk and restore backup from backup disk.	

System Recovery Options

Booting from a Bootable Backup

If you have used Casper Secure Drive Backup to create a bootable backup of your computer's Windows system disk, you can run your computer directly from your backup either by replacing your computer's existing Windows system disk with the backup hard disk or by temporarily reconfiguring your computer to boot and run directly from the backup hard disk. Either way, the backup hard disk will take on the identity of the original Windows system disk. For example, if your computer's system disk normally boots and appears as Local Disk (C:), your backup disk will boot and appear as Local Disk (C:) whenever your computer has been configured to boot and run from it. In addition, all of your programs, settings, and data will run and appear just they did on the original Windows system disk when your backup was created.

When the backup hard disk is installed as an internal hard disk, or attached externally as an eSATA or USB device, booting from the backup hard disk is accomplished by changing the boot priority setting in the computer's BIOS or EFI Firmware to designate the backup hard disk as the preferred boot device.

If the computer's BIOS or EFI Firmware does not offer an option to select the designated backup hard disk as the preferred boot device, or if the original hard disk fails completely, the backup hard disk must be reconfigured to replace the original hard disk. For an internally mounted backup hard disk, this is accomplished by changing the hard disk cable connection to make the backup hard disk the primary SATA drive or the master on the primary IDE/ATA controller. For a backup hard disk installed in a secondary media bay of a notebook, or installed in an external USB, Firewire, eSATA, or PCMCIA enclosure, the backup hard disk is removed from its enclosure and exchanged with the original, internally mounted hard disk.

NOTE: For a hard disk attached as an external USB device, booting from the backup hard disk may require the selection of additional BIOS or EFI Firmware options to completely enable booting. By default, some BIOS implementations disable USB boot support, or have it configured for floppy or ZIP drive emulation rather than hard disk drive (HDD) emulation. *If the computer's BIOS or EFI Firmware does not support booting from external USB hard disk type devices, a bootable backup hard disk must be removed from its external enclosure and installed as a replacement for the internal hard disk in order to boot from it. Alternatively, a restore may be performed by using the Casper Secure Startup Disk to copy the external backup hard disk to the computer's internal hard disk.*

For detailed instructions on how to replace an older style IDE/ATA hard disk in a desktop system, see **Replacing a hard disk** under **Additional Resources** in the **Casper Help and Documentation**.

Restoring a System Backup

If you created a restore-point backup, or if you are unable to boot your computer to your bootable backup, a system backup can be restored by booting your computer to the Casper Secure Startup and Recovery Environment.

If the Casper Secure Startup and Recovery Environment was added your backup disk, you can boot your computer directly from the backup disk to perform the restore. When restoring a bootable backup, or when the Casper Secure Startup and Recovery Environment is not present on the backup disk, the Casper Secure Startup Disk can be used to boot the computer to perform the restore.

Booting a computer from the Casper Secure Startup and Recovery Environment may take several minutes. Once it has completed the boot process, Casper SmartRestore™ will attempt to automatically identify your backup and prompt you to begin the restore. If SmartRestore is unable to locate your backup, the Casper Secure Drive Backup console will display. For more information on using Casper SmartRestore to perform a restore, please see the **Casper Secure SmartRestore Guide**.

The following examples illustrate how to manually restore a system backup when Casper SmartRestore is unable to locate your backup.

Example 11: Manually Restoring a Restore-Point Backup. This example shows how to manually restore a backup using the **Restore Image** wizard.

Example 12: Manually Restoring a Bootable Backup. This example demonstrates how to manually restore a bootable backup using the **Copy Drive** wizard.

Example 11: Manually Restoring a Restore-Point Backup

Assuming the computer is presently booted to the Casper Secure Startup and Recovery Environment and SmartRestore was unable to locate your backup, the following procedure illustrates how to manually restore an image of the Windows system hard disk to either the original Windows system disk or a replacement disk.

1. Select Restore Image.

	CASPER SECUR VERSION 4.0	E™ DRIVE BACKUP Future Systems soluTioNs
_2	Copy Drive	Restore Image
	Create Image	Select Restore Image to restore from a disk image backup.
	Restore Image	
٢	Explore	
7	Exit	

2. Click Select image file.

👄 🎜 Casper 8.0 - Restore Image	- • <mark>×</mark>
Select the image source You can restore an entire disk or an individual partition or volume from the selecte	d image file.
[Select image file
	Next Cancel

 In the Open dialog, navigate to the folder that contains the backup you want to restore. By default, the Casper Backups folder will be selected. This special folder provides direct access to all of the restore-point backups that were discovered. Double-click the My Computer folder to see all of the restore-point system backups that were located for your computer.

X	Ор	en		×
€ ∋ - ↑ 🗊 -	Casper Backups	× ٢	Search Casper Backups	>
Organize 🔻			• •	0
 ★ Favorites ■ Desktop ▶ Downloads > Recent places ⇒ Libraries > Documents > Music ≈ Pictures ≅ Videos ↔ Homegroup ☆ Computer Network 	Wy Computer			
File	name:	~	Casper Image files (*.cib;*.cibx) 💉 Open Cancel	

4. Select the image you want to restore and click **Open**.

X		Ор	en				×
ເ ເ ເ ເ 😸	(ⓒ) → ↑ 🔀 « My Computer → JETSON System Disk Backup v 🖒 Search JETSON System Disk B						
Organize 🔻							0
🔆 Favorites	Nam	ie -	Date created	Туре	Size	Status	
📰 Desktop	🐙 E	Before installing Windows Updates	7/17/2013 1:58 PM	Differential	2,628,928 KB	Complete	
鷆 Downloads	32 N	Manual backup	7/16/2013 1:18 PM	Differential	736,984 KB	Complete	_
🔛 Recent places) 🐺 N	Manual backup	7/16/2013 12:59 PM	Full	11,495,548 KB	Complete	
Libraries Documents Music Pictures Videos Homegroup Computer Network							
	File name: B	efore installing Windows Updates		✓ Ca	sper Image files (Open	*.cib;*.cibx) Cancel	 ✓ ✓

5. Once the selected image has loaded, click **Next**.



6. Select the hard disk that will become the restored Windows system disk as the destination, and then click **Next**.

				×
€	🍒 Casper Secure Drive	Backup - Restore Image		
	Select the destination Casper will restore the disk in 2013-07-17] to the hard disk. layout and content of any par	hard disk nage from JETSON System Disk Backup [Before installin Any existing data on the destination hard disk will be lo ritions defined on the hard disk.	ng Windows Update ost, including the	s
	Name	Description	Size	
	🗉 📊 Disk 1	Samsung SSD 840 PRO Series	119.24 GE	в
	 Other destinations hav 	e been omitted because they are not selectable. <u>Show</u>	all.	
		[Next Car	ncel

7. If the selected destination hard disk defines a partition or contains data, Casper will warn you that the contents will be overwritten. Confirm you have selected the correct hard disk to receive the restored image, and click **Next** to proceed.

- 🗆 🗙
Destination Disk Contains Data
Next Cancel

8. If the source disk image is encrypted using drive encryption technology Casper will offer the option of restoring an unencrypted copy unless prohibited by administrative policy settings. Click **Restore an encrypted copy**



9. When prompted to specify how the space on the destination hard disk is to be used, retain the default selection and click **Next**. If the destination hard disk is the same size or smaller than the original, Casper will ask you to manually configure how the space is to be used.

) 🏅 Casper Secure Drive B	ackup - Restore Image		
Specify how you would	like to use the space on D	Disk 1	
Select and specify the size for e	ach partition on Disk 1 [Samsung	SSD 840 PRO Series].	
Partition		Original size	Size of copy
JETSON System Disk Back	up, Partition 1 [System Reserved]	350.00 MB	350.00 MB
JETSON System Disk Backı	ip, Partition 2	118.90 GB	118.90 GB
Partition 1 [System Reserved] Minimum size:	350.00 MB	Disk 1:	119.24 GB
Maximum size:	350.00 MB		
		Unallocated space	e: 0.00 bytes
			Next Cancel

If restoring the image to a hard disk that is larger than the original, the default option will be *Give all of the space to the partition*, or *Proportionally distribute the space to all partitions* when there is more than one partition defined in the image.

			- 🗆 🗙
📀 🦉 Casper Secure Drive Backup -	- Restore Image		
How would you like to use the When restoring the partitions from JETS the partitions. This will increase the amo folders. Proportionally distribute the space to Leave the additional space unallocate Let me specify how the additional sp 	additional space ON System Disk Bac unt of free space av all partitions (recon ed ace is to be allocated	te on Disk 1? kup, Casper can give the additi ailable on the partitions for new nmended)	ional space to v files and
Partition Partition 1 [System Reserved] Partition 2	Disk 1 usage 350.00 MB 476.60 GB	Disk 1	476.94 GB
		Unallocated space:	0.00 bytes
		Nex	t Cancel

Simply clicking **Next** to accept the default selection or value is generally best.

10. Click **Begin now** to begin the image restoration process.

📀 凝 Casper Secure Drive Back	up - Restore Im	age		- □ ×	
Casper is ready to restore the image Casper will restore the disk image from JETSON System Disk Backup [Before installing Windows Updates 2013-07-17] to Disk 1 [Samsung SSD 840 PRO Series].					
✓ Notify me when completed:		Always		*	
Additional notification option	s				
Send a SmartAlert					
Email address:			\vee \blacktriangleright	New	
Description:	JETSON System	Disk Backup [Before in	stalling Windo	ows Upda [,]	
Turn off computer when fini	shed:	Power off	~		
			Desite and		
			Begin no	ow Cancel	

11. When Casper has completed the restoration process, click **Close**.

	×
🐉 Casper Secure Drive Backup - Restore Image	
The image was restored successfully	
JETSON System Disk Backup [Before installing Windows Updates 2013-07-17] was restored to Disk 1 [Samsung SSD 840 PRO Series].	
Elapsed time: 3 minutes.	
An activity report providing additional details has been saved to the Casper History. <u>View this report</u> now.	
CI	ose

Example 12: Manually Restoring a Bootable Backup

Assuming the computer is presently booted to the Casper Secure Startup and Recovery Environment and SmartRestore was unable to locate your backup, the following procedure illustrates how to manually restore a bootable backup of the Windows system hard disk to either the original Windows system disk or a replacement disk.

1. Select Copy Drive.

CASPER SECUR VERSION 4.0	E™ DRIVE BACKUP Future Systems soluTIONS
Copy Drive	Copy Drive
Create Image	Select Copy Drive when you want to upgrade a hard disk, create and maintain a backup hard disk, or restore from a backup hard disk.
Restore Image	
Explore	
👎 Exit	

2. Select the hard disk containing the bootable backup to restore as the source, and click **Next**.

		- 🗆 🗙
) 🐉 Casper Secure Drive B	ackup - Copy Drive	
Select the source Select a disk to copy the disk la partition or volume to copy onl	yout and content of all partitions defined on the disk. Se ly the selected partition or volume.	lect an individual
Name	Description	Size
🗉 📊 Disk 1	Samsung SSD 840 PRO Series	119.24 GB
Disk 2 [JETSTON Sys	stem Dis EXT USB 3.0 Samsung SSD 840 PRO Seri	119.24 GB
		Next Cancel

3. Select the hard disk that will become the restored Windows system disk as the destination, and then click **Next**.

📀 🥈 Casper Secure Drive Ba	ickup - Copy Drive	- • ×
Select the destination ha Casper will copy Disk 2 (JETSTON destination hard disk will be lost, disk.	rd disk N System Disk Backup] to the hard disk. Any exi including the layout and content of any partit	sting data on the ions defined on the hard
Name	Description	Size
Disk 1	Samsung SSD 840 PRO Series	119.24 GB
		Next Cancel

4. If the selected destination hard disk defines a partition or contains data, Casper will warn you that the contents will be overwritten. Confirm you have selected the correct hard disk to receive the restored backup, and click **Next** to proceed.



5. If the backup disk is encrypted using drive encryption technology, Casper will offer the option of creating an unencrypted copy unless prohibited by administrative policy settings. Click **Create an encrypted copy**

- - ×
📀 🍒 Casper Secure Drive Backup - Copy Drive
Would you like to create an encrypted copy?
Disk 2 [JETSTON System Disk Backup] is encrypted using whole disk encryption technology.
Create an encrypted copy (recommended)
Encrypted data from Disk 2 will be stored in its encrypted state on Disk 1.
Encrypted data from Disk 2 will be stored unencrypted on Disk 1.
Cancel

6. When prompted to specify how the space on the destination hard disk is to be used, retain the default selection and click **Next**. If the destination disk is the same size or smaller than the backup source, Casper will ask you to manually configure how the space is to be used.

			_ □
) 🥻 Casper Secure Driv	e Backup - Copy Drive		
Specify how you wou	uld like to use the space o	n Disk 1	
	1		
Select and specify the size f	or each partition on Disk 1 [Sams	ung SSD 840 PRO Series].	
Partition		Original size	Size of copy
Disk 2, Partition 1 [Syst	em Reserved]	350.00 MB	350.00 MB
🖃 Local Disk (C:)		118.90 GB	118.90 GB
L			
Disk 2, Partition 1 [System	Reserved]	Disk 1:	119.24 GB
Minimum size:	350.00 MB		
Maximum size:	350.00 MB		
New size:	350 🔶 MB 🗸		
		Unallocated space	e: 0.00 bytes
			-
			Vext Cancel

When the destination hard disk is larger than the backup source, the default option will be *Give all of the space to the partition*, or *Proportionally distribute the space to all partitions* when there is more than one partition defined on the backup source.

			- 🗆 🗙
🔶 🐉 Casper Secure Drive B	Backup - Copy Drive		
How would you like to	use the additional spac	e on Disk 1?	
When copying the partitions fr space to the partitions. This wi files and folders.	om Disk 2 [JETSTON System [Il increase the amount of free	Disk Backup], Casper can give space available on the partiti	the additional ons for new
Proportionally distribute the	e space to all partitions (recon	nmended)	
Cleave the additional space of the space	unallocated		
Let me specify how the add	itional space is to be allocated	ł	
Partition	Disk 1 usage	Disk 1	476.94 GB
System Reserved	350.00 MB		
Local Disk (C:)	476.60 GB		
		_	
		Unallocated space	: 0.00 bytes
		N	ext Cancel

Simply clicking Next to accept the default selection or value is generally best.

7. Click **Begin now** to begin the cloning process.

			- 🗆 🗙
👄 🐹 Casper Secure Drive Back	up - Copy Drive	3	
	.p cop/ 5		
Casper is ready to copy the	hard disk		
Casper will copy Disk 2 [JETSTON Sy	stem Disk Backup]	to Disk 1 [Samsung SSD &	40 PRO Series].
		Always	м
Notify me when completed:		Always	*
Additional notification option	5		
Send a SmartAlert			
Email address:			V New
Description	IETSTON System	Disk Packup	
Description.	JETSTON System	ыя васкар	
			_
Turn off computer when finit	shed:	Power off	~
			Begin now Cancel

8. When Casper has completed the cloning process, click **Close**.



Retrieving Specific Files and Folders from a Backup

You can retrieve a specific file or folder from a backup without booting to the backup or performing a restore. Because a bootable backup is a clone of your Windows system disk, it can be accessed in the same manner as the Windows system disk whenever it is connected to the computer. Similarly, the contents of a restore-point backup can be accessed in the same manner as the Windows system disk whenever it has been mounted.

The following examples illustrate how to access the contents of a backup to retrieve specific files and folders without booting or restoring the entire backup.

Example 13: Accessing the Contents of a Bootable Backup. This example shows how to browse a bootable backup using Windows Explorer to retrieve a file located in the [*My*] *Documents* folder.

Example 14: Accessing the Contents of a Restore-Point Backup. This example demonstrates how to use Windows Explorer to mount a specific restore-point within a restore-point backup and retrieve a file from the *Documents* folder of the backup.

Example 13: Accessing the Contents of a Bootable Backup

Assuming the hard disk containing the bootable backup is currently installed or attached to the computer, the following procedure illustrates how to browse the contents of the backup to retrieve a specific file from the [*My*] *Documents* folder.

1. Open [**My**] **Computer**. On Windows 8, start **Windows File Explorer** and then click **Computer**. On Windows 7 and earlier, simply click [**My**] **Computer** on the *Start* menu.



 Double-click the drive containing your bootable backup. In this example, Local Disk (E:) represents the drive letter assigned by Windows to the backup drive.



3. Double-click **Users** to open the Users folder.



4. Double-click the folder that corresponds to the account name with which you normally log onto your computer. In this example, the user logs on as **George Jetson**.

👪 l ⊋ 👪 = l		Users			-	
File Home Share	View					× 🕐
⊛ ∋ → ↑ 🎍 ► Ca	omputer 🔸 Local Disk (E:) 🔸 Users	Ý	Ç	Search Users		م
🔆 Favorites	Name	Date modified	Туре		Size	
E Desktop	🔑 George Jetson	7/16/2013 2:20 PM	File fol	lder		
🚺 Downloads 🔙 Recent places	Public	7/26/2012 4:13 AM	File fol	lder		
 □ Libraries □ Documents □ Music □ Pictures □ Videos 						
🤣 Homegroup						
👰 Computer						
두 Network						
🇊 Casper Backups						
2 items						:==

5. Double-click the **My Documents** folder to access the contents of your account's *Documents* folder. The contents of this folder will represent the original contents of the *Documents* folder appearing on your system drive when you created your backup.

🏭 l ⊋ 🚯 = l	Geo	orge Jetson		- 🗆 🗙
File Home Share	View			~ 🕑
	mputer → Local Disk (E:) → Users → (George Jetson 🗸 🗸	🖒 Search George Je	etson 🔎
🔆 Favorites	Name	Date modified	Type Si	ze
🔤 Desktop) Contacts	7/3/2013 11:43 PM	File folder	
🗼 Downloads	膧 Desktop	7/18/2013 10:37 AM	File folder	
🔛 Recent places	🚺 Downloads	7/3/2013 11:43 PM	File folder	
	🙀 Favorites	7/3/2013 11:43 PM	File folder	
🥞 Libraries	📝 Links	7/3/2013 11:43 PM	File folder	
Documents	My Documents	7/4/2013 5:12 PM	File folder	
👌 Music	🚺 My Music	7/3/2013 11:43 PM	File folder	
Pictures	🖹 My Pictures	7/3/2013 11:43 PM	File folder	
😸 Videos	📔 My Videos	7/3/2013 11:43 PM	File folder	
	🍺 Saved Games	7/3/2013 11:43 PM	File folder	
🤣 Homegroup	📔 Searches	7/3/2013 11:43 PM	File folder	
🖳 Computer				
두 Network				
🧊 Casper Backups				
11 items				:==

6. Once you have located the desired file or folder, you can access or copy it as you would any other file on your original Windows system drive.

1	My Documents -	□ ×
File Home Share	View	~ ()
⋲ 🌛 👻 🕇 📗 « Loca	al Disk (E:) + Users + George Jetson + My Documents + C Search My Documents	Q
🔆 Favorites	Name Date modified Type Size	
Desktop	Spacely's Space Sprockets Digital Index Report 7/19/2013 2:15 PM Journal Document	5 KB
🗼 Downloads	Open	
Recent places	Print	
E	Open with	
Cibraries	Send to 🕨	
Documents Music	Cut	
Pictures	Conv	
Videos	Copy L	
	Create shortcut	
🍓 Homegroup	Delete	
	Kename	
🖳 Computer	Properties	
🗣 Network		
🇊 Casper Backups		
1 item 1 item selected 4.43	3 KB	:==

Example 14: Accessing the Contents of a Restore-Point Backup

Assuming the hard disk containing the restore-point backup is currently installed or attached to the computer, the following procedure illustrates how to mount a restore-point backup and retrieve a specific file from the *Documents* folder.

 Open the Casper Backups folder. On Windows 8, start Windows File Explorer and then click Casper Backups. On Windows 7, open Windows Explorer and click Casper Backups.



2. Double-click the **My Computer** folder to browse all of the restore-point backups discovered for your computer.



3. Double-click the backup containing the restore-point you want to access.



4. <u>Right</u>-click on the desired restore-point, and then click **Mount**.

2 F	JETSON System Disk	Backup			- 🗆 🗙
💽 🏵 🔻 🕇 🎾 « M	ly Computer → JETSON System Disk Backup	~	🖒 Searc	h JETSON Syster	n Disk B 🔎
Organize 🔻					= • 🔞
🚖 Favorites	Name	Date created	Туре	Size	Status
🔲 Desktop	🕼 Before installing the latest Updates	7/14/2013 6:24 PM	Differential	4,758,904 KB	Complete
🐌 Downloads 🧱 Recent places	V Mount	7/5/2013 2:45 PM	Full	11,401,156 KB	Complete
 Libraries Documents Music Pictures Videos 	Properties				
🤣 Homegroup					
1툦 Computer					
辑 Network					
🧊 Casper Backups					
2 items 1 item selected					

5. After the restore-point has been mounted and a drive letter has been assigned, a new Explorer window will open to reveal its contents. In this example, **Local Disk (H:)** was assigned to the restore-point when it was mounted. Double-click **Users** to open the Users folder.

👝 I 💽 🖡 = I Local Disk (H:) –					
File Home Share	View				v 🕐
(e) (⇒) → ↑ (a) → Computer → Local Disk (H:)		C Search Local Disk (H:)		Q	
🔆 Favorites	Name	Date modified	Туре	Size	
E Desktop	퉬 PerfLogs	7/26/2012 3:33 AM	File fo		
🐌 Downloads	퉬 Program Files	7/14/2013 12:25 PM	File fo		
🔛 Recent places	퉬 Program Files (x86)	7/4/2013 5:12 PM	File folder File folder		
	🗼 Users	7/3/2013 11:43 PM			
📜 Libraries	Windows	7/14/2013 6:27 PM	File fo	lder	
Documents					
J Music					
Pictures					
Videos					
輚 Homegroup					
👰 Computer					
🙀 Network					
🧊 Casper Backups					
5 items 1 item selected					:==

6. Double-click the folder that corresponds to the account name with which you normally log onto your computer. In this example, the user logs on as **George Jetson**.


7. Double-click the **My Documents** folder to access the contents of your account's *Documents* folder. The contents of this folder will represent the original contents of the *Documents* folder appearing on your system drive when you created your backup.

👪 l 🕞 🚯 = l	Ge	eorge Jetson	-		
File Home Share View					
(€) → ↑ 🍑 → Computer → Local Disk (H:) → Users → George Jetson v 🖒 Search George Jetson					
🔆 Favorites	Name	Date modified	Type Size		
Desktop	📙 Contacts	7/3/2013 11:43 PM	File folder		
📜 Downloads	膧 Desktop	7/14/2013 12:38 PM	File folder		
🖳 Recent places	🝺 Downloads	7/3/2013 11:43 PM	File folder		
	🙀 Favorites	7/3/2013 11:43 PM	File folder		
🥽 Libraries	Links	7/3/2013 11:43 PM	File folder		
Documents	My Documents	7/19/2013 7:59 PM	File folder		
👌 Music	📕 My Music	7/3/2013 11:43 PM	File folder		
Pictures	╞ My Pictures	7/3/2013 11:43 PM	File folder		
🚼 Videos	📔 My Videos	7/3/2013 11:43 PM	File folder		
	🕞 Saved Games	7/3/2013 11:43 PM	File folder		
🔣 Homegroup	🍺 Searches	7/3/2013 11:43 PM	File folder		
1 Computer					
Network					
🇊 Casper Backups					
11 items 1 item selected				:==	

8. Once you have located the desired file or folder, you can access or copy it as you would any other file on your original Windows system drive.

👔 l ⊋ 🚯 = l	My Documents _ t	×
File Home Share	View	~ ()
🛞 🏵 🔹 🕇 📗 « Loo	cal Disk (H:) > Users > George Jetson > My Documents > C Search My Documents	Q
🔆 Favorites	Name Date modified Type Size	
Desktop	Spacely's Space Sprockets Digital Indexer Report 7/7/2013 8:46 PM Journal Document	5 KB
🗼 Downloads	Open	
Recent places	Print	
	Open with	
Libraries Documents	Send to	
J Music	Cut	
Pictures	Сору	
Videos	Create shortcut	
a	Delete	
😽 Homegroup	Rename	
🖳 Computer	Properties	
🙀 Network		
🇊 Casper Backups		
1 item 1 item selected 4.4	43 KB	

9. When you have finished accessing the contents of the restore-point, <u>right</u>-click on the restore-point and select **Dismount**.

3F	JETSON System Disk Ba	ackup			- • ×
⋲ 🌛 🔻 ז 🎾 « M	y Computer 🔸 JETSON System Disk Backup	Ŷ	C Searc	h JETSON System	m Disk B 🔎
Organize 🔻					= • 🕜
🔆 Favorites	Name	Date created	Туре	Size	Status
🔲 Desktop	🕼 Before installing the latest Updates	7/14/2013 6:24 PM	Differential	4,758,904 KB	Mounted
 ▶ Downloads ♥ Recent places ♥ Libraries ● Documents ● Music ● Pictures ● Videos 	Control Contro	7/5/2013 2:45 PM	Full	11,401,156 KB	ln use
🜏 Homegroup I∰ Computer					
🗣 Network					
🧊 Casper Backups					
2 items 1 item selected					•

The procedure for upgrading a hard disk is basically the same whether you are upgrading a hard disk in a desktop or a notebook. For a desktop system, the new hard disk is temporarily installed as a secondary hard disk in the computer or attached as an external hard disk using an external USB, Firewire, or eSATA hard disk enclosure or bridge adapter. For a notebook computer, a secondary media bay or external USB, Firewire, or eSATA hard disk enclosure or bridge adapter is required to connect the new hard disk to the notebook.

Example 15: Upgrading a Hard Disk

Assuming the new hard disk is currently installed or attached to the system, the following procedure illustrates how Casper Secure Drive Backup may be used to clone the original hard disk to the new hard disk and complete the upgrade.

1. Select Copy Drive.

CASPER SECUR VERSION 4.0	E™ DRIVE BACKUP Future Systems soluTioNs
Copy Drive	Copy Drive
Create Image	Select Copy Drive when you want to upgrade a hard disk, create and maintain a backup hard disk, or restore from a backup hard disk.
Restore Image	
Explore	
👎 Exit	

2. Select the hard disk to be upgraded (e.g., the hard disk on which Windows is installed) as the disk to copy, and click **Next**.

🐉 Casper Secure Drive	Backup - Copy Drive	
Select the source		
Select a disk to copy the disk partition or volume to copy o	layout and content of all partitions defined on the disk. So only the selected partition or volume.	elect an individual
Name	Description	Size
🗉 📊 Disk 1	Samsung SSD 840 PRO Series	119.24 GB
Disk 2	EXT USB 3.0 Samsung SSD 840 PRO Seri	476.94 GB
		Next Cano

3. Select the new hard disk as the destination, and click **Next**.

📀 凝 Casper Secure Drive Bac	kup - Copy Drive	- • ×
Select the destination hard Casper will copy Disk 1 [Samsung] destination hard disk will be lost, in disk.	<mark>1 disk</mark> SSD 840 PRO Series] to the hard disk. Any existing da ncluding the layout and content of any partitions de	sta on the fined on the hard
Name	Description	Size
Disk 2	EXT USB 3.0 Samsung SSD 840 PRO Seri	476.94 GB
		Next Cancel

4. When the new disk is attached as an external hard disk, Casper will prompt you to assign a name to the disk. A name is unnecessary because the new disk will soon become the new Windows system disk. Uncheck **Yes, use the following name when referring to Disk 2**, and then click **Next** to proceed.

📀 🏅 Casper	_ 🗆 🗙
Would you Disk 2 [EXT U change depe confusion, Ca	u like to assign a name to Disk 2? SB 3.0 Samsung SSD 840 PRO Seri] is a removable disk whose unit number is subject to nding on the order in which disks are identified by the Windows operating system. To avoid asper can refer to this disk using a name of your choosing.
🗌 Yes, use th	ne following name when referring to Disk 2
Name:	My Portable Backup
	Next Cancel

5. When prompted to specify how the additional space on the new hard disk is to be used, retain the default selection and click **Next**. When the new hard disk is larger than the original disk, the default option will be *Give all of the space to the partition*, or *Proportionally distribute the space to all partitions* when there is more than one partition defined.

				- 🗆 🗙
€	羄 Casper Secure Drive Bad	ckup - Copy Drive		
	How would you like to us When copying the partitions from space to the partitions. This will in files and folders. Proportionally distribute the sp Leave the additional space una Let me specify how the additional	e the additional space n Disk 1 (Samsung SSD 840 i crease the amount of free space to all partitions (recom sllocated onal space is to be allocated	e on Disk 2? PRO Series], Casper can give t space available on the partitio imended)	he additional ns for new
	Partition	Disk 2 usage 350.00 MB 476.60 GB	Disk 2	476.94 GB
			Ne	xt Cancel

If the new hard disk is the same size or smaller than the original hard disk, Casper will ask you to manually configure how the space is to be used.

d like to use the space or	n Disk 2 ON System Disk Backup].	
	Original size	Size of copy
n Reserved]	350.00 MB	350.00 MB
350.00 MB	Disk 2:	119.24 0
220.00.00		
	d like to use the space of 'each partition on Disk 2 (JETST) In Reserved] Reserved] 350.00 MB 350.00 MB	d like to use the space on Disk 2 'each partition on Disk 2 [JETSTON System Disk Backup]. Original size Neserved] Seserved] Disk 2: 350.00 MB 350.00 MB 350.00 MB 350.00 MB

Simply clicking **Next** to accept the default selection or value is usually best. For additional help with making a selection, press **F1**.

6. Click **Perform the copy now** to begin the copy.



7. When Casper has completed the cloning process, click **Close**.

×
Casper Secure Drive Backup - Copy Drive
The copy completed successfully
Disk 1 [Samsung SSD 840 PRO Series] was copied to Disk 2 [EXT USB 3.0 Samsung SSD 840 PRO Seri].
Elapsed time: 4 minutes.
An activity report providing additional details has been saved to the Casper History. <u>View this report</u> now.
Save the settings for this conv. as
Conv System Dick to FXT LISB 3.0 Samsung SSD 840 PRO Seri
Copy system bisk to EXT 050 50 someting 550 CHO YNO SET
Close

- 8. Shutdown and power-off the computer.
- 9. Reconfigure the computer to replace the original hard disk with the new hard disk. If the new hard disk is installed in a secondary media bay of a notebook, or installed in an external USB, Firewire, or eSATA enclosure, simply remove the hard disk from its enclosure and exchange it with the original hard disk.

For a new hard disk that has been temporarily mounted as a secondary internal hard disk, remove the original hard disk and replace it with the new hard disk.