



# CASPER SECURE™ DRIVE BACKUP

STARTUP DISK CREATOR GUIDE

v4.0



Future Systems  
SOLUTIONS

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# Introduction

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The Casper Secure™ Startup Disk enables you to boot and run Casper Secure Drive Backup directly from a USB flash drive, CD-ROM or DVD disc with full access to external USB and Firewire hard disks.

While a Casper Secure Startup Disk is often unnecessary, it may be needed to restore a backup in certain situations. For example, a Casper Secure Startup Disk is required to restore an image file or restore-point backup from a disk that does not contain the Casper Secure Startup and Recovery Environment. It may also be needed to restore a bootable backup from an external hard drive if Windows is unable to boot and run from the external hard drive.

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**NOTE:** A Casper Secure Startup Disk is not required to restore the primary system drive from a bootable backup if your computer supports booting and running directly from the backup disk. Likewise, a Casper Secure Startup Disk is not needed to restore the primary system drive from a restore-point backup if you added the Casper Secure Startup and Recovery Environment to your backup disk when creating the restore-point backup.

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## System Requirements

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While the Casper Secure Startup Disk is designed to run on virtually all Windows 2000 and later systems, installation and creation of the Casper Secure Startup Disk must be performed on a system running Windows XP (SP3) or later.

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### Installation Requirements

- Windows 8, Windows 7, Windows Vista, or Windows XP (SP3)
- 5GB available disk space
- 1GB RAM (2GB or more recommended)
- Windows 8 Recovery Environment, Windows 8 Assessment and Deployment Kit (ADK), or Windows 7 Automated Installation Kit (AIK)

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### Startup Disk Run-time Requirements

- 500MB available disk space
- 512MB RAM (1GB or more recommended)

# Creating and Using a Casper Secure Startup Disk

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The Startup Disk Creator wizard will prepare a USB flash drive, CD, or DVD disc to boot and run Casper Secure Drive Backup. It can also create an ISO disc image file that can be used to create a CD or DVD later.

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## Installing the Windows Preinstallation Environment

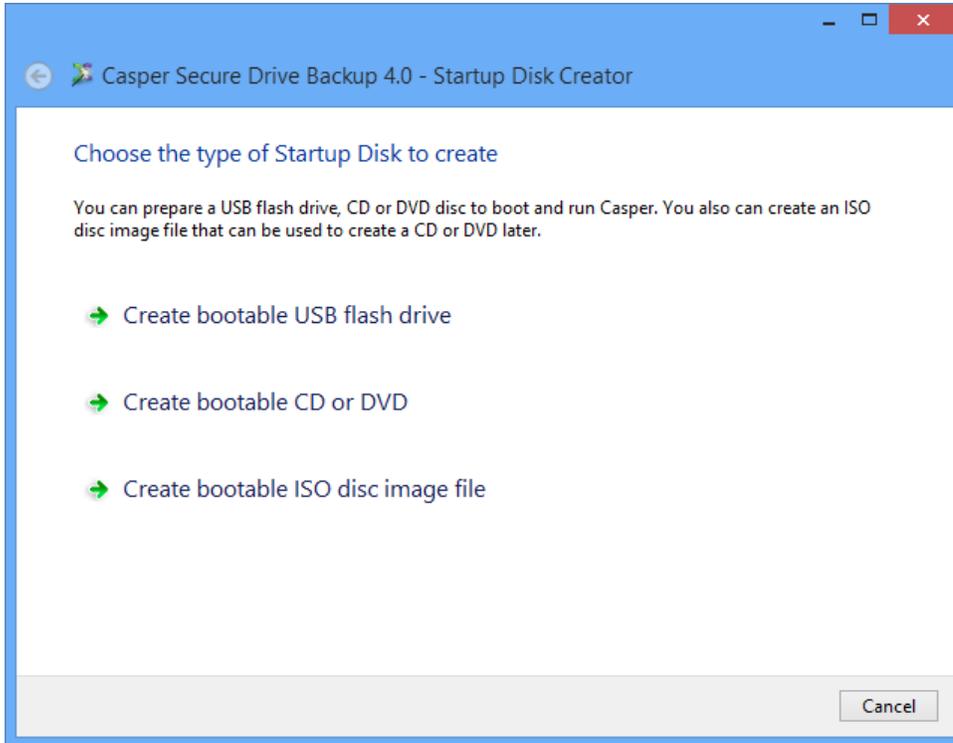
The Microsoft Windows Preinstallation Environment (WinPE) must be installed prior to creating a Casper Secure Startup Disk. If a compatible version of WinPE is not available, the Startup Disk Creator will automatically download and install a copy for you.

The Startup Disk Creator is compatible with both WinPE 3.0 and WinPE 4.0. When running on a computer containing a compatible copy of the Windows 8 Recovery Environment (WinRE 4.0), the Startup Disk Creator can obtain the necessary components of WinPE 4.0 directly from the installed WinRE 4.0. In other cases, WinPE must be obtained by installing either the Windows 7 Automated Installation Kit (AIK) or the Windows 8 Assessment and Deployment Kit (ADK). If neither kit has been installed, the Startup Disk Creator will attempt to download and install the appropriate kit before creating a Startup Disk for the first time. Alternatively, you can download and install either the Windows 7 AIK or Windows 8 ADK manually. For details, see <http://www.fssdev.com/link?id=100>.

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## Creating a Casper Secure Startup Disk

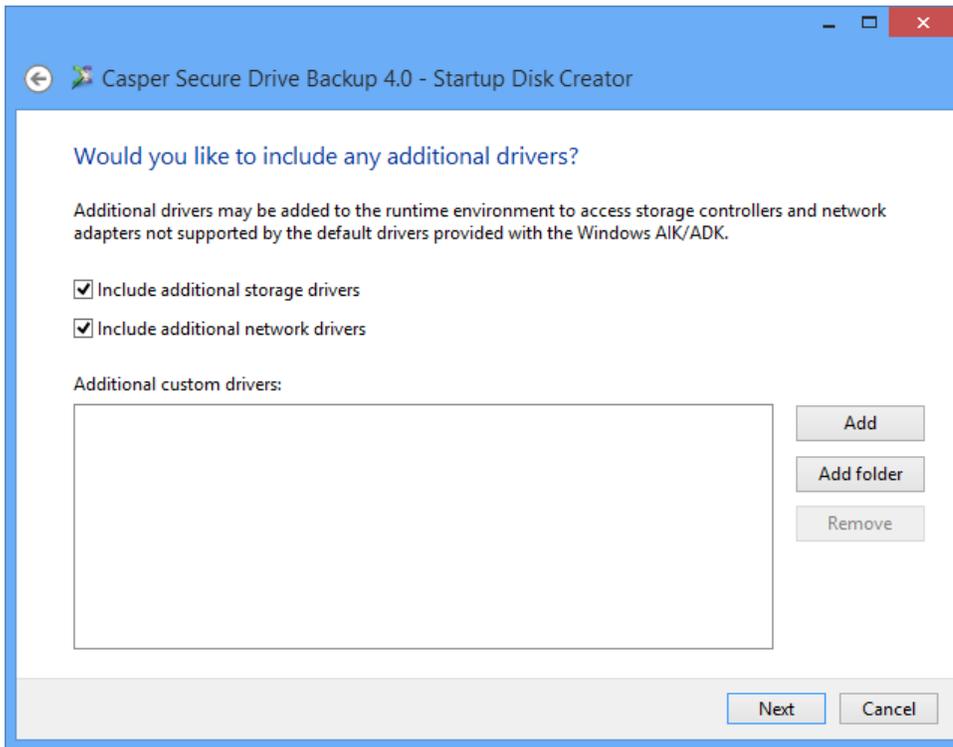
1. Open **Casper Secure 4.0 Startup Disk Creator**.
2. Choose the type of Startup Disk to create.



There are three options:

- **Create a bootable USB flash drive.** This option will prepare a USB flash drive to boot and run Casper Secure Drive Backup.
- **Create a bootable CD or DVD.** This option will prepare a CD or DVD disc to boot and run Casper Secure Drive Backup.
- **Create a bootable ISO disc image file.** This option will create an ISO disc image file, which can be used to create a CD or DVD disc later or used to emulate a bootable Casper Secure Startup Disk CD within a virtual environment.

3. Specify additional drivers to add to the runtime environment. Additional drivers may be required to provide access to storage devices and network resources not supported by the drivers included within the Windows AIK or Windows ADK.



Check **Include additional storage drivers** to add a collection of popular third-party storage controller drivers. Check **Include additional network drivers** to add a collection of popular third-party network drivers. Both options provide out-of-the-box support for a broad range of hardware.

Click **Add** and select the Setup Information File (INF) to include a specific driver. To add more than one driver at a time, click **Add folder** and select the folder containing the drivers. All drivers within the selected folder and within any subfolders will be added to the runtime environment. Incompatible drivers will be ignored.

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**NOTE:** The **Include additional storage drivers** and **Include additional network drivers** options are available only when using WinPE 3.0. These options will not appear when using a later version of WinPE to create the Startup Disk.

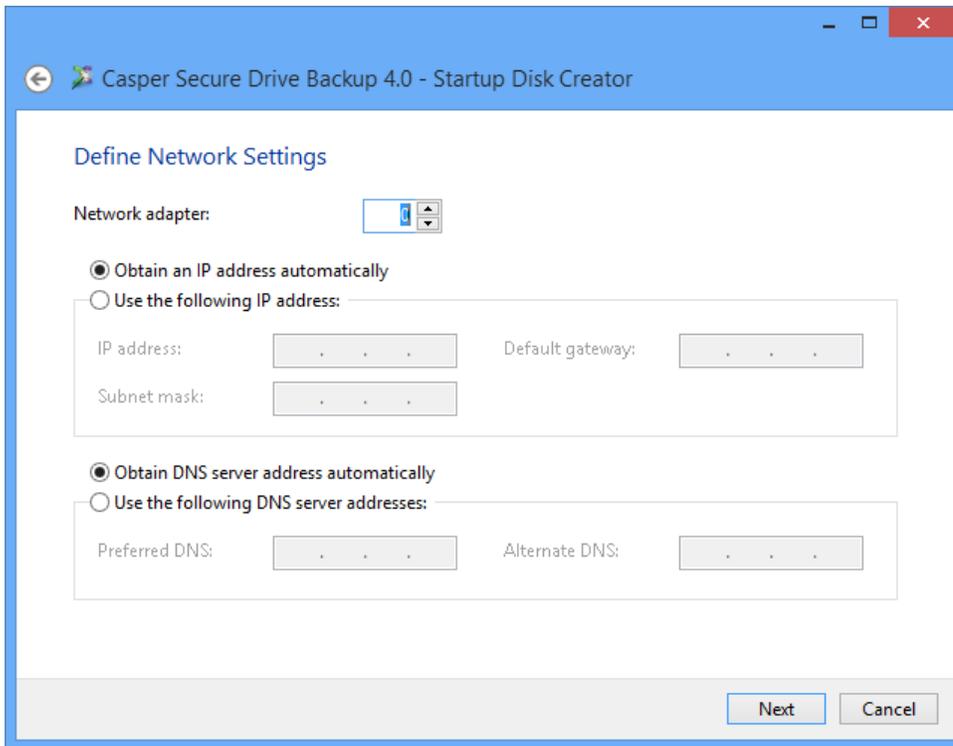
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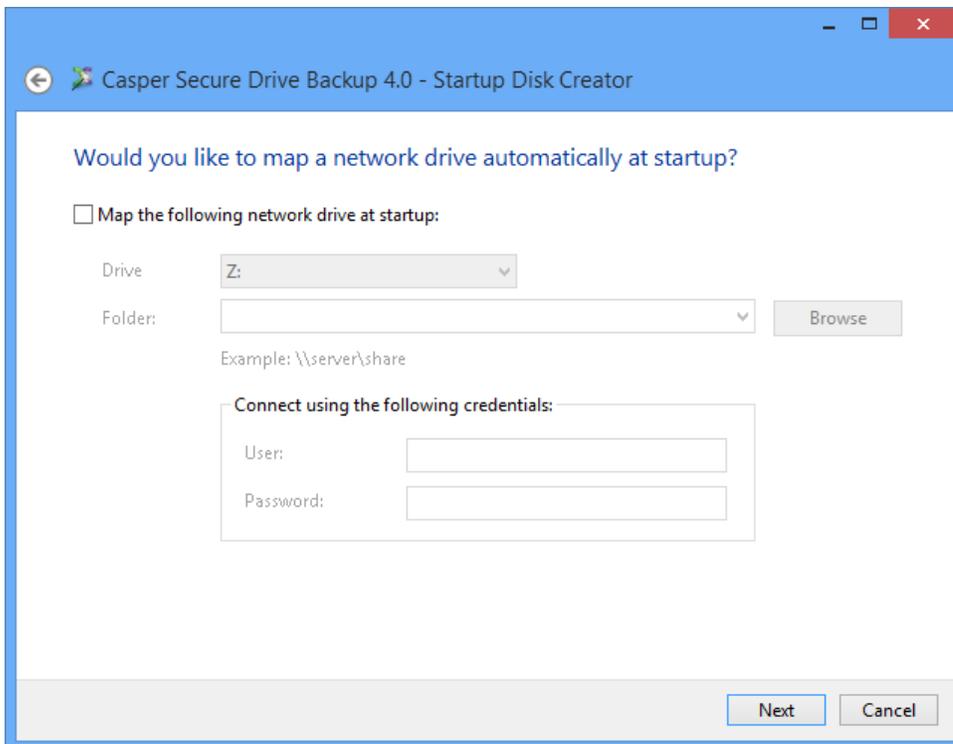
**NOTE:** Adding a large number of custom drivers with **Add** or **Add folder** can significantly increase the amount of time required to create the Startup Disk.

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4. Define the network configuration for the runtime environment. You can configure a specific network configuration for each adapter discovered within the runtime environment.

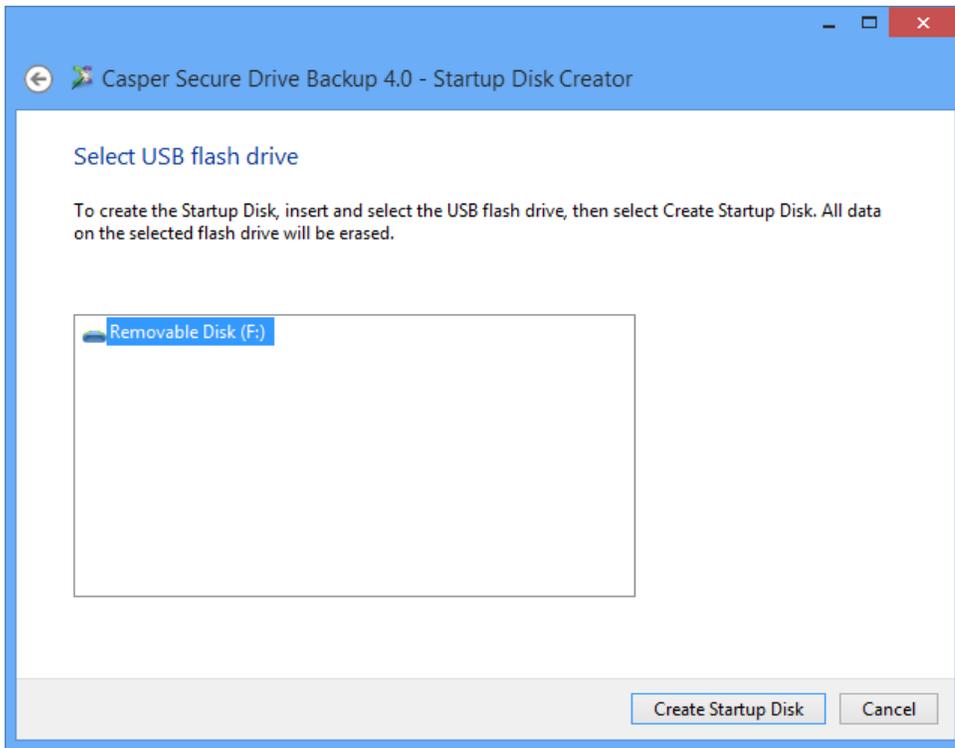


5. Choose whether to have a network drive mapped automatically at startup.



The **User** and **Password** fields are optional and may be left blank. You will be prompted to provide the missing credentials if necessary at startup.

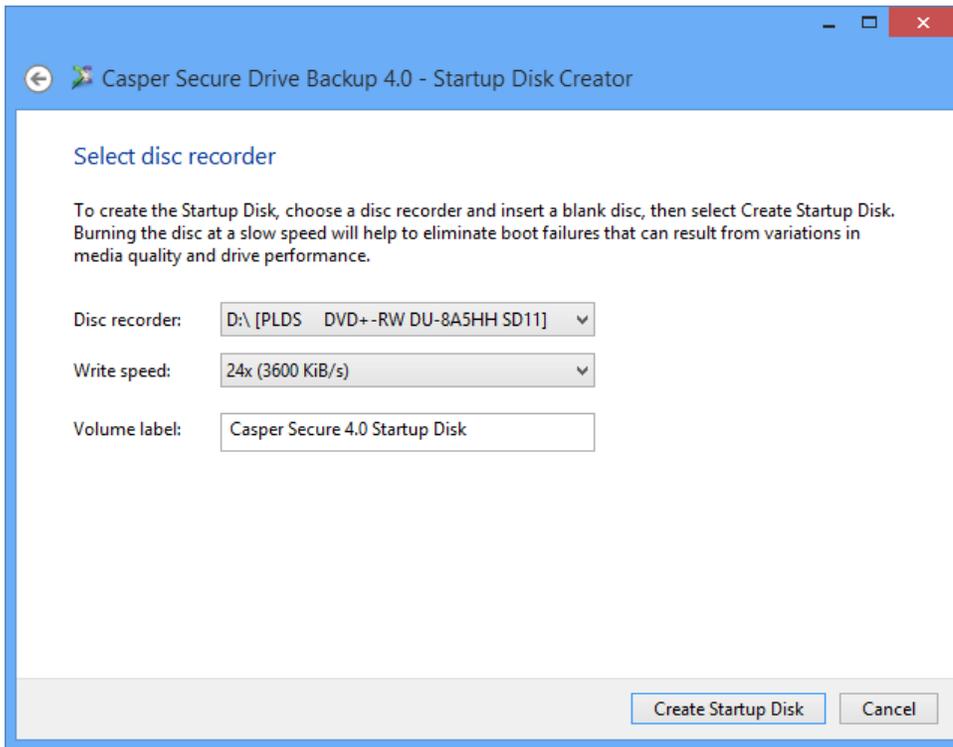
6. If creating a bootable USB flash drive, insert and select the USB flash drive, then click **Create Startup Disk**. Existing data on the flash drive will be erased.



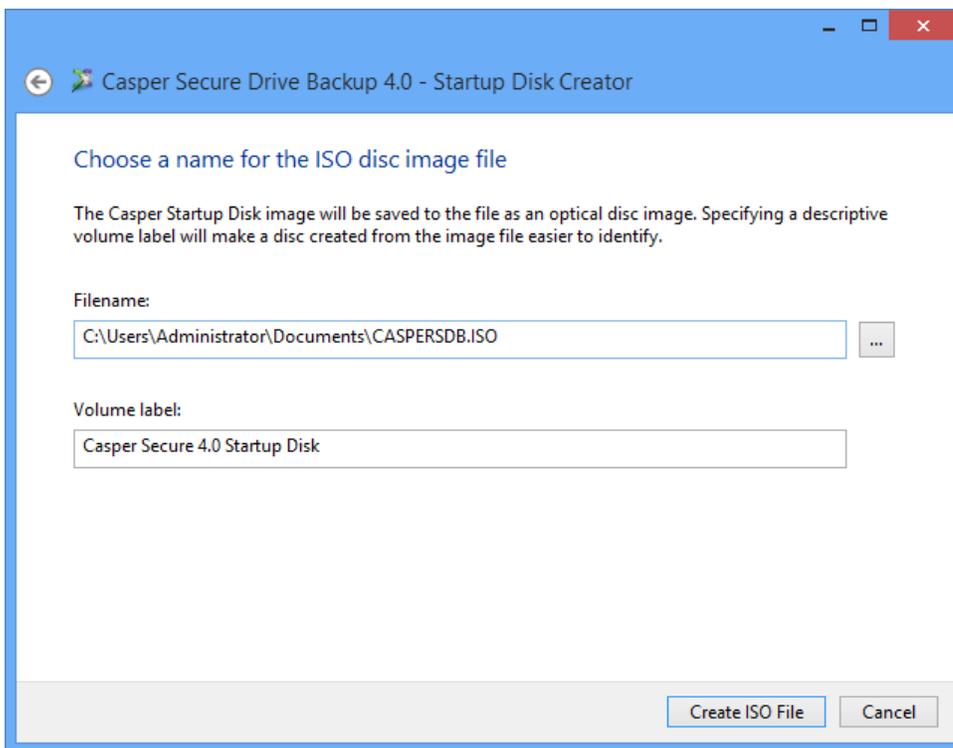
**WARNING:** All data on the selected flash drive will be erased!

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If creating a bootable CD or DVD, select a disc recorder and insert a blank disc, then click **Create Startup Disk**.



If creating a bootable ISO disc image file, type a name for the file and click **Create ISO File**.

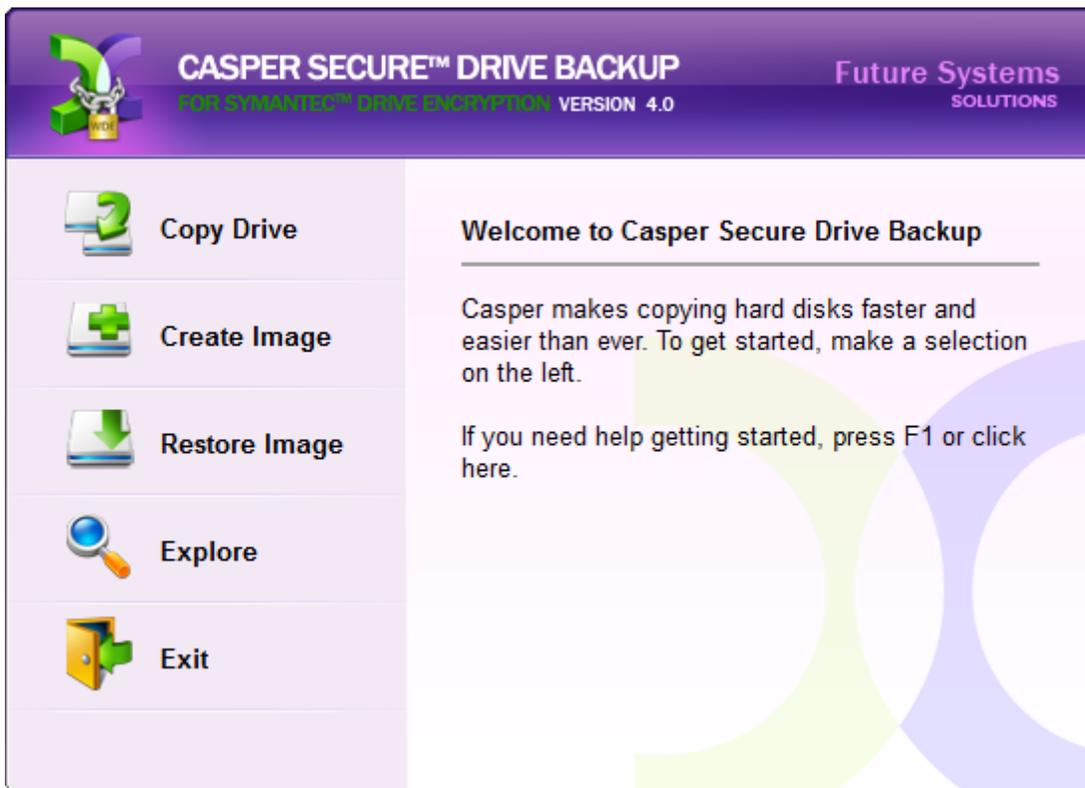


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## Using the Casper Secure Startup Disk

The Casper Secure Startup Disk can be used to restore your computer's Windows system disk from an image file or Casper restore-point backup. You can also use the Casper Secure Startup Disk to restore your computer's Windows system disk when you are unable to boot your computer directly from a Casper backup hard disk. For example, if you used an external hard disk to create a bootable backup, but your computer will not boot and run from an external hard disk, you can restore your computer by booting from the Casper Secure Startup Disk.

Booting a computer from the Casper Secure Startup Disk 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.



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**CAUTION:** *When running from the Casper Secure Startup Disk, temporary disk unit numbers and drive letters will be assigned, which may be different than those assigned by Windows when the system is running normally.*

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## Loading specific drivers after booting via the Casper Secure Startup Disk

The Casper Secure Startup Disk boots and runs Casper Secure Drive Backup within a self-contained Windows Preinstallation (WinPE) environment. If you need to load a driver that was not included when the Casper Secure Startup Disk was created, you can load the driver after booting the computer from the startup disk.

Follow this procedure:

1. Click **Explore** to open Casper Explorer
2. From the **Tools** menu, click **Load driver**
3. Browse to the Setup Information File (.INF) of the driver package that contains the hardware driver to load and click **Open**.

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**NOTE:** The driver must have the same architecture as the Casper Secure Startup Disk. By default, the Startup Disk Creator will match the architecture of Windows. For example, when run on a 64-bit version of Windows, the Startup Disk Creator will create a startup disk that uses 64-bit drivers. Likewise, when run on a 32-bit version of Windows, the Startup Disk Creator will create a startup disk that uses 32-bit drivers.

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