CASPER SECURE™

SERVER EDITION

STARTUP DISK CREATOR GUIDE

v6.0

Future Systems SOLUTIONS

Copyright and Trademark Information

Information in this document is subject to change without notice. Federal law prohibits unauthorized use, duplication, and distribution of any part of this document in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of Future Systems Solutions.

Future Systems Solutions may have patents, trademarks, copyrights, or other intellectual property rights covering subject matter in this document.

Copyright © 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

Casper, the Casper logo, Casper Secure, the Casper Secure logo, Drive2Drive, SmartClone, SmartWrite, AccuClone, SmartAlert, SmartSense, SmartStart, SmartRestore, 1-Click SmartStart, and 1-Click Cloning are trademarks or registered trademarks of Future Systems Solutions, Inc. BitLocker, Microsoft, Windows, and Windows Vista are trademarks or registered trademarks of Microsoft Corporation. Symantec and PGP are trademarks or registered trademarks of Symantec Corporation. Other brand and product names may be trademarks or registered trademarks of their respective holders.

Table of Contents

Introduction **4**

System Requirements **4**

- **Installation Requirements** **4**
- **Startup Disk Run-time Requirements** **4**

Creating and Using a Casper Secure Startup Disk **5**

- **Installing the Windows Preinstallation Environment** **5**
- **Starting the Casper Secure Startup Disk Creator** **5**
- **Creating a Casper Secure Startup Disk** **6**
- **Creating a Customized Casper Secure Startup Disk (Advanced)** **9**
- **Using the Casper Secure Startup Disk** **15**
  - Loading specific drivers after booting via the Casper Secure Startup Disk 16

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

Introduction

The Casper Secure™ Startup Disk enables you to boot and run Casper Secure Server Edition 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.

A Casper Secure Startup Disk is not required to restore the primary system drive from a bootable backup if the server 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.

System Requirements

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 Vista or later.

Installation Requirements

- Windows Server 2025, Windows Server 2022, Windows Server 2019, Windows Server 2016, Windows Server 2012 R2, Windows Server 2012, Windows Server 2008 R2, Windows Server 2008, Windows 10, Windows 8.x, Windows 7, or Windows Vista
- 10GB available disk space
- 1GB RAM (2GB or more recommended)
- Windows 11 Assessment and Deployment Kit, Windows 10 Assessment and Deployment Kit, Windows 8 / Windows 8.1 Assessment and Deployment Kit (ADK), Windows 7 Automated Installation Kit (AIK), or compatible version of Windows 8.x Recovery Environment
- Administrator rights

Startup Disk Run-time Requirements

- 500MB available disk space
- 2GB RAM (4GB or more recommended)

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

Creating and Using a Casper Secure Startup Disk

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.

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 Casper Startup Disk Creator is compatible with WinPE 3.x[1], WinPE 4.0, WinPE 5.x, WinPE 10.0, and WinPE 11.0. When running on a computer containing a compatible copy of the Windows 8.x Recovery Environment (WinRE 4.0/5.0), the Casper Startup Disk Creator can obtain the necessary components of WinPE directly from the installed WinRE. In other cases, WinPE must be obtained by installing a compatible Windows Assessment and Deployment Kit (ADK) or the Windows 7 Automated Installation Kit (AIK). The Casper 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 the Windows ADK or Windows AIK manually. For details, see https://www.fssdev.com/link?id=105.

Starting the Casper Secure Startup Disk Creator

1. Open **Casper Secure Drive Backup**
2. On the **Tools** menu, click **Create Startup Disk**

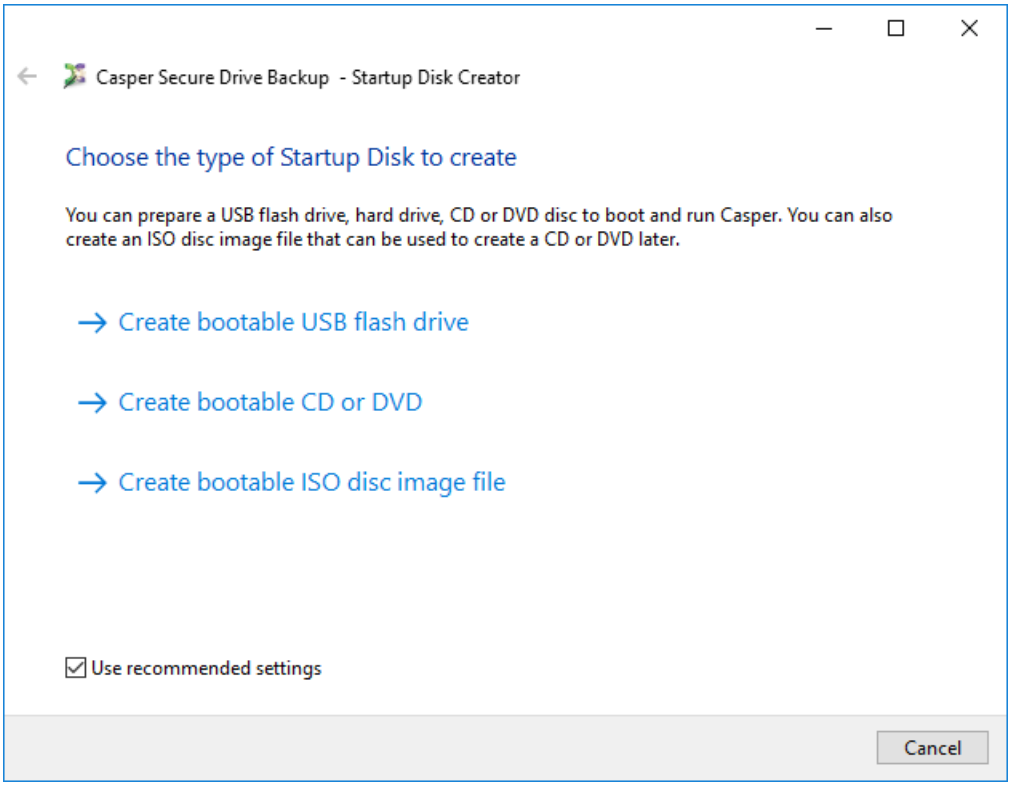
[1] Casper Secure Drive Backup does not support the VHDX image file format when running within WinPE 3.x (Windows 7 AIK).

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

Creating a Casper Secure Startup Disk

1. Open **Casper Secure Startup Disk Creator**.

2. Check **Use recommended settings** and then choose the type of Startup Disk to create.

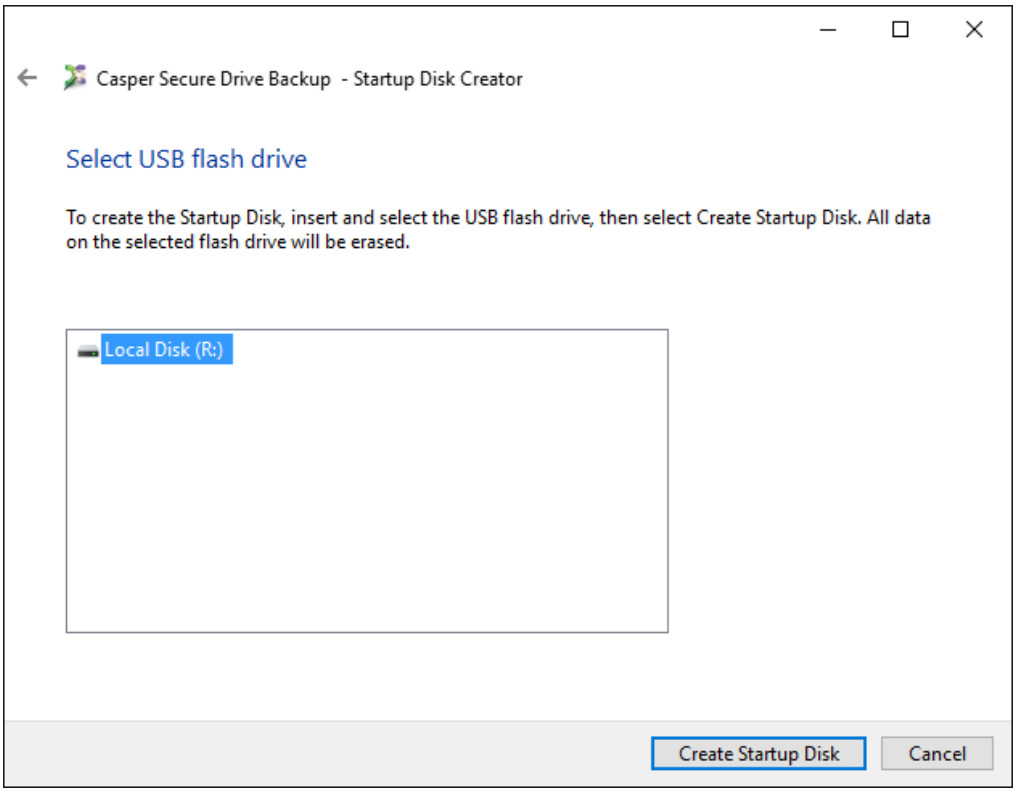


There are four options:

- **Create bootable USB flash drive.** This option will prepare a USB flash drive to boot and run Casper Secure.
- **Create bootable CD or DVD.** This option will prepare a CD or DVD disc to boot and run Casper Secure.
- **Create 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.

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

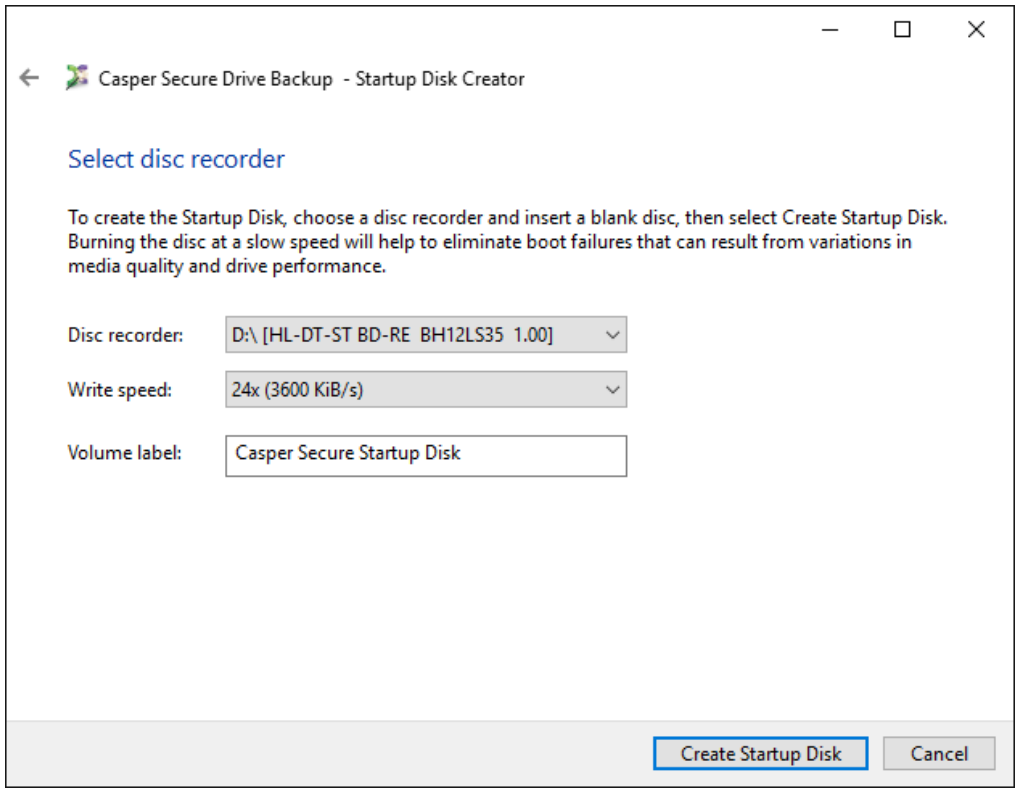
3. If creating a bootable USB flash drive, insert and select the USB flash drive, then click **Create Startup Disk**. All data on the flash drive will be erased.



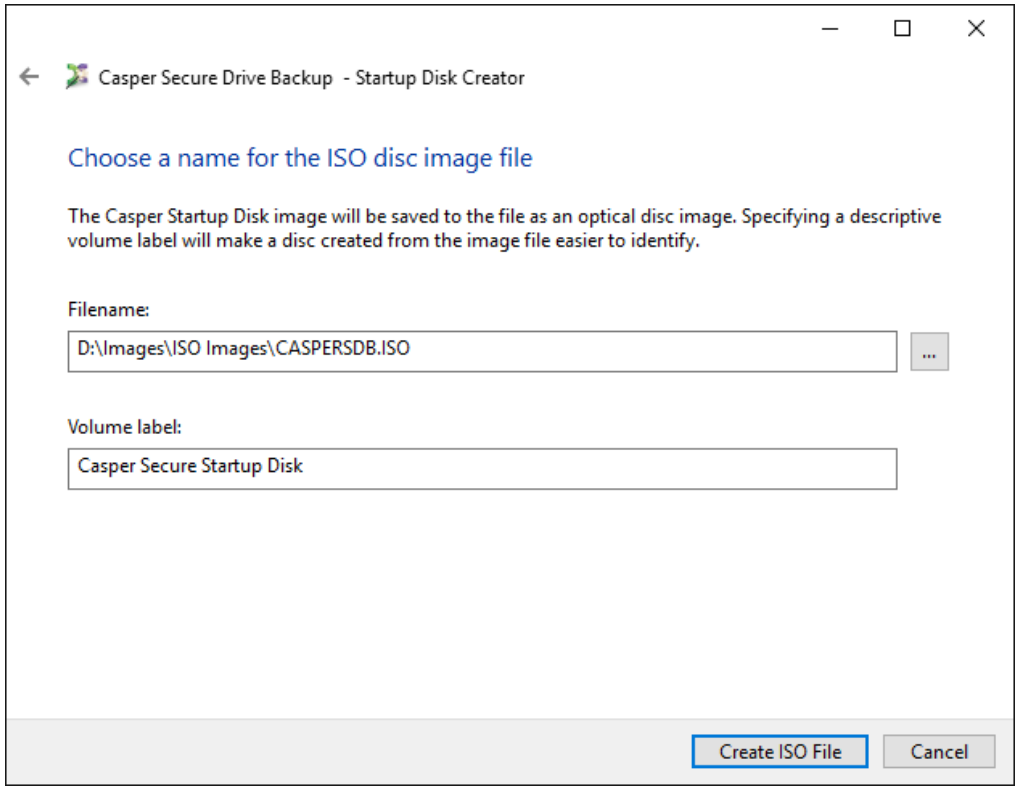
Except when selecting a USB flash drive that is presently configured as a Casper Secure Startup Disk, all data on the flash drive will be erased. If the flash drive is currently configured as a Casper Secure Startup Disk, only existing Casper Secure settings will be preserved along with any files and folders located within the \Drivers and \Private folders.

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

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



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



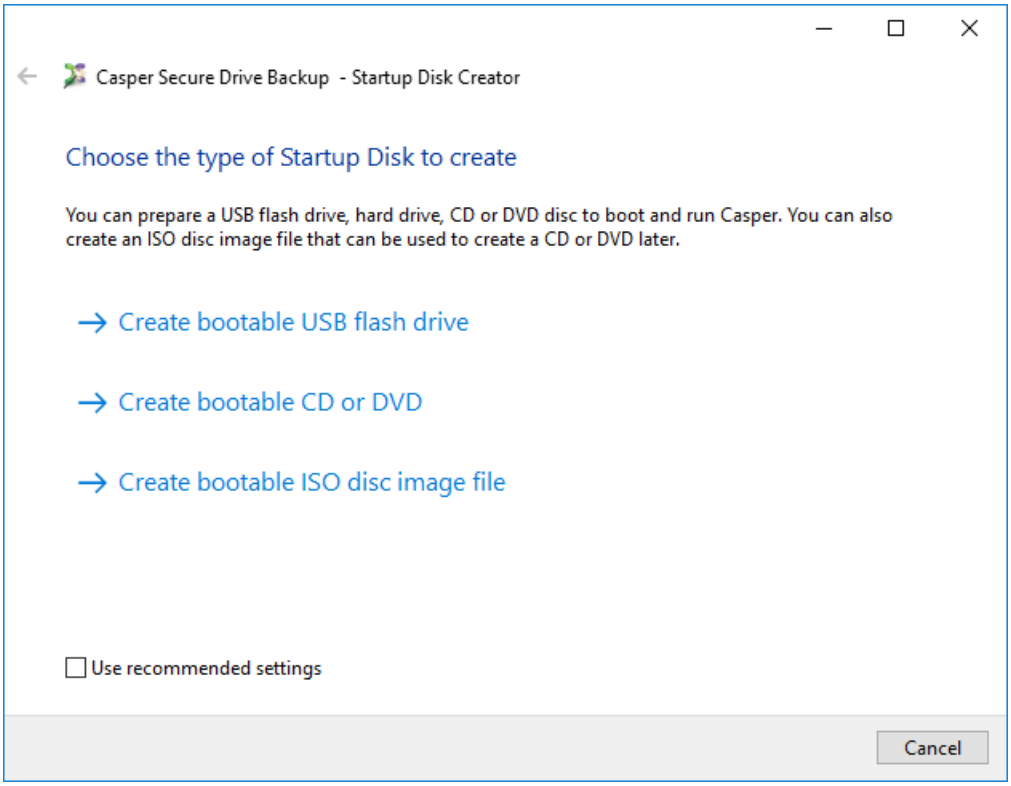
© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

Creating a Customized Casper Secure Startup Disk (Advanced)

You can choose to use a specific version of Windows PE, add special drivers, and specify custom network settings by creating a customized Casper Secure Startup Disk.

1. Open **Casper Secure Startup Disk Creator**.

2. Uncheck **Use recommended settings** and then choose the type of Startup Disk to create.

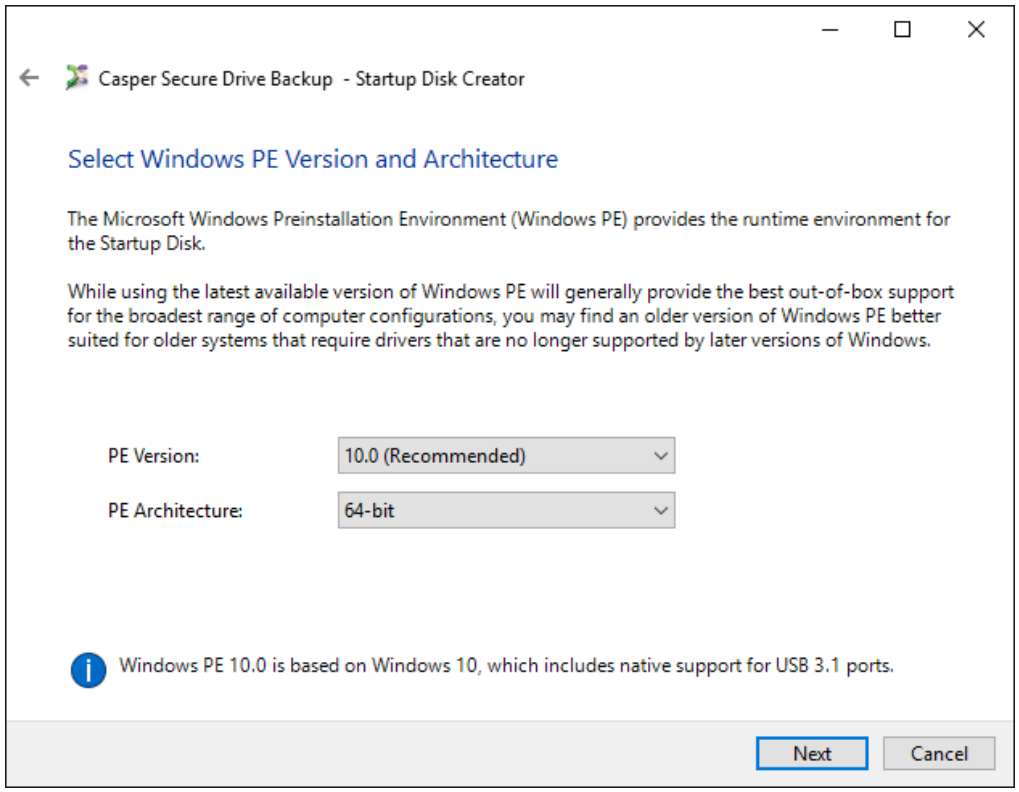


There are four options:

- **Create bootable USB flash drive.** This option will prepare a USB flash drive to boot and run Casper Secure.
- **Create bootable CD or DVD.** This option will prepare a CD or DVD disc to boot and run Casper Secure.
- **Create 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.

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

3. Choose the specific version and architecture of the Windows Preinstallation Environment to use for the runtime environment and then click **Next**.

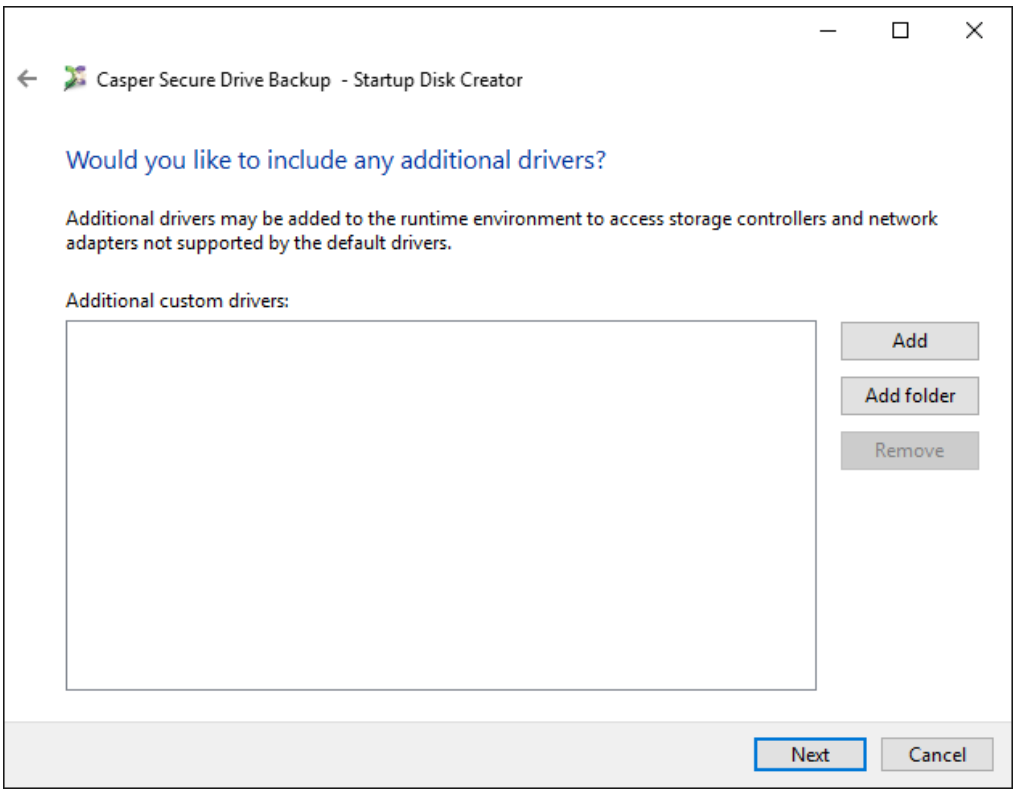


The PE version does need to be based on the same version of Windows running on your computer. For example, if your computer is running Windows 7, you may choose to use PE version 10.0, which is based on Windows 10.

The PE architecture best suited for your computer will be selected by default.

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

4. 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.



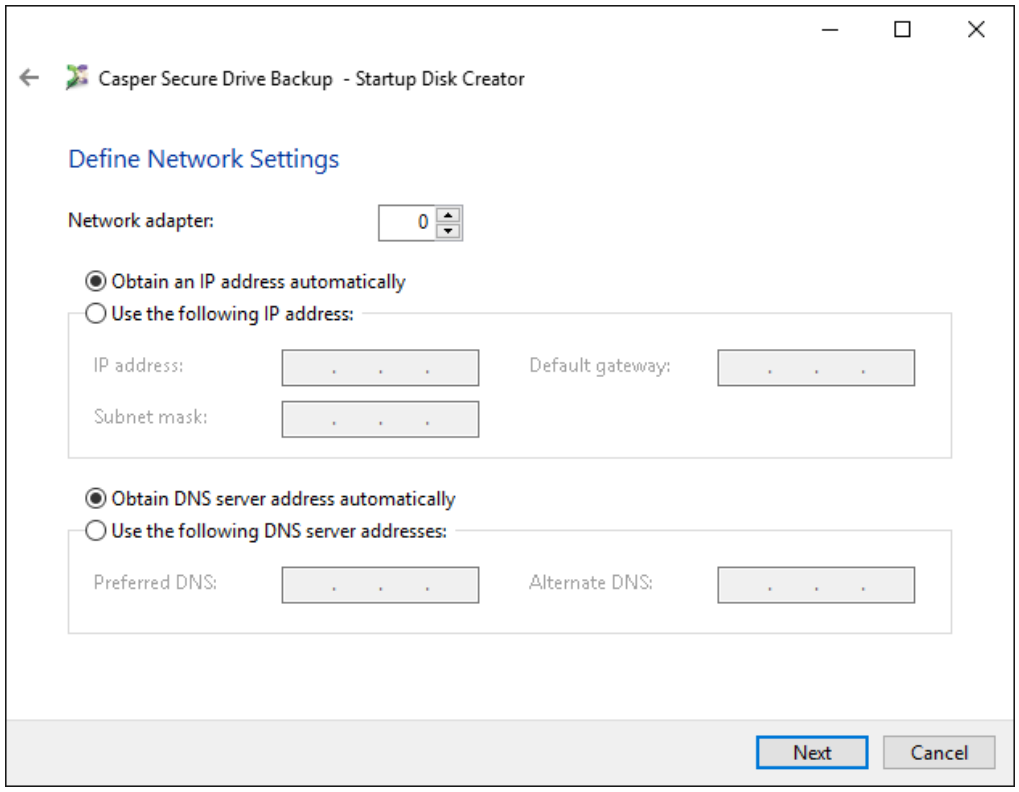
Click **Add** and select the Setup Information File (INF) to include a specific driver. To add more than one driver at time, click **Add folder** and select the folder containing the drivers. All drivers within the selected folder and within any subfolders will be added to the runtime environment. Incompatible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

*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.*

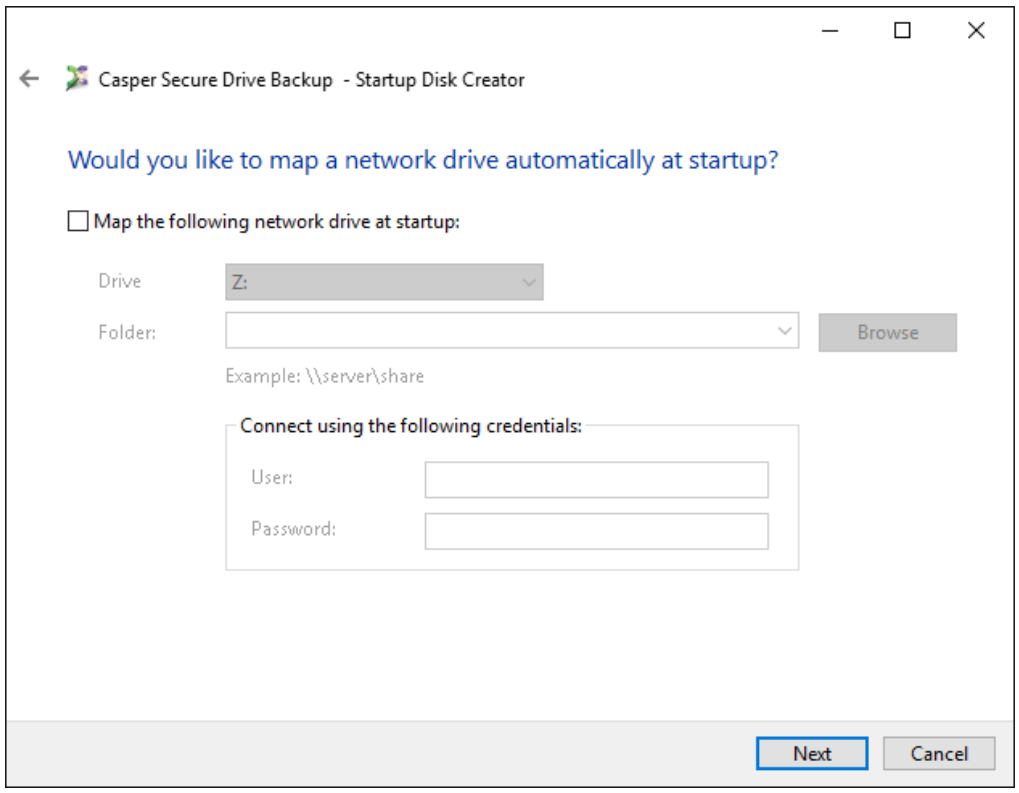
*Adding a large number of custom drivers with **Add** or **Add folder** can significantly increase the amount of time required to create the Startup Disk.*

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

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

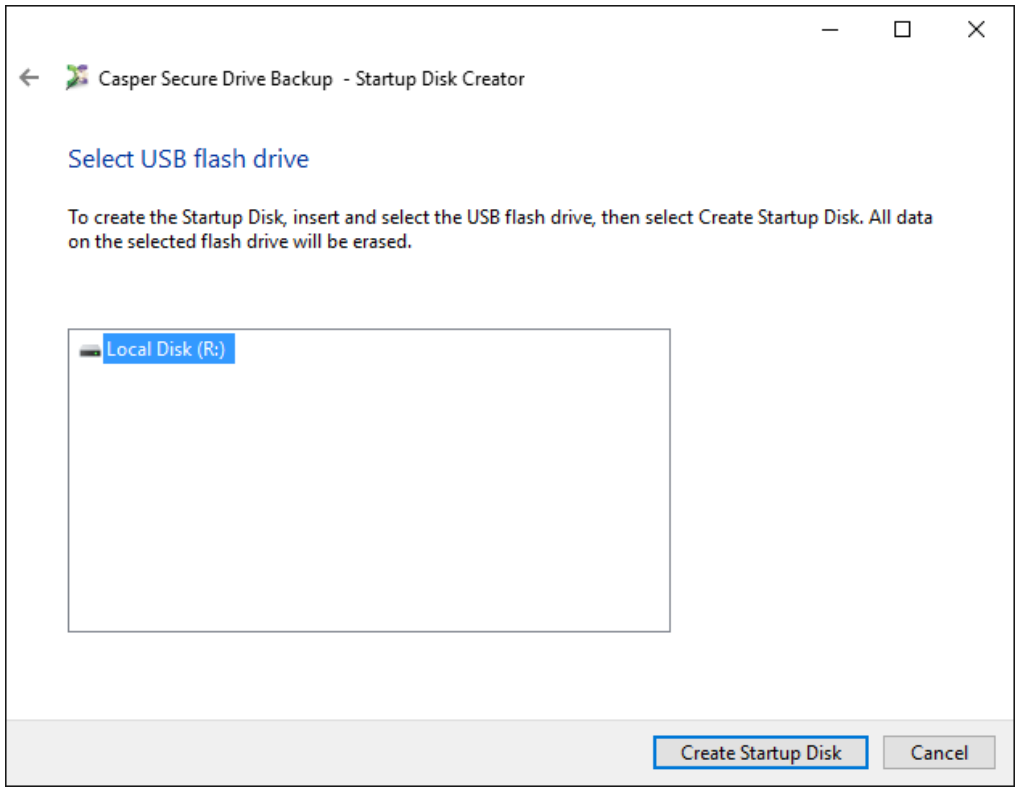


6. Choose whether to have a network drive mapped automatically at startup. The **User** and **Password** fields are optional and may be left blank. You will be prompted to provide the missing credentials if necessary at startup.



© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

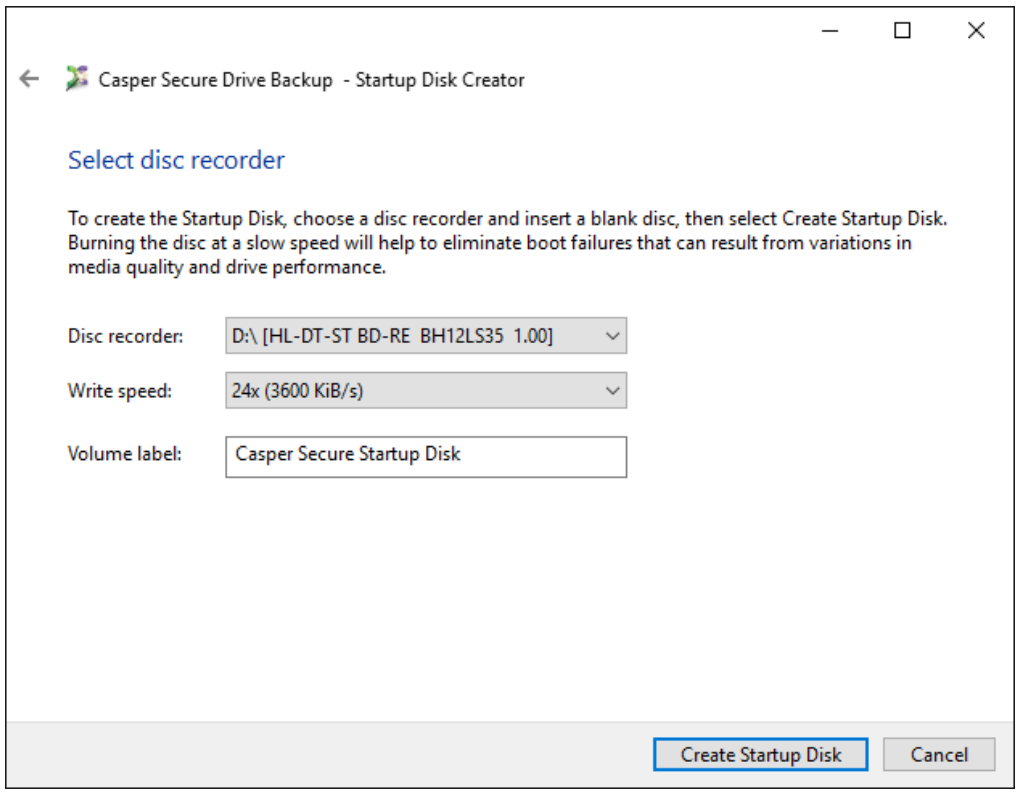
7. If creating a bootable USB flash drive, insert and select the USB flash drive, then click **Create Startup Disk**. Existing data on the flash drive will be erased.



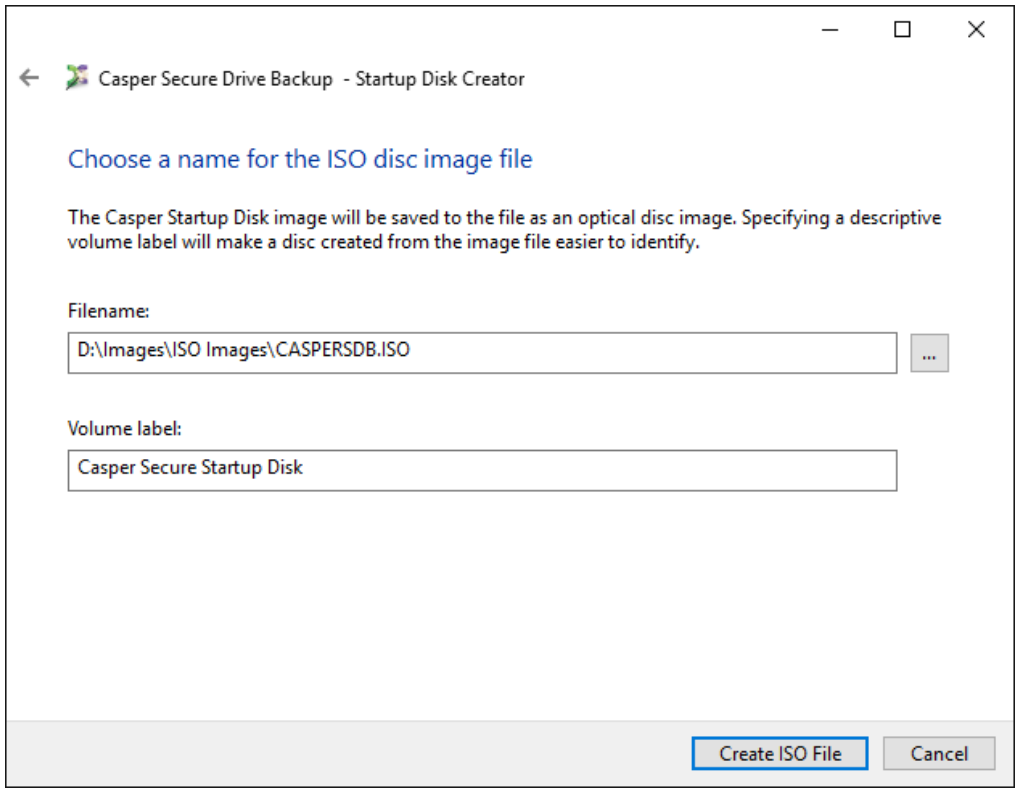
Except when selecting a USB flash drive that is presently configured as a Casper Secure Startup Disk, all data on the flash drive will be erased. If the flash drive is currently configured as a Casper Secure Startup Disk, existing Casper Secure settings will be preserved along with any files and folders located within the \Drivers and \Private folders.

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

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**.

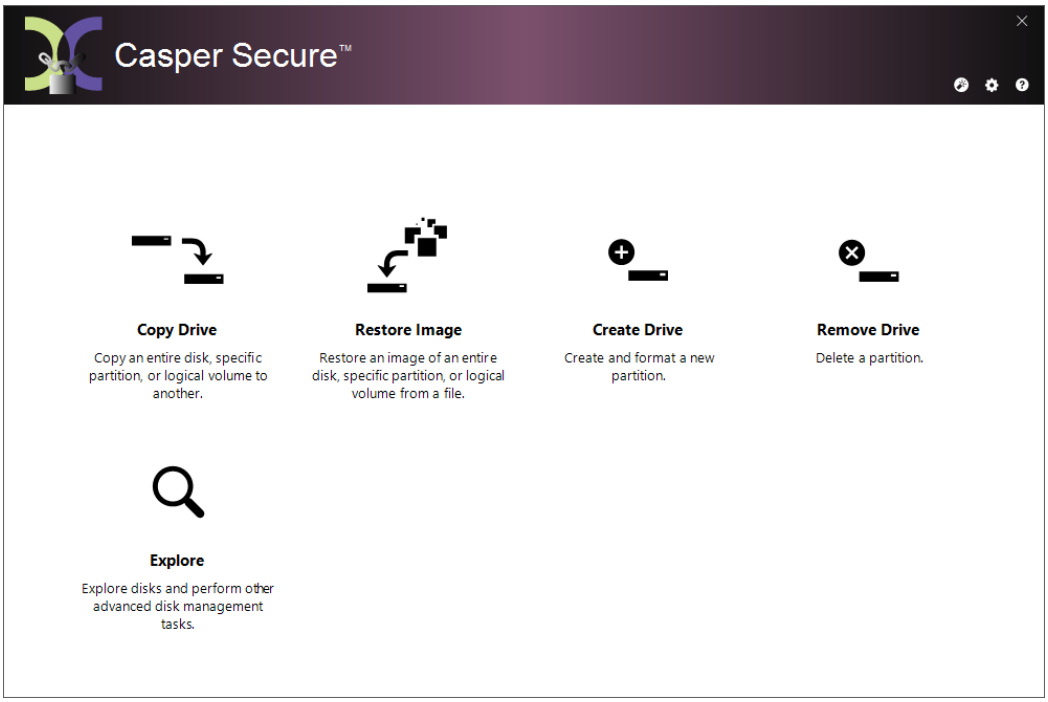


© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

Using the Casper Secure Startup Disk

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



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.

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.

Loading specific drivers after booting via the Casper Secure Startup Disk

The Casper Secure Startup Disk boots and runs Casper Secure 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**.

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.

© Copyright 2012-2025 Future Systems Solutions, Inc. All Rights Reserved.