CASPER™

VERSION 10

STARTUP DISK CREATOR GUIDE

Future Systems SOLUTIONS

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Table of Contents

Introduction 4

System Requirements 4

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

Creating and Using a Casper Startup Disk 5

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

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Introduction

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

While a Casper Startup Disk is often unnecessary, it may be needed to restore a backup in certain situations. For example, a Casper Startup Disk is required to restore an image file or restore-point backup from a disk that does not contain the Casper 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.

NOTE: A Casper 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 Startup Disk is not needed to restore the primary system drive from a restore-point backup if you added the Casper Startup and Recovery Environment to your backup disk when creating the restore-point backup.

System Requirements

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

Installation Requirements

- Windows 10, Windows 8, Windows 7, Windows Vista, or Windows XP (SP3)
- 10GB available disk space
- 1GB RAM (2GB or more recommended)
- Windows 10 Assessment and Deployment Kit, Windows 8 Recovery Environment, Windows 8 Assessment and Deployment Kit (ADK), or Windows 7 Automated Installation Kit (AIK)
- Administrator rights

Startup Disk Run-time Requirements

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

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Creating and Using a Casper Startup Disk

The Startup Disk Creator wizard will prepare a USB flash drive, CD, or DVD disc to boot and run Casper. 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 Startup Disk. If a compatible version of WinPE is not available, the Casper Startup Disk Creator will automatically download and install a copy for you.

The Casper Startup Disk Creator is compatible with WinPE 3.0, WinPE 4.0, WinPE 5.0, and WinPE 10.0. 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 http://www.fssdev.com/link?id=100.

Starting the Casper Startup Disk Creator

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

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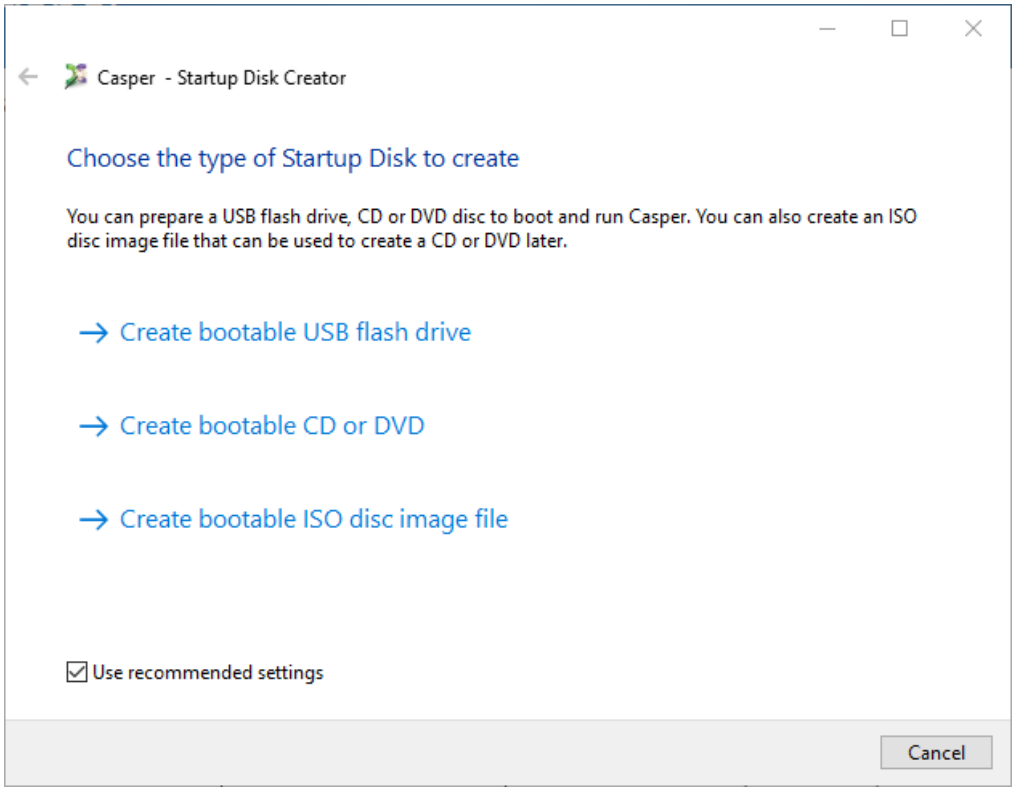
Creating a Casper Startup Disk

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

2. Check **Use recommended settings** and then 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.

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

- **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 Startup Disk CD within a virtual environment.

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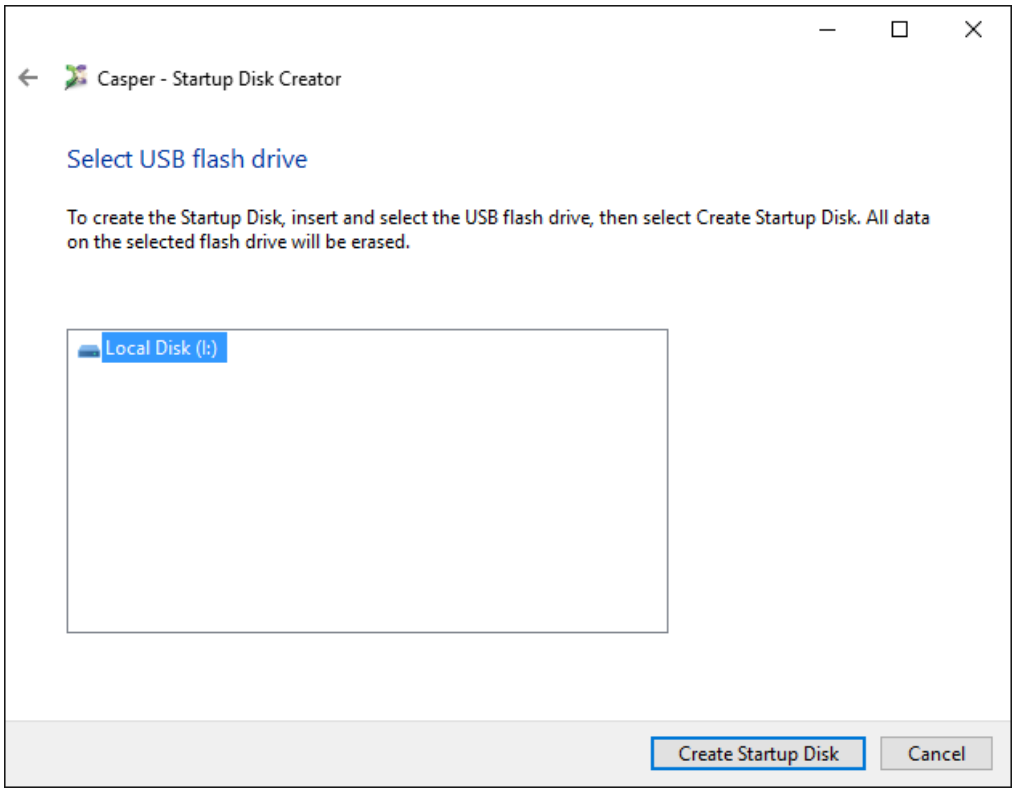
3. If creating a bootable USB flash drive, insert and select the USB flash drive, then click **Create Startup Disk**. Existing data on the flash drive will be erased.



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

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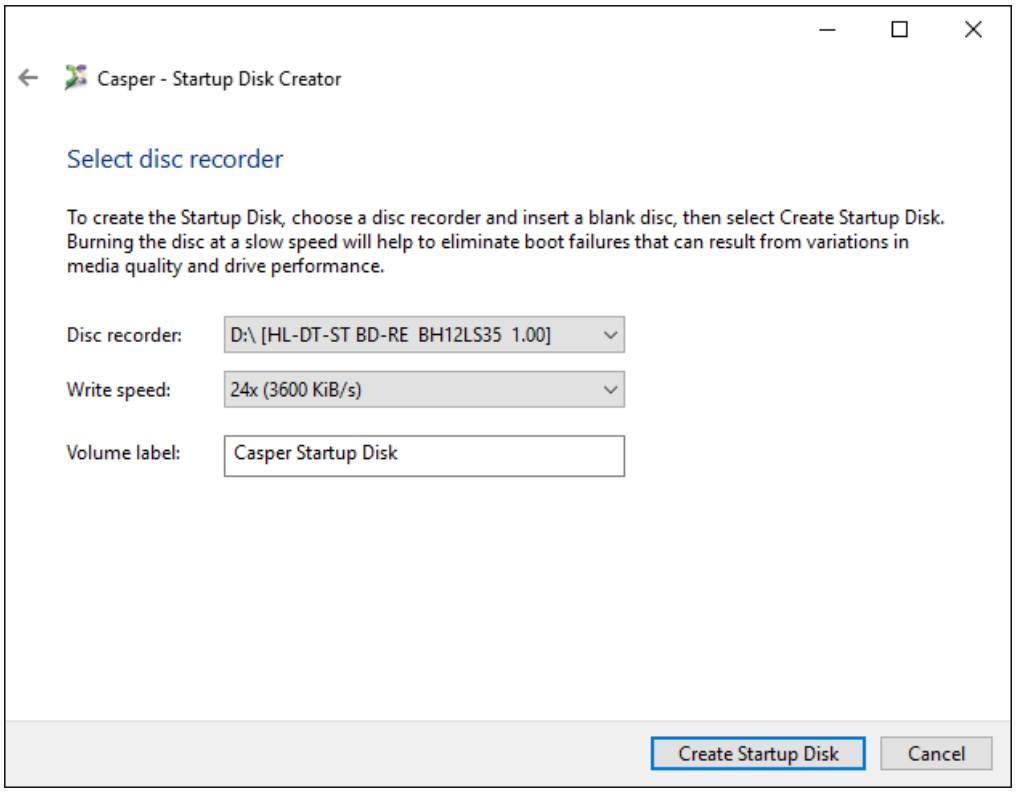
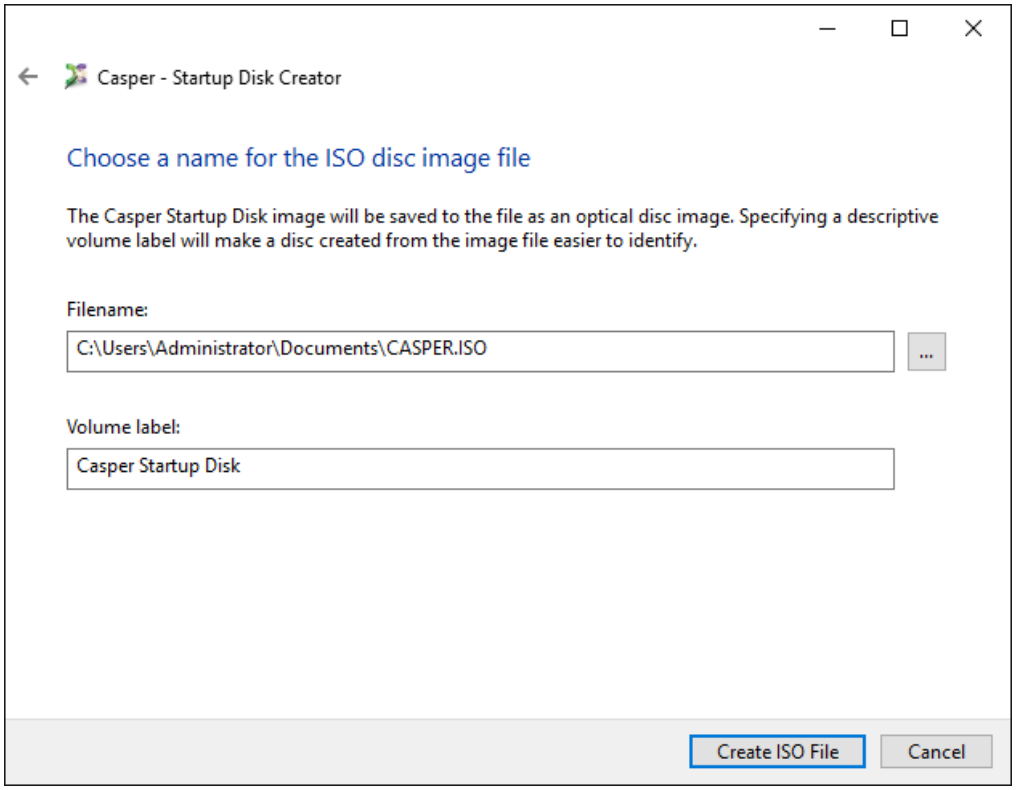
If creating a bootable CD or DVD, select a disc recorder and insert a blank disc, and then click **Create Startup Disk**.



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



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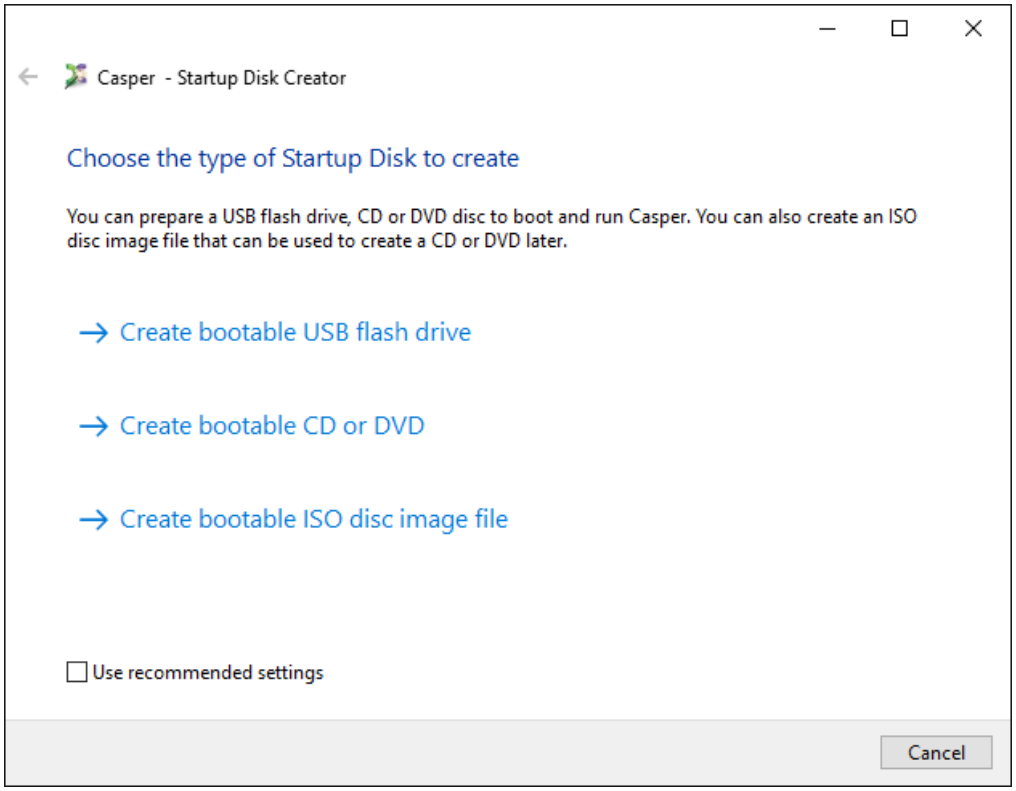
Creating a Customized Casper Startup Disk (Advanced)

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

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

2. Uncheck **Use recommended settings** and then 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.

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

- **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 Startup Disk CD within a virtual environment.

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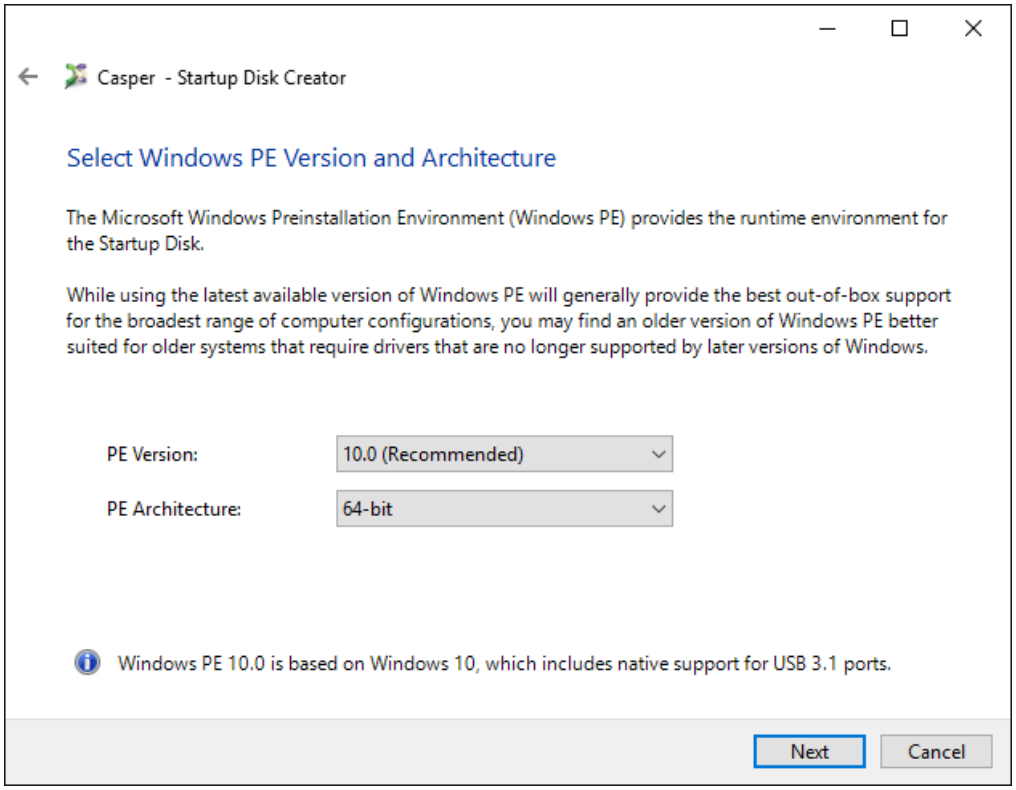
3. Choose the specific version and architecture of the Windows Preinstallation Environment to use for the runtime environment and then click Next.



NOTE: 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.

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

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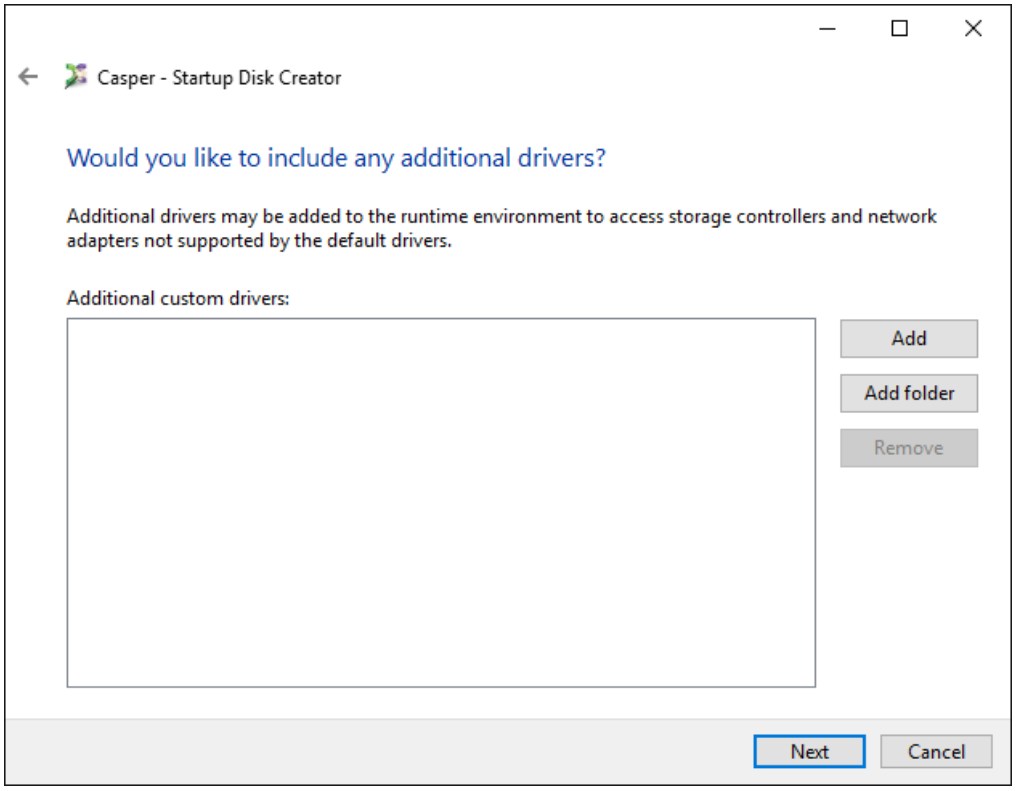
4. Specify additional drivers to add to the runtime environment. Additional drivers may be required to provide access to storage devices and network resources not supported by the drivers included within the Windows ADK or Windows AIK.



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.

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.

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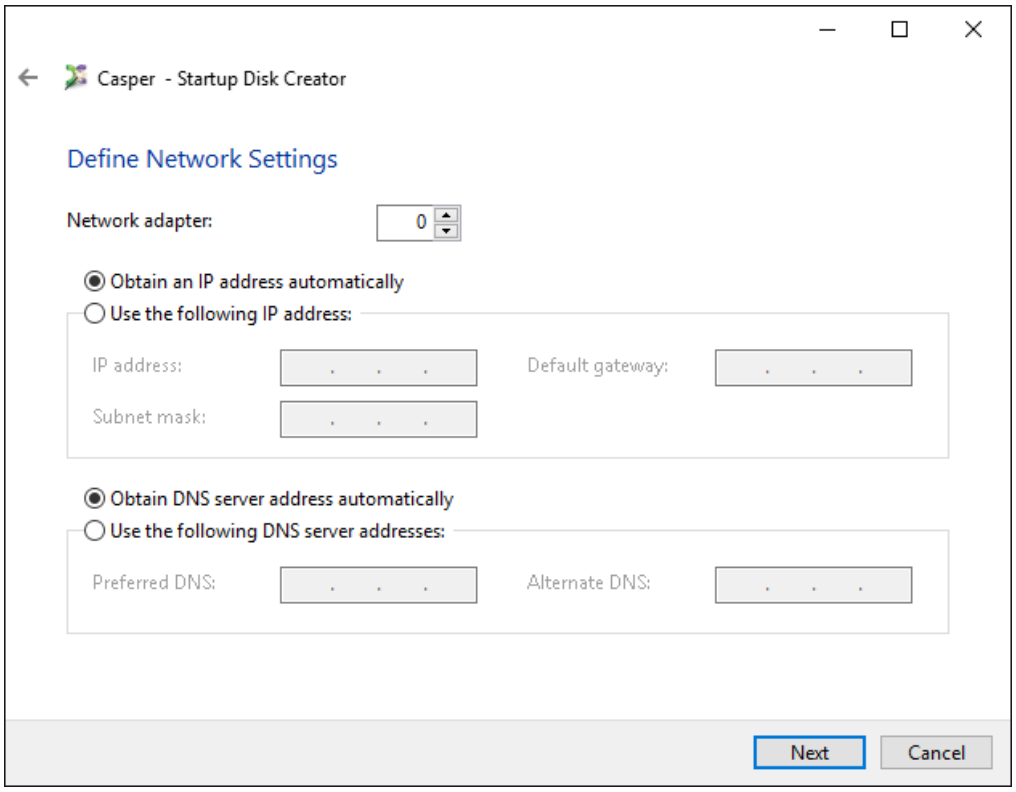
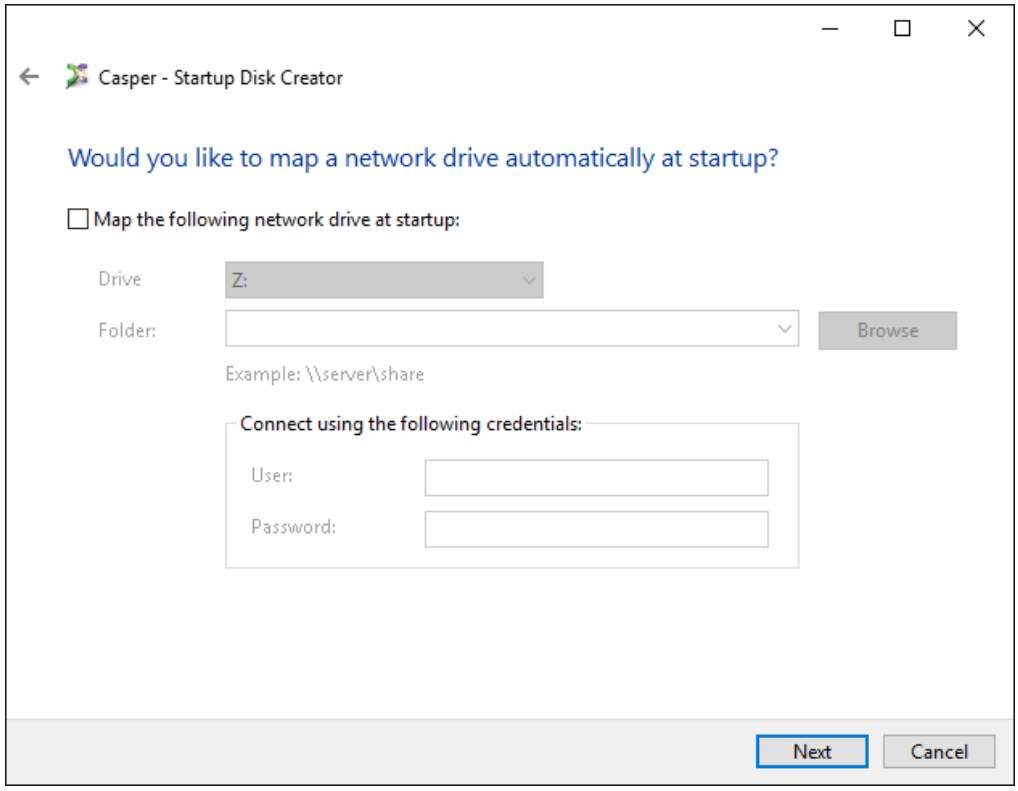
5. Define the network configuration for the runtime environment. You can configure a specific network configuration for each adapter discovered within the runtime environment.



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.



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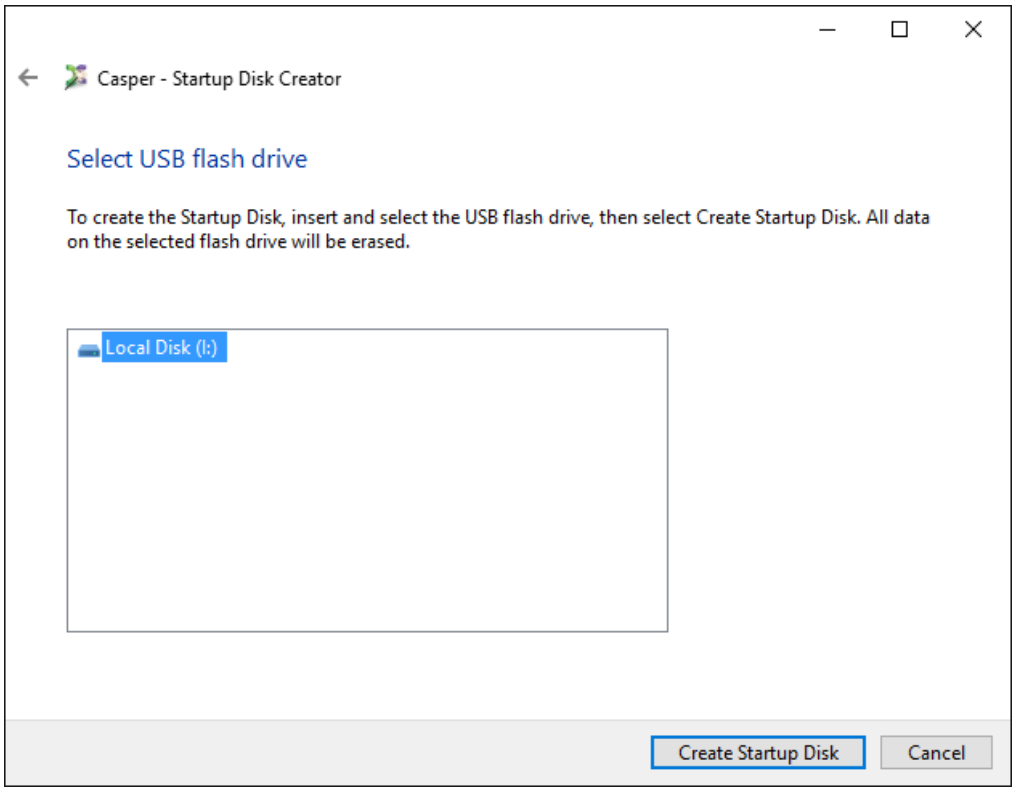
7. If creating a bootable USB flash drive, insert and select the USB flash drive, then click **Create Startup Disk**. Existing data on the flash drive will be erased.



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

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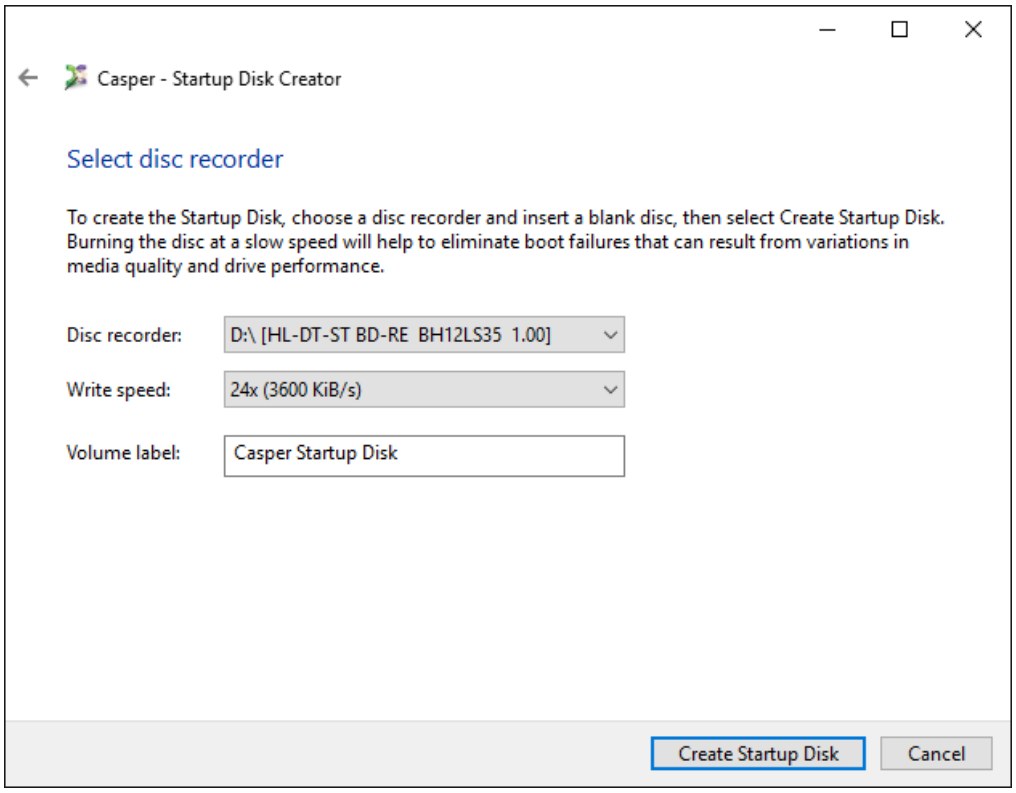
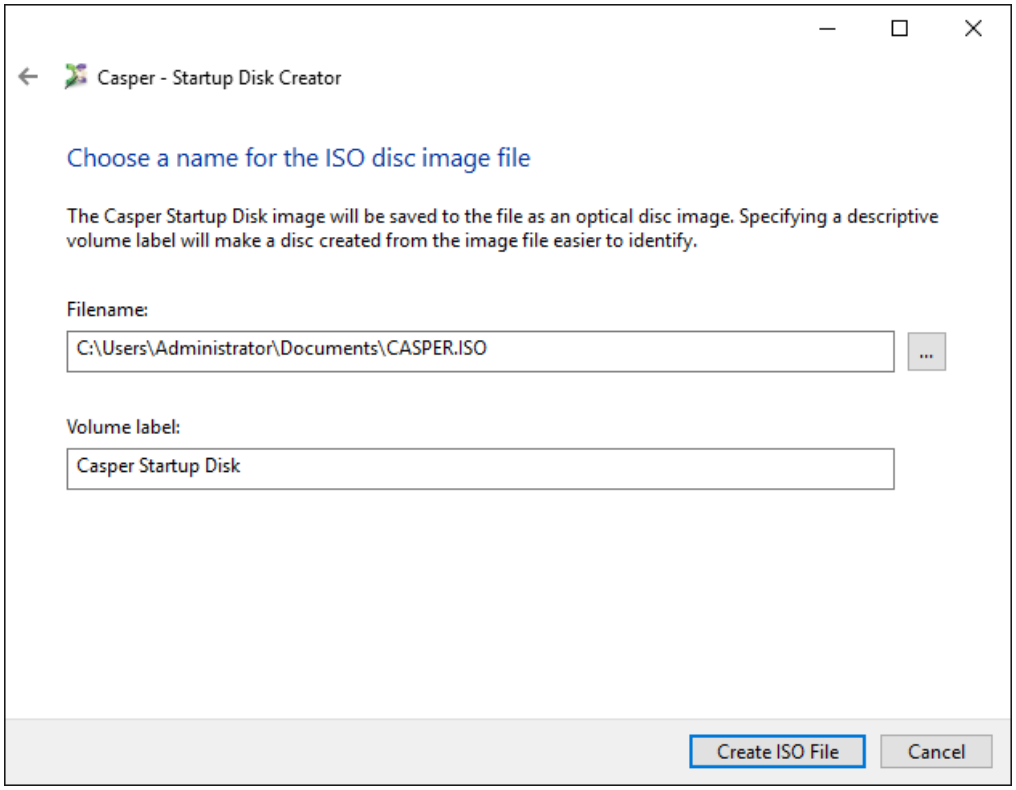
If creating a bootable CD or DVD, select a disc recorder and insert a blank disc, and then click **Create Startup Disk**.



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



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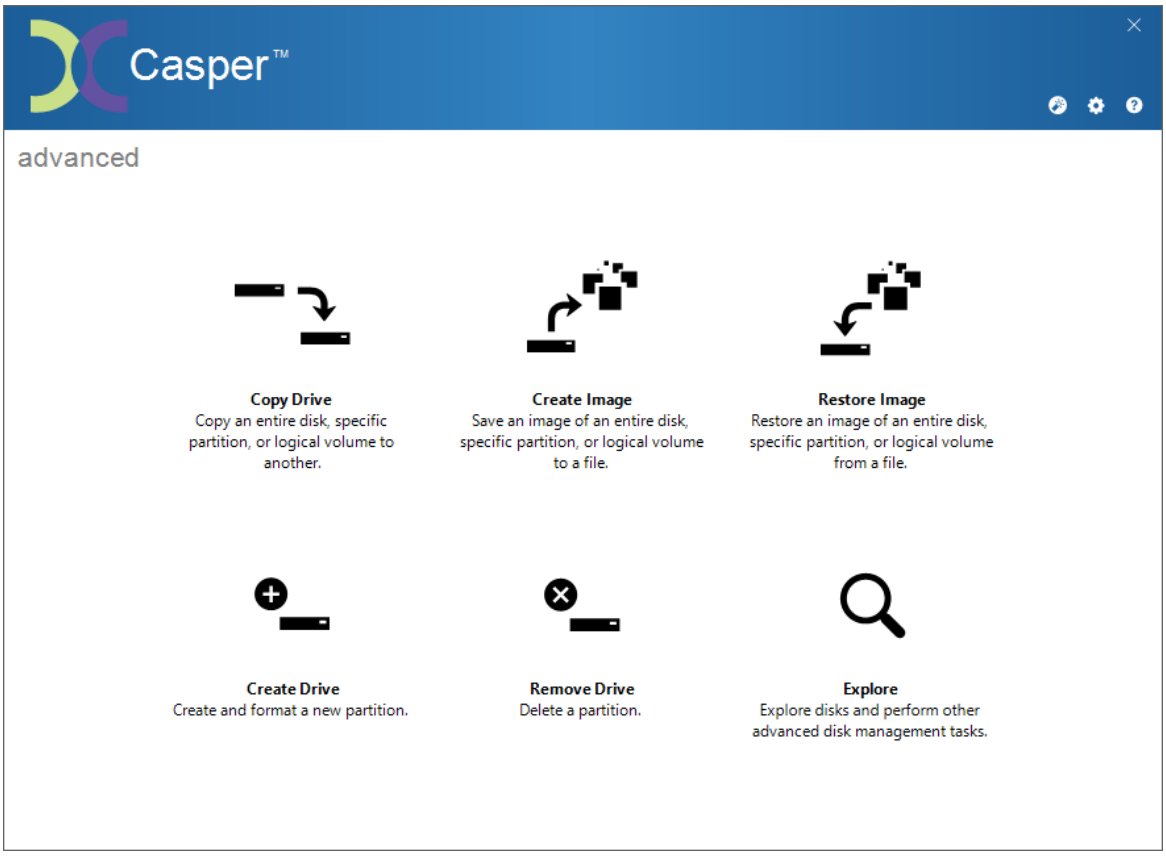
Using the Casper Startup Disk

The Casper 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 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 Startup Disk.

Booting a computer from the Casper 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 console will display.



CAUTION: *When running from the Casper 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 Startup Disk

The Casper Startup Disk boots and runs Casper within a self-contained Windows Preinstallation (WinPE) environment. If you need to load a driver that was not included when the Casper 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**.

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

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