

# BackupAssist - RecoverAssist Reference Sheet



When a hardware or software failure has occurred, it is critical to recover your system quickly. RecoverAssist achieves this by creating a bootable media that can start and recover your server or workstation.

BackupAssist's Recovery tab uses RecoverAssist to create a customized, bootable recovery media. The media will start your computer and enable access to an image backup so that you can perform a recovery of your system. This reference sheet contains the key configurations and dependences that need to be considered when planning a system recovery strategy.

## BIOS / EFI firmware compatibility

A computer's BIOS or EFI (a chip containing basic hardware settings) detects the hardware needed to start the computer. When you turn your computer on, the BIOS/EFI will display some of the steps onscreen and beep to confirm that it has run successfully.

It is important to know if your backup and recovery computers use BIOS or EFI because the firmware compatibility will determine your recovery options. Backups made on a computer with one type of firmware cannot be used to start a computer that uses a different type of firmware.

The chart below shows the firmware compatibility of BIOS and EFI computers.

Firmware matrix	Backups of a BIOS machine	Backups of an EFI machine
Recover to a BIOS machine	Compatible	Incompatible
Recover to an EFI machine	Incompatible	Compatible



**Important:** EFI booting can be turned off. When EFI is turned off, the system will use BIOS to boot.

## Operating System compatibility

The type of operating system that you are creating the RecoverAssist media for, will determine how the media can be created. There are two ways to create a bootable media using RecoverAssist:

- ❖ From the operating system's installation disk.
- ❖ Using the operating system installed on a computer.

**Note:** OEM installations of Windows and Windows installation media provided by system manufacturers may include altered system files that could cause RecoverAssist recovery environments to fail. BackupAssist recommend the use of a Microsoft issued install disk or ISO when building RecoverAssist recovery media.

Recovery environments can be built from the Windows operating systems shown in the table below. The color assigned to each operating system corresponds to the media creation method available, as defined in the Legend.

**Note:** RecoverAssist media cannot be created using a Windows Server Core installation. However, you can use a RecoverAssist media created on a Windows Server installation, to launch a recovery environment and access backups of a Core Server to perform a recovery.

### RecoverAssist media creation support - by operating system

Windows Server 2016 – from v9.5 (excludes CSV)		
Windows Server 2012 / 2012 R2		
Windows Server 2008 R2 / SBS 2011		
Windows 8.1 and Windows 10		
Windows 7		
Windows Server 2008		<p><b>Remember:</b> A recovery media's operating system, must match the operating system of the System Protection backup.</p>
Windows SBS 2008		
Windows Server 2003		
Windows Vista		
Windows XP		

### Legend

	Installation disks & Installed version of Windows
	Installation disks only
	Not supported

**Note:** Operating systems that can create a recovery environment from the computer's installed operating system, can find the option is greyed out due to the way the operating system has been installed. If the option is greyed out, the operating system's install disk should be used to create a RecoverAssist media.

## Back up considerations

To perform a recovery, you will need a backup that can be used by the recovery environment. The contents of the backup and how it was made are important considerations. These requirements are explained in detail below.

The 3 critical backup requirements are:

The backup must be an image backup.

For example, a System Protection backup. This creates a set of VHD or VHDX image files.

The backup must be a full image backup of the computer.

For example, the computer's settings and operating system (as well as the data) must be in the backup.

To use a backup to recover to a computer that is different to the computer that was backed up (or has different hardware), you must have a bare-metal backup.

For example, you created a System Protection backup with the bare-metal option selected.

- ❖ Bare-metal backups are highly recommended to ensure that you have the widest range of recovery options available.
- ❖ If a backup cannot be detected by the recovery environment, then it could be a problem with the backup. Check your backup to ensure it meets the 3 requirements listed above.

## Hardware considerations

**Memory:** The computer being recovered must have at least 4GB of RAM.

**Disks:** When planning a recovery, it is important to know the details of the disks that were backed up (to create the backup), and the disks on the computer that you plan to recover (using that backup).

The 2 critical disk requirements for a recovery are:

The computer that is being recovered, must have a physical disk the same size, or larger than, the physical disk that the backup was made from.

For example, if your backup contains 200GB from a 1TB drive, the physical disk of the computer that you are recovering, must be 1TB or larger.

If the backup used in a recovery contains data from multiple disks, the computer that is being recovered must contain at least the same number of disks.

For example, if the backup image contains data from 2 physical disks, then the computer being recovered must have at least 2 physical disks.

**! Important:** The computer being recovered must have a physical disk setup that is compatible with the computer that was backed up.