

**FarStone Total Backup Recovery  
7 Workstation  
User's Guide**

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# Chapter 1: Introduction

## 1.1 Product Overview

FarStone Total Backup Recovery 7 Workstation's hard drive imaging and cloning features let you quickly recover, replace, or upgrade your hard drive in case of any data disaster. Your operating system, files and settings will appear exactly as they were when you cloned or imaged your hard drive.

Simple enough for a home user, FarStone Total Backup Recovery 7 Workstation still has plenty of features for the system administrator, who can copy a single disk image onto multiple computer systems, dramatically reducing the time needed to install new software, configure settings, and load data. FarStone Total Backup Recovery 7 Workstation offers incremental backup, which could allow you to perform most imaging and recovery tasks without ever leaving the Windows environment.

FarStone Total Backup Recovery 7 Workstation backs up onto a network place, which is not available in the personal edition of Total Backup Recovery. With this feature, your data security cannot be influenced by disasters like, earthquake, fire or flood, any more. The whole process of all functionalities is very easy for everyone only by clicking buttons. So the FarStone Total Backup Recovery 7 Workstation is the best choice for backup and recovery.

With a special recovery environment (Recovery Manager), you can run Total Backup Recovery to back up and restore damaged partitions even if Windows won't start for some reason. Also some other features of Total Backup Recovery are still available in this recovery environment.

## 1.2 Powerful Backup Features

**Total Backup Recovery's Suite of backup features includes:**

- **Hard Drive Imaging:** Backs up and restores a system with a complete copy of all files, installed software, partition information, and system settings.
- **Incremental Backup:** Manually or automatically updates save disk images without ever leaving Windows. Incremental backup points log only the changes that have occurred since the last Complete Backup.
- **System Snapshots:** Backs up an entire computer system automatically to the Secure Area. The system snapshots also provide a fast method to recover from software-related data disasters.

- **File Backup:** Manually or automatically backs up selected file/folder, file extension, etc.
- **Universal Restore:** Restores a complete system image of a particular configuration to a different hardware configuration system or a Virtual Machine.

### 1.3 Other Features and Benefits

- **Complete External Backup:** Store a complete system image on a USB hard drive, or on a network share.
- **Easy Disk Image Updates:** Incremental Backup lets you quickly update your saved disk image without ever leaving Windows.
- **Flexible Backup:** Back up your client's hard drive to another local hard drive, network drive, or a USB device.
- **Rapid, Controlled Recovery:** Rebuild system via Complete Restore or System Snapshot in minutes, not hours or days.
- **Partition Support:** Supports FAT, FAT32, NTFS and other unknown partitions.
- **Hardware Support:** Supports IDE, EIDE, SATA, and SCSI/RAID hard drives.
- **100% Protection:** Restore an operating system damaged by corrupt software, human error, a virus attack, or a software bug.
- **Quick and Safe Try:** You have the choice to return your computer to its original state in seconds as long as a System Snapshot is created before a new application is installed.
- **Unlimited System Snapshots:** Total Backup Recovery has no limit for multiple system snapshots as long as adequate space is allocated in the hard drive for Total Backup Recovery's Secure Area.
- **FTP Support:** Save another data copy onto a remote FTP server to enhance the protection of files and even the whole computer.
- **Virtual Machine Support:** Convert the backup image into a VMware file image format to run it on a virtual machine.

### 1.4 Newly-added Features

- **Set Password:** Enable users to set a password to prevent other unauthorized users from changing program settings.

- **Resize Secure Area:** **Secure area** is a hidden, secure area on the primary hard drive, used to store Total Backup Recovery Server backup data. By using the **Resize Secure Area** feature, users can allocate more backup space.
- **Simplified Quota Mangement:** One base backups one folder when backuping, and users can choose to maintain several base backups.
- **Google Desktop Search:** Enable search engine support if you want to use Google Desktop to locate and recover files and folders contained in Backup Images.
- **Customized File Backup Search:** Users can restore file(s) by customized searching of backup file(s).
- **Windows 2008 Local Account Authentication:** If the console is CBP Schedule backup of 2008 system, a dialog box containing user name and password is displayed to let users input a local account. Then CBP will call the corresponding interface according to the account.

# Chapter 2: Installing and Uninstalling Total Backup Recovery

## 2.1 System Requirements

- CPU: Pentium or higher
- RAM: 512 MB or more (1 GB or more for Vista)
- Hard Drive: 250 MB free space
- Supported Desktop Operating Systems: Windows® XP (32-bit & x64), Windows® Vista (32-bit & 64-bit), Windows® 7 (32-bit & x64)

## 2.2 Start Total Backup Recovery Installation

### If you purchased a CD:

Insert the CD into your CD-ROM drive. The setup program should start automatically. If it doesn't, browse the CD and double-click on the Autorun.exe. Follow the prompts displayed to finish your installation.

### If you purchased an electronic download:

Save the executable file to your hard drive. Double-click on the file to launch the Total Backup Recovery installer. Follow the prompts displayed to finish your installation.

### 2.2.1 Installing FarStone Total Backup Recovery 7 Workstation

1. Select **Setup**, and click **Next**.
2. Select the language preference of the application, and click **Next**.
3. Carefully read the software license agreement. If you accept the terms of the agreement, select **I accept the terms in the license agreement**, and click **Next**.
4. Enter your personal information and **serial number**, and click **Next**.



**Note**

Installation without purchasing a serial number will activate a time-limited evaluation version of Total Backup Recovery.

5. Click **Next** to install to the default folder, or **Change** to select another location.
6. Click **Install** to launch the installation process.
7. Click **Finish** to complete the installation. You are required to restart your computer to launch FarStone Total Backup Recovery 7 Workstation.

## 2.3 Uninstalling Total Backup Recovery

1. From the Windows Start menu, select **Start ->Settings->Control Panel**.
2. Double-click **Add/Remove Programs**, and select **Change** or **Remove Programs**.
3. Select **FarStone Total Backup Recovery 7 Workstation**, and click **Remove** to begin uninstalling the associated component.

# Chapter 3: Total Backup Recovery Specific Terminology

## 3.1 File Backup

Total Backup Recovery File Backup monitors file changes. When a change is detected, Total Backup Recovery will record it and back it up according to your schedule. File backups can be stored locally or externally.

## 3.2 System Snapshot

System Snapshot and Hard Drive Imaging are both sector level backup functions. System Snapshot stores only the changed data sectors into the Total Backup Recovery Secure Area. The amount of storage capacity required for each snapshot is substantially less than the entire amount of data on the hard drive. As a result, snapshots offer a significant savings of hard drive space and an increased restoration speed when compared with hard drive imaging or complete disk cloning methods.

## 3.3 Hard Drive Imaging

Hard Drive Imaging can be used for bare-metal disaster recovery when hard drive failure occurs.

## 3.4 Full and Incremental Backups

Full and incremental backup solutions aim to make storing several copies of the source data more feasible. To accomplish this, a complete backup is taken initially and then incremental backups can be scheduled or run manually (Incremental backup only stores the files or sectors that have changed since the previous full or incremental backup). Restoring a system to a certain point involves locating the complete backup and the incremental backups executed between the time of the complete backup and the time of the restore.

## 3.5 Total Backup Recovery Universal Restore

With Total Backup Recovery Universal Restore, there is no need to reinstall the operating system, applications, configuration files, individual files, and folders into the new system with

different hardware configuration, or to a virtual machine. With Universal Restore, you can restore your system onto a similar or a different (than original) hardware configuration with a few mouse-clicks.

### **3.6 Total Backup Recovery Secure Area**

Total Backup Recovery's Secure Area is a virtual partition which is created onto the hard drive's free space. This location is hidden, protected, and accessible only by Total Backup Recovery. The secure area is used to store the system snapshots and the Recovery Manager. It will not be influenced by most computer disasters, so it ensures the protection of your data and the efficiency of Total Backup Recovery recovery.

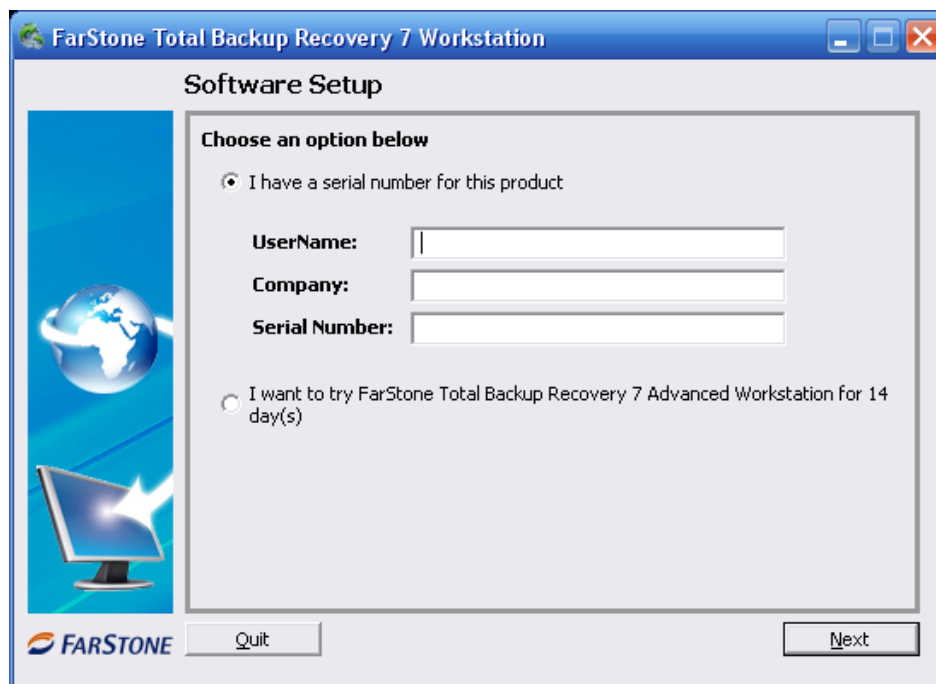
# Chapter 4: Start Using Total Backup Recovery

To launch Total Backup Recovery, double-click the **FarStone Total Backup Recovery 7 Workstation** icon on your desktop or select **Start**→ **All Programs** →**FarStone**->**FarStone Total Backup Recovery 7 Workstation**.

## 4.1 Activation and Deactivation

### 4.1.1 Activation

If you don't purchase a serial number when installing the product, you will see the following dialog box:



If you select **I have a serial number for this product**, please enter your personal information and serial number, then click **Next** to continue.

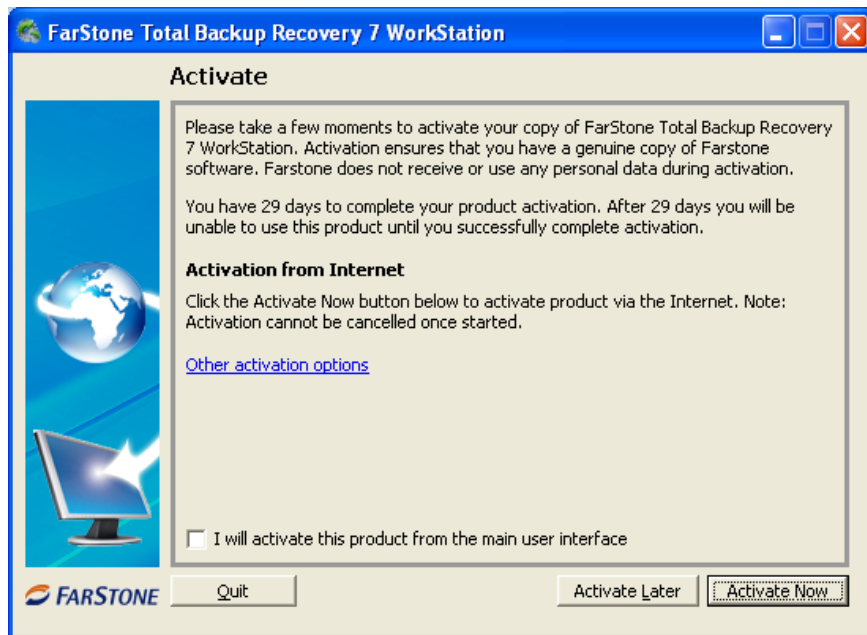
If you select **I want to try FarStone Total Backup Recovery 7 Small Business Server for 14 day(s)**, you can use the product within 13 days. Then click **Next** to continue.



**Note**

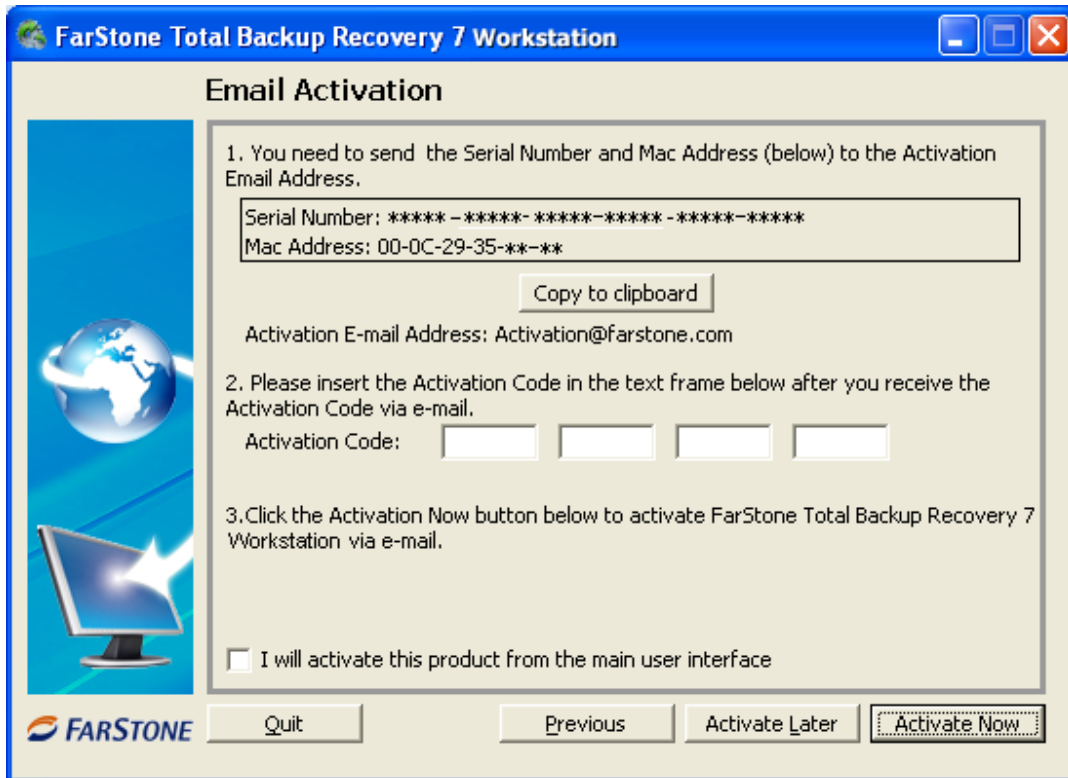
Activation Times Count Exceeded, please log on to <http://www.farstone.com/support/user-profile/support-ticket.php> for more assistances.

If you input a serial number when installing the product, you will see the following dialog box:



If you click **Activate Now**, you will activate the product successfully, then click **Next**, a dialog box will pop up, click **Yes** to enter a web site to register the product. Then you will enter the main console.

If you click **Other activation options**, you will activate the product via e-mail. A dialog box will pop up:

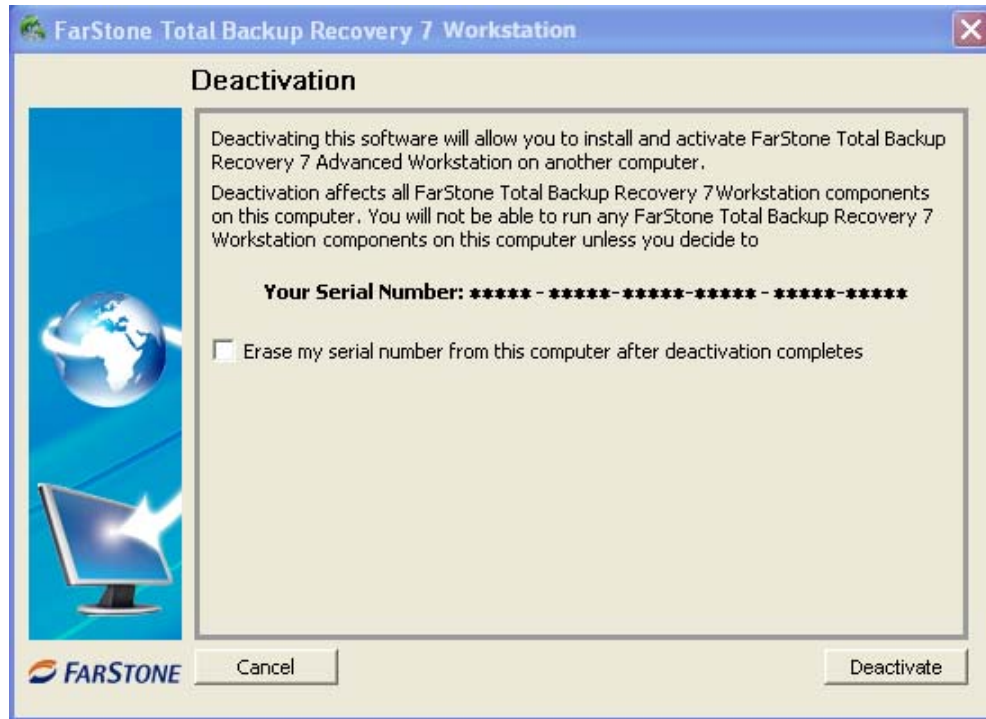


1. Click **Copy to clipboard** button to copy the serial number and Mac address to send to the activation address: [Activation@farstone.com](mailto:Activation@farstone.com).
2. Our technical support engineer will send you a Activation Code via e-mail, just input the activation code to the specified frame.
3. Click **Activate Now**.

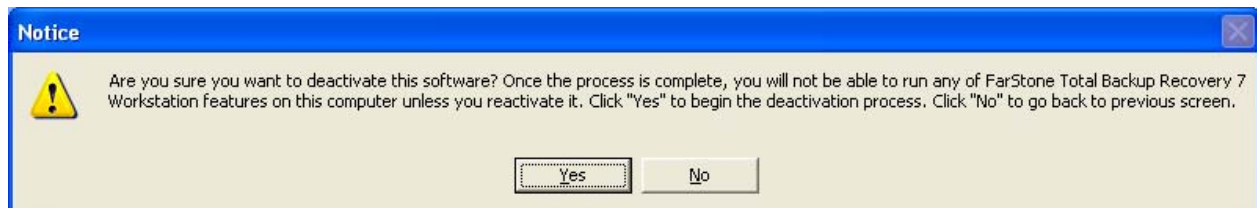
#### 4.1.2 Deactivation

Deactivation steps:

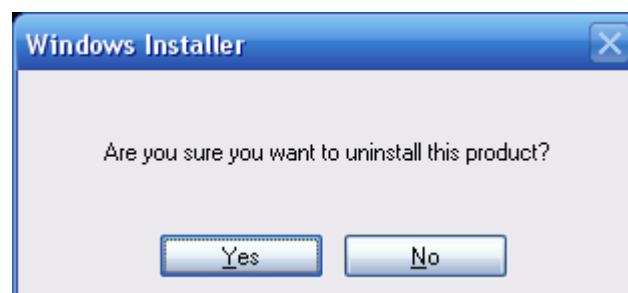
1. Click **Help** on the main console, select **Deactivation**, you will see the following dialog box:



2. Click **Deactivation**, a dialog box will pop up:



3. Click **Yes** to deactivate successfully, then click **Quit**, you will see the following dialog box:



You can choose whether to uninstall the product from this computer.



**Note**

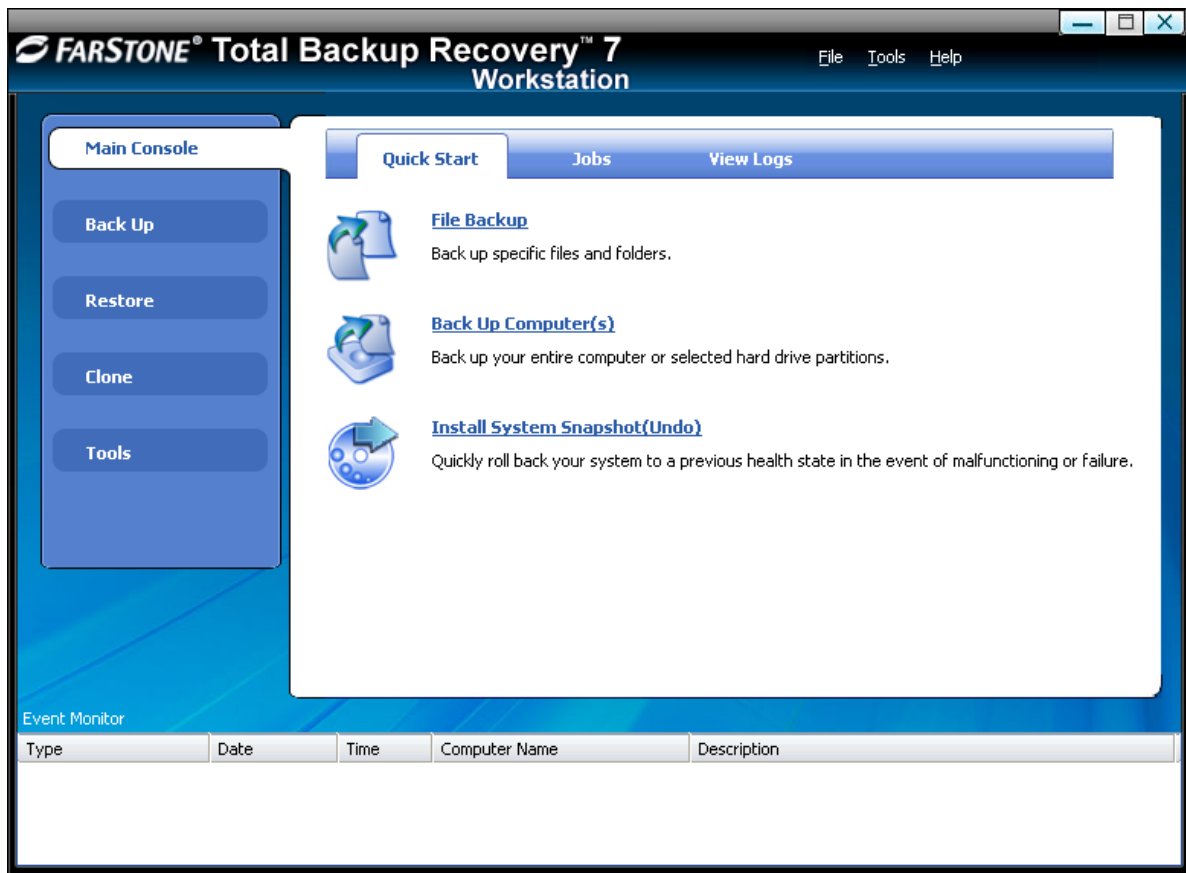
If you select **Erase my serial number from this computer after deactivation completes**, and continue using the product, the product will be a trial version.



**Tip**

If you want to run the activated program on other computers with the same serial number, please run the deactivation program from this computer.

## 4.2 Main Console



\* Total Backup Recovery Main Console

### 4.2.1 Quick Start

This displays a shortcut menu for File Backup, Back up Computer and Install System Snapshot (Undo).

**File Backup** – Click here to back up the selected files and folders.

**Back Up Computer(s)** – Click here to back up the entire hard drive or partition(s) to an external location.

**Install System Snapshot (Undo)** – Click here to install system snapshot feature, which backs up the whole computer and saves the backup data on its Secure Area.



**Note**

All system snapshots created within the trial period will be cleared once upgraded to a formal version. Once upgraded, Total Backup Recovery will create a new system snapshot.

To install System Snapshot, please do the following:

1. Click **OK** to continue after carefully reading the warning message.
2. Allocate the space for Secure Area (at least 1200 MB) and click **Next**.
3. Click **Next** to continue.
4. Then the system will reboot automatically.

If you don't want to use the system snapshot feature any more, you can also uninstall it from here by clicking **Uninstall System Snapshot(Undo)** on the main console. Then click **OK** to continue after carefully reading the warning message. Then the system will reboot automatically.

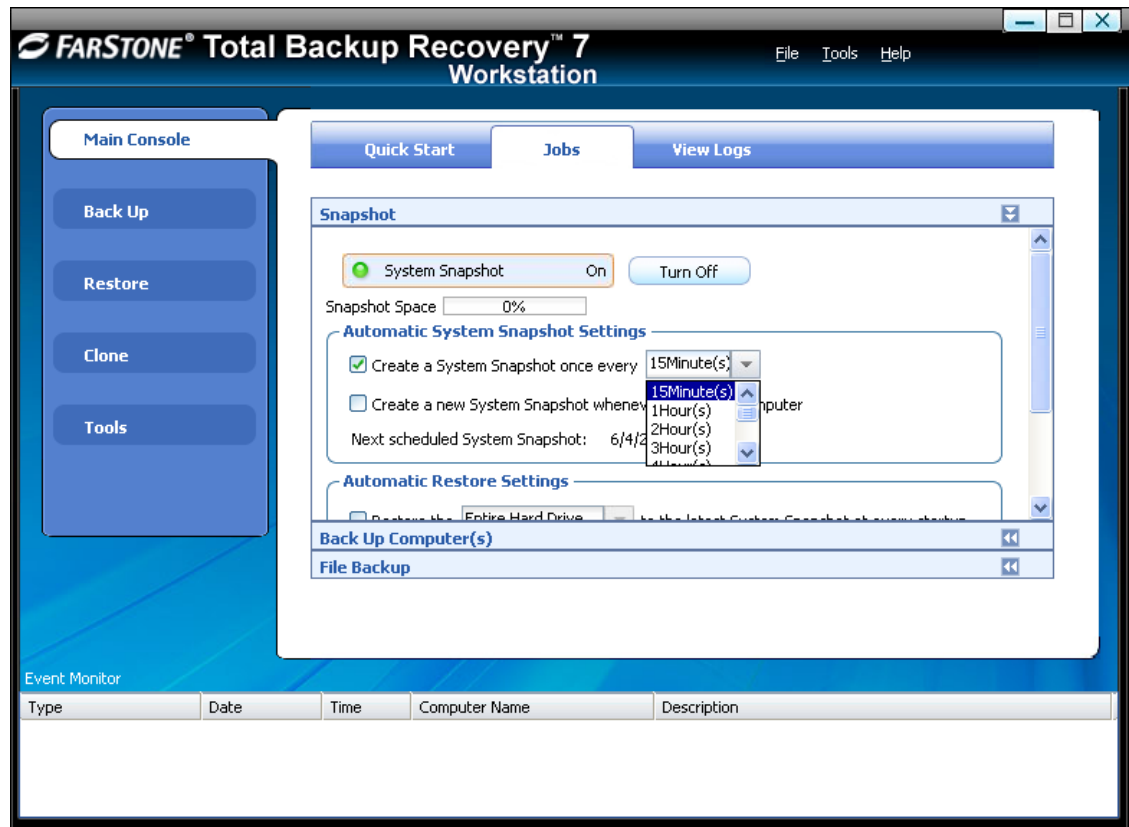
#### 4.2.2 Jobs

View existing Snapshot, Complete Backup, and File Backup jobs.

- **Snapshot** – Set the frequency for the automatic creation of a System Snapshot, and intervals for automatic restoration. Also you can enable/disable System Snapshot by clicking the button **Turn On** or **Turn Off**.

#### Automatic creation of System Snapshots

- a. **Create a Snapshot every x hour(s)** – Create a Snapshot every 1 to 24 hours.



\*Automatic System Snapshot



**Note**

If the system is set to create a snapshot every hour, Total Backup Recovery will take the first snapshot an hour after the creation of the most recent system snapshot.

- b. **Create a Snapshot at system startup** – Create a new System Snapshot automatically every time the computer boots up.
- **Intervals for Automatic Restoration**
  - a. **Restore computer at every startup** – Check this box if you want Total Backup Recovery to restore from the most recent System Snapshot every time you start your computer. You can either just restore the system partition or the entire hard drive. If you choose to only restore the system partition, all Snapshots created before the restore point will be available for system partition restoration only.

- b. **Set the time for rebooting your computer** – You can also select a time to automatically restart the computer. The computer will be restarted and restored according to these set times as well as at system startup. This option can be enabled only if you select option a.
- **Back Up Computers** – Total Backup Recovery shows all file backup jobs related to this computer. There are four functions you can perform on the each backup computer job.
  - a. **Detail** – View detailed information about the backup jobs you’ve created, including the job name, source, destination, scheduled settings, description and FTP address for the selected backup.
  - b. **Edit Schedule** – Schedule incremental updates for the backup job you’ve created; change other scheduled settings.
  - c. **Offsite Copy** – Change FTP settings or click **Restore Defaults** to restore the FTP settings to be the same as it in [Settings](#).
  - d. **Back Up Now** – Create an Incremental Backup immediately.
  - e. **Delete** – Delete the selected job.



**Scheduling Complete Backups**

1. Complete backups and incremental updates can be created according to the pre-set schedule.
2. If the system is busy, Total Backup Recovery will not be able to perform the scheduled backup job, and will automatically try again later.

- **File Backup** – Total Backup Recovery displays all of the file backup jobs related to this computer, you’ll see the following options under each job:
  - a. **Detail** - View detailed information about a backup job you’ve created, including the job name, job destination, scheduled settings and FTP address.
  - b. **Edit Schedule** – Change scheduled settings for the backup job you’ve created.
  - c. **Offsite Copy** – Change FTP settings or click **Restore Defaults** to restore the FTP settings to be the same as it in [Settings](#).
  - d. **Add Files** - Add files to your File Backup list.

- e. **Back Up Now** - Run the selected incremental File Backup job immediately.
- f. **Delete** - Delete the selected job.



#### **Scheduling File Backups**

1. If your system is busy, Total Backup Recovery will not be able to initiate the backup process. Total Backup Recovery will attempt to perform the backup after 5 minutes.
2. The following files are not backed up:
  - a. Files in the Recycle Bin
  - b. Files in the System Volume Information directory, pagefile.sys, and the \_\$temp directory
  - c. Hiberfil.sys
  - d. Files with ".rit" and ".tmp" extensions
  - e. Microsoft Office temporary files
  - f. Files in Total Backup Recovery 's installation folder
  - g. Files in the Backup Destination directory of the backup job currently running
  - h. Files in the Temp directory

### **4.2.3 View Logs**

This feature records all events of Total Backup Recovery, including warnings, errors and operations.

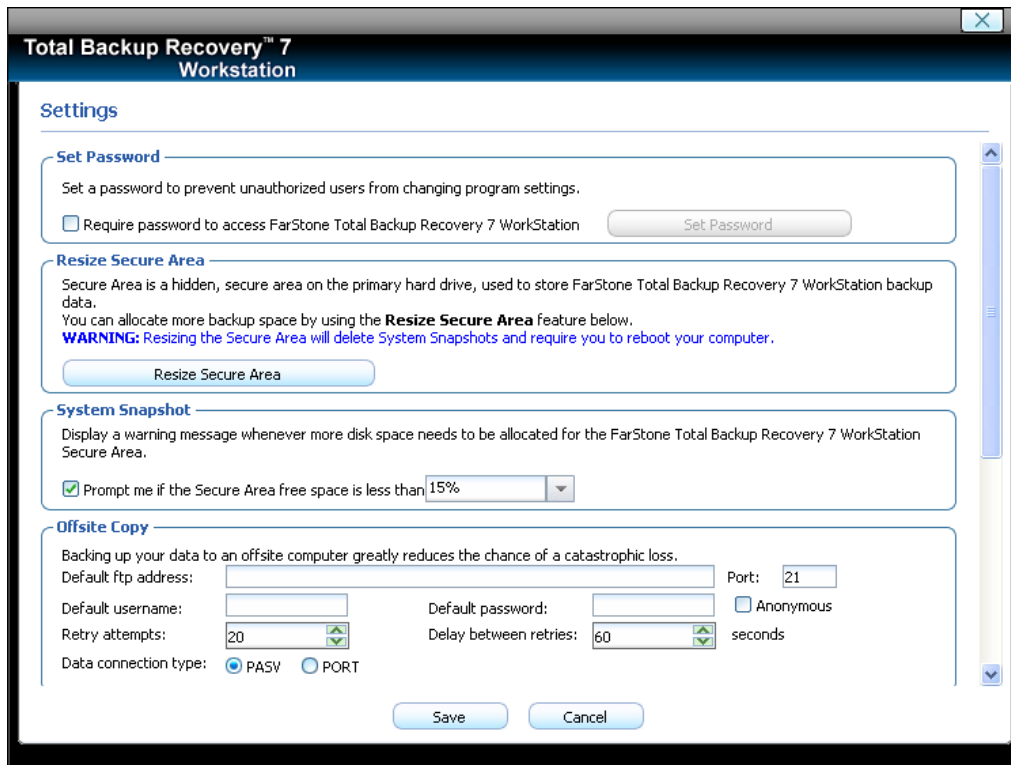
**Save** - Export the logs and save the event record as an excel file.

**Delete** - Delete the selected event(s).

**Delete All** - Delete all the saved events.

#### 4.2.4 Settings

- **Set Password** – Enable users to set a password to prevent other unauthorized users from changing program settings.
- **Resize Secure Area** – By using the **Resize Secure Area** feature, users can allocate more backup space. **Secure area** is a hidden, secure area on the primary hard drive, used to store Total Backup Recovery Server backup data.
- **System Snapshot** – When users select this check box, users can set the percentage of secure area free space. Total Backup Recovery will automatically display a warning message if the ratio is smaller than this space.
- **Offsite Copy** - By setting the following options, users can save another image copy on an FTP server to ensure the data protection. It is the default one for your file backup and complete backup.
  - a. FTP information – Enter the address and port.
  - b. FTP account – Enter the username and password of the FTP. You can select **Anonymous** if the FTP server is shared to all users in the network.
  - c. FTP connection retry frequency – Enter Retry attempts (Maximum of 100 times), Delay between retries (Maximum of 600s).
- **E-mail Notification** - By configuring the below settings, Total Backup Recovery will send an E-mail to your specified E-mail account when the backup is completed.
  - a. E-mail configuration - Enter preferred E-mail address and other server settings.
  - b. Send test email – Click here to test proper setting functionality.
  - c. Notification events – Specify the events for which you would like to receive notification via E-mail regarding the backup operation.



\*E-mail Notification Setup

## 4.3 Backup Console

### 4.3.1 Create a System Snapshot

This feature is available only if you install it by clicking **Install System Snapshot(Undo)** on the main console.

1. Click **Back Up** to create a System Snapshot. You can also click **Create a System Snapshot** on the main interface of Total Backup Recovery to start creating a System Snapshot.
2. Enter a name for the System Snapshot. Click **Next** to continue. To return to the previous menu, click **Cancel**.
3. After you choose a way to create the system snapshot, click **Next**.
  - i. If you select **Start Now**, Total Backup Recovery will initiate the process after clicking **Next** twice.
  - ii. If you set a schedule, specify the frequency for creating or restoring from a System Snapshot automatically. (For more detail about scheduling, please [refer to 4.2.2](#))

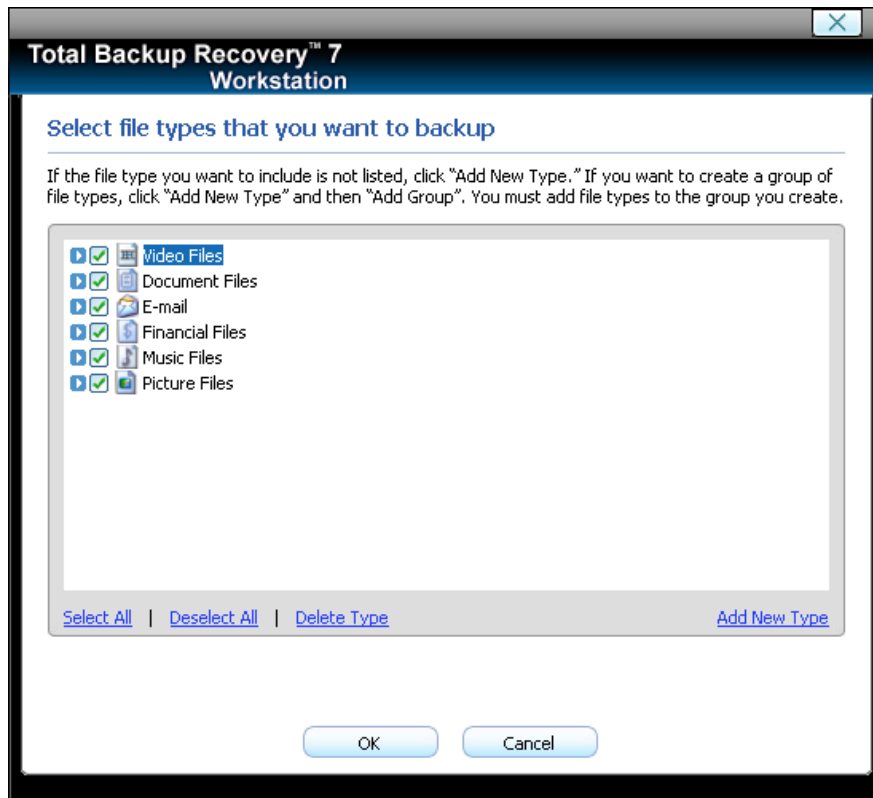
4. Confirm all the settings, and then click **Next** to launch the backup process or click **Previous** to modify any setting.
5. If any program is currently writing data to the hard drive, Total Backup Recovery may not be able to create a System Snapshot.
6. Click **Finish** when a System Snapshot has been successfully created. You can also click **Edit Schedule** to specify how often a System Snapshot should be automatically created and specify if the system need to be restored automatically.

### 4.3.2 File Backup

1. Start the Total Backup Recovery program. Select **Back Up** and then click **File Backup**.
2. Select **New File Backup** to create a new job.
3. Enter a name for your new job
4. Select the file(s) you want to back up. You can also click **Add Files/Folders** or **Add File Types** to add file type, folder or individual file to back up according to your preference. Click **Next** to continue.

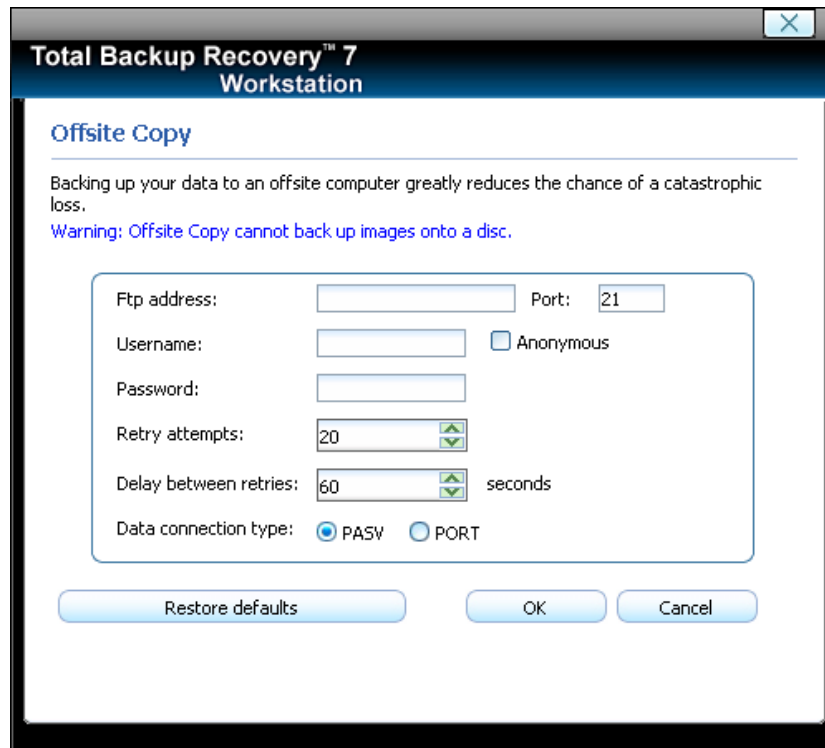
**Add Files/Folders:** Click this to select the files or folders you want to add from Windows<sup>®</sup> Explorer.

**Add File Types:** Click this to enter the **Select File Types** interface, as shown below.



\*Select Files for Backup or Add File/Folders or Add File Types

- a. Click **Delete Type** to remove file types you don't want to back up.
  - b. Click **Add New Type** to add new file type in to the back up list. You will need to enter a file type extension and a description. Or click **Add Group** to create a new file type group. You will need to enter a group name.
5. Select a location to store the backup file, such as a shared folder or locally on the system. Click **Next** to continue. If you want to save one more image copy on the FTP, select **Enable offsite copy** (optional), and click **Settings** to configure these below.



\*Enable Offsite Copy

- a. FTP information – Enter the address and port.
- b. FTP account – Enter the username and password of the FTP. You can select **Anonymous** if the FTP server is shared to all users in the network.
- c. FTP connection retry frequency – Enter Retry attempts (Maximum of 100 times), Delay between retries (Maximum of 600s).
- d. Restore Defaults – Clear all FTP settings.



**Tip**

This feature only supports local image files. If you want to use the image file on the network or disc, you should save it on the local computer first.

The entire FTP upload process executes in the background. If the program fails to upload backup data onto FTP server, it will be recorded in logs which can be checked through View Logs. Total Backup Recovery will retry three times automatically until the next startup.

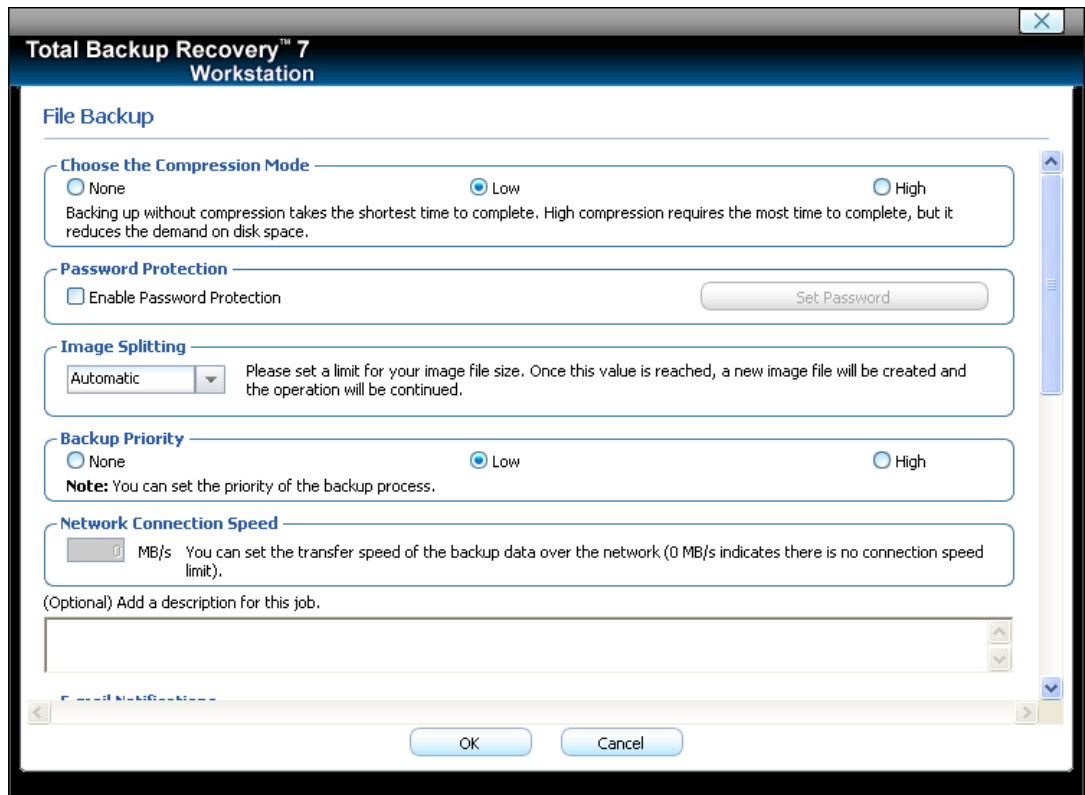
6. Click **Start Now** to proceed. You can also choose to run daily, weekly, or monthly backups.



**Note**

If you select daily, weekly or monthly, and then uncheck “**Create a full backup at 1 st backup of each month**” checkbox, so this item can’t be for option. And X latest catalog is retained, the default value is “3”

Click **Advanced** for optional settings including: backup priority, network connection speed, compression mode, password protection, image split, backup description, configuration of E-mail notification and Pre/Post command:



\*Optional Advanced Settings

7. Review your information and settings, and click **Next** to launch the backup process. For best results, close all of the files you want to back up prior to launching your backup job.
8. Click **Finish** to return to the main console. Or to specify your preferred Schedule Settings, **click here to create a schedule now**. By doing so, you can choose to repeat the backup operation at a specific scheduled time.

### Updating a File Backup Job

1. Launch Total Backup Recovery.
2. Select **Back Up**, and click **File Backup**.
3. Select **Incremental File Backup**, and click **Next**.
4. Select an existing job from the Job List.
5. Review your information and settings, and click **Next** to launch the incremental backup.
6. Click **Finish** to return to the main console.

### 4.3.3 Back Up My Computer

1. Start the Total Backup Recovery program. Select **Back Up** and then click **Back Up Computer(s)**.
2. Select **Create a New Complete Backup**.
3. Enter a name for your new Complete Backup and click **Next**.
4. Select the partition(s) or the entire hard disk to back up, and click **Next**.



**Tip:**

If you want to restore with **Universal Restore** later, you must choose your system partition (e.g. C:) to back up.

5. Enter the storage path and click **Goto**. Or select a destination location on a hard drive, USB storage medium, or a network location to store the image file. If you want to save one more image copy on the FTP, select **Enable offsite copy** (optional), and click **Settings** to configure these below.
  - a. FTP information – Enter the address and port.
  - b. FTP account – Enter the username and password of the FTP. You can select **Anonymous** if the FTP server is shared to all users in the network.
  - c. FTP connection retry frequency – Enter Retry attempts (Maximum of 100 times), Delay between retries (Maximum of 600s).
  - d. Restore Defaults – Clear all FTP settings.



**Tip**

This feature only supports the local image file. If you want to use the image

file on the network or disc, you should save it on the local computer first.

The entire FTP upload process executes in the background. If the program fails to upload backup data onto FTP server, it will be recorded in log files which can be checked through View Logs; Total Backup Recovery will retry three times automatically until the next startup.

6. Click **Next** to continue.
7. Click **Start Now** to proceed. You can also choose to run daily, weekly or monthly backups.



**Note**  
If you select daily, weekly or monthly, and then uncheck "**Create a full backup at 1 st backup of each month**" checkbox, so this item can't be for option. And X latest catalog is retained, the default value is "3"

8. Optional settings will pop-up if you click **Advanced**. These settings include: backup priority, network connection speed, compression mode, password protection, image split, backup description, configuration of E-mail notification and Pre/Post command.
9. Click **Next**.
10. Review the information and settings that have been specified. Click **Next** to launch the backup process. Or click **Previous** to modify setting(s).



**Tip**  
If the system is busy, and Total Backup Recovery cannot start the backup process successfully, Total Backup Recovery will try to back up again automatically.

11. Click **Finish** to return to the main console. If you would like to edit the schedule for this job, **click here to create a schedule now**.

## Creating an Incremental Backup

1. Launch Total Backup Recovery.
2. Select **Back Up** and click **Back Up Computer(s)**.

3. Select **Incremental Backup** and click **Next**.
4. Select an existing job from the Job List.
5. Review your information and settings, and click **Next** to launch the incremental backup.
6. Click **Finish** to return to the main console.

## 4.4 Restore Console

### 4.4.1 Return to a System Snapshot

This feature is only available if you install System Snapshot and take system snapshots on your system.

1. Click **Restore** and then click **Return to a System Snapshot** on the main interface.
2. Select the date you want to restore to from the calendar on the left pane and select the System Snapshot of that day you would like to restore to on the right pane and click **Next**. You can also click **Preview System Snapshot** to view its content prior to restoration. Then if you want to close the Preview Drives, click **Unmount Preview Drive** in the **Tools** tab or in the menu to close the Preview Drives.
3. Choose to restore the **Entire Hard Drive** or **C : Drive Only** and then click **Next** to begin the restoration.



**Tip**

If the user chooses to restore the C Drive only, Total Backup Recovery only restores the files of the active partition. All of the System Snapshots created before the restoration point can only be used to restore the C: drive.

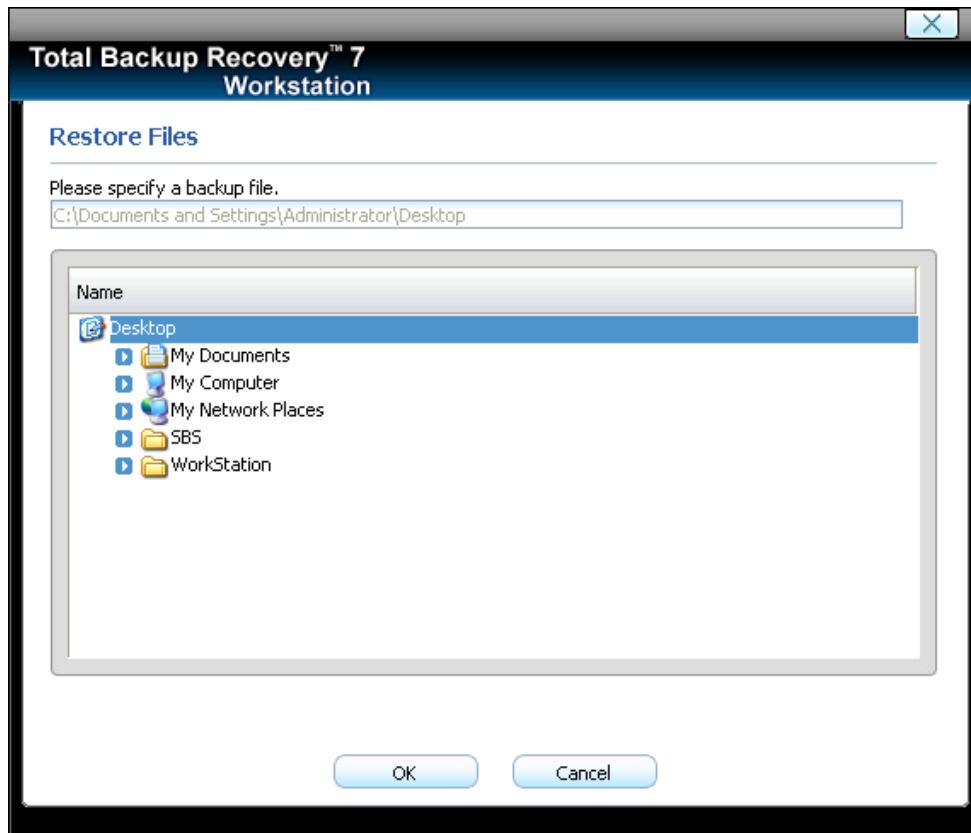
4. Carefully read the warning message. Click **OK** to proceed to the next step. You can also click **Cancel** to exit.
5. Your computer will restart automatically to start the restoration process.

### 4.4.2 Restore Files

To restore file(s), please do the following:

1. Select **Restore** and then click **Restore Files**.

2. Select a backup image file from the drop down list. You can also **click here** to select it on a network share. Click **Next** to continue.



\*Select backup image from network share

3. Select **Files from the most recent backup** or **Files from a previous backup** and click **Next**. If you select **Files from a previous backup**, please select the backup point you want to restore from the list.
4. If you select "**Please select common restoration or special restoration**", then click **Next**, skip to step 6; if you select "**Search special files for the restoration**", then click **Next**, skip to step 5.
5. Input the file name you want to restore, then click **Search** or click **Search** directly to choose the file(s).
6. Select the file(s) you want to restore.
7. Select a location to save the restored files:
  - a. If **New Desktop Folder** is selected, the restored files will be saved in a new folder on the client's desktop, with the folder hierarchy preserved exactly as it was backed up.

- b. If **Original Location** is selected, the restored files will be saved to their original folder and will overwrite existing files in that folder with the same name.
  - c. If **Another Folder** is selected, click **Select a folder** to browse a folder on the network. The restored files will be kept in their original folder hierarchy.
8. Click **Next** to start the restore after confirming the source and the destination.
9. Click **Finish** to return to the main console.

### 4.4.3 Restore Your Computer

To restore a partition or the entire hard drive, please do the following:

1. Launch Total Backup Recovery.
2. Select **Restore**, and click **Restore Your Computer**.
3. Select a backup image from the list, or **click here** to select an image file stored on a network share. Click **Next** to continue.
4. Select a Complete Backup point or any Incremental Backup point to restore from, and click **Next**.

If you want to restore your entire physical disk drive, click **One-Click Restore**, then click **Restore** to begin the restoration process; or click **No** to exit.

5. Select **Do not use Universal Restore**, and click **Next**.
6. Select to restore a single partition or the entire hard drive, and click **Next**.
7. Click **OK** to return to the original location, or click **Cancel** to select another location. If you choose **OK**, skip to step 11.
8. Select a destination partition or a destination hard drive to be restored from the image file, and click **Next**.
9. To restore a single partition, skip to step 10. To restore the entire hard disk, please select a restore option.
  - a. Select the checkbox if you would like to modify the destination partition size.
  - b. Do not check the box if you have multiple systems or a hidden partition.

If you selected option **a**, double click the partition capacity to be resized from the list. If you selected option **b**, skip to step 10.

10. When it displays the structure of the destination partition, double-click the highlight and modify its size, and click **Next** to continue.



**Tip**

The restoration process will require your computer to reboot into the FarStone Recovery Environment.

11. Click **Next** to start the restoration after confirming the source and the destination.
12. Click **Yes** to begin the restoration process. Then Click **OK** to enter the FarStone recovery environment to complete the restoration process automatically.

Your computer will restart to complete the restoration. After that, it will reboot into Windows automatically.

You will need to reallocate space for the secure area if you installed System Snapshot and want to continue to use the system snapshot feature:

1. Click **OK** to start the allocation.
2. Click **Next** to continue.
3. Click **Yes** to restart your computer and complete the process.

#### 4.4.4 Perform Universal Restore

You can restore the system partition or the entire hard drive of the selected client to dissimilar hardware.

1. Launch Total Backup Recovery.
2. Select **Restore**, and click **Restore Your Computer**.
3. Select a backup image from the list, or **click here** to select an image file stored on a network share. Click **Next** to continue.
4. Select a Complete Backup point or any Incremental Backup point to restore from, and click **Next**.
5. Select to restore with **Universal Restore**, and click **Next**.

6. When the dialog box appears, click **OK** to restart your system into FarStone Recovery Environment to begin the restoration process, or **Cancel** to exit.

**After your computer restarts to complete the Universal Restore, you need to do the following:**

1. Select to restore a single partition or the entire hard drive, and click **Next**.
2. Click **OK** to restore to the original location, or click **Cancel** to select another location. If you choose **OK**, skip to step 6.
3. Select a destination partition or a destination hard drive to be restored from the image file, and click **Next**.
4. To restore a single partition, skip to step 6. To restore the entire hard disk, please select a restore option.
  - a. Select the checkbox to modify the destination partition size.
  - b. Do not check the box if you have information on multiple systemsIf you selected option **a**, double click the partition Capacity to be resized from the list. If you selected option **b**, skip to step 6.
5. When it displays the structure of the destination partition, double click the highlight and modify its size, and click **Next** to continue.
6. Click **Next** to continue after confirming all settings.
7. Click **Yes** to begin the restoration process. After the restore, it will reboot into Windows automatically.

You will need to reallocate space for the secure area if you installed system snapshot and want to continue to use the system snapshot feature:

1. Click **OK** to start the allocation.
2. Click **Next** to continue.
3. Click **Yes** to restart your computer and complete the process.

## **4.5 Clone Console**

### **4.5.1 Clone Drive**

Clone Drive duplicates one hard drive to another. It eliminates the need to re-install the operating system, drivers and applications, and enables you to upgrade a new hard drive with only a few mouse clicks.



**Tip**

To use this function, you will need to have at least two hard drives on your computer.

The target hard drive should have enough space to store the data of the source hard drive.

1. Select **Clone** and then click **Clone Drive**.
2. Select the Source Disk (top pane) and then the Destination Disk (bottom pane). You can choose to modify the Destination Partition Size manually by selecting **Modify the destination partition size**. You can also choose not to modify the Destination Partition Size by selecting **Keep the partition size of the destination drive the same as the source drive**. Click **Next** to continue.



**Tip**

If you select **Keep the partition size of Destination Hard Drive the same as the Source Hard Drive**, please skip to step 4.

If the Hard Drive you want to clone is going to boot your system, for best result, please select **Keep the partition size of Destination Hard Drive the same as the Source Hard Drive**.

3. You can alter the Destination Partition size by double-clicking the entry of Destination Partition and change the size in a popup dialog box. Click **Next** to continue.
4. After confirming your selections, click **Clone Now** to proceed or you can click **Previous** to change your selection. If the system is busy, Total Backup Recovery will try to clone again automatically.



**Note**

The cloning process will overwrite all data on the destination disk. Click **Continue** to begin the cloning process. You can also click **Cancel** to exit.

5. Click **Shutdown** to complete the cloning process.

## 4.5.2 Clone Partition

With Total Backup Recovery, you can copy data from the source partition into the destination partition.

1. Select **Clone** and then click **Clone Partition**.

2. Select a Source Partition in the Hard Drive (top pane).



**Note**

You can only choose one partition at a time.  
The Source Partition and the Destination Partition cannot be the same.

3. Select a Destination Partition in the original Hard Drive or another Hard Drive (bottom pane), then click **Next** to continue.



**Tip**

The selected destination partition must have enough space to hold the data of the source partition.

4. After confirming your selections, click **Clone Now** to start the duplicating process or you can click **Previous** to change your selections. You can start the cloning process by clicking **Start Clone**. If the system is busy, Total BackupRecovery will try to clone again automatically.



**Tip**

The cloning process will overwrite all data on the destination disk. Click **Continue** to begin the cloning process. You can also click **Cancel** to exit.

5. Click **Return to Main Console** to complete the process.

## 4.6 Tools Tab

### 4.6.1 Create a Bootable Rescue Disk

Create a bootable disk to recover from a system crash or hard drive failure

1. Insert a blank Disc or USB device.



**Note**

Before creating a Bootable Rescue Disk, data on the disk should be formatted.

2. Click **Tools** tab on the left or **Tools** menu on the top of the interface, and then select **Bootable Rescue Disk**.

3. Select the CD/DVD drive or the USB device you'll be using to create your Bootable Rescue Disk, and click **Next**.



**Tip**

If there is some data on the inserted device, you will be asked whether you wish to erase the disc. If you want to continue, click **Erase**. Click **Change** to insert another blank CD/DVD, or **Cancel** to stop the creation process.

4. Click **Finish** to complete the process.

#### 4.6.2 Preview Backup Image

Preview the content of the specified partition of a complete backup image to make sure you can only restore the needed partition(s).

1. Click on the **Tools** tab, and then select **Preview Backup Image**.



**Note**

If you have mounted an image before, you will be prompted to dismount the previous image. Click **Continue** to dismount the previous image, or **Cancel** to exit this process.

2. Enter the storage path of the image you want to preview and click on **Goto** to select the image, or select the storage path of the image you want to preview and click **Next**.

3. Select a complete backup point or an incremental backup point, and click **Next**.

4. Select the partition you want to preview, and click **Mount** to load the image into the system.

5. You can now browse and copy data on the preview drive in Windows® Explorer.
6. You can click **Yes** to mount another image. Click **No** to return to main console.

If you do not want to preview the image anymore, select **Unmount Preview Drive** on the the **Tools** tab, or select the **Tools** menu and click **Unmount Image** to close the preview partition.

### 4.6.3 Check Image Integrity

Use this function to check if a complete backup image file is valid and can be used for restoration.

1. Click the **Tools** tab in the left or the **Tools** menu on the top of the interface, and then select **Check Image Integrity**.
2. Enter the storage path of the image you want to check, and click **Goto** to select the image. You can also select the storage path of the image you want to check and click **Next**.
3. Select to validate either the Complete or Incremental Backup point, and click **Next** to continue.
4. After validating the backup point, click **Finish** to complete the Image Integrity Check.

### 4.6.4 Convert Backup to Virtual Disk

With the tool “Convert Backup to Virtual Disk” , you can convert a Complete Backup image to a VMware-format one, and then implement your virtual applications.

1. Login the VMwareofficial website, download “VMware Virtual Disk Development Kit” from <http://www.vmware.com/support/developer/vddk/>, and then install it;
2. Run “Convert Backup to Virtual Disk” under the Tab page “Tools” . First, you need to choose a Complete Backup image, whose filename extension should be “.sco” ;
3. Then, you need choose converting type(a partition or entire hard drive to be converted), VMware format, and destination path(where to store the converted image);

After converting process finishes, a virtual disk file will be generated, whose filename extension is “.vmdk” . You can refer to the VMware help file to load this virtual disk file to an existing VMware machine, or follow the below steps to create a new VM machine based on the file:

1. New a VMware machine from the menu ” File->New->Virtual Machine” ;
2. Make sure you choose the following options: in the ” What type of configuration do you want?” page, choose ” Custom(advanced)” ; in the ” Guest Operating System Installation” page, choose ” I will install the operating system later” ; in the ” Select a Disk” page, choose ” use an existing virtual disk” , and then in the ” Select an Existing Disk” page, browse the vmdk file you have converted.
3. Except the above options, set your configurations as you need. After finishing all configurations, please reboot the new VMware machine.

After converting the complete backup image as a \*.vmdk format successfully, you can conveniently load it as a new hard disk on your virtual machine. In doing so, all data on the original hard disk is available on that virtual machine.



**Tip**

If you did not install **VMware Virtual Disk Development Kits**, this function will be disabled. You can visit the provided link to download it.

1. Click on the **Tools** tab, and select **Convert Backup to Virtual Disk**.
2. Enter the storage path of the backup image and click **Goto**, or select it locally or remotely and click **Next**.
3. Select a complete backup point or an incremental backup point, and click **Next**.
4. Select to convert a single partition or the entire hard drive, and click **Next**.
5. Choose to either convert to VMware 5 or VMware 6, and click **Next**.
6. Select a local or remote destination path to save the conversion backup. Click **Next** to launch the conversion process.
7. Confirm all information about this conversion. Click **Next** to launch the conversion process.
8. Click **Finish** to return to the main console when the process completes.

# Chapter 5: Recovery Manager

## 5.1 Enter Recovery Manager

To launch the Recovery Manager, press the **space bar** after the system POST (Power-On-Self-Test), but before Windows® begins to load. Also you can enter the Recovery Manager via the following means, a bootable rescue disk, USB drive, USB key.



### Tip

To prevent its use as a pirated operating system, Windows PE automatically stops running the shell and reboots after **72 hours of continuous use**. This time period is not configurable.

### 5.1.1 Boot from Bootable Rescue Disk

1. Insert the Bootable Rescue Disk and restart your computer, and then enter the BIOS to set the CD/DVD ROM as the first boot device.
2. After entering the Recovery Manager main console, you can then back up and restore your computer, return to a system snapshot, clone a hard disk and many other useful functions.

### 5.1.2 Boot into Windows via a USB Drive or USB Key

With the USB Hot Drive, you can restore the entire system from a Windows environment.

Follow the steps below to use the USB Hot Drive:

1. Connect the USB device, start your computer, enter the BIOS to set the USB device as the first bootable option, and save your settings.
2. Restart the system and boot from the USB device.
3. After entering Windows, use Total Backup Recovery to restore the system. All of Total Backup Recovery's other features will also be available to you.

## 5.2 Recovery Manager Main Console

After you enter the Recovery Manager, you will see the following window.



## 5.2.1 Quick Start

**Back Up Computer(s)** – Click here to back up partition(s) or the entire hard drive for your system.

**Return to a System Snapshot** – Click here to restore from a specified system snapshot.

**Restore Your Computer** – Click here to restore from a complete backup point.

**Data Shredding (Eradication) US DoD Standard Complied** – Click here to 100% clean your data by wiping hard drive contents beyond recovery.

## 5.2.2 Backup (Computers)

### 5.2.2.1 Back up Your Computer in Recovery Manager

1. Click **Back Up Computer(s)**.
2. Enter a name for your new Complete Backup, and click **Next**.
3. Select the partition(s) or the entire hard disk to back up, and click **Next**.



#### Tip

This backup performed in Recovery Manager is not supported by Universal

Restore.

4. Enter the storage path and click **Goto**, or select a destination location on a hard drive, USB storage medium, or a network location to store the image file. Some optional settings will be displayed if you click **Advanced**; these include: compression mode, password protection, image split, backup priority, and network connection speed.
5. Click **Next**.
6. Review the information and settings that have been specified. Click **Next** to launch the backup process, or click **Previous** to modify setting(s).
7. Click **Finish** to return to main console.

## 5.2.3 Return to a System Snapshot

### 5.2.3.1 Return to a System Snapshot in Recovery Manager

1. Click on **Return to a System Snapshot** icon to display a list of System Snapshots. The first System Snapshot listed will be the most recently created snapshot.
2. Select the date you want to restore to from the calendar on the left pane and select System Snapshot of that day you would like to restore on the right pane and click **Next**.
3. Choose to restore the **Entire Hard Drive** or **C : Drive Only** and then click **Next** to begin restoration.



#### Tip

If the user chooses to restore the C Drive only, Total Backup Recovery only restores the files of the active partition. All of the System Snapshots created before the restoration point can only be used to restore C: drive.

4. Carefully read the warning message. And then click **OK** to proceed to next step. You can also click **Cancel** to exit.
5. Your computer will restart automatically to start the restoration process.

A complete restore can take from 20 seconds up to 10 minutes, depending on the number of files affected. Once the system has restarted, your SYSTEM will be restored from the chosen System Snapshot. All file modifications and additions made after System Snapshot date will be removed.

## 5.2.4 Restore Your Computer

### 5.2.4.1 Restore Your Computer in Recovery Manager

To restore a partition or the entire hard drive, please do the following:

1. Enter into Recovery Manager.
2. Click **Restore Your Computer**.
3. Select a backup image from the list, or **click here** to select an image file stored on a network share. Click **Next** to continue.
4. Select a Complete Backup point or any Incremental Backup point to restore from, and click **Next**.
5. Select to restore a single partition or the entire hard drive, and click **Next**.
6. Select a destination partition or a destination hard drive to be restored from the image file, and click **Next**. If you choose to restore a single partition, click **Yes** to launch the restoration process.
7. To restore the entire hard disk, please select a restore option.
  - a. Select the checkbox to modify the destination partition size.
  - b. Don't select it for fear of information loss on multiple systems or hidden partition.

If you selected option **a**, double click the partition Capacity to be resized from the list. If you selected option **b**, skip to step 9.

8. When it shows the structure of the destination partition, double click the highlight and modify its size, and click **Next** to continue.
9. Click **OK** to begin the restoration process.

After the restoration completes, it will reboot into Windows automatically.

If you want to continue to use system snapshot feature, you will need to reallocate space for the secure area as prompted.

### 5.2.4.2 Perform Universal Restore

You can restore the system partition or the entire hard drive of the selected client to a dissimilar hardware.

1. Launch Recovery Manager.
2. Click **Restore Your Computer**.
3. Select a backup image from the list, or **click here** to select an image file supported by Universal Restore. Click **Next** to continue.
4. Select a Complete Backup point or any Incremental Backup point to restore from, and click **Next**.
5. Select to restore with **Universal Restore**, and click **Next**.
6. Select to restore a single partition or the entire hard drive, and click **Next**.
7. Select a destination partition or a destination hard drive to be restored from the image file, and click **Next**. If you choose to restore a single partition, click **Yes** to launch the restoration process.
8. To restore the entire hard disk, please select a restore option.
  - a. Select the checkbox to modify the destination partition size.
  - b. Don't select it for fear of information loss on multiple systems.

If you selected option **a**, double click the partition Capacity to be resized from the list. If you selected option **b**, skip to step 10.
9. When it shows the structure of the destination partition, double click the highlight and modify its size, and click **Next** to continue.
10. Click **Next** to begin the restoration process.
11. Click **Finish** to complete the process.

## 5.2.5 Clone Tab

### 5.2.5.1 Clone Drive

Clone Drive duplicates one hard drive to another. It eliminates the need to re-install the operating system, drivers and applications, and enables you to upgrade a new hard drive with only a few mouse clicks.



**Tip**

To use this function, you will need to have at least two hard drives on your computer.

The target hard drive should have enough space to store the data of the source hard drive.

1. Select **Clone** and then click **Clone Drive**.
2. Select the Source Disk (top pane) and then the Destination Disk (bottom pane). You can choose to modify the Destination Partition Size manually by selecting **Modify the destination partition size**. You can also choose not to modify the Destination Partition Size by selecting **Keep the partition size of the destination drive the same as the source drive**. Click **Next** to continue.



**Tip**

If you select **Keep the partition size of Destination Hard Drive the same as the Source Hard Drive**, please skip to step 4.

If the Hard Drive you want to clone is going to boot your system, for best result, please select **Keep the partition size of Destination Hard Drive the same as the Source Hard Drive**.

3. You can alter the Destination Partition size by double-clicking the entry of Destination Partition and change the size in a popup dialog box. Click **Next** to continue.
4. After confirming your selections, click **Clone Now** to proceed or you can click **Previous** to change your selection. If the system is busy, Total Backup Recovery will try to clone again automatically.



**Note**

The cloning process will overwrite all data on the destination disk. Click **Continue** to begin the cloning process. You can also click **Cancel** to exit.

5. Click **Shutdown** to complete the cloning process.

### 5.2.5.2 Clone Partition

With Total Backup Recovery, you can copy data from the source partition into the destination partition.

1. Select **Clone** and then click **Clone Partition**.
2. Select a Source Partition in the Hard Drive (top pane).



**Note**

- You can only choose one partition at a time.
- The Source Partition and the Destination Partition cannot be the same.

3. Select a Destination Partition in the original Hard Drive or another Hard Drive (bottom pane), then click **Next** to continue.



**Tip**

- The selected destination partition must have enough space to hold the data of the source partition.

4. After confirming your selections, click **Clone Now** to start the duplicating process or you can click **Previous** to change your selections. You can start the cloning process by clicking **Start Clone**. If the system is busy, Total Backup Recovery will try to clone again automatically.



**Tip**

- The cloning process will overwrite all data on the destination disk. Click **Continue** to begin the cloning process. You can also click **Cancel** to exit.

5. Click **Return to Main Console** to complete the process.

## 5.2.6 Data Shredding

### 5.2.6.1 Data Shredding (Eradication) in Recovery Manager

Total Backup Recovery can eradicate all data on specified partition(s) or the entire hard drive; the eradicated data cannot be recovered after eradication. Be cautious before operating this function.

1. Select Data Shredding on the left pane, then click **Data Shredding (Eradication) US DoD Standard Complied** or click **Data Shredding (Eradication) US DoD Standard Complied** on **Quick Start** console.

2. Select the partition(s) or the entire hard drive and enter number of the times (maximum of 49) you would like to operate eradication.
3. Confirm all information and then click **Start Now**.
4. Carefully read the warning message and click **OK** to continue, or click **Cancel** to return to main console.
5. Click **Finish** to return to main console.

## 5.2.7 Analyze Tab

### 5.2.7.1 Check Backup Image

Use this function to check if a complete backup image file is valid and can be used for restoration.

1. Select the **Analyze** tab in the left pane, and then select **Check Backup Image**.
2. Enter the storage path of the image you want to check, and click **Goto** to select the image. You can also select the storage path of the image you want to check and click **Next**.
3. Select to check either the Complete or Incremental Backup point, and click **Next** to continue.
4. After checking the backup image, click **Finish** to complete the Image Backup Check.

### 5.2.7.2 Check Hard Disk Errors

In this section, you can check if the backup data in your complete backup image file is valid.

1. Select **Analyze** tab and click on **Check Hard Disk for Errors** icon.
2. Select the disk to be checked.
3. Do one of the following to launch checking process.
  - a. To check for errors without repairing them, click **Check Now** without selecting either of the check boxes above.
  - b. To check for and correct system errors, make the appropriate selections in the check boxes. And then click **Check Now**.
4. Click **OK** to complete the process.
5. Click **Finish** to return to the main console.

### 5.2.7.3 Run Command Shell

The command shell executes programs and displays their output on the screen by using individual characters similar to the MS-DOS command interpreter Command.com. You can use the command shell to create and edit batch files (also called scripts) and to automate routine tasks. You can perform operations more efficiently by using batch files than you can by using the user interface.

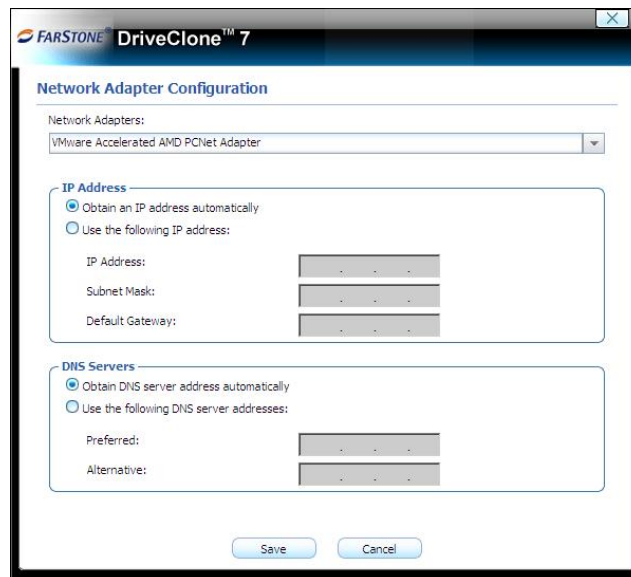
1. Select **Analyze** tab and click on **Open Command Shell Window** icon.
2. Put in the command in the pop-up window and press **Enter** key.
3. Type exit and press **Enter** key to return to main console.

### 5.2.8 Network Tab

#### 5.2.8.1 Network Adapter Configuration

Total Backup Recovery can back up to, or restore from a network location. To use this feature, you should first configure your network settings. From here, you can configure the **IP Address Settings** and **DNS Server Settings**.

Click the **Network** tab and then select **Network Adapter Configuration**, you will see the following screen.



You can setup your network adapter, IP address, Subnet mask and Default gateway from here.

If you have more than one network adapter on your system, select the adapter to be used from the dropdown menu.

### IP Address Settings:

- Obtain an IP address automatically: If your network supports DHCP (Dynamic Host Configuration Protocol), this option will obtain an IP address automatically from a DHCP server or a Point-to-Point Protocol (PPP) dial-up network access server. Total Backup Recovery Client sets DHCP as the default option.
- IP address: Choose this option to manually specify an IP address for your network. This option can be used when automatically obtaining an IP address fails or when there is an IP address conflict.

If your computer is on a Local Area Network (LAN), you can configure the LAN settings to back up images to or restore from a network location.

### DNS Server Settings:

- Obtaining a DNS server address automatically: DNS (Domain Name System) is an internet service that translates domain names into IP addresses. It is a system for name resolution, suitable for network computers with fixed IP addresses. Total Backup Recovery sets DHCP as the default option.
- Use the following DNS server address: Manually specify the DNS server address if needed. You can enter a preferred one and an alternative one (if the former one is unavailable).

## 5.2.8.2 Map Network Drive

In this section, you can use the network folder as the local one, and assign a drive letter for it. In doing so, you can access the image files in that folder more conveniently.

After the network resource is connected successfully, you can access all data in it just like they were on your local computer.

1. Select **Network** tab and click on **Map Network Drive** icon.
2. Select a drive letter from the drop-down list to map the shared resource
3. Enter the computer share name of the resource in this format: **\\Server name\share name**. Or click **Browse** to locate the resource.
4. Click **Save**.
5. In the User name and password dialogue box, type your user name in this format: **domain name\username**. Enter password if prompted.



**Note**

All mapped drive(s) will be removed if you reboot or shut down this computer.

### 5.2.8.3 Launch Web Brower

Click the button, users will go through the website in PE.

## 5.2.9 Tools Tab

### 5.2.9.1 Preview Backup Image

Preview the content of the specified partition of a complete backup image to make sure you can only restore the needed partition(s).

1. Click on the **Tools** tab, and then select **Preview Backup Image**.



**Note**

If you have mounted an image before, you will be prompted to dismount the previous image. Click **Continue** to dismount the previous image, or **Cancel** to exit this process.

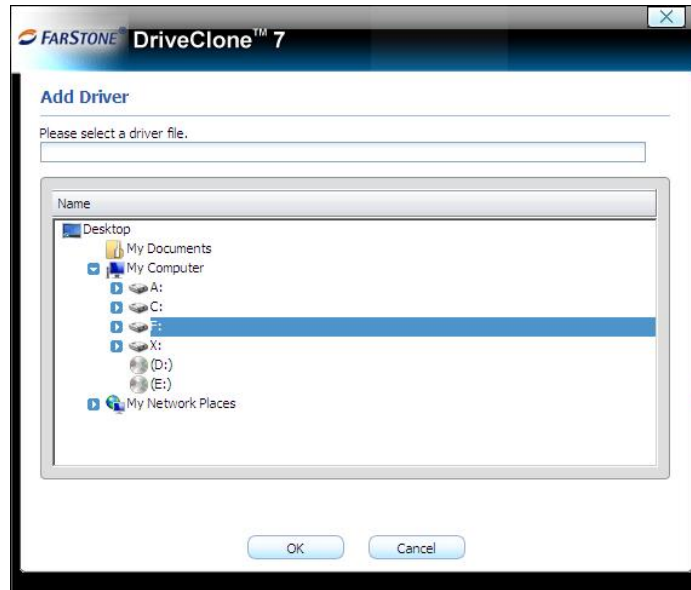
2. Enter the storage path of the image you want to preview and click on **Goto** to select the image, or select the storage path of the image you want to preview and click **Next**.
3. Select a complete backup point or an incremental backup point, and click **Next**.
4. Select the partition you want to preview, and click **Mount** to load the image into the system.
5. You can now browse and copy data on the preview drive in Windows® Explorer.
6. You can click **Yes** to mount another image. Click **No** to return to main console.

If you do not want to preview the image anymore, select **Unmount Preview Drive** on the the **Tools** tab to close the preview partition.

### 5.2.9.2 Add Driver

If Total Backup Recovery cannot detect the compatible and available driver for the application you need, you can install a third party driver manually.

1. Select **Tools** tab and click on **Add Driver** icon.
2. Select the driver file on the local computer or on the network.



\*Select a driver file on your local computer or shared network.

3. Click **OK**.



**Note**

All mapped drive(s) will be removed if you reboot or shut down this computer.

The added driver(s) can now work with the matched applications.

### 5.2.9.3 Fix System MBR

Click **Fix System MBR** to quickly fix the MBR of the primary bootable hard disk to boot the system normally, but the System Snapshot feature will be unavailable and Total Backup Recovery may not work normally.

1. Select **Tools** tab and click on **Fix System MBR** icon.
2. Click **OK** to confirm this operation.



**Note**

You must carefully read the shown warning message prior to processing.

3. Click **Next** to continue.

4. Select a disk from the list and click **Next**. If your disk doesn't display on the list, you can click **Load Driver** to search matched driver for your disk.
5. Click **Next** to launch the fix process after you select the checkbox.
6. Click **Finish** to complete the process. And you need to restart your computer to Windows manually.

#### **5.2.9.4 Open Explorer Window**

Select Tools tab, then click **Open Explorer Window**, files and folders on your computer will be displayed.

## Chapter 6: Glossary

- **Total Backup Recovery Image**

A Total Backup Recovery image is a file containing a complete copy of a computer's hard drive or partitions on that hard drive. With this image, you can transfer the contents of a hard drive to a portable medium such as a recordable CD/DVD, USB drive, or to another hard drive, for later restoration when needed.

- **Recovery CD/DVD**

The Recovery CD/DVD allows users to restore their system by inserting this disc into their CD/DVD-ROM drive. Once the system is booted up, the Recovery CD/DVD will restore the system automatically based on the content contained on the Recovery CD/DVD.

- **Clone (Copy) Partition/Drive**

The term "cloning" refers to the physical reading of all sectors of a source partition / disk and the subsequent writing of this raw sector information to the corresponding sectors of a destination partition or disk. The size, file system formats, brand of the source partition/disk and target partition/disk can be different.

- **Secure Area**

The Secure Area is a Virtual Partition on the primary hard drive. It uses dispersed free hard drive space to create a logically continuous storage area. This area is hidden in Windows and protected and accessible only by FarStone Total Backup Recovery 7 Workstation.

- **System Snapshot**

System Snapshots are incremental points-in-time of a computer system's state at a given moment. FarStone Total Backup Recovery 7 Workstation monitors all sector-level changes from the last Snapshot and writes any changes to a new Snapshot. This backup usually takes only seconds to complete. Snapshots offer the quickest way to restore a damaged Windows system to a working state.

- **System Partition**

The system partition refers to the disk volume that contains the hardware-specific files that are needed to launch Windows (for example: Ntldr, Boot.ini, and Ntdetect.com). On dynamic disks, this is known as the system volume.

- **Boot Partition**

The boot partition refers to the disk volume that contains the Windows operating system files (by default, in the WINDOWS folder) and its support files (by default in the WINDOWS\System32 folder). The boot partition can, but is not required, to be the same partition as the system partition. There will be one (and only one) system partition, but there will be one boot partition for each operating system in a multi-boot system. On dynamic disks, this is known as the boot volume.

- **Universal Restore**

Universal Restore allows you to restore your system partition and active partitions to different hardware configurations or virtual machines, such as a replaced motherboard or hard drive controller.

- **Pseudo Drive**

Pseudo Drive is a virtual space created in the Secure Area. FarStone Total Backup Recovery 7 Workstation utilizes this space to reduce the backup data of System Snapshot and increase backup efficiency.

# Chapter 7: Appendix

## 7.1 Frequently Asked Questions

**Q. How long does it take FarStone Total Backup Recovery 7 Workstation to back up or restore a system?**

A: This depends on the amount of data on your system. However, FarStone Total Backup Recovery 7 Workstation's technology minimizes the time it takes to perform a backup.

**Q. I started Total Backup Recovery in Windows immediately after installation completed, but a message says that I have to restart my computer in order to run it. Why?**

A: You have to restart your computer after installing Total Backup Recovery, in order for all configuration changes to take effect.

**Q. When I restored a partition from an image file, FarStone Total Backup Recovery 7 Workstation prompted me that "There is not enough space on the Destination Partition". But I'm sure the free space on the Destination Partition is larger than the used space in the Source Partition. Why am I getting this prompt?**

A: If data at the end of the source partition cannot be moved, FarStone Total Backup Recovery 7 Workstation will prompt you with this notice.

**Q. I created an image for Drive C: on two CD-R discs. Why can't the disc be mounted as a temporary partition?**

A: Mounting a partition requires all the backup data of the drive. If you use one of two discs, it cannot provide the complete information. To solve this problem, copy the image files from the two discs to the hard drive and then mount it as a temporary partition. This problem cannot be overcome by using multiple CD/DVD drives.

**Q. While creating a Recovery CD/DVD, an error message appears.**

A: This error may occur if the quality of the recordable CD/DVD media is not good, or the disc is incompatible with the recorder. To solve this problem, please try a different brand of CD/DVD media or upgrade your CD/DVD recorder.

**Q. Do I need to do anything before installing FarStone Total Backup Recovery 7 Workstation?**

A: We recommend running Windows Check Disk to scan for hard drive errors.

**Q. Bad Sectors have already been detected on a hard drive. How does this affect my backup and restore options?**

A: Total Backup Recovery will try to copy all used sectors when performing a Complete or Incremental backup. You may be prompted to skip a bad sector or a job could fail due to bad sectors. Therefore, it's recommended to run Windows Check Disk command to detect and repair hard drive errors, or use utilities provided by your hard drive manufacturer, when attempting to resolve this type of problem.

**Q. Can FarStone Total Backup Recovery 7 Workstation fix my system after my hard drive has been accidentally formatted or repartitioned?**

A: Yes — if FarStone Total Backup Recovery 7 Workstation was installed prior to the incident.

**Q. Can I use disk tools such as Fdisk, PartitionMagic and Norton Speed Disk after installing FarStone Total Backup Recovery 7 Workstation on my computer?**

A: Currently there is no known resource conflicting with those utilities.

**Q. I've installed three operating systems on my computer, including Linux. Can FarStone Total Backup Recovery 7 Workstation protect all three systems?**

A: FarStone Total Backup Recovery 7 Workstation protects multiple Windows operating systems completely, and we recommend using **Back Up Computers** to protect the non-windows systems.

**Q. Does FarStone Total Backup Recovery 7 Workstation work in Windows Safe Mode?**

A: FarStone Total Backup Recovery 7 Workstation does not work in Windows Safe Mode.

**Q. Can FarStone Total Backup Recovery 7 Workstation protect my PC from a destructive virus?**

A: While FarStone Total Backup Recovery 7 Workstation cannot prevent the actual virus attack, it can restore your computer to a point before the attack occurred, recovering your files and effectively removing the virus.

**Q. Does FarStone Total Backup Recovery 7 Workstation Provide support for Windows® advanced power management?**

A: FarStone Total Backup Recovery 7 Workstation supports all Windows® advanced power management features (Standby, Sleep, Hibernate).

**Q. Why was my System Snapshot deleted automatically?**

- A:
1. If there are two operating systems on your computer with only one of the systems installed with FarStone Total Backup Recovery 7 Workstation, when you enter the operating system which does not have FarStone Total Backup Recovery 7 Workstation installed and modify the hard disk data, the system snapshot will be deleted automatically.
  2. If you connect your hard drive physically to another computer and modify your data, the system snapshot will be deleted automatically.
  3. If you use DOS Bootable Rescue Disk to start the system and modify your data, the system snapshot will be deleted automatically.

**Q. Why does it take more time to install System Snapshot on my computer than on other systems?**

- A: If there are too many dispersed/fragmented files in your system partitions, FarStone Total Backup Recovery 7 Workstation will defragment them to free up continuous space for the application's kernel file Secure Area. This may take several minutes. Moreover, when you install System Snapshots on a FAT32 partition, FarStone Total Backup Recovery 7 Workstation will divide the Secure Area, which takes much longer time than an installation on NTFS partitions.

**Q. How can I restore without having a DHCP Server on the network?**

- A: If the DHCP service is not running on your network, you'll have to manually enter a static IP address to access the network through **Network Adapter Configuration** in Recovery Manager.

**Q. What happens if my PC misses a scheduled backup?**

- A: Total Backup Recovery will start the missed backup automatically at next boot up if you select the checkbox in the setting interface saying **If the computer shuts down, run the missed tasks when it boots next time**. If you don't select that checkbox, Total Backup Recovery will start the next schedule backup at next boot up.

**Q. Does the FarStone Total Backup Recovery 7 Workstation conflict with any other applications?**

- A: Please close the following applications when launching FarStone Total Backup Recovery 7 Workstation: Utimaco SafeGuard,

Besides, be aware of the following applications, which is conflict with system snapshot:

Norton GoBack, RecoveryGenius, Acronis OS Selector, Acronis TrueImage, SafeguardV4.2, OSL2000

**Q. Which partition types does FarStone Total Backup Recovery 7 Workstation recognize?**

A: NTFS, FAT, FAT32, Linux Ext2 and Ext3.

**Q. Why is my backup image larger than the source partition or hard disk?**

A. The source partition or hard disk may have too much of fragmentation. Please Defragment it and then run the backup again.

**Q. How can I access the computer outside the Workgroup through the network under the Recovery Manager?**

A. Click on the Tools tab and select Map Network Drive. And then map the directory on the remote computer as you wish.

**Q. How can I get SDK download location correctly before I use Convert Backup to Virtual Disk feature?**

A. VMware Home Page ([www.vmware.com](http://www.vmware.com)) ->Download ->VMware SDK&APIs ->Virtual Disk ->VMware Virtual Disk Development Kit