Total Backup Recovery

Advanced Server

User's Guide

Copyright Notice

No part of this publication may be copied, transmitted, stored in a retrieval system or translated into any language in any form or by any means without the expressed written permission of FarStone Technology, Inc.

FarStone grants you the right to use one copy of the enclosed software program ("SOFTWARE") on a single computer. If the SOFTWARE is installed on a network, or more than one user can run the SOFTWARE at the same time, you must purchase an additional license for each additional user or computer.

Trademark

FarStone® is a trademark of FarStone Technology, Inc. Microsoft, Windows® and MS-DOS® are registered trademarks of Microsoft Corporation. Other product names mentioned in this User's Guide may be trademarks or registered trademarks of their respective companies.

FarStone Technology, Inc.

U.S. Headquarters:

1758-B North Shoreline Blvd
Mountain View, CA 94043
Phone: (650)969-4567
Fax: (650)968-4567
www.farstone.com

Asia-Pacific Offices

9F-4, No.87, Sec 4
Jhongsiao E. Rd.
Taipei City 106,Taiwan
Phone: 886-2-2777-2887
Fax: 886-2-2777-2857
www.farstone.com.tw

Technical Support

Answers to frequently asked questions are posted on our website at www.farstone.com/support/faqs. For other support issues, please contact FarStone Technical Support at www.farstone.com/support.

Software License Agreement

FARSTONE TECHNOLOGY, INC. (FARSTONE) END USER LICENSE AGREEMENT FOR TOTAL BACKUP RECOVERY, HEREAFTER REFERRED TO AS THE "SOFTWARE"

PLEASE READ CAREFULLY: THE USE OF THIS "SOFTWARE" IS SUBJECT TO THE "SOFTWARE" LICENSE TERMS OF FARSTONE AND OTHER LICENSORS WHO'S SOFTWARE MAY BE BUNDLED WITH THIS PRODUCT.

BY YOUR USE OF THE "SOFTWARE" INCLUDED WITH THIS PRODUCT YOU AGREE TO THE LICENSE TERMS REQUIRED BY THE LICENSOR OF THE "SOFTWARE", AS SET FORTH BELOW. IF YOU DO NOT AGREE TO THE LICENSE TERMS APPLICABLE TO THE "SOFTWARE", YOU MAY RETURN THE ENTIRE UNUSED PRODUCT FOR A FULL REFUND.

LICENSE AND WARRANTY:

The software that accompanies this license (the "Software") is the property of FARSTONE or its licensors and is protected by copyright law. While FARSTONE continues to own the Software, you will have certain rights to use the Software after your acceptance of this license. Except as may be modified by a license addendum which accompanies this license, your rights and obligations with respect to the use of this Software are as follows:

A. Single User License:

(a) Use the "Software" on a single computer system or network, and only by a single user at a time. If you wish to use the "Software" for more users, you will need an additional License for each user.

(b) Make one copy of the "Software" in machine-readable form solely for back-up purposes provided you reproduce FarStone's copyright proprietary legends. Notwithstanding the foregoing, the "Software" may be used on the home, laptop or other secondary computer of the principal user of the "Software", and an additional copy of the "Software" may be made to support such use. As used in this License, the "Software" is "in use" when it is either loaded into RAM or installed on a hard disk or other permanent memory device. The "Software" may be "in use" on only one computer at any given time. (Different License terms and fees are applicable for networked or multiple user applications.) As a specific condition of this License, you agree to use the "Software" in compliance with all applicable laws, including copyright laws, and that you will not copy, transmit, perform or distribute any audio or other content using the "Software" without obtaining all necessary Licenses or permissions from the owner of the content.

B. Multiple User License:

Make one copy of the "Software" in machine-readable form solely for back-up purposes, provided you reproduce FarStone's copyright proprietary legends.

You must acquire and dedicate a License for each separate computer on which any part or portion of the "Software" is installed or run As used in this License, the "Software" or any part or portion of the "Software" is "in use" when it is either loaded into RAM or installed on a hard

disk or other permanent memory device including any networked or shared environment where either direct or indirect connections are made through software or hardware which pools or aggregates connections.

As a specific condition of this License, you agree to use the "Software" in compliance with all applicable laws, including copyright laws, and that you will not copy, transmit, perform or distribute any audio or other content using the "Software" without obtaining all necessary Licenses or permissions from the owner of the content.

C. Restrictions:

You may not distribute copies of the "Software" to others or electronically transfer the "Software" from one computer to another over a network. You may not post or otherwise make available the "Software", or any portion thereof, in any form, on the Internet. You may not use the "Software" in a computer service business, including in time-sharing applications. The "Software" contains trade secrets and, in order to protect them, you may not decompile, reverse engineer, disassemble, or otherwise reduce the "Software" to a human-perceivable form. YOU MAY NOT MODIFY, ADAPT, TRANSLATE, RENT, LEASE, LOAN, RESELL FOR PROFIT, DISTRIBUTE, NETWORK OR CREATE DERIVATIVE WORKS BASED UPON THE "SOFTWARE" OR ANY PART THEREOF.

D. Limited Warranty:

FarStone warrants that the media on which the Software is distributed will be free from defects for a period of fourteen (14) days from the date of delivery of the Software to you. Your sole remedy in the event of a breach of this warranty will be that FarStone will, at its option, replace any defective media returned to FarStone within the warranty period or refund the money you paid for the Software. FarStone does not warrant that the Software will meet your requirements or that operation of the Software will be uninterrupted or that the Software will be error-free.

THE ABOVE WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

E. Limitation of Liability:

IN NO EVENT WILL FARSTONE OR ITS LICENSORS BE LIABLE TO YOU FOR ANY INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS, OR LOSS OF DATA, EVEN IF FARSTONE OR A LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY. Some states do not allow the exclusion or limitation of special, incidental, or consequential damages, so the above limitation or exclusion may not apply to you.

F. General:

You acknowledge that you have read this Agreement, understand it, and that by using the "Software" you agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the agreement between FarStone and you, and

supersedes any proposal or prior agreement, oral or written, and any other communication between FarStone and you relating to the subject matter of this Agreement. No additional or any different terms will be enforceable against FarStone unless FarStone gives its express consent, including an express waiver of the terms of this Agreement, in writing signed by an officer of FarStone. You assume full responsibility for the use of the "Software" and agree to use the "Software" legally and responsibly.

Should any provision of this Agreement be declared unenforceable in any jurisdiction, and then such provision shall be deemed severable from this Agreement and shall not affect the remainder hereof. FarStone reserves all rights in the "Software" not specifically granted in this Agreement.

Additional Terms and Conditions:

In addition to the above agreement, the following terms and conditions will also apply to Your use of the Software:

A. You may use the Software on one Device to clone, or apply an image of a hard drive on that Device, or to another hard drive on the same Device, a replacement Device, secondary media, or network drive.

B. You may use the Software on a Device to create an image file of a hard drive on that Device and store the image file on fixed or removable media for disaster recovery purposes.

C. You may use the Software as a boot disk to re-apply the hard drive image that was created for disaster recovery purposes to the hard drive on the Device from which the disaster recovery image was made or on a replacement Device provided that the software has been removed from the original Device.

D. You may use the Software to clone a hard drive from a Device to a replacement Device, in the manner described in the Software documentation and to use the Software on the replacement Device provided that the Software has been removed from the original Device.

E. You may not use the Software commercially or non-commercially for the purpose of creating an image on multiple Devices or hard drives, except for multiple hard drives installed in or attached directly to the original Device.

F. For the purposes of this License Agreement, a virtual device is considered the same as a physical device.

G. If the Software you have licensed includes the Recovery Manager the following uses and restrictions apply to the Software:

 (i)   The Recovery Manager contains Windows® software licensed from Microsoft Corporation. Microsoft Corporation has no liability to You for the Component. Any support for the Component will be provided by FarStone in accordance with FarStone's then-current support guidelines.

 (ii)   THE RECOVERY MANAGER CONTAINS A TIME-OUT FEATURE THAT WILL AUTOMATICALLY RE-BOOT THE DEVICE AFTER SEVENTY-TWO HOURS OF CONTINUOUS USE. THIS TIME-OUT FEATURE WILL RESET EACH TIME THE COMPONENT IS RE-LAUNCHED.

(iii) The Recovery Manager may be used as a boot, diagnostic, disaster recovery, setup, restoration, emergency service, installation, test, and configuration utility program. Use of the Component as a general purpose operating system or as a substitute for a fully functional version of any operating system product is strictly prohibited.

Windows® is a registered trademark of Microsoft Corporation.

Should you have any questions concerning this Agreement, you may contact FarStone by writing to:

1758-B North Shoreline Blvd
Mountain View, CA 94043
Phone: (650)969-4567
Fax: (650)968-4567

Contents

Chapter 1: Introduction

1.1 Product Overview

Total Backup Recovery 7 Advanced Server is a powerful, all-in-one, centrally managed data backup and hard disk imaging application that provides local and network features for the user.

The user can independently manage every computer on the network with Total Backup Recovery. It can create a complete disk image of a hard drive and a single hard drive partition and store it on a local computer, network share and even on an FTP server. The image can be used for backup and recovery and to quickly transfer all information from a server's hard drive to a new hard drive. The image file can also be compressed and distributed across multiple hard drives or partitions.

Total Backup Recovery's compressed image file contains all of the hard drive data files, partition information, and security settings by copying only the used data sectors – this keeps the size of the image to a minimum. The complete disk image can be updated quickly with incremental backups; theses incremental backups contain only the hard drive changes that occurred since execution of the complete backup, or since the last incremental backup.

This offers the administrator an easy and reliable way to keep the system backup data current, by storing the images on an external USB hard drive, CD or DVD set, or on a network share. The administrator is then able to quickly recover from any type of data disaster, including data corruption or a hard drive failure.

With a special recovery environment (Recovery Manager), you can run Total Backup Recovery to back up and restore damaged partitions even if Windows does not start. Some other features of Total Backup Recovery, such as creating bootable rescue disc, are also available in this recovery environment.

For advanced users, a network administrator can remotely deploy Total Backup Recovery Client Module. It also has the capability to remotely back up selected files, folders, Windows application settings, and even entire disks or partitions to an external location for a single client, one group or domain. Users can also remotely restore the client module from any existing image file, or even remotely monitor the whole process by viewing the real time status.

Advanced Server has optimized the control and management of network, which no longer requires 24-hour online server to manage it. Meanwhile, it enables users to set bandwidth with backup tasks and ensures that the routine work is free of communication interference. In addition, it can control the network connections and make the network support concurrent connections by more Clients.

Total Backup Recovery 7 Advanced Server offers the administrator flexible ways to protect all involved computers. System administrators will appreciate FarStone Total Backup Recovery 7 Advanced Server's ability to dramatically reduce the time spent configuring multiple systems, installing software, or restoring multiple systems to an original image.

1.2 Software Structure

The software includes two components: the Administrating Console and the Client Module.
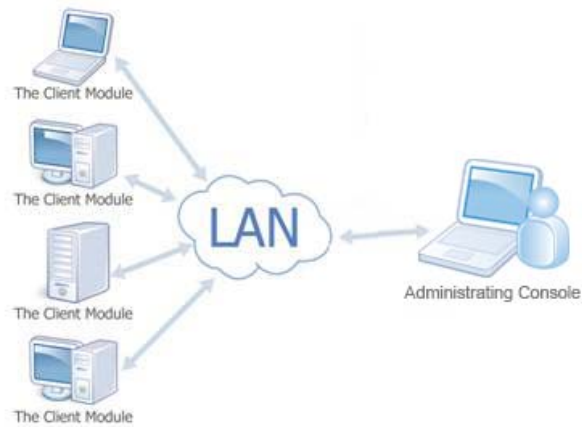
The Administrating Console – This centralized console enables users to manage all of the clients in the network.

The Client Module– This module is installed on the client systems to allow management via the Administrating Console; this can also operate all powerful features locally.

1.3 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.

1.4 Other Features and Benefits

Microsoft Volume Shadow Copy Service (VSS) Support (for Windows Server 2003 and higher): Easily back up VSS compatible databases (Exchange, Oracle, SQL Server) without taking databases offline and ensuring data consistency.

Preboot Execution Environment (PXE) Support: Boot and recover any system from PXE server without the need for a Bootable Rescue Disk.

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.

1.5 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.

Web Brower：Users can go through the website in PE by clicking **Launch Web Brower**.

Explorer Window：Files and folders on your computer will be displayed by clicking **Open Explorer Window**.

Chapter 2: Installing and Uninstalling Total Backup Recovery

2.1 System Requirements

Desktop or notebook computer running

- Windows® XP (32-bit & x64)
- Windows® Vista (32-bit & 64-bit)

Administrating Console

- Intel® Pentium processor at 133 MHz or faster
- 512 MB of RAM (Suggested 1 GB of RAM or more)
- 550 MB or more disk space
- Internet Explorer® 6.0 or higher

Client Module

- Intel® Pentium processor at 133 MHz or faster
- 512 MB of RAM (Suggested 1 GB of RAM or more)
- 1450 MB or more disk space
- Internet Explorer® 6.0 or higher

Optional

- USB 2.0 Device
- CD/DVD ROM

2.2 Start Total Backup Recovery Installation
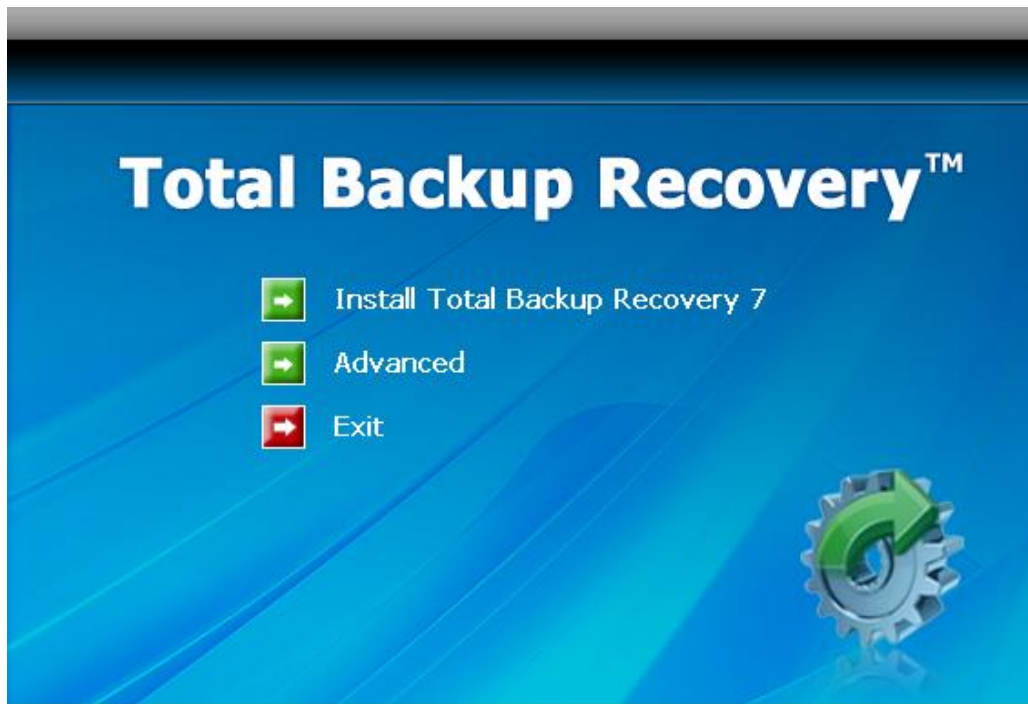
If you purchased a CD:

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.

> **Tip**
> Depending on the size and the number of computers a company maintains, Total Backup Recovery provides the following three installation scenarios:
>
> If it is *necessary* to manage all the computers under a network administrator, you can install Administrating Console to manage them centrally by clicking **Advanced**.
>
> If it is *unnecessary* to manage all the computers under a network administrator, you can install Total Backup Recovery 7 Advanced Server on each computer to manage them independently by clicking **Install Total**

> **Backup Recovery Client Module**.
>
> For the most efficient backup, one Administrating Console should manage one group of computers, with a maximum of 50 Clients. If there are more computer groups, then users will need other administrating consoles that back up to different locations for optimum security.
>
> Be sure to install the Total Backup Recovery components according to the order shown below: Please install the Client Module first followed by the installation of the Administrating Console.

2.2.1 Installing Total Backup Recovery 7 Advanced Server Module

1. Select Install Total Backup Recovery 7 Advanced Server Module, 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 be a limited time evaluation version of Total Backup Recovery.

5. If the Client Module needs to perform local operations later, choose to enable the interface. Otherwise, select disable.

6. Click **Next** to install to the default folder, or click **Change** to select another location.

7. Click **Install** to launch the installation process.

8. Click **Finish** to complete the installation. You are required to restart your computer to launch Total Backup Recovery.

2.2.2 Installing the Administrating Console

1. Select Advanced and then click Install Total Backup Recovery Administrating Console.

2. Click **Next** to continue.

3. Select your language preference for the application, and click **Next**.

4. 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**.

5. Enter your personal information, and click **Next**.

6. Click **Next** to install to the default folder, or click **Change** to select another location for your installation.

7. Click **Install** to launch the installation process.

8. Click **Finish**, and then click **Yes** to restart your computer to complete the installation.

> **Note**
> An administrator will have to log into a domain to install the Administrating Console on any computer within that domain. After the installation, restart the computer to complete the deployment.

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 the Administrating Console or the Client Module, and click **Remove** to begin uninstalling the associated component. A deactivation dialog box will pop up,click **Yes** to uninstall the product.

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.

Chapter 4: Start using Total Backup Recovery

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

Tip

If Google Desktop is installed, when you start up Total Backup Recovery, it will confirm if you want to install "The Third Party Plug-in". Click "OK" to begin installation.

When entering the following interface, please select your wanted file types and options and "**File Backup Index Plugin (Indexes FileBackup Recovery Points(*.FDB))**，then Google Desktop will establish related indexes. You can open the .FDB files with the Google Desktop Search.
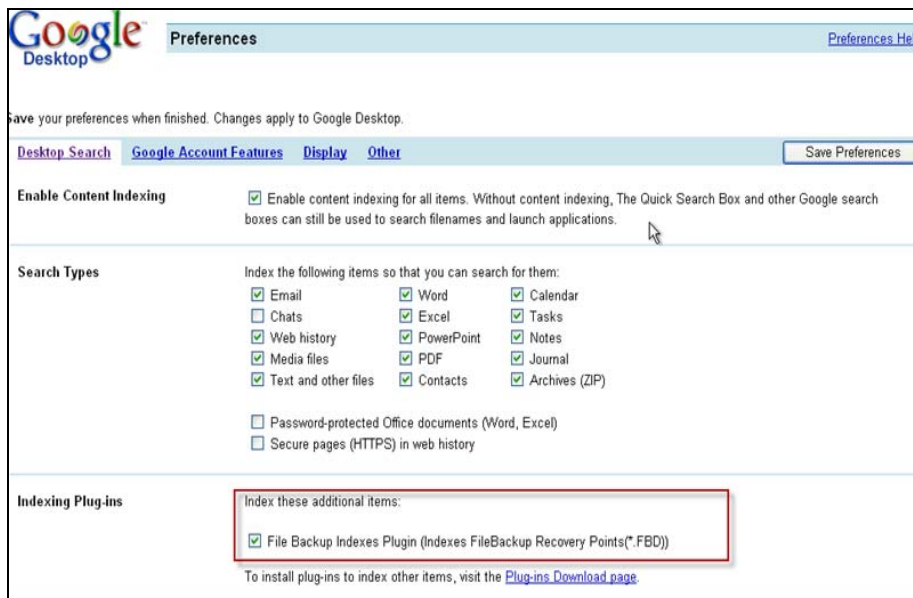
4.1 Activation and Deactivation

4.1.1 Activation

If you don't purchase a serial number when installing the product, you will see the following dialog box:
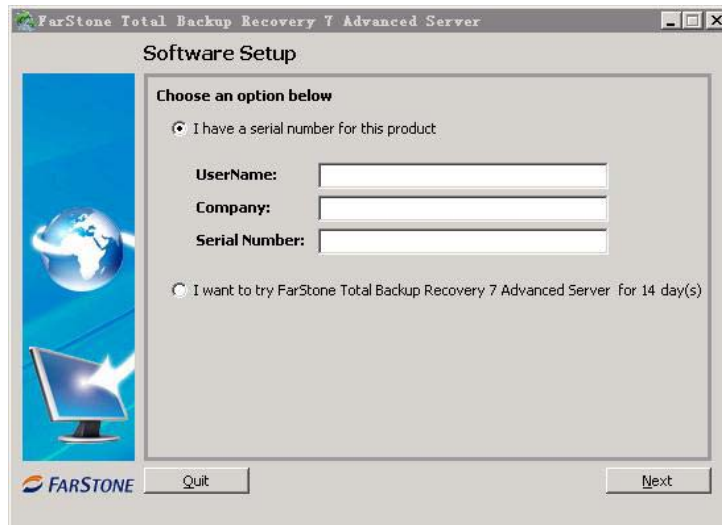
If you select **I have a serial number for this product**, please enter your personal information and serial number, then click **Next** to continue. (Note: Please enter the "-" characters together within your serial number.)

If you select **I want to try FarStone Total Backup Recovery 7 Advanced Server for 14 day(s)**, the program will be a trial version. 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:
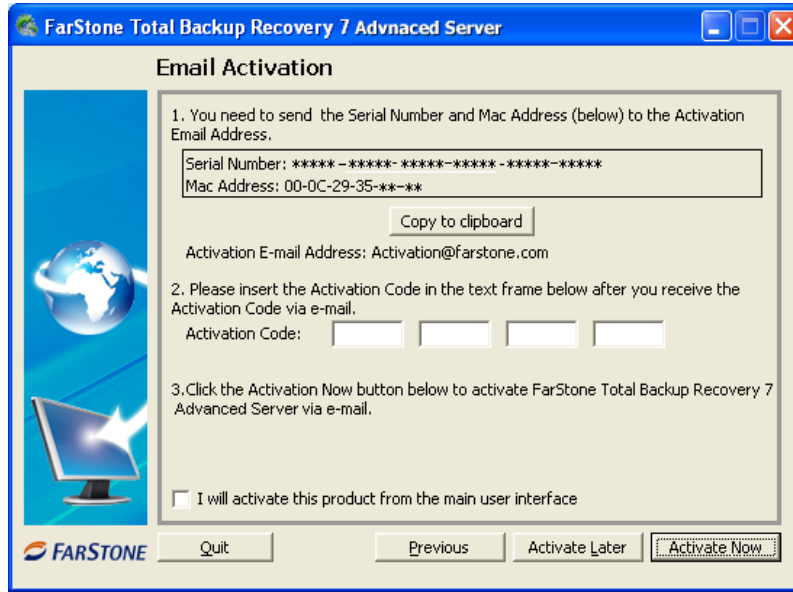
What you need to do concerning the email activation are as followings:

1. Click **Copy to clipboard** button to copy the serial number and Mac address to send to the activation address: Activation@farstone.com.

2. Our technical support engineer will send you the 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:
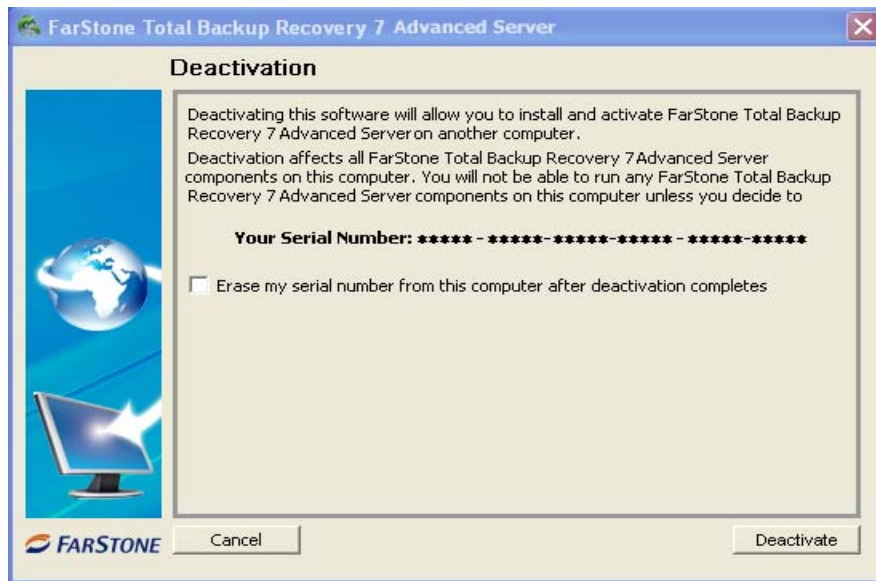
2. Click **Deactivation**, a dialog box will pop up:
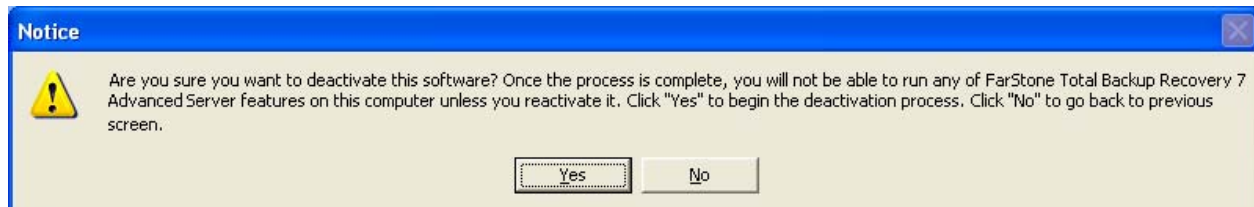
3. Click **Yes** to deactivate successfully, then click **Quit**, you will see the following dialog box:
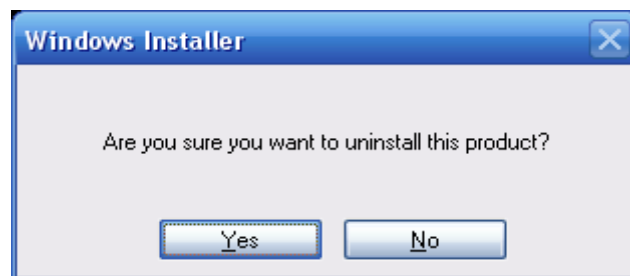
You can choose whether to uninstall the product from this computer.

> **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
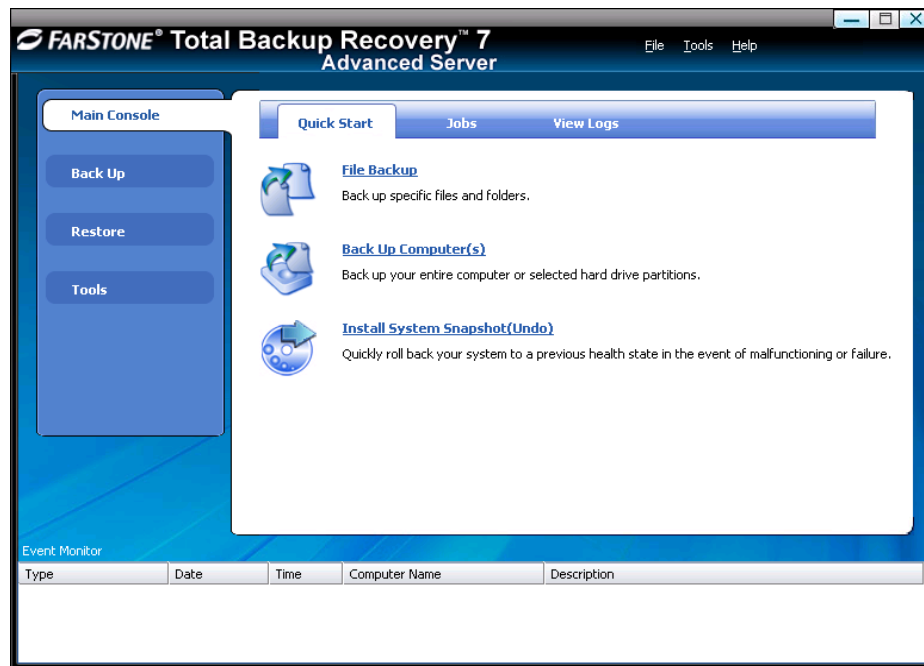
*Total Backup Recovery Main Console

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 followings:

1. Click **OK** to continue after carefully reading the warning message.

2. Allocate the space for Secure Area (at least 1200 MB), you can also choose the partition manually (only for system partition hard drive), and click **Next**.

3. Check or uncheck Disable System Restore, click **Next**.

4. Then wait patiently until the system reboots automatically.

If you don't want to use the system snapshot feature any more, you can also uninstall it from here by clicking **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.
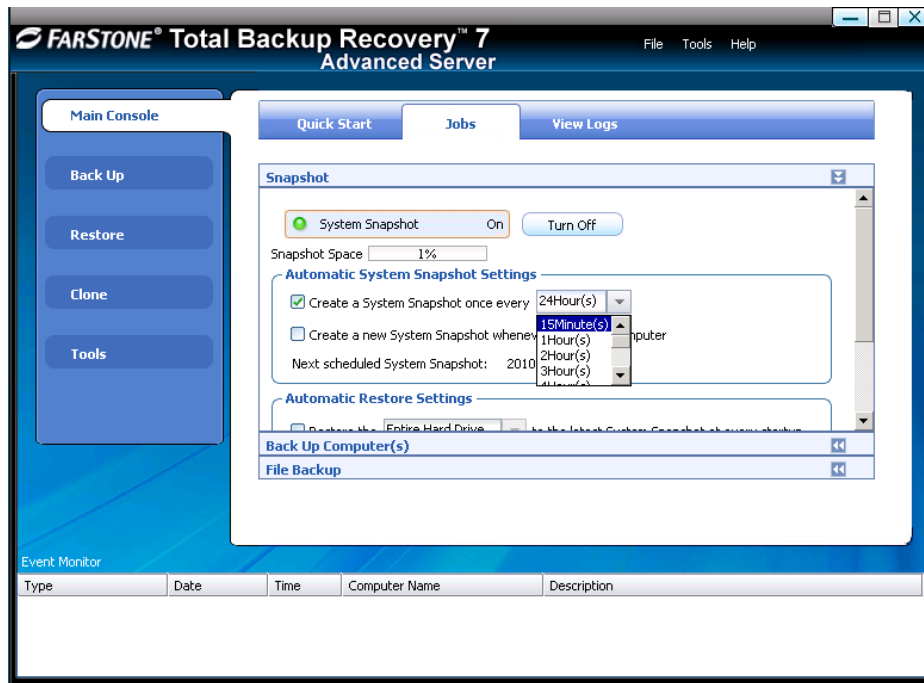
*Automatic System Snapshot

> ⚠️ **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. Advanced —Receive the backup reports from Total Backup Recovery to your specified email address. Choose to execute operations before or after the backup. Users may select to perform the operations **before the command's execution is complete**; or **if the command's execution fails,** you can select to perform the operations after the command's execution is complete**.**

e. Back Up Now — Create an Incremental Backup immediately.

f. 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 location, 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. Advanced —Receive the backup reports from Total Backup Recovery to your specified email address. Choose to execute operations before or after the backup. Users may select to perform the operations **before the command's execution is complete**; or **if the command's execution fails,** you can select to perform the operations after the command's execution is complete.

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

g. 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:

(1) Files in the Recycle Bin

(2) Files in the System Volume Information directory, pagefile.sys, and the _$temp directory

(3) Hiberfil.sys

(4) Files with ".rit" and ".tmp" extensions

(5) Microsoft Office temporary files

(6) Files in Total Backup Recovery's installation folder

(7) Files in the Backup Destination directory of the backup job currently running

(8) 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

Click "Tools" on the interface, then click "Settings" to set the following functions in the popped up dialogue box.

Require a password to access Total Backup Recovery - Check this box to enable password protection for the program. Set a password to protect against unauthorized access to Total Backup Recovery.

1. Click **Set Password**.

2. Enter your password (maximum of 8 characters) and re-enter it to confirm your password.

> **Tip**
> If you enter an incorrect password five consecutive times, Total Backup Recovery will shut down automatically (you can try to enter the password again by restarting the application). Please memorize your password and keep it confidential.

3. **Resize Secure Area** - Modify the size of the Secure Area. This action will delete all of the system snapshots and will require a system restart.

(1)Select Resize Secure Area and click OK to continue.

(2)Allocate space from each partition listed for the Secure Area. The allocated space for the Secure Area cannot be larger than the available space.

(3)Click Save to start resizing your Secure Area. Click Cancel to return to the main console.

(4)Click OK to restart your computer and complete the process.

4. **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.

5. **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.

(1)FTP information – Enter the address and port.

(2)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.

(3)FTP connection retry frequency – Enter Retry attempts (Maximum of 100 times), Delay between retries (Maximum of 600s).

6. **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.

7. **E-mail configuration** - Enter preferred E-mail address and other server settings.

(1)Send test email – Click here to test proper setting functionality.

(2)Notification events – Specify the events for which you would like to receive notification via E-mail regarding the backup operation.
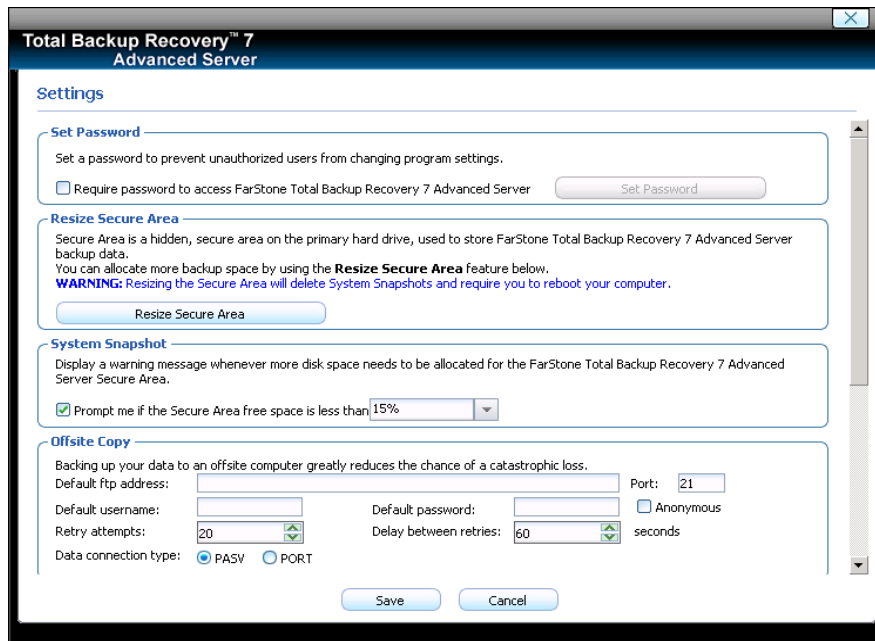
*E-mail Notification Setup

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**.

(1)If you select **Start Now**, Total Backup Recovery will initiate the process after clicking **Next** twice.

(2)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)

31

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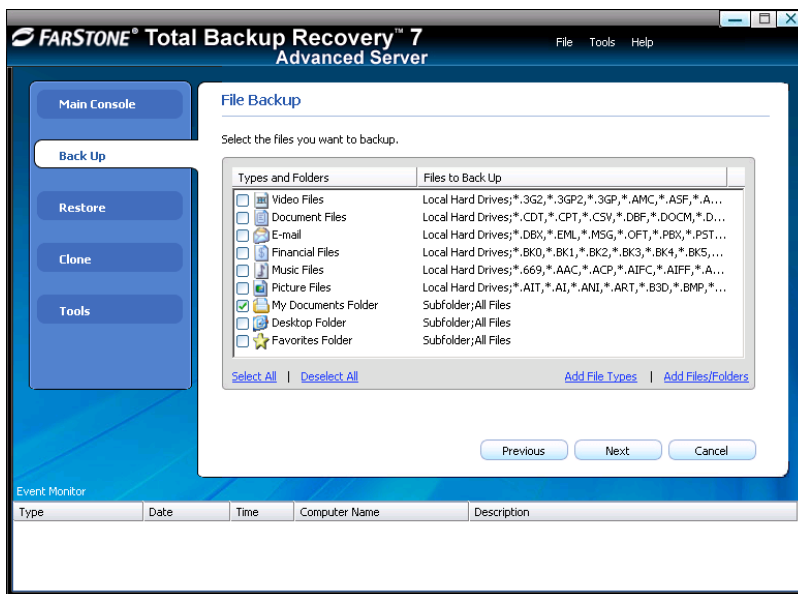
*Select Files for Backup or Add File/Folders or Add File Types

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

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

32

(1)Click **Delete Type** to remove file types you don't want to back up.

(2)Click **Add New Type** to add new file type in to the backup 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

(1)FTP information – Enter the address and port.

(2)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.

(3)FTP connection retries frequency – Enter Retry attempts (Maximum of 100 times), Delay between retries (Maximum of 600s).

(4)Data connection type – Choose one type: PASV or PORT.

(5)Restore Defaults – Clear all FTP settings.

6. Click **Start Now** to proceed. You can also choose to run weekly or monthly or backup one time only.

7. 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:
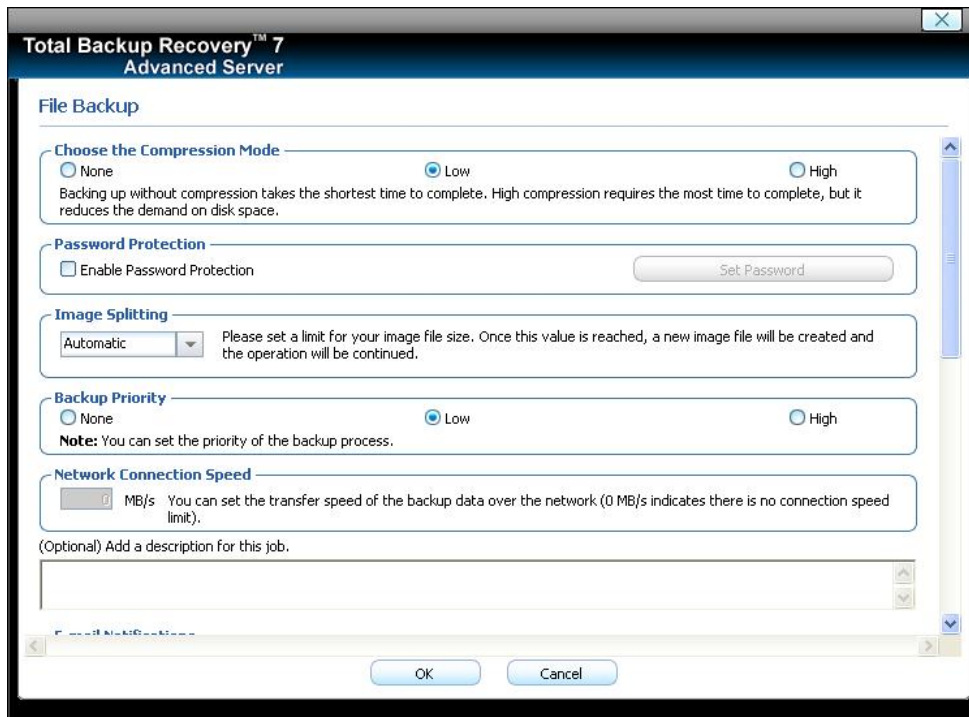
*Optional Advanced Settings

8. 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.

9. 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.

(1) FTP information – Enter the address and port.

(2) 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.

(3) FTP connection retries frequency – Enter Retry attempts (Maximum of 100 times), Delay between retries (Maximum of 600s).

(4) Data connection type – Choose one type: PASV or PORT.

(5) 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 weekly or monthly backups.

Note
If you select weekly or monthly, then the program will make a base backup at 1st backup of each week or each month, after which the incremental backup will be made, and this base and incremental backup files will be kept in one backup set only.

If you set the **Quota Management** checkbox to "Keep 3 Backup Sets", then the program will reserve 3 backup sets only(backup setting number is 99). Take "monthly" for example: If you make a backup on 1st, 2nd, 3rd month each, then the 1st backup set will be deleted on the 4th monthly backup.

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 followings:

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.
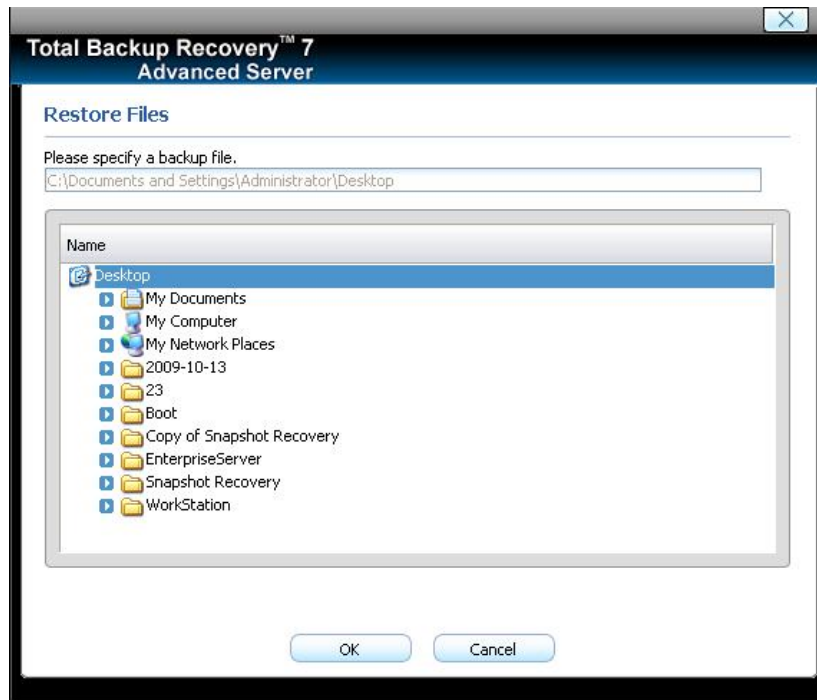
*Select backup image from network share

3. Select **Find file to restore** or **Browse and Select file to restore** and click **Next**. If you select **Browse and Select file to restore,** please select the backup point you want to restore from the list.

4. Select the file(s) you want to restore.

5. Select a location to save the restored files:

(1) 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.

(2) 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.

(3) 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.

6. Click **Next** to start the restore after confirming the source and the destination.

7. 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 followings:

39

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.

(1)Select the checkbox if you would like to modify the destination partition size.Do not check the box if you have multiple systems or a hidden partition.

(2)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 **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 followings:

(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 systems

7. If you selected option **a**, double click the partition Capacity to be resized from the list. If you selected option **b**, skip to step 5.

41

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

9. Click **Next** to begin the restoration process after confirming all settings.

After the restore, it will reboot into Windows.

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 CloneDrive

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 **CloneDrive**.

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 Backup Recovery will try to clone again automatically.

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

4.6 Tools Tab

4.6.1 Create a Bootable Rescue Disk

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

2. Insert a blank Disc or USB device.

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

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

5. 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 Export PXE Image

Export the PXE image to restore system without using the Bootable Rescue Disk.

1. Click on the **Tools** tab or **Tools** menu, and select **Export PXE Image**.

2. Enter the destination path where you want to save the exported image and click **Goto,** or select the destination path locally or remotely and click **Next**.

3. Click **Finish** to return to the main console, or click the storage path to view the PXE Image.

45

4.6.5 Convert Backup to Virtual Disk

1. 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.

2. Login the VMware official website, download "VMware Virtual Disk Development Kit" from http://communities.vmware.com/community/developer/forums/vddk, and then install it;

3. 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";

4. 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);

5. 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.

6. 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.

4.6.6 iSCSI Initiator

First, ensure that the iSCSI initiator is installed on the machine. On Windows Vista, it is installed by default; other Windows systems require a download and manual installation. With this feature, users may connect to the iSCSI device and access a great deal of information and configuration options.

1. Click on the **Tools** tab, and select **iSCSI Initiator**.

2. Select the **Discovery** tab.

3. Click **Add** and enter the **IP address or DNS name** and **Port number** for the Target Portal on which you would like to log on.

4. If your Target Portal requires Chap for authentication, click **Advanced**. Then select the **Chap logon information** option and enter the **Target secret**. Click **OK** twice to return to the iSCSI Initiator Properties dialog.

5. Verify the **Target Portals** properties displayed on the Discovery tab.

6. Select the **Targets** tab to view a list of available targets which you can log on to. Note that the **Status** for these targets is shown as **Inactive** prior to login.

> **Tip**
> a. If your targets are not listed in the Targets tab, verify discovery and successful login by repeating Steps 3 through 6.
>
> b. If you successfully log into the Target portal but the target is still not listed, verify that the target has Logical Unit Numbers (LUNs) assigned to the server.
>
> c. If the target is still not listed, check the System Event Log for errors, resolve any issues noted in the log, and repeat Steps 2 through 5 to log on to the Target Portal.

7. Select the target that you want to log on to and click **Log On**.

8. Click **Advanced** and enter the username and password of the iSCSI target.

9. Verify that your target indicates "**Connected**" in the **Status** column.

Once connected, you can operate the connected iSCSI hard drive as you would a physical hard drive on your system (such as backup and restore).

Chapter 5: Recovery Manager

5.1 Enter Recovery Manager

To launch the Recovery Manager, press the **F4** after the system POST (Power-On-Self-Test), but before Windows® begins to load. Also you can enter the Recovery Manager manager via the following means, a bootable rescue disk, USB drive, USB key and PXE server.

> **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 backup 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.

5.1.3 Boot from PXE Server

If the operating system of the PXE Server is Windows Server 2003, you can enable and configure Windows Deployment Services (WDS), and then set the boot image as Total Backup Recovery boot.wim in the configuration options of Windows Deployment Services.

If you failed to configure WDS, you have to configure the TFTP Server and DHCP Server prior to booting from the PXE Server.

5.1.3.1 System Requirements for PXE

Intel 486 (or compatible) processor or higher

VBE2.0 Display Card or higher

256 MB of RAM or higher

5.1.3.2 Configuration of PXE Restore

When the operating system on a client PC cannot be accessed after a system crash, the System Administrator can use Total Backup Recovery's Recovery Manager mode (from the Client PC) to restore the system to a working status by using PXE Restore.

To do this, your Server PC and Client PC must have a network card which supports PXE Boot. You will also have to configure a DHCP Server and a TFTP Server to support the function of PXE Restore.

5.1.3.3 Configuration of a TFTP Server

Please follow the steps below to configure a TFTP Server.

Set the IP address of your server (example: 192.168.0.1). For best results, start the IP address with xxx.xxx.xxx.1.

Create a Root directory for the TFTP Server. For instance, set the C:\pxe_boot to be the Root directory (You can create the directory in any location on the TFTP Server and the directory can have any name). Then, copy all the files of Boot folder from directory of your exported PXE image to your root directory.

Select a tsize option for the TFTP Server.

5.1.3.4 Configuration of DHCP Server

Set the Boot File as boot\wdsnbp.com.

 Configure the Boot Server with the same IP address of your TFTP Server.

Create a new port for DHCP Server (The port can be named with any name). Then, set   the IP Address to be the IP Address of the TFTP Server, such as 192.168.0.1.

5.1.3.5 Configuration of Client PC

Enter the BIOS and set the boot mode as LAN Boot.

Turn on the DHCP and TFTP Servers. Restart the client PCPE.

You will be prompted to press F12 within 3 seconds to launch PXE booting process.

In the Recovery Manager, specify your network settings ([Refer to 5.2.8.1](#)) and restore your computer.

5.2 Recovery Manager Main Console

After you enter the T 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 Computer(s)

5.2.2.1 Back up My 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, integrity check, backup description, 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. 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 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.

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

11. Click **Next** to begin the restoration process.

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

5.2.5 Clone Console

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 Erase Data (Data Shredding)

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

1. Select **Tools** tab and click on **Data Shredding** icon.

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

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 Backup Image** icon.

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**.

> **Tip**
> Total Backup Recovery can also check the image file stored on a mapped drive. For more detail about map network drive, please refer to section 6.7.5.2.

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.

5.2.7.2 Check Hard Drive

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 partition 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 **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 **Tools** 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 Adaptor Configuration**. Or click the **Tools** menu and then select **Settings**, you will see the following screen.
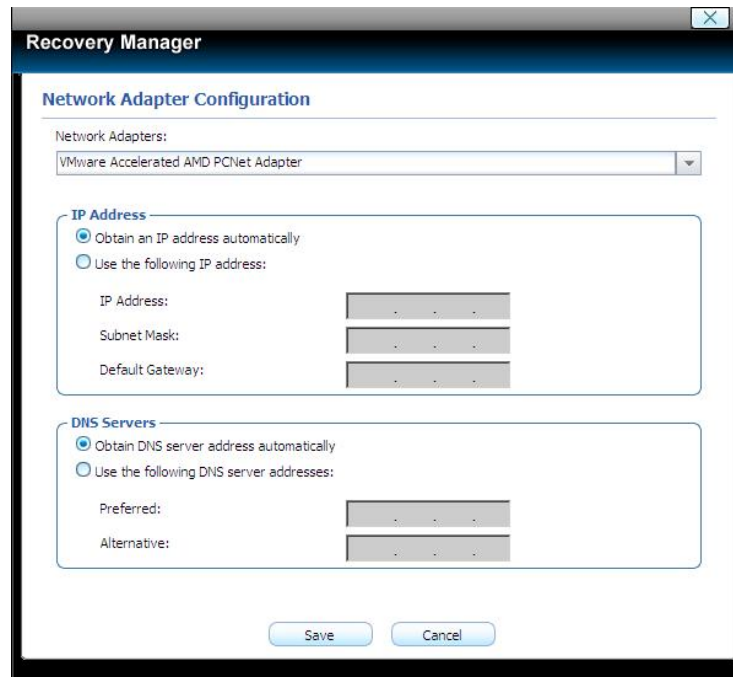
You can setup your network adaptor, IP address, Subnet mask and Default gateway from here.

If you have more than one network adaptor on your system, select the adaptor 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:

Obtain 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 iSCSI Initiator

First, ensure that the ISCSI initiator is installed on the machine. On Windows Vista, it is installed by default; other Windows systems require a download and manual installation. With this feature, users may connect to the iSCSI device and access a great deal of information and configuration options. For more details regarding the configuration of iSCSI initiator, please refer to 4.5.6.

5.2.8.4 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, or select the **Tools** menu and click **Unmount Image** 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.
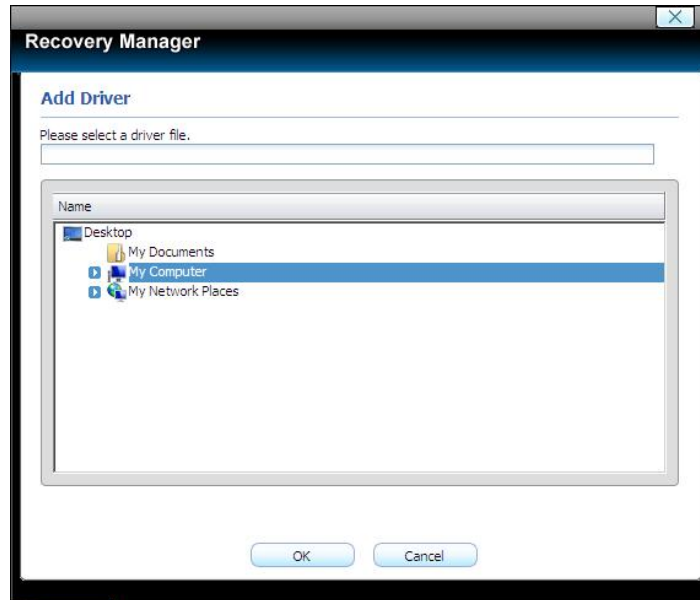
*Select a driver file on your local computer or shared network.

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.

> ⚠️ **Note**
> You must carefully read the shown warning message prior to processing.

1. Select **Tools** tab and click on **Fix System MBR** icon.

2. Click **OK** to confirm this operation.

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: The Administrating Console

To launch the Administrating Console, double-click the Total Backup Recovery 7 Advanced Server Administrating Console icon on your desktop, or select Start → All Programs → Farstone → Total Backup Recovery → Total Backup Recovery 7 Advanced Server Administrating Console.

6.1 Main Console
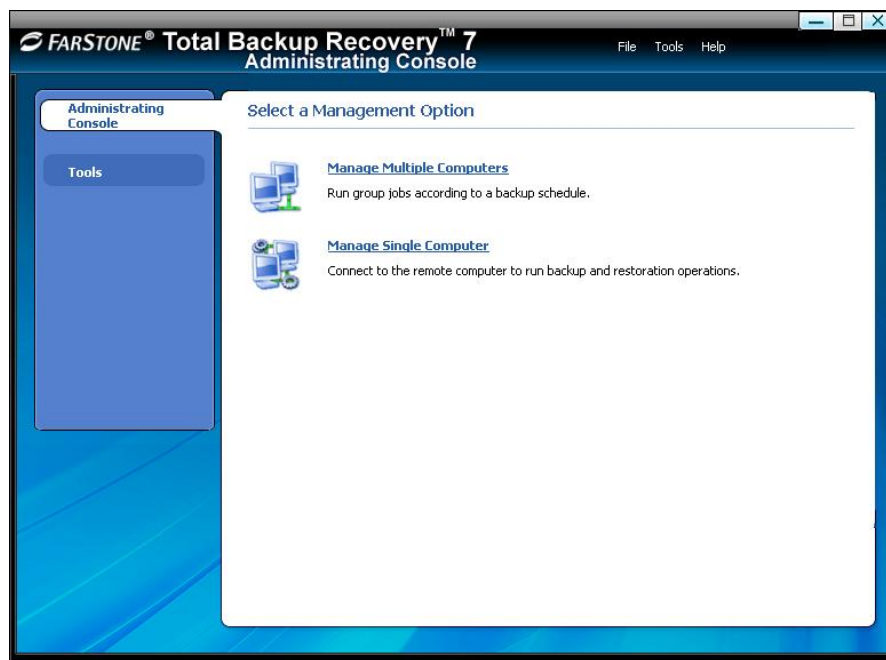
Manage Multiple Computers – Click this to allow all computers in a computer group to run backup jobs together.

Manage Single Computers–Click this to connect to a remote client computer by entering its username and password.

After selecting a management option, Administrating Console can manage the connected Client(s).

6.1.1 Quick Start

Under the Quick Start tab, you'll find a shortcut to Create a System Snapshot, File Backup and Back Up Computer(s).

Create a System Snapshot - With Total Backup Recovery, you can create a System Snapshot for any each connected Client according to your configured schedule. All System Snapshots reside in the protected, hidden Total Backup Recovery Secure Area.

File Backup - Manually select files or folders on clients' hard drives to be automatically backed up at set intervals.

Back Up Computer(s) - Back up the clients' hard drives or selected partitions, which can be used to restore the client's system or copy his system information to a new hard drive.

6.1.2 Client List

To make any computer on the network under control, Click on **Add Client** to enter the computer name/ the IP address, or click **Browse** to search the client computer through the network. And then click **OK** to access it.

Each Client is represented by an icon showing its Connection and Authorization status, along with its operating system type and a status display of the System Snapshot feature.

Connection Status- each client's accessibility will be indicated as follows:

• **Ready** - the client is online and the Remote Console can manage this client.

- **Inaccessible** - the client is online, but the Remote Console cannot control the client.

- **Off-line** - the client is not currently connected to the Administrating Console.

Authorization Status indicates whether or not the client has been authorized (licensed).

PC Type shows the current operating system as **Server** Client or **Workstation** Client.

Snapshot Status: the System Snapshot's function will be indicated as follows:

- **Enabled** - System Snapshot is turned on.

- **Disabled** - System Snapshot is turned off.

- **N/A** - System Snapshot was erased during a system restoration and it is not available unless you enable System Snapshot manually.

Selected Clients or Groups can be controlled or configured in the Client List window:

- **Client Authentication —**Click on **Client Authentication,** or right-click on a client and select **Authentication**. Enter the user name and password of the client. If the computer is in a domain, the client must be authenticated under an administrator account. To operate all functions locally, select the **Enable client UI** checkbox. The client UI will be unavailable if this checkbox is deselected.

- **Enable/Disable System Snapshot —** System Snapshot becomes available only if the selected Client Module installs System Snapshot feature. Right-click on a client and select **Enable System Snapshot** or **Disable System Snapshot** to change the System Snapshot status for it.

- **Enable/Disable Client UI —**You must authenticate the selected client before operating this function. Right-click on a client and select **Enable Client UI** or **Disable Client UI** to allow the client to operate functions locally or not.

- **Jobs** – Click on **Jobs**, or right-click on a client and select **Jobs** to view existing Snapshot, Complete Backup, and File Backup jobs.

- **Snapshot —** (available only if the selected Client Module installs the System Snapshot feature.) Set the frequency for the automatic creation of System Snapshots, 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

Create a Snapshot every n hour(s) - Create a Snapshot every 1 to 24 hours.

Create a Snapshot at system startup - Create a new System Snapshot automatically every time the computer boots up.

Intervals for automatic restoration

Restore computer at every startup - Check this box if you want Total Backup Recovery to restore to the most recent System Snapshot every time you start your computer. You have the option of restoring just the system partition or the entire hard drive. If you restore just the system partition, all Snapshots created before the restore point used will be available for system partition restoration only.

Set the time for rebooting a client computer –You can also select a time to automatically restart the computer. The client computer will be restarted and restored at those set times as well as at system startup. This option can be enabled only if you select option a.

Back Up Computer(s) –Total Backup Recovery shows all complete backup jobs related to this computer, there are a few functions you can perform on each back up computer job.

Detail - View detailed information about the backup jobs you've created, including the description, source, destination, and scheduled settings.

Edit Schedule - Schedule incremental updates for the backup job you've created; change other scheduled settings.

Offsite Copy – Set the remote FTP server to save another backup copy for this job.

Advanced –Receive the backup reports from Total Backup Recovery to your specified email address. Choose to execute operations before or after the backup. Users may select to perform the operations **before the command's execution is complete**; or **if the command's execution fails**, you can select to perform the operations after the command's execution is complete**.**

Back Up Now - Create an Incremental Backup immediately.

Delete - Delete the selected job.

File Backup –Total Backup Recovery shows all complete backup jobs related to this computer, you'll see the following options under each file backup job:

Detail - View detailed information about a backup job you've created, including the job name, job location, and scheduled settings.

Edit Schedule – Change scheduled settings for the backup job you've created.

Offsite Copy – Set the remote FTP server to save another backup copy for this   job.

Advanced –Receive the backup reports from Total Backup Recovery to your specified email address. Choose to execute operations before or after the backup. Users may select to perform the operations **before the command's execution is complete**; or if the command's execution fails, you can select to perform the operations **after the command's execution is complete**.

Add Files - Add file to your File Backup list.

Back Up Now - Run the selected incremental File Backup job immediately.

Delete - Delete the selected job.

Scheduling File Backups
1. If your system is busy, Total Backup Recovery will not 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:

Files in the Recycle Bin

Files in the System Volume Information directory, pagefile.sys, and the _$temp directory

Hiberfil.sys

Files with ".rit" and ".tmp" extensions

Microsoft Office temporary files

```
┌─────────────────────────────────────────────────────────────────┐
│ Files in Total Backup Recovery's installation folder              │
│                                                                   │
│ Files in the Backup Destination directory of the backup job currently │
│ running                                                           │
│                                                                   │
│ Files in the Temp directory                                       │
└─────────────────────────────────────────────────────────────────┘
```

Properties – Right-click on a client and select **Properties** to view client details like the computer name, workgroup, IP address, and connection status.

6.1.3 Group Jobs

Back Up Computers:

After a Complete Backup is created, you can perform following functions by clicking **Group Job,** and selecting **Back Up Computers**.

Detail - View detailed information about the backup jobs you've created, including Job Name, Source, Storage Path, Schedule, Description and the Clients involved.

Edit Schedule - Change the schedule settings for the clients in this group job.

Offsite Copy - Set the remote FTP server to save the backup image.

Advanced –Receive the backup reports from Total Backup Recovery to your specified email address. Choose to execute operations before or after the backup. Users may select to perform the operations **before the command's execution is complete**; or **if the command's execution fails,** you can select to perform the operations after the command's execution is complete**.**

Resend Job - Select the Client Module(s) and resend accidentally deleted jobs back to the selected one(s).

Backup Now – To immediately run the backup, click here.

Delete - Delete the selected job.

Status - View the Job Status here that includes the detailed information of the Job and the general information of the client operating system.

File Backup

After a File Backup Job is created, you can perform the following functions by clicking **Group Job,** and selecting **File Backup**.

Detail – View detailed information about the backup jobs you've created, including Job Name, Destination, and Schedule.

69

Edit Schedule - Change the schedule settings for the clients in this group job.

Offsite Copy - Set the remote FTP server for saving the backup image.

Advanced —Receive the backup reports from Total Backup Recovery to your specified email address. Choose to execute operations before or after the backup. Users may select to perform the operations **before the command's execution is complete**; or **if the command's execution fails**, you can select to perform the operations after the command's execution is complete.

Add Files - Add a file to your File Backup list.

Resend Job - Select the Client Module(s) and resend accidentally deleted jobs back to the selected one(s).

Backup Now – To immediately run the backup job, click here.

Delete - Delete the selected job.

Status - View the Job Status here which includes the detailed information of the Job and the general information of the client operating system.

6.1.4 View Logs

This feature displays all of the Total Backup Recovery events, including warnings, errors, and operations. You can double-click any event log to view its detail.

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

Delete - Delete the selected event(s).

Delete All - Delete all events.

Refresh – Refresh the current list.

6.1.5 Settings

You can click **Tools** menu on the top of the main console and then select **Settings** to configure some system options.
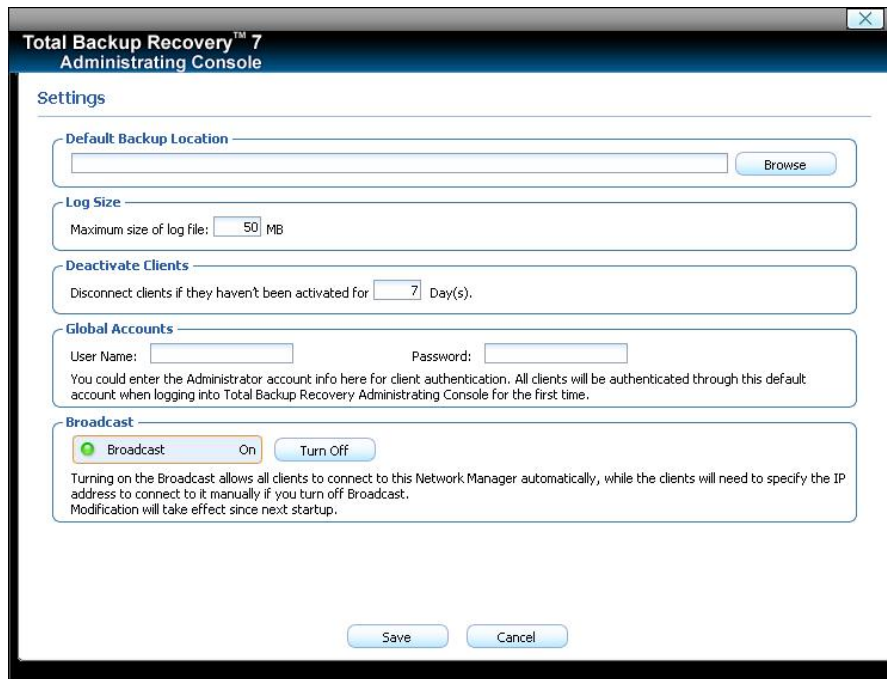
Default Backup Location

1. Click **Browse** to change the default backup location.

2. Select a computer from the list.

3. If required, enter a valid user name and password, and then click **OK**.

4. Select an existing folder or create a new subfolder by typing the new folder name, and then click **Create New folder**.

5. Click **OK** to accept the new setting.

(1)**Log Size -** specify the maximum size of the log file.

(2)**Deactivate Clients -** remove inactive clients from the client list according to your setting.

(3)**Global Account -** enter an administrator account as the default authentication account.

(4)**Broadcast –** enable/disable the Broadcast functionality. If there is more than one administrating console in the LAN, you must disable the broadcast and manually connect the Client Module by clicking **Add Client** in the Client List.

6.2 Backing up Client Computers

Total Backup Recovery backs up partitions or an entire hard drive as an image file, which can be

71

used to restore a system. The image file can be saved on a local hard drive or network share. It supports file systems like FAT16, FAT32, and NTFS, and data compression of up to 60%.

6.2.1 Create a System Snapshot

It is available only if System Snapshot is installed on the target Client Module(s).

1. Launch the Administrating Console.

2. Select **Manage Multiple Computers** or **Manage Single Computer**. And then make the connected computer(s) ready for operation.

3. Select Back Up, and click Create a System Snapshot.

4. Enter a name for the System Snapshot job, and click **Next**.

5. Select a workgroup, domain, or an individual computer you want to back up, and click **Next**.

> **Tip**
> The client has to be ready(Connection Status) prior to the operation.
>
> If you select a computer, workgroup, or domain that has already been scheduled for System Snapshots, you'll be prompted that the new operation will overwrite the original schedule for that client. You'll need to initialize the System Snapshot manually in the Client List if you continue.

6. After you choose a way to create the system snapshot, click **Next**.

(1)If you select **Start Now**, Total Backup Recovery will initiate the process after clicking **Next** twice.

(2)If you set a schedule, specify the frequency for creating or restoring from a System Snapshot automatically. More detail about scheduling, please refer to 6.1.2.

7. Confirm all the settings, and then click **Next** to launch the backup process or click **Previous** to modify any setting.

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

6.2.2 Create Complete Backups for Clients

6.2.2.1 Backing up Multiple Clients

Creating a Complete Backup

1. Launch the Administrating Console.

2. Click **Manage Multiple Computers**, and use Connection Status to make the Client ready for operations.

3. Select Back Up, and click Back Up Computer(s).

4. Select Create a New Complete Backup.

5. Enter a name for your new Complete Backup and click **Next**.

6. Select the System Partition or the Entire Hard Drive you would like to back up.

7. Store the backup file on a network share or locally on the client's computer. Click **Next.**

Store in a network share - Select a computer from the displayed list and enter a user name and password.

Store locally on the client computer - Follow the given example to enter a storage path for your file backup.

8. Select **Start Now** and click **Next** to proceed. Users may choose to schedule weekly or monthly backups; otherwise you may backup one time only.

> **Note**
> If you select weekly or monthly, then the program will make a base backup at 1st backup of each week or each month, after which the incremental backup will be made, and this base and incremental backup files will be kept in one backup set only.
>
> If you set the **Quota Management** checkbox to "Keep 3 Backup Sets", then the program will reserve 3 backup sets only(backup setting number is 99). Take "monthly" for example: If you make a backup on 1st, 2nd, 3rd month each, then the 1st backup set will be deleted on the 4th monthly backup.

9. If you click **Advanced**, some optional settings will be displayed; these include: compression mode, password protection, image split, integrity check, backup priority backup description and network connection speed.

10. Review your information and settings. Click **Next** to launch the backup process. Click **View Status** to monitor the backup progress.

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 the Administrating Console.

2. Click **Manage Multiple Computers**, and search for the remote computer group or domain.

3. Select Back Up and click Back up Computer(s).

4. Select Incremental Backup and click Next.

5. Select an existing job from the Job List.

6. Review your information and settings, and click **Next** to launch the incremental backup.   A backup progress bar popup if one computer is selected for back up.   Otherwise, click **View Status** to monitor the backup progress.

7. Click **Finish** to return to the main console.

6.2.2.2 Backing up Individual Computer

1. Creating a Complete Backup

2. Launch the Administrating Console.

3. Click **Manage Single Computer**, and select one from the Client list.

4. Enter the account of the remote computer.

5. Select Back Up, and click Back Up Computer(s).

6. Select Create a New Complete Backup.

7. Enter a name for your new Complete Backup and click **Next**.

8. Specify the Partition(s) or the Entire Hard Drive you would like to back up.

> **Tip**
> If you would like to restore with **Universal Restore** later, your backup must contain a system partition (e.g.C:).

9. Store the backup file on a network share or locally on the client's computer. Click **Next.**

(1)**Store in a network share** - Select a computer from the displayed list and enter a user name and password if required.

(2)**Store locally on the client computer -** Follow the given example to enter a storage path

for your file backup, or click **Browse** to save the backup image on the client's computer.

10. Select **Start Now** and click **Next** to proceed. You can also set to run back up weekly or monthly or back up one time only. optional settings will display; these include: compression mode, password protection, image split, integrity check, backup priority backup description and network connection speed.

11. Review your information and settings. Click **Next** to launch the backup process. A backup progress bar will be displayed.

12. 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 the Administrating Console.

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.   A backup progress bar will appear if one computer is selected for back up.   Otherwise, click **View Status** to monitor the backup progress.

6. Click **Finish** to return to the main console.

6.2.3 File Backup

6.2.3.1 Backing up Files for Multiple Computers

Creating a New File Backup Job

1. Launch the Administrating Console

2. Click **Manage Multiple Computers** to make the Client ready (Connection Status) for the operations.

3. Click Back Up. Click File Backup.

4. Select **New File Backup** to create a new job.

5. Enter a name for your new job.

6. Select the files you would like to back up.

7. Click **Delete Type** to remove file types you do not want to back up.

75

8. Click **Add New Type** to add a new file type to the backup list. Enter a file type extension and a description; or click **Add Group** to create a new file type group and enter a group name.

9. Click **Next**.

10. To store the backup file, select a location; you can store the file locally on the Client's system or in a shared folder.

(1)**Store in a network share -** Select a computer from the list and if prompted, enter a valid user name and password to access the computer.

(2)**Store locally on the client's computer -** Follow the given example to enter a storage path for your file backup

11. Click **Start Now** to proceed. You may run backups one time only or choose weekly or monthly backups.

> **Note**
> If you select weekly or monthly, then the program will make a base backup at 1st backup of each week or each month, after which the incremental backup will be made, and this base and incremental backup files will be kept in one backup set only.
>
> If you set the **Quota Management** checkbox to "Keep 3 Backup Sets", then the program will reserve 3 backup sets only(backup setting number is 99). Take "monthly" for example: If you make a backup on 1st, 2nd, 3rd month each, then the 1st backup set will be deleted on the 4th monthly backup.

10. If you click **Advanced**, optional settings will appear; these include: backup priority, network connection speed, compression mode, password protection, image split and backup description.

11. Review your information and settings, and click **Next**. Click **View Status** to monitor the backup progress.

12. Click **Finish** to return to the main console. Or click **Schedule Incremental Backup** to specify your preferred **Schedule Settings**. By doing so, you can choose to repeat the backup operation at any scheduled time.

Updating a File Backup Job

1. Launch the Administrating Console.

2. Click **Manage Multiple Computers**, and search for the remote computer group or the domain.

3. Select Back Up, and click File Backup.

4. Select Incremental File Backup, and click Next.

5. Select an existing job from the Job List.

6. Review your information and settings, and click **Next** to launch the incremental backup.

7. Click **Finish** to return to the main console.

6.2.3.2 Backing up Files for Individual Computer

Creating a New File Backup job

1. Launch the Administrating Console.

2. Click **Manage Single Computer**, and select one from the Client list.

3. Enter the account for the remote computer.

4. Click Back Up, and then File Backup.

5. Select **New File Backup** to create a new job.

6. Enter a name for your new job.

7. Select the files you would like to back up.

(1)Click **Delete Type** to remove files you would not like to back up.

(2)Click **Add New Type** to add a new file type in to the backup list. Enter a file type extension and a description, or click **Add Group** to create a new file type group and enter a group name

8. Click **Next**.

9. Select a location to store the backup file, (e.g. on a shared folder or locally on the Client's system)

(1)**Store in a network share -** Select a computer from the list and if prompted, enter a valid user name and password for access.

(2)**Store locally on the client computer -** Follow the given example to enter a storage path for your file backup

10. Click **Start Now** to proceed. You may back up weekly or monthly or one time only. If you click **Advanced**, optional settings will appear; these include: backup priority, network connection speed, compression mode, password protection, image split and backup description.

11. Review your information and settings, and click **Next**. For best results, close all of the files you would like to back up prior to launching your backup job. A progress bar will appear.

12. Click **Finish** to return to the main console. Or click **Schedule Incremental Backup** to specify your preferred **Schedule Settings**. By doing so, you may choose to repeat the backup operation at any scheduled time.

Updating a File Backup Job

1. Launch the Administrating Console.

2. Click **Manage Single Computer**, and connect to the remote Client Module by entering the right account of the remote computer.

3. Select Back Up, and click File Backup.

4. Select Incremental File Backup, and click Next.

5. Select an existing job from the Job List.

6. Review your information and settings, and click **Next** to launch the incremental backup.

7. Click **Finish** to return to the main console.

6.3 Restoring Client Computers

The restoration option is only available for **Managing Single Computer**. Total Backup Recovery can restore the connected client's system from an existing image file partition(s) or from an entire hard drive. The image file can be stored on a local hard drive or a shared network.

6.3.1 Return to a System Snapshot

1. Go to the Administrating Console and click **Restore**.

2. Click Return to a System Snapshot.

3. Select the computer you want to restore and click **Next**.

> **Tip**
> The client has to be ready (as shown in Connection Status) prior to the operation.

4. Select a date from the calendar and the System Snapshot you want to restore from. Click **Next** to continue.

5. Select to restore the entire hard drive or just the C: drive. Click **OK** to initiate the restore process.

Note
If you restore just the C: drive, Total Backup Recovery will restore the files on the C: drive partition only. After the restoration, all Snapshots created before the selected Snapshot will able to restore the C: drive only.

6. A pop-up window will prompt you to restart the client system to complete the restoration process. Click **OK** to continue, or click **Cancel** to exit.

7. Click **Finish** to return to the main console.

6.3.2 Restore Your Computer

To restore a partition or the entire hard drive on a client computer

1. Launch Administrating Console.

2. Click **Manage Single Computer**, and select one from the Client list.

3. Enter the valid account for the remoter computer.

4. Select Restore, and click Restore Your Computer.

5. From the list, select the computer you want to restore and click **Next**.

Tip
The client has to be ready (Connection Status) prior to the operation.

6. Select a backup image from the list, or **click here** to select an image file stored on a network share. Click **Next** to continue.

7. Select a Complete Backup point or any Incremental Backup point to restore from, and click **Next**.

8. Select to restore a single partition or the entire hard drive, and click **Next**.

9. 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, skip to step 9.

10.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.

11. 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 the Client Computer to reboot into Farstone Recovery Environment if you select to restore the system partition or the entire hard disk.

12. Click **OK** to enter the FarStone recovery environment to complete the restoration process automatically.

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

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

The Client Module will need to reallocate space for the secure area if you 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.

6.3.3 Perform Universal Restore

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

1. Launch Administrating Console.

2. Select Restore, and click Restore Your Computer.

3. From the list, select the computer you want to restore and click **Next**.

4. Select a backup image from the list, or **click here** to select an image file stored on a network share. Click **Next** to continue.

5. Select a Complete Backup point or any Incremental Backup point to restore from, and click **Next**.

6. Select to restore with **Universal Restore**, and click **Next**.

7. When the dialog box appears, click OK to restart the selected client system into Farstone Recovery Environment to begin the restore process, or **Cancel** to exit.

After client computer restarts to complete the **Universal Restore**, he will need to do the following:

1. Select to restore a single partition or the entire hard drive, and click **Next**.

2. 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 begin restoration after you carefully read the warning message.

3. 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 5.

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

5. Click **Next** to begin the restoration process.

After the restoration, it will reboot into Windows.

You will need to reallocate space for the secure area if you 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.

6.3.4 Restore Files

1. Launch Administrating Console, and click **Restore.**

2. Click Restore Files.

3. From the list displayed, select a computer to restore and click **Next**.

> **Tip**
> The client has to be ready(Connection Status) prior to the operation. You can select only one computer at a time in step 3.

4. Select an image file from the list, or **click here** to select an image file stored on a network share. Click **Next** to continue.

5. 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.

6. Select the file(s) you want to restore from.

7. Select a location to save the restored files:

(1)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.

(2)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. It is recommended that you back up the folder prior to restoration. If several versions of a file are selected, they will be restored to the same location with the version number added to the file name.

(3)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 begin the restore process.

9. Click **Finish** to return the main console.

6.4 Tools Tab

Create a Bootable Rescue Disk - Create a bootable disk to recover from a system crash or hard drive failure from the Recovery Manager Mode. The operation process is the same as it in Remote Console. (Refer to 4.5.1)

82

Preview Backup Image - Browse and copy data on the preview drive in Windows Explorer before restoration. ([Refer to 4.5.2](#) for the operation detail)

Check Image Integrity - Confirm that a complete backup image file is valid and can be used for restoration. ([Refer to 4.5.3](#))

Export PXE Image - When you want to use Preboot Execute Environment (PXE), [follow 4.5.4](#) to export PXE image.

Install Components —Total Backup Recovery provides three installation methods; Remote, E-mail, and Local Installation.

Remote Installation

> **Tip**
> The remote installation tool can only deploy Total Backup Recovery components in Windows XP or Windows Server 2003 Edition. These operating systems require local or E-mail Installation.
>
> Before starting a remote installation, you must:
>
> 1. Install Remote Console on your local computer prior to the remote installation.
>
> 2. Confirm that the firewall on the target computer allows File and Printer Sharing.
>
> 3. Make sure the share name ADMIN$ is accessible on the target computer. The registry key value under:
> HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\lanmanserver \AutoShareServer on the target computer should be set to 1.
>
> 5. Configure the "**Network Access:** Sharing and security model for local accounts" in the Local Security Policy on the target computer to "Classic - Local users authenticate as themselves".

1. Click on the **Tools** tab, and select **Install Components**.

2. Select Remote Installation and click Next.

3. Enter the computer's name, the user name, the password and the domain for the remote computer.

4. Specify an installation path.

5. Select to either enable or disable the interface for the remote Client Module.

83

6. Select the option at the bottom to restart remote computer automatically. If you de-select this option, the remote client system will need to restart manually to complete the installation.

7. Confirm all the configuration information, and click **Next**.

8. Enter the User Account of the remote computer, and click **OK**.

9. The software will now start to install. When the installation is completed, click **Finished** to exit.

E-mail Installation

1. If the Remote Installation function is not available, you can email Client Module installer to selected client system(s).

2. Select **E-mail Installation** in the main interface. If you have configured your Email account, please skip to step 3.

Note
If there is no mail software installed on the client system or if the mail software is never configured, you can not install via Email.

---

3. Configure your E-mail account as follows:

(1)Go to the **Tools** menu in the Outlook Express, and click on **Accounts.**

(2)Click **Add** and select **Mail**.

(3)Enter your name as you want it to appear on your emails, and click **Next**.

(4)Enter an email address which includes a user set up in webmail and @yourdomain.xyz, and then click **Next**.

(5)Set the server type as **POP3**.

(6)Enter the name of the incoming and outgoing mail servers, and click **Next**.

(7)Enter your email address for the **Account Name**. Enter the password you set for this account.

(8)Click **Next**, and then click **Finish**.

(9)Select the account you just created, and then click on **Properties**.

(10)Select the **Servers** tab

(11)Under Outgoing Mail Server, check the box next to **My server requires authentication** and click **OK**.

4. Enter the client account you want to send this mail.

5. Click **Send**.

6. After this mail is received, the client can visit the provided link and operate the manual installation at any time.

Chapter 7: 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 Advanced Server.

System Snapshot
System Snapshots are incremental points-in-time of a computer system's state at a given moment. Total Backup Recovery 7 Advanced Server 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.

Chapter 8: Appendix

8.1 Frequently Asked Questions

Q. How long does it take Total Backup Recovery 7 Advanced Server to back up or restore a system?

A: This depends on the amount of data on your system. However, FarStone Total Backup Recovery 7 Advanced Server'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, Total Backup Recovery 7 Advanced Server 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, Total Backup Recovery 7 Advanced Server will prompt you with this notice.

Q. Do I need to do anything before installing the Total Backup Recovery?

 A: We recommend running Windows CheckDisk to scan for hard drive errors. CheckDisk can be started by running the Chkdsk.exe from the command prompt or by using the Client Module Pre-Installation Checklist.

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 Total Backup Recovery 7 Advanced Server fix my system after my hard drive has been accidentally formatted or repartitioned?

A: Yes, if Total Backup Recovery 7 Advanced Server was installed prior to the incident.

Q. Can I use disk tools such as Fdisk, PartitionMagic and Norton Speed Disk after installing Total Backup Recovery 7 Advanced Server 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 Total Backup Recovery 7 Advanced Server protect all three systems?

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

Q.   Does Total Backup Recovery 7 Advanced Server work in Windows Safe Mode?

A: Total Backup Recovery 7 Advanced Server does not work in Windows Safe Mode.

Q.   Can Total Backup Recovery 7 Advanced Server protect my PC from a destructive virus?

A: While Total Backup Recovery 7 Advanced Server 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.   I've installed Total Backup Recovery 7 Advanced Server on Windows 2003 Server. Why can't I back up data through VSS?

A: VSS requires an NTFS partition in the system. Please check to see if your computer has an NTFS partition and that all other VSS requirements are met.

Q.   I'm trying to back up data to a computer on the network. Why can't I access the network share after I have entered a valid user name and password?

A: Follow these steps to reconfigure the Local Security Settings of the remote computer:

Configuration

Select Start → Control Panel → Administrative Tools → Local Security Policy.

Locate **Security Settings → Local Policies → Security Options** from the directory in the left window.

Double click on Network access: sharing and security model for local accounts.

Select Classic - local users authenticate as themselves, and click Apply.

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

A: If there are too many dispersed/fragmented files in your system partitions, Total Backup Recovery 7 Advanced Server 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 Snapshot on a FAT32 partition, Total Backup Recovery 7 Advanced Server will divide the Secure Area, which takes much longer time than an installation on NTFS partitions.

Q. Why couldn't I run the Administrating Console following installation?

A: Two or more Administrating Consoles may have been installed on the same LAN. Total Backup Recovery 7 Advanced Server will allow only one Administrating Console to operate at any given time.

Q. Why couldn't I find the backup file I wanted after I ran a backup for several computers?

A: Backup times for different systems vary according to network times and the size of the backup. You may have to wait for the entire backup job to finish before you can locate the file in question.

Q. How can a Client connect to Administrating Console automatically?

A: Enable the broadcast functionality on the Administrating Console allows client to connect automatically. If this doesn't work, you may have to turn off the broadcast feature and connect from the Client manually.

> **Tip**
> When the Client connects automatically (via broadcast mode), the Administrating Console can use a dynamic IP address. When the Client connects manually, the Administrating Console should reside on a static IP address.

Q. How can a Client PC be restored following a data disaster?

A: There are three ways to boot the Client:

Press the **F4** upon boot up to enter PE.

Use a Bootable Rescue Disk to enter PE.

Configure PXE and remotely boot the Client to PE.

Upon entering PE:

Select a System Snapshot to restore from.

Connect to the network or other locally attached storage and select a Complete or Incremental Backup Image to restore from.

Q. When do I have to manually initialize the Secure Area of a Client PC?

A: If a restoration results in changes to the partitions that hold the hidden files, the Secure Area will have to be initialized. When the Client computer restarts, a prompt to initialize the Secure Area will appear.

Q. How can I back up and 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 in PE.

Q. What happens if a Client 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 scheduled backup at next boot up.

Q. Does the Total Backup Recovery conflict with any other applications?

A: Please close and uninstall the following applications when launching Total Backup Recovery: Utimaco SafeGuard,

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

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

Q. Why do I have to authenticate (license) Total Backup Recovery on a Client PC after I restored it from a System Snapshot?

A: Only if you restore from the initially created System Snapshot, all data from the backup point you select is recovered, including your old authentication status. If that authentication status shows the Client as unlicensed, you'll have to re-enter the serial number.

Q. Which partition types does Total Backup Recovery 7 Advanced Server recognize?

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

Q. What do I do if Total Backup Recovery Client does not respond to the backup command given from Administrating Console?

A. Please restart the client computer. After the client is restarted, within Administrating Console, under "Group Job" tab, select "Job Resend" function to resend the backup request.

Q. Why didn't Total Backup Recovery 7 Advanced Server initiate my Outlook when I click on "Email Installation"?

A. The configuration setting of the Internet Explorer may be incorrect. Launch your Internet Explorer, select **Tools->Internet Options->Programs->E-mail**, and modify E-mail setting manually. We recommend using either Microsoft Office Outlook or Outlook Express.

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) ->Download ->VMware SDK&APIs ->Virtual Disk ->VMware Virtual Disk Development Kit

Q. Why do I see message like "Cannot connect or connection failure" when I execute some network operations?

A. Please check the firewall to confirm it is closed or it is set as Exceptions.

Q. Under Windows 2000, why does the error occur even if I enter the right account in Login Setting?

A: It is because that the privilege of the default user in Windows 2000 is not enough. You need to add it manually by doing the following operation: Select **Start → Control Panel → Administrative Tools → Local Security Policy → Local Policies → User Rights Assignment →Act as part of the operating system → Locations**, and then select the user into the list.