



Kernel for FAT+NTFS

“Successfully Recover Data from Formatted or
Corrupt FAT and NTFS Partitions”

PRODUCT GUIDE

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1. Introduction to Kernel for FAT and NTFS

Welcome to the user manual for Kernel for FAT and NTFS, the most effective and easy to use data recovery software that helps you to recover data from lost, deleted, formatted and corrupted FAT and NTFS partitions on Windows 95, Windows 98, Windows ME, Windows 2000, Windows XP, Windows 2003, and Windows Vista hard disk or data storage media. This user manual comprises step by step guidelines on using Kernel for FAT and NTFS.

1.1 Using this Manual

This user manual is intended to guide users on using Kernel for FAT and NTFS. We suggest that first time users should read this user manual completely and carefully before proceeding to use the software. However, if you are an experienced user, you can use the table of contents to find out information pertaining to the tasks that you need to perform by using Kernel for FAT and NTFS.

You can use the table of contents to navigate through different sections of this user manual. The table of contents lists all the sections that are contained in this user manual in chronological order. The user manual comprises the following sections:

- Introduction
- Getting Started
- Software Interface
- Recovering Windows Data
- Full Version
- Support
- Troubleshooting
- Legal Notices

Certain abbreviations have been used throughout this manual. For clear understanding of the contents of this user manual, please go through the list of abbreviations, mentioned below, before reading the manual.

1.1.1 List of Abbreviations

FAT: File Allocation Table

NTFS: New Technology File System

RAM: Random Access Memory

MB: Mega-Byte

GB: Giga-Byte

1.2 About Kernel for FAT and NTFS

Kernel for FAT and NTFS – Data Recovery Software is a software utility developed for data recovery from hard disk and other storage media.

Kernel for FAT and NTFS – Windows Data Recovery Software recovers windows operating system data, lost due to following reasons:

1. Format of a Windows installed hard drive
2. Virus, worm, infected or corrupted files
3. Partition structures are damaged or deleted
4. Unexpected system shutdown or software failure
5. Windows registry corruption

Kernel for FAT and NTFS - Windows Data Recovery Software can recover files and folders from disks on which the following components have become corrupted (or even if they are completely missing):

- Partition table (main or extended)
- Boot Sectors (sometimes called "BIOS Parameter Block" or BPB)
- File Allocation Table
- Root Folders
- Master File Table

1.3 Salient Features

Salient features of Kernel for FAT and NTFS include:

- Recovery of deleted, damaged and inaccessible partitions
- Recovery of missing files(s) and folder(s)
- Data recovery after the loss of MBR, Boot sector or File Allocation Table corruptions
- Recovery of data that was lost due to accidental formatting of your hard disk
- Recovery of lost data due to variety of viruses(s)
- Full support for long file names

- Recovery possible even if the disk partition has been formatted with different file system type or with different parameters
- Recovery even if the MFT is corrupted
- Full support for long file names
- Full support for IDE, EIDE, SCSI and SATA, PAN, ZIP and USB drives
- Live Update available for the software, to make sure that you always have the latest version of the software

1.4 Who Should Use this Software?

The capability and potential of Kernel for FAT and NTFS to recover deleted, damaged and formatted windows hard drive partition makes it appropriate for use by every computer user. Previously, the hard drive recovery was manually performed by professionals or experienced user. Now with Kernel for FAT and NTFS, any inexperienced or home user can easily use it to recover data from the corrupt, formatted and deleted partitions which leads to data loss scenarios.

The data loss scenarios could have been caused due to accidental file deletion, file system corruptions, operating system corruptions, erroneous hard drive format operations and other logical problems to your computer system.

2. Getting Started

Now that you have understood the features and potential of Kernel for FAT and NTFS, you are ready to get hands on experience of the software. To start windows data recovery, you will first need to download and install this software.

It is strongly recommended that before installing Kernel for FAT and NTFS, you should go through the installation pre-requisites for the software to ensure that your computer is appropriately configured to run the software.


2.1 Installation Pre-requisites

The various pre-requisites for installing and running Kernel for FAT and NTFS can be broadly classified into two major categories – Hardware requirements and Software requirements.

2.1.1 Hardware Requirements:

The hardware requirements for installing the software are as follows:

- Pentium Class Processor
- Minimum 64MB RAM (128 MB recommended)
- 10MB for Software installation
- Disk Space - Enough space to save the recovered data

 You should have at-least 10 MB of free disk space if you want to save recovered data of 10 MB data.

2.1.2 Software Requirements:

The software requirements for installing the software can further be grouped into two categories – Operating system requirements and Supported file system requirements.

The requirements are as follows:

2.1.2.1 Operating System Requirements

Supported Operating Systems:

- Windows Vista
- Windows XP
- Windows 2003
- Windows 2000

- Windows 98
- Windows 95

2.1.2.2 File System Requirements

Supported file systems:


- FAT16
- FAT32
- NTFS
- HPFS
- NTFS5

2.2 Downloading Kernel for FAT and NTFS for the First Time

After checking your computer with the prescribed system requirements for Kernel for FAT and NTFS, you can download and install the software on your computer. You can buy full version of the software from any one of our authorized resellers – Element5, Asknet and 2CO.

If you want to try using Kernel for FAT and NTFS before buying it, you can download the evaluation version from the following link:

<http://www.nucleustechologies.com/Download-Windows-Data-Recovery-Software.php>

 You can recover data from the corrupted, formatted or deleted Windows partition; however, you cannot save the recovered data with evaluation version of the software.

2.3 Install Kernel for FAT and NTFS

After downloading the installer file for Kernel for FAT and NTFS, you can install the software by running the file. To install Kernel for FAT and NTFS:

1. Double-click the Kernel for FAT and NTFS installer.
2. Follow the on-screen instructions.

The **Setup Installation Complete** screen will be displayed. Click **Finish** to launch the software.

2.4 Start Kernel for FAT and NTFS

To start Kernel for FAT and NTFS:

Click the **Start → All Programs → Kernel for FAT and NTFS**

Alternatively, you can launch Kernel for FAT and NTFS by double-clicking the shortcut icon available on the Desktop and Quick Launch icon.


2.5 Uninstall Kernel for FAT and NTFS

You may need to uninstall Kernel for FAT and NTFS. To uninstall Kernel for FAT and NTFS:

1. Click the **Start → All Programs → Kernel for FAT and NTFS → Uninstall Kernel for FAT and NTFS**

A warning message will be displayed.

2. Click **Yes** to uninstall Kernel for FAT and NTFS.

 Before proceeding to uninstall Kernel for FAT and NTFS, you must ensure that the software is not running in system background.

You can alternatively uninstall Kernel for FAT and NTFS from the **Control Panel** by performing the following steps:

1. Click the **Start Menu → Control Panel** and then double click the **Add or Remove Programs** icon.
2. Select **Kernel for FAT and NTFS** and click **Remove**. A warning message will be displayed.
3. Click **Yes** to uninstall Kernel for FAT and NTFS.

3. Software Interface

Now that Kernel for FAT and NTFS has been installed on your computer, you can start using the software after getting acquainted with the software interface.

3.1 Menu-bar

The menu-bar of Kernel for FAT and NTFS comprises four main menus – Recovery, View, Tools and Help.

3.1.1 Recovery Menu

The **Recovery** menu comprises five menu items.

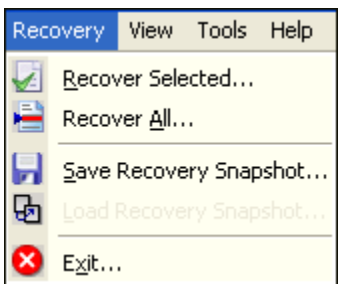


Figure 3.1: Recovery Menu

Menu items in the **Recovery** menu:

Field Name	Field Description
Recover Selected	Select to recover the selected files in the right pane of the window
Recover All	Select to recover all files in the right pane of the window
Save Recovery Snapshot	Select to save the scan information about the file(s) and folder(s) that have been found in the recovery process
Load Recovery Snapshot	Select to load the previously saved scan information. This option is disabled in Evaluation version
Exit	Select to close the software

3.1.2 View Menu

The **View** menu comprises three menu items.

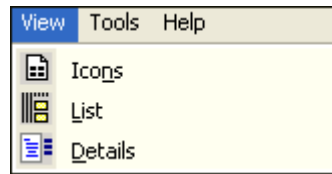


Figure 3.2: View Menu

Menu Items in the **View** menu:

Field Name	Field Description
Icons	Select to display the file(s) and folder(s) in windows standard small icon view style
List	Select to display the file(s) and folder(s) in windows standard list view style
Details	Select to display the details of the file(s) and folder(s) like File Size, Creation Date, and Type along with the name of the file or folder

3.1.3 Tools Menu

The **Tools** menu comprises five menu items.

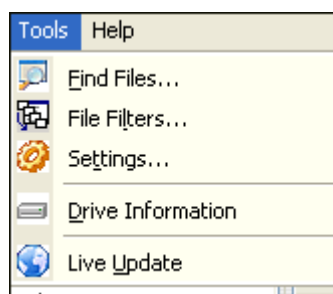


Figure 3.3: Tools Menu

Menu Items in the **Tools** menu:

Field Name	Field Description
Find Files	Select to search a particular file or file type in the data found
Find Filters	Select to filter only the file(s) that you want to recover and software will hide rest of the file(s)
Settings	Select to configure the settings of the software
Drive Information	Select to retrieve the information about the file system being recovered
Live Update	Select to get the latest version of the software available on Nucleus server

3.1.4 Help Menu

The **Help** menu comprises three menu items.

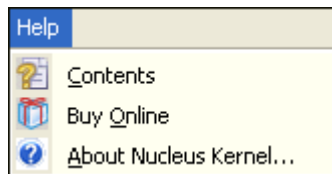








Figure 3.4: Help Menu

Menu items in the **Help** menu:

Field Name	Field Description
Contents	Select to view help information pertaining to performing various tasks using Kernel for FAT and NTFS
Buy Online	Select to visit buy online page of software on our website
About Kernel for FAT and	Select to view version-related and support information of

3.2 Tool-bar

The tool-bar in Kernel for FAT and NTFS is displayed below the menu-bar. It provides a convenient and user-friendly method to perform certain actions that can also be performed by using the menu-bar. Read the information in the table below to find out about the tool-bar buttons:

Button	Button Name	Button Description
	Recover selected	Recover the selected files in the right pane of the window
	Recover All	Recover all files in the right pane of the window.
	Save Recovery Snapshot:	Save the scan information about the file(s) and folder(s) that have been found in the recovery process
	Load Recovery Snapshot	Load the saved scan information
	Find File(s)	Search for particular files in the current recovery session
	Settings	This option configures the software. It provides the various options to control over the whole recovery process






Live Update

Updates the current software with the available version in the Nucleus server

3.3 Buttons Used

Apart from the standard options available in the menu-bar and the tool-bar, the following buttons are displayed on the main and other windows.


	Click to start the recovery process
	Click to go back to the previous screen
	Click to stop the scanning process


4. Recovering Windows Data


Now that you have complete familiarity of the user interface of Kernel for FAT and NTFS, you are ready to recover Windows data.


To recover Windows data:


1. Launch Kernel for FAT and NTFS. It shows all the detected drives in the left pane of the main window:
2. Choose the appropriate Physical Drive where all your deleted files, corrupted or formatted partitions are located and then select the scan type.

 Advance scan is recommended in case of recovering data from formatted partitions, OS re-installation and deletion of files long ago.


3. After choosing the physical drive and the scan type, click  button to display all the available portions in the selected storage device.

 If you don't get your Logical Partitions listed, you can use the "Search for Partition" option

4. Choose the logical drive or partition which has been formatted, corrupted to recover the file system in the selected partition. Click the  button to proceed with the scanning process.

5. Kernel for FAT and NTFS displays the file systems found in the selected partition on the left pane of the window. Select the file system and click the  button to show the recovered files and folders in the right pane of the window.

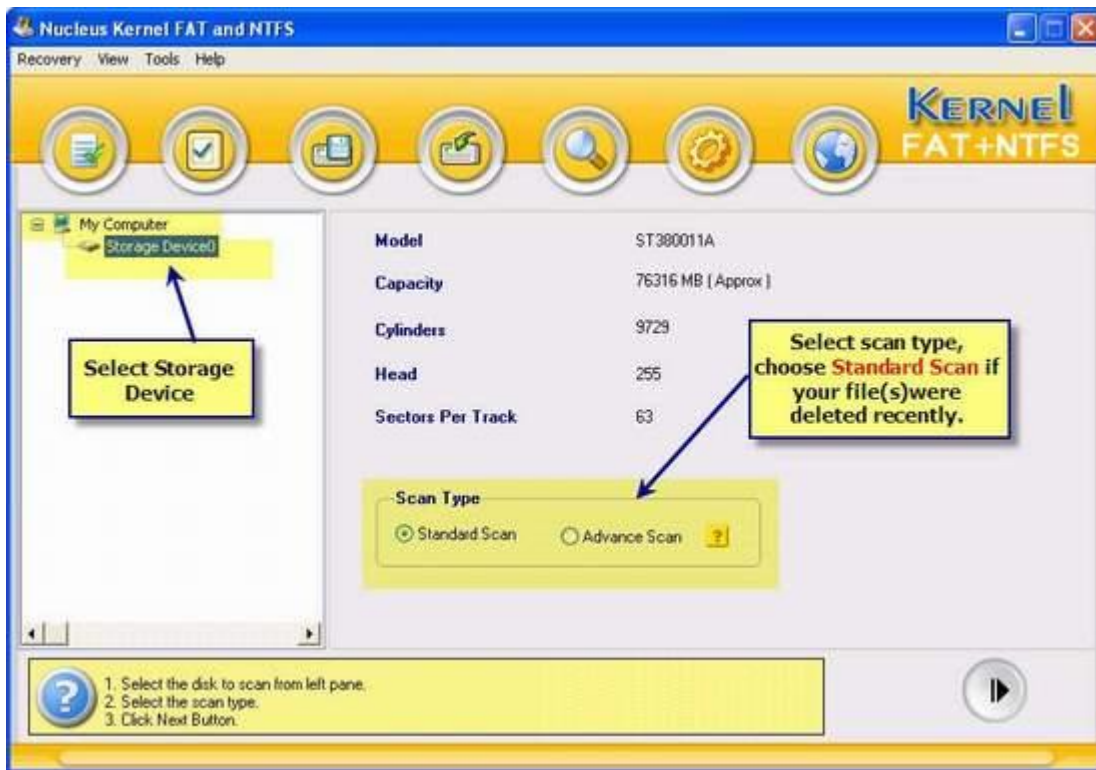
6. Select the files and folders that you want to recover and use **Recover Selected** and **Recover All** to save from Recovery menu.

 It's quite possible that Kernel for FAT and NTFS will show you more than one file system in the 5th step. Actually Kernel for FAT and NTFS uses very sophisticated algorithms for searching the data and identifying the file systems, so it would identify the file systems that you formatted long time ago. If you don't find your data in the file system you selected then you will need to press Back button and select another file system.


4.1 How to Recover Deleted Files?

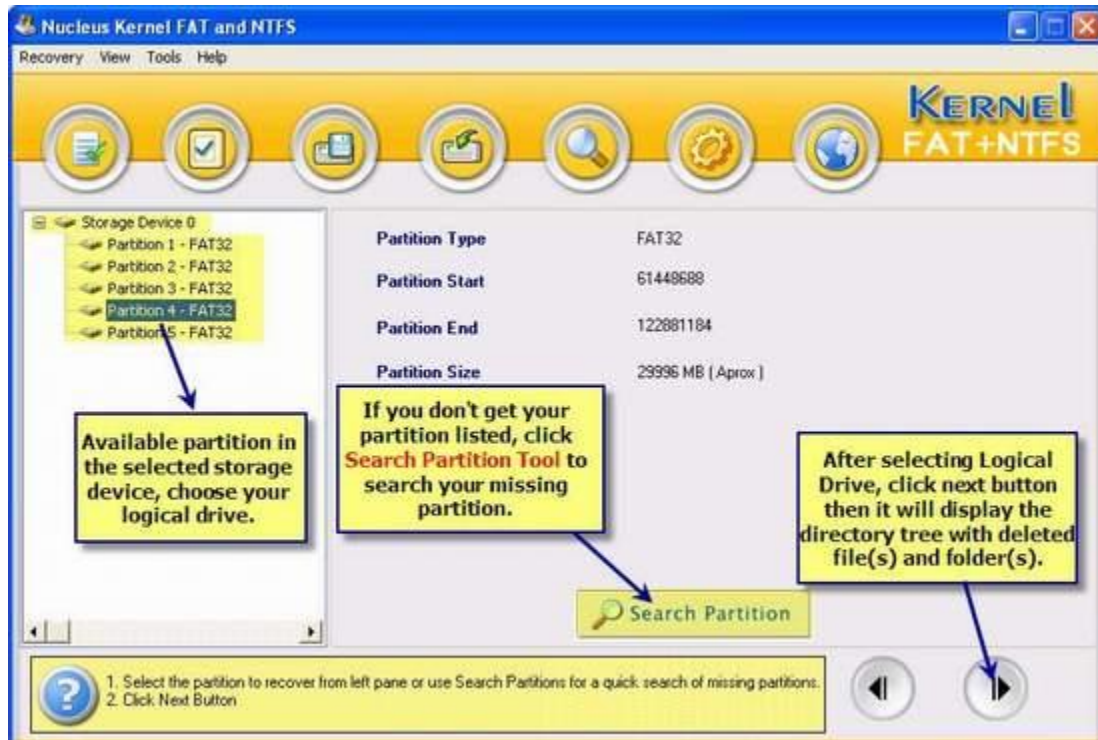
Know the steps to recover those files which were permanently deleted:

1. Launch Kernel for FAT and NTFS and select the detected drive. Also select the Scan type for scanning the drive:




Select Standard Scan option if the files were recently deleted or select the Advance Scan option if they were deleted long time back.

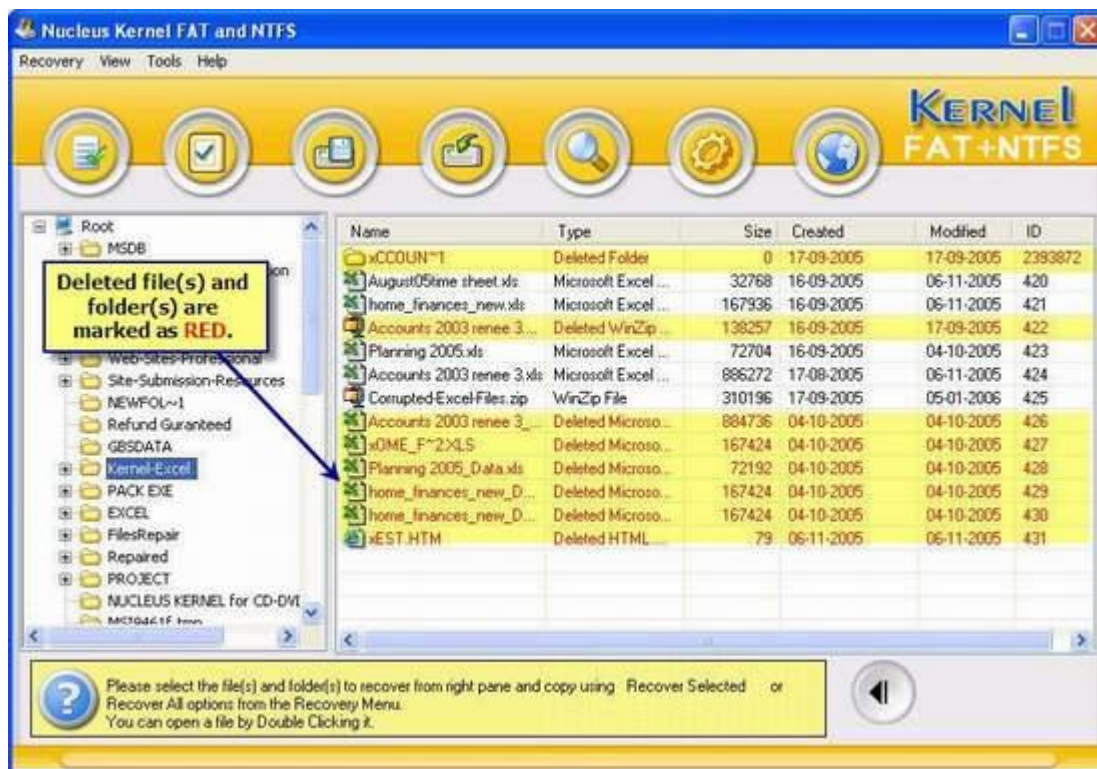
2. Click the  button to continue. Software will display the available partitions for the selected drive




Select the appropriate partition to recover deleted files and folders. Click Search Partition button if you do not find the partition listed in the left panel from which you want to perform the file recovery. Software will start searching for the missing and deleted partitions.



3. Click the  button to continue. Software will display the recovered files from the selected partitions after thoroughly scanning the drive.



Files and Folders which were permanently deleted and are now recovered by the software are listed in **Red** color in the tree.

 If the files and folders were not deleted recently then it is quite possible that you might not get the desired results while using **Standard Scan**. In this case you would need to select the **Advance Scan** and follow the same steps as described above. You may get the deleted folder(s) by virtual name like DIR123. You can rename the directories by pressing F2 on them.

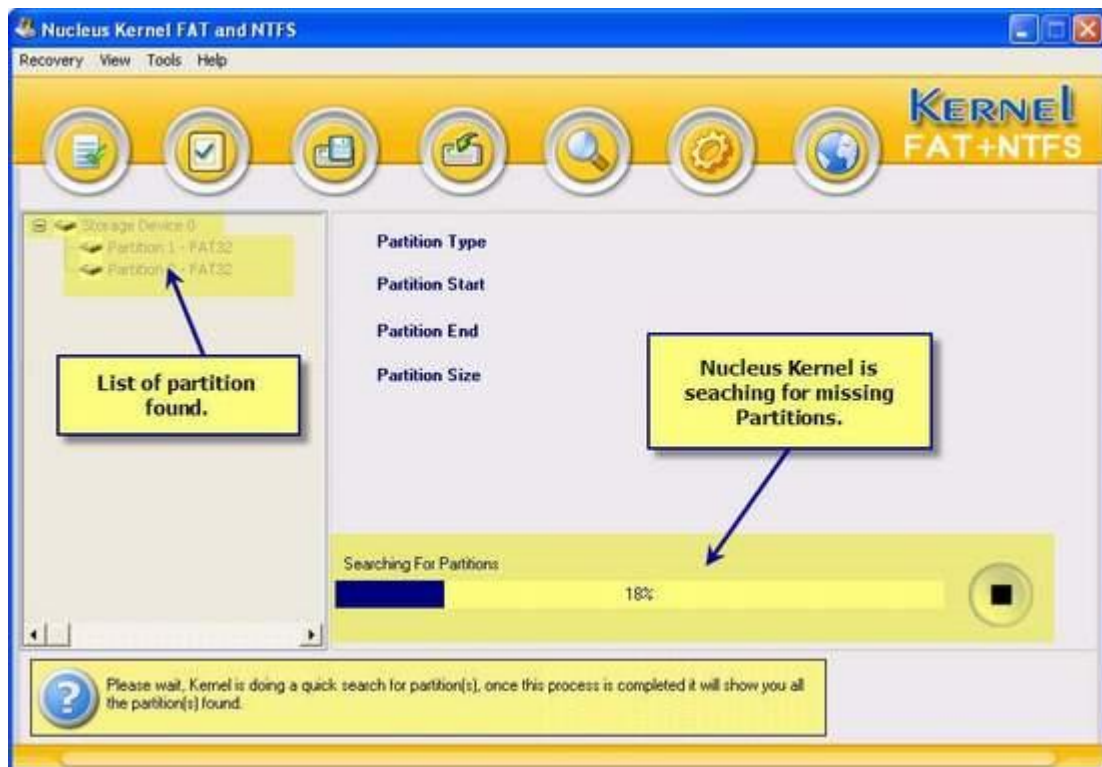
4.2 How to Recover from Missing Partitions?

Use **Advance Scan** option of Kernel for FAT and NTFS to recover the lost and missing partitions.

1. Launch the software and select the storage device from which you want to perform data recovery.
2. Click the **Search Partition** button to search for the partitions.



Software will start searching for the missing partitions. It will display the detected partitions in the left panel.



Now select the appropriate partition and perform the data recovery.

4.3 How to Recover from Formatted Partitions?

With Kernel for FAT and NTFS you can recover the partitions that were formatted with the same or different file system:

FAT32 Formatted as NTFS

NTFS formatted as FAT32

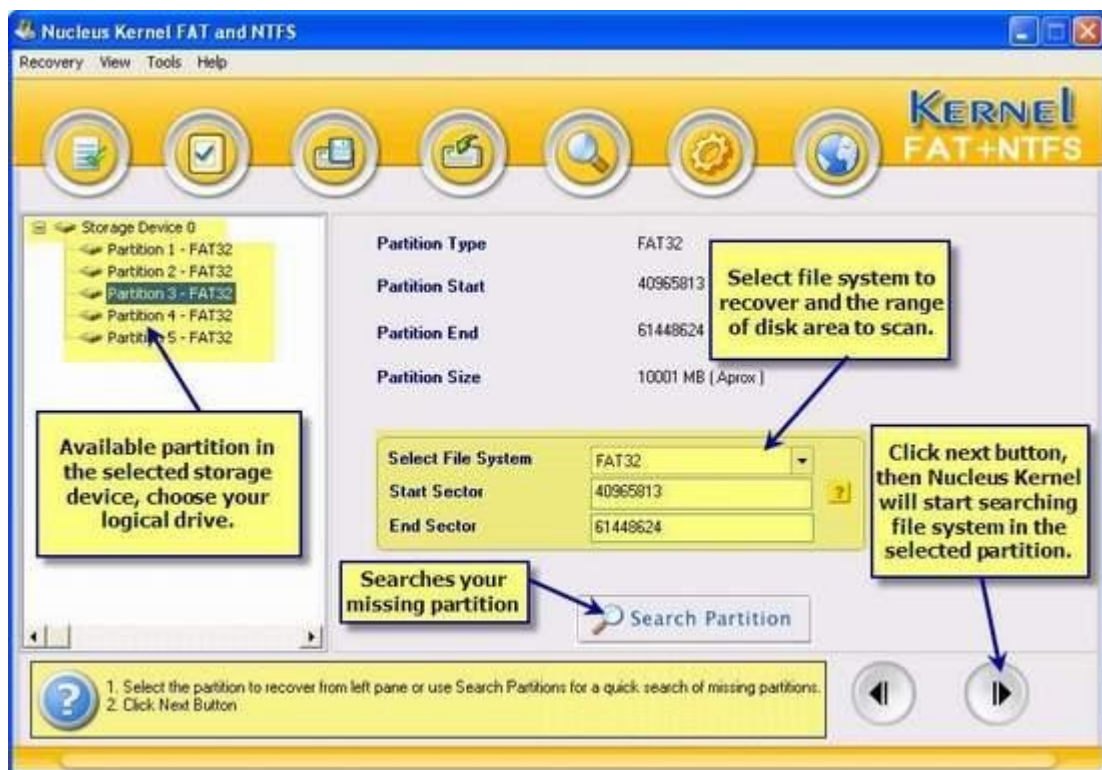
FAT16 formatted as FAT32

FAT32 formatted as FAT16

FAT16 formatted as NTFS

NTFS formatted as FAT16

1. Launch the software and select the Advance Scan mode for scanning the drive
2. Software will display the list of partitions found (formatted/lost/missing) in the Logical Drive.



Data can also be searched in sectors of the drive by typing the sector number and Kernel for FAT and NTFS will scan and recover from the mentioned sectors.

3. After this, software will start scanning the drive and perform recovery of files and folders from the recovered partitions which were formatted, lost or missing.

5. Full Version

Although you can use Kernel for FAT and NTFS evaluation version for free and experience the capabilities of the software, there are certain features that are not available in the evaluation version.

5.1 Requirement of Full Version

By using the evaluation version of Kernel for FAT and NTFS, you can recover and view the files and folders. However, you cannot save the recovered file(s) and folder(s).

With evaluation version, you cannot utilize the Load Recovery Snapshot feature which enables you to load the saved scanning process.

You will need to buy Full version of the software to save the recovered file(s) and folder(s) and to utilize the Load Recovery Snapshot option.

5.2 Purchasing Full Version

You can buy the full version of Kernel for FAT and NTFS from any one of our authorized resellers – Element5, Asknet and 2CO.

As soon the purchase transaction with our resellers gets completed, our sales team will send you an email comprising the URL to download the full version of Kernel for FAT and NTFS and activation details of the software.

6. Support

We have an extensive and efficient support system in place to assist our customers with all issues related to using Kernel for FAT and NTFS. The software comes with an embedded help manual that can be accessed by clicking **Help→Contents** in the menu-bar. You can also press the F1 key on the keyboard of your computer to access the embedded help of Kernel for FAT and NTFS.

You can access the online help for Kernel for FAT and NTFS at

<http://www.nucleustechnologies.com/Online-Helps.html>

View Animated Working Demo of the software at

http://www.nucleustechnologies.com/Animated_Demo_Windows.html

We also have live support wherein you can chat with our software experts at

<http://www.nucleustechnologies.com/Support.html>

To talk on phone with our software experts call:

Help line:

+91-9818725861

1-866-348-7872 (Toll Free for USA/CANADA)

You can also email us about your queries at;

sales@nucleustechnologies.com for Sales

support@nucleustechnologies.com for Support

contact@nucleustechnologies.com for General Queries

7. Troubleshooting

This section deals with your generic and specific queries pertaining to using Kernel for FAT and NTFS.

7.1 Common Issues

Why does Kernel for FAT and NTFS have limitations in evaluation copy?

The free evaluation version of Kernel for FAT and NTFS is intended to enable you to experience the capabilities of the software. You will need to buy the software to save the recovered data.

7.2 Frequently Asked Questions

How to Buy Kernel for FAT and NTFS?

You can buy Kernel for FAT and NTFS online at <http://www.nucleustechnologies.com/Buy-Windows-Data-Recovery-Software.php>

I have lost my full version for Kernel for FAT and NTFS. Can you help me?

Please email us at sales@nucleustechnologies.com. Please include your name, address, email address, and order confirmation number (if you have it). We will be happy to help you.

Will it recover the data from my Pen Drive?

Yes, Kernel for FAT and NTFS completely supports data recovery from Hard Drives, USB Drives, Pen Drives, Zip Drives, SCSI disks, Jazz and many other type of storage media.

I accidentally deleted the partitions and re-created the new partitions. After that I have copied some of my data back to new partitions. Will it recover from such cases?

Yes, just use Advance Scan and select the whole drive to scan in the next step. It will recover whatever old data is intact.

How much time will it take to scan my hard drive?

Time for scanning the disk depends on the size of the disk, amount of data in the disk and physical condition of the disk. In general if you use full scan than it takes around 30 minutes to scan a 40 GB Hard Drive.

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