



Kernel for Linux

“Recover Linux Operating System Data INSTANTLY!”

PRODUCT GUIDE

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1. Introduction to Kernel for Linux

Welcome to the user manual for Kernel for Linux, which guides you on how the software recovers, files and folders from deleted, damaged, or corrupted Linux partitions. This user manual comprises step by step guidelines on using Kernel for Linux.

1.1 Using this Manual

This user manual is intended to guide users on using Kernel for Linux. 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 Linux.

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 Deleted Files
- Recovering Missing Partitions
- Customizing Recovered Files
- Recovery Resuming
- 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

MS: Microsoft

RAM: Random Access Memory

MB: Mega-Byte

GB: Giga-Byte

1.2 About Kernel for Linux

Kernel for Linux is a software utility developed for data recovery from hard disk and other storage media. It recovers Linux operating system data, lost or damaged due to following reasons:

- Group Descriptor Block corruption
- Damaged Super Block or Inode Table
- Partition structures are damaged or deleted
- Improper System Shutdown
- File Deletion

Kernel for Linux 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

Kernel for Linux - data recovery software provides following features:

- Recovery if the partition has been deleted.
- Data recovery of missing files and folders.
- Volume recovery on Linux systems with damaged Super Block
- Volume recovery on Linux systems with damaged Leaf Node
- Volume recovery on Linux systems with damaged Journal
- Full support for IDE, EIDE, SCSI and SATA, PAN, ZIP drives.

1.4 Who Should Use this Software?

The competence of Kernel for Linux to recover partitions makes it appropriate for use by professionals, organizations and individuals, who have lost their important data stored in Linux Operating System. Kernel for Linux is suitable for users, who are striving to recover files and folders from disks which contain components like partition table, boot sectors, file allocation tables, root folders or master file table.

2. Getting Started

Now that you have understood the features and potential of Kernel for Linux, you are ready to get hands on experience of the software. To start recovery of partition of Linux Operating System, first of all you will need to need to download and install this software.

It is strongly recommended that before installing Kernel for Linux, 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

Kernel for Linux - data recovery software works on all Linux-based computers. Following are detailed minimum system requirements for the host computer:

2.1.1 Operating Systems

Windows 95, 98, 2003, and ME, NT, 2000, XP, Vista

2.1.2 Memory (RAM)

At least 64 megabytes (the more the better)

2.1.3 CPU Processor

Pentium II 400 MHz

2.1.4 Available Space on the Good Device

Enough space to save the recovered data; for example, if you expect to recover 40 MB lost data, the Good Device should have at least 40 MB free space (and even more if you plan to take the Host Computer as the Good Device)

2.2 Downloading Kernel for Linux for the First Time

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

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

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

2.3 Install Kernel for Linux

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

1. Double-click the Kernel for Linux installer. Follow the on-screen instructions.

The **Setup Installation Complete** screen will be displayed.

2. Click **Finish** to launch the software.

2.4 Start Kernel for Linux

To start Kernel for Linux:

Click the **Start → All Programs → Kernel for Linux**

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


2.5 Uninstall Kernel for Linux

You may need to uninstall and re-install Kernel for Linux. To uninstall Kernel for Linux:

1. Click the **Start → All Programs → Kernel for Linux → Uninstall Kernel for Linux**

A warning message will be displayed.

2. Click **Yes** to uninstall Kernel for Linux.

 Before proceeding to uninstall Kernel for Linux, you must ensure that the software is not running on your system.

You can alternatively uninstall Kernel for Linux 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 Linux** and click **Remove**.

A warning message will be displayed.

3. Click **Yes** to uninstall Kernel for Linux.

3. Software Interface

Now that Kernel for Linux 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 Linux comprises three main menus – Recovery, View, Tools and Help.

3.1.1 Recovery Menu

The **Recovery** menu comprises four menu items.



Figure 3.1: Recovery Menu

Menu items in the **Recovery** menu:

Field Name	Field Description
Recover Selected	Recovers the selected files
Recover All	Recovers all files
Save Recovery Snapshot	Saves the scan information about the file(s) and folder(s) found in recovery process
Load Recovery Snapshot	Loads the saved scanned information
Exit	Close the software

3.1.2 View Menu

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

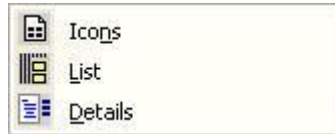


Figure 3.2: View Menu

Menu Items in the View menu:

Field Name	Field Description
Icons	Displays the file(s) and folder(s) in windows standard small icon view style
List	This option will display the file(s) and folder(s) in windows standard list view style
Details	View default display style for files and folders

3.1.3 Tools Menu

The **Tools** menu comprises three menu items.

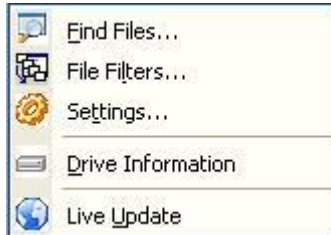


Figure 3.3: Tools Menu

Menu items in the **Tools** menu:

Field Name	Field Description
Find Files	Searches for a particular file or file type in the data found
File Filters	Adds filters to files
Settings	Configures the software settings

Drive Information Displays the information about the file system being recovered

Live Update Updates the current software version

3.1.4 Help Menu

The Help Menu comprises three menu items:

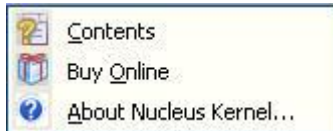




Figure 3.4: Help Menu

Field Name	Field Description
Contents	Displays the user manual of Kernel for Linux
Buy Online	Purchase software online from website
About Nucleus Kernel...	Displays version related information of the software

3.2 Tool-bar

The tool-bar in Kernel for Linux is displayed below the menu-bar. The tool-bar 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	Recovers selected files
	Recover All	Recovers all files



Save Recovery Snapshot

Saves the scan information about the file(s) and folder(s) found in recovery process



Load Recovery Snapshots

Loads the scanned information



Find Files

Searches for a particular file or file type in the data found



Settings

Configures the software settings



Live Update

Updates the current software version

4. Recovering Deleted Files

Now that you have complete familiarity of the user interface of Kernel for Linux, you are ready to start with the recovery process. This section deals with deleted files and allows the user to undelete them for recovering deleted files, these steps needs to be performed:

1. In the main window of Kernel for Linux – data recovery software, it shows all the detected Hard Disks in the left pane of the main window.

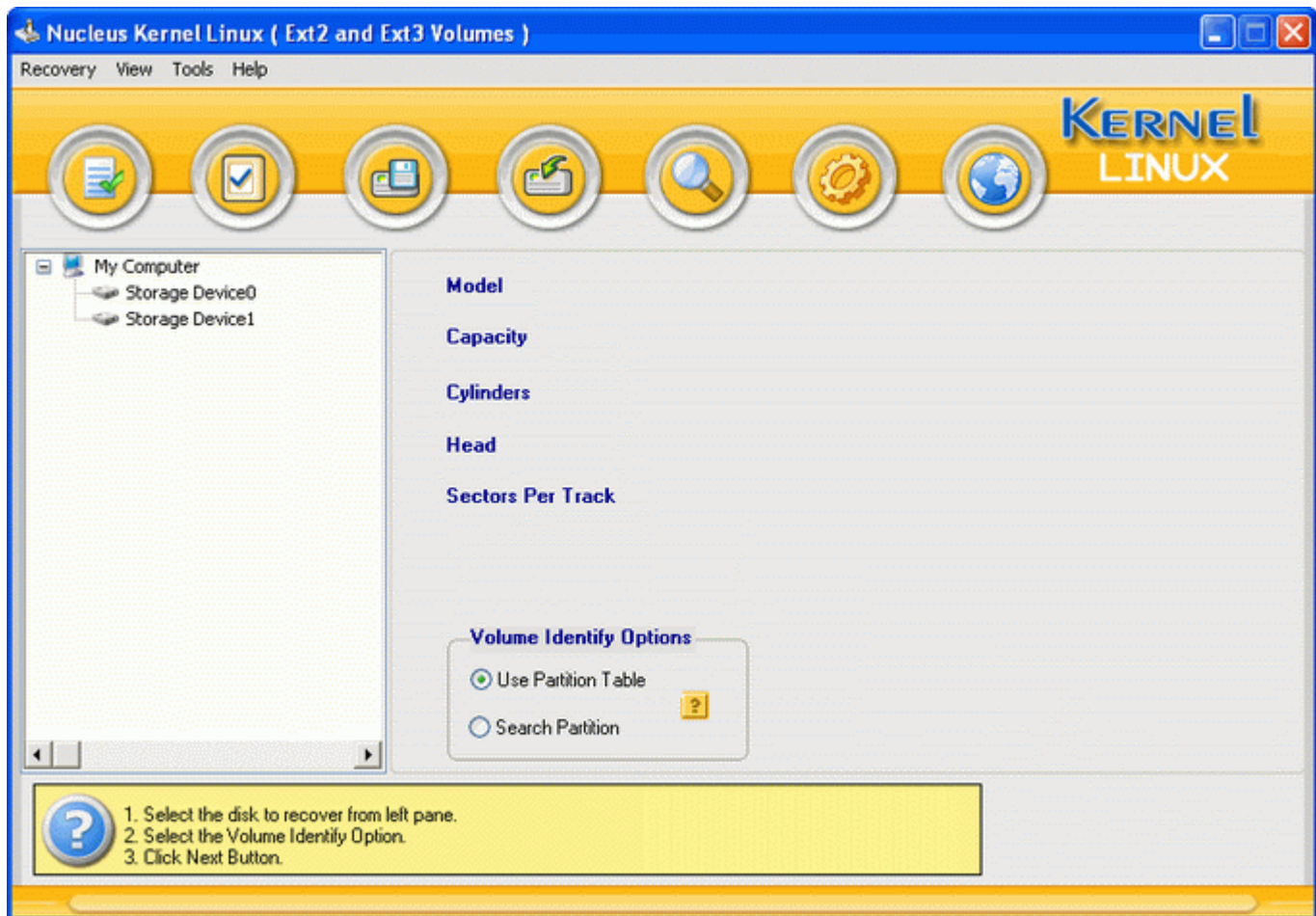


Figure 4.1: Main Window

2. Choose Physical Drive where all your deleted files are located, select "**Use Partition Table**" and click **Next** button.

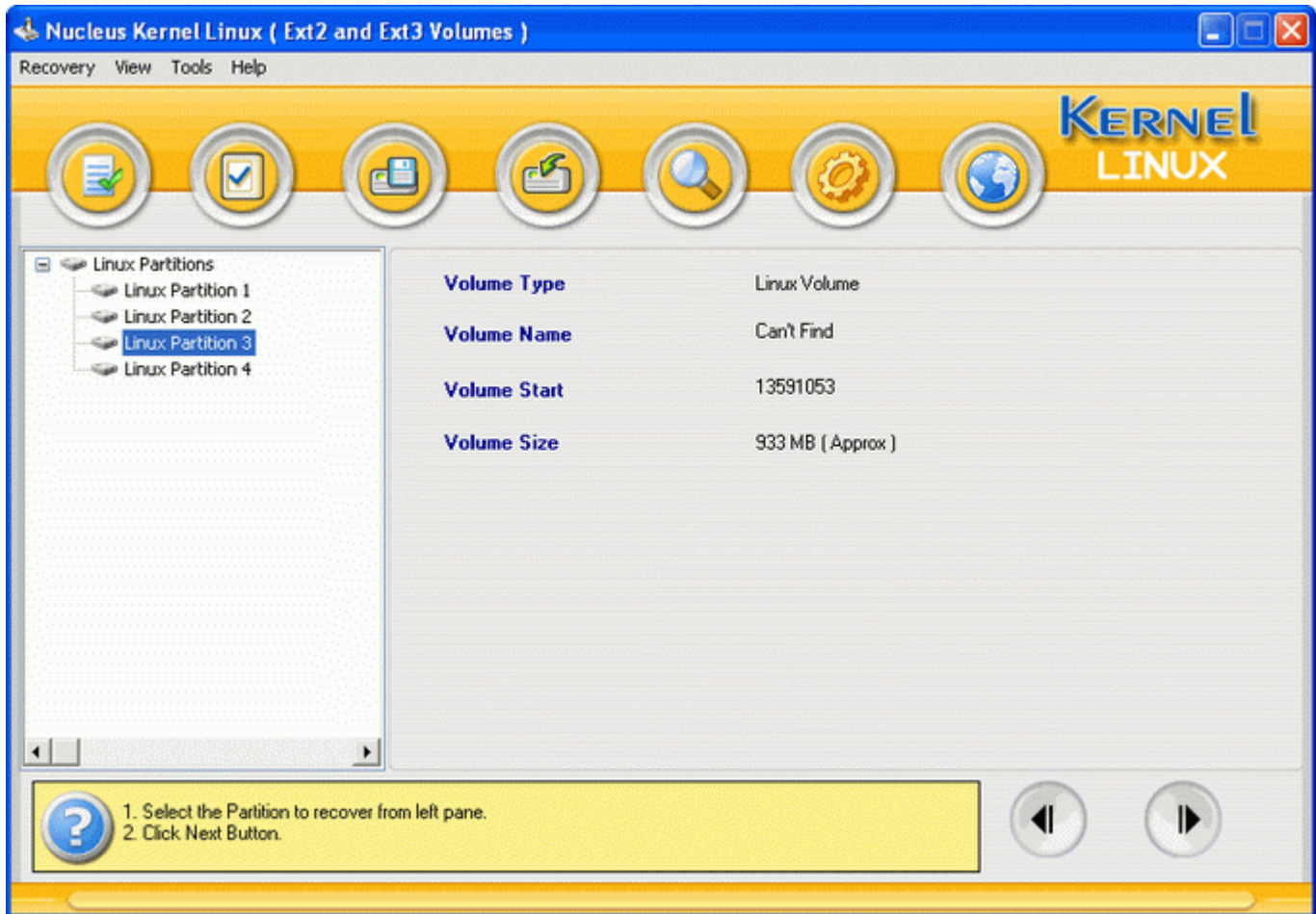


Figure 4.2: Select Physical Drive

3. Now it will show all the available partitions in the selected storage device in the left pane of the software. Choose the Logical Drive or Partition that contains Recoverable data and click **Next** to proceed.
4. Kernel for Linux will ask you to select the mode of recovery, select the recovery mode and click **OK**. Once recovery mode is selected, Kernel for Linux will start the recovery process.

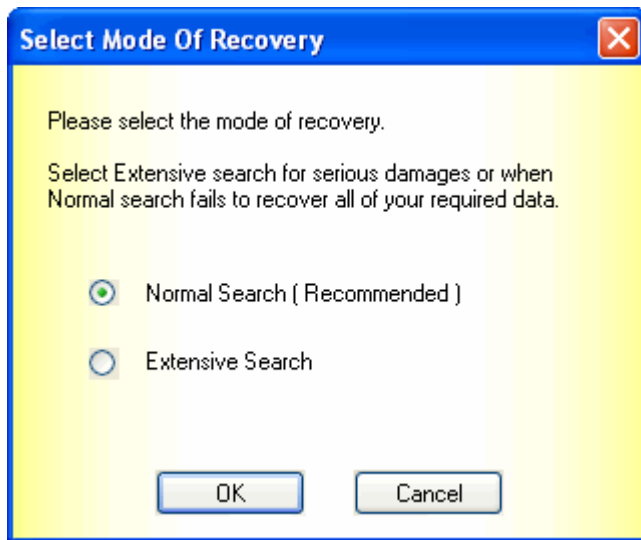


Figure 4.3: Select Mode of Recovery

5. After completion of the recovery process, Kernel for Linux will display all the file(s) and folder(s) found in the selected partition.

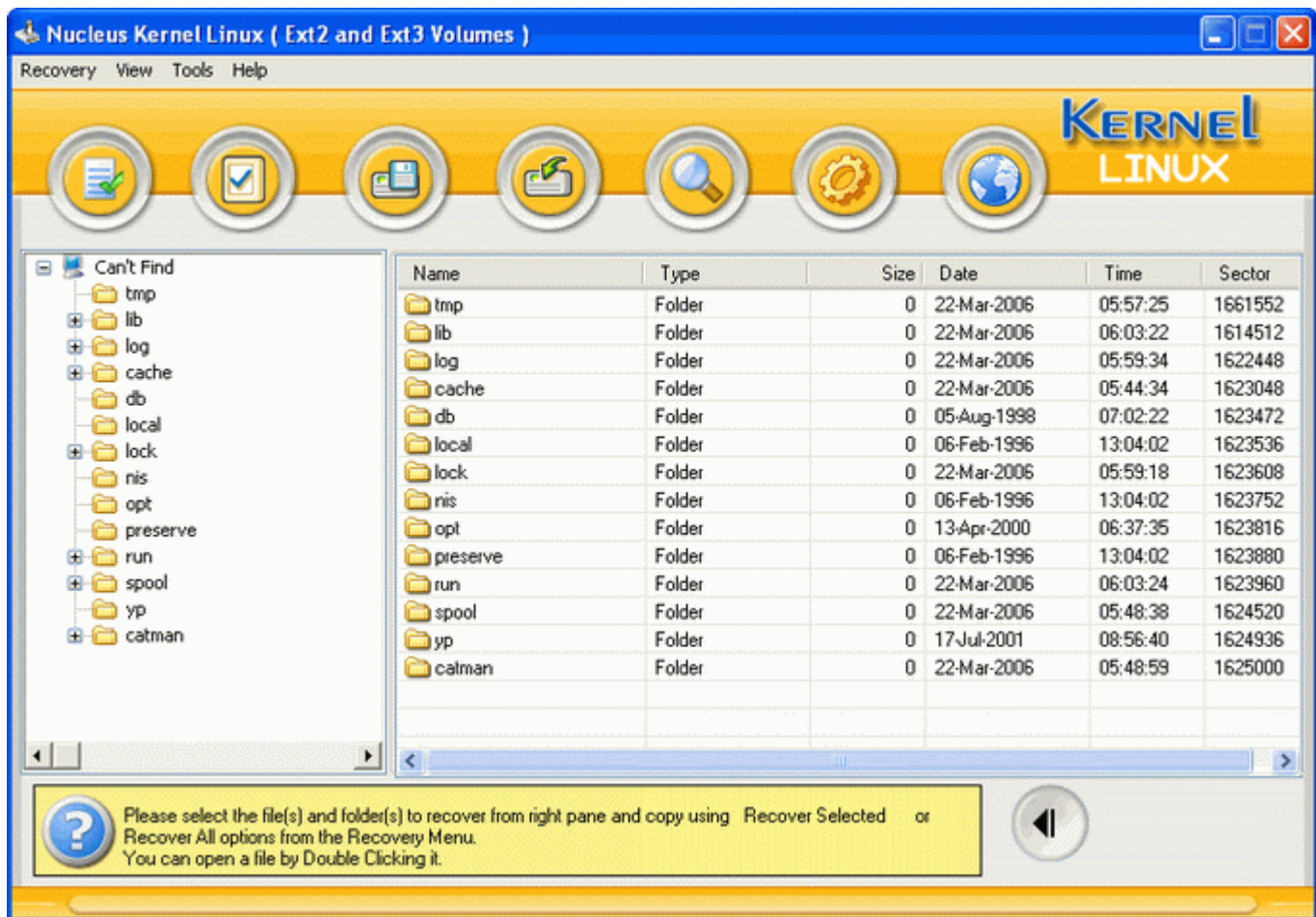


Figure 4.4: Files and Folders found in Selected Partition

6. Select the deleted files and click **Recover All** or **Recover Selected** button from the toolbar to save the recovered files to the desired location.

5. Recovering Missing Partitions

1. In the main window of Kernel for Linux – data recovery software, it shows all the detected drives in the left pane of the main window.

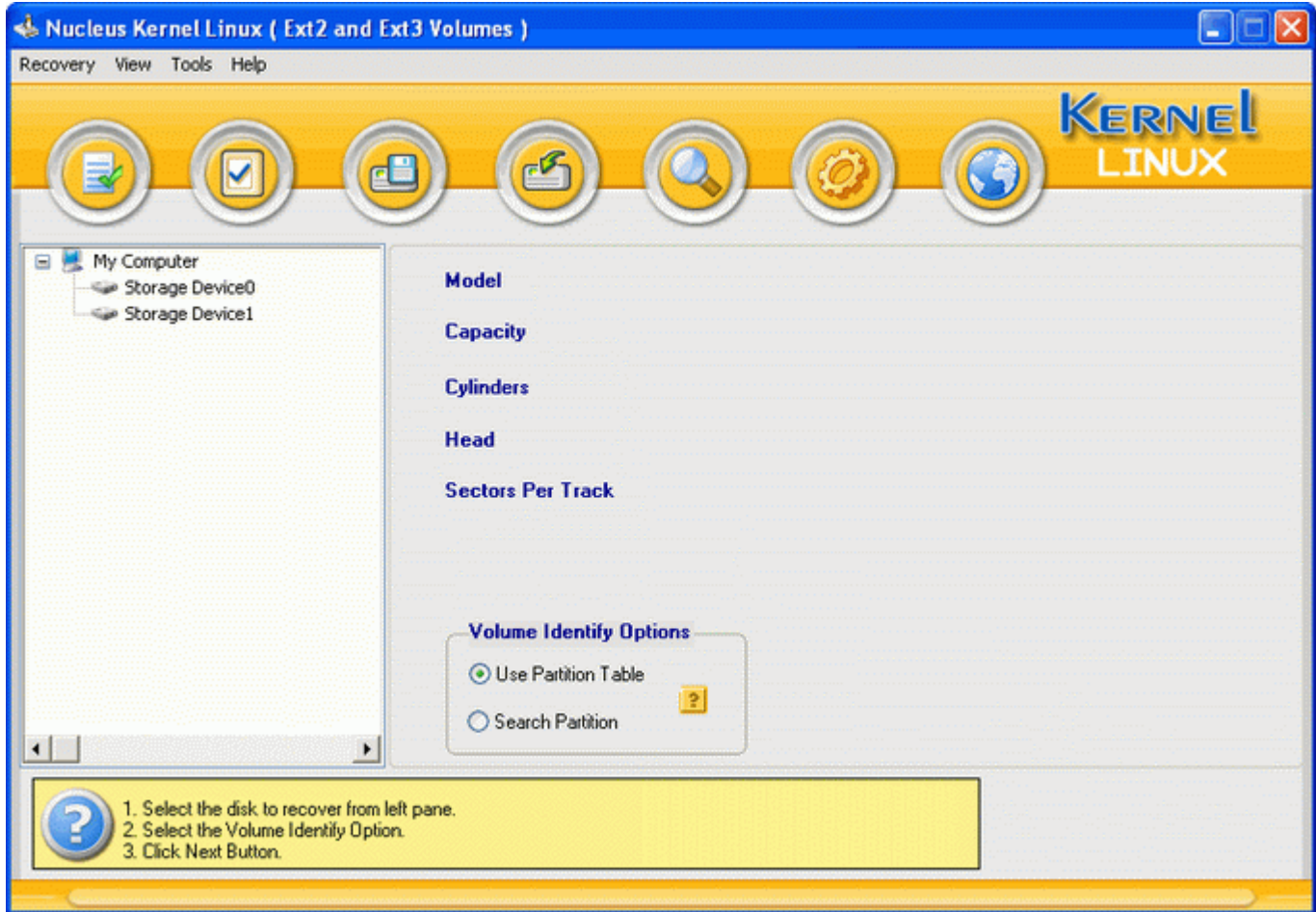


Figure 5.1: Main Window- Kernel for Linux

2. Choose Physical Drive where all your deleted or missing partitions are located, select "Search Partition", edit the start and end sector to scan and click **Next** button.

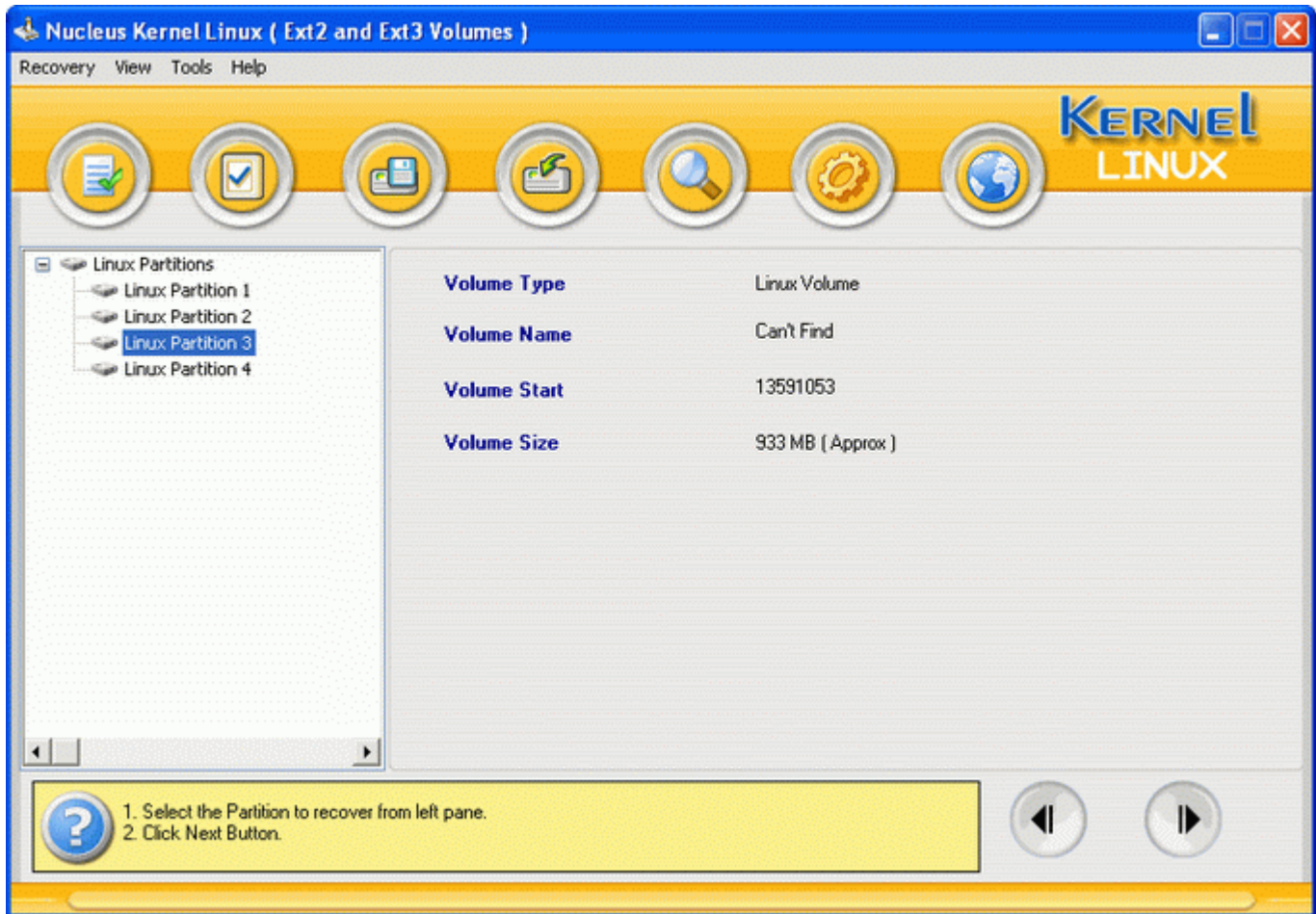


Figure 5.2: Select Physical Drive

3. After this process, Kernel for Linux will list all the partition(s) found in left pane of the window. Then it will show you all the available partitions in the selected storage device in the left pane of the window.

Choose the Logical Drive or Partition that contains Recoverable data and click **Next** button to proceed. Then Kernel for Linux will ask you to select the mode of recovery.

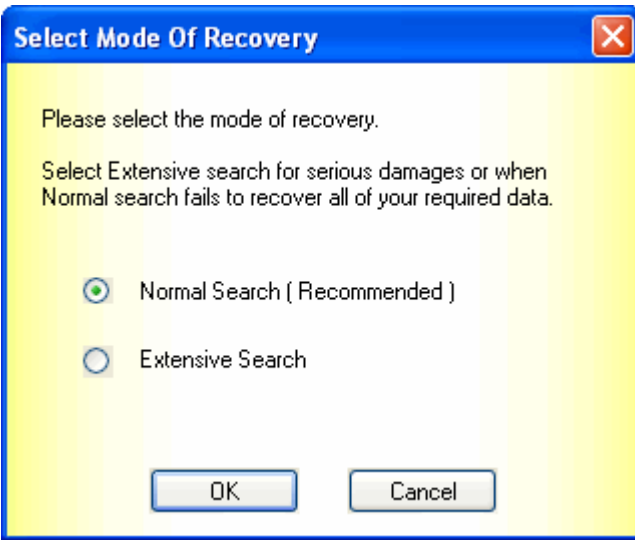


Figure 5.3: Select Recovery Mode

4. After choosing the mode of recovery, Kernel for Linux will start the recovery process. After completion of the recovery process, Kernel for Linux will display all the file(s) and folder(s) found in the selected partition.

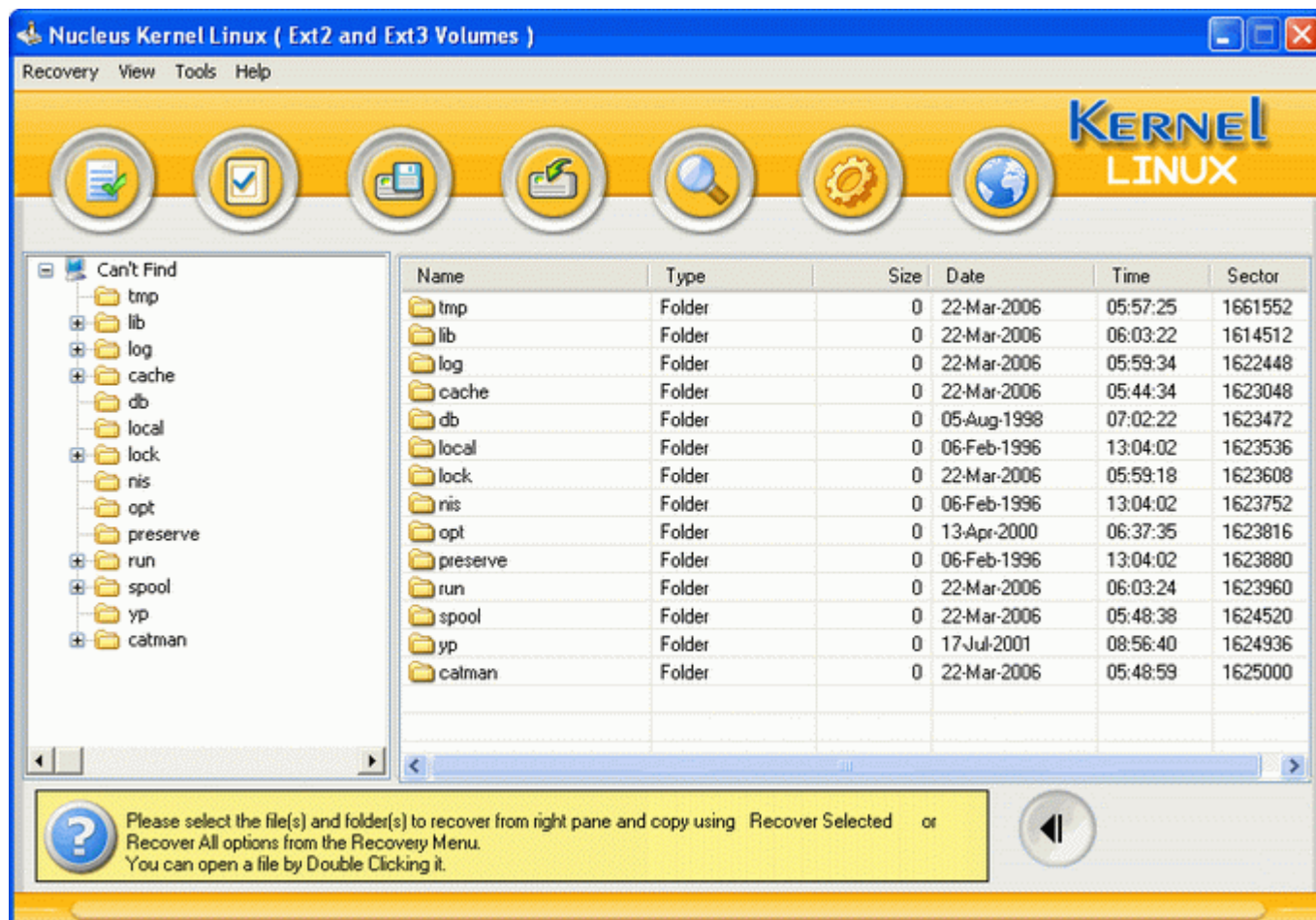


Figure 5.4: Preview of Recovered Files and Folders

5. Select the deleted files and Click **Recover All** or **Recover Selected** button from the toolbar to save the recovered files to the desired safest location.

6. Customizing Recovered Files

Kernel for Linux data recovery software provides you with the option to configure the software to ease the process of recovery. It provides the various options to have a control over the whole recovery process. To configure the software you can follow these steps:

Click **Tool Menu > Settings** or click **Setting** button from the Toolbar, Kernel for Linux displays the screen where you need to select the options to configure the software.

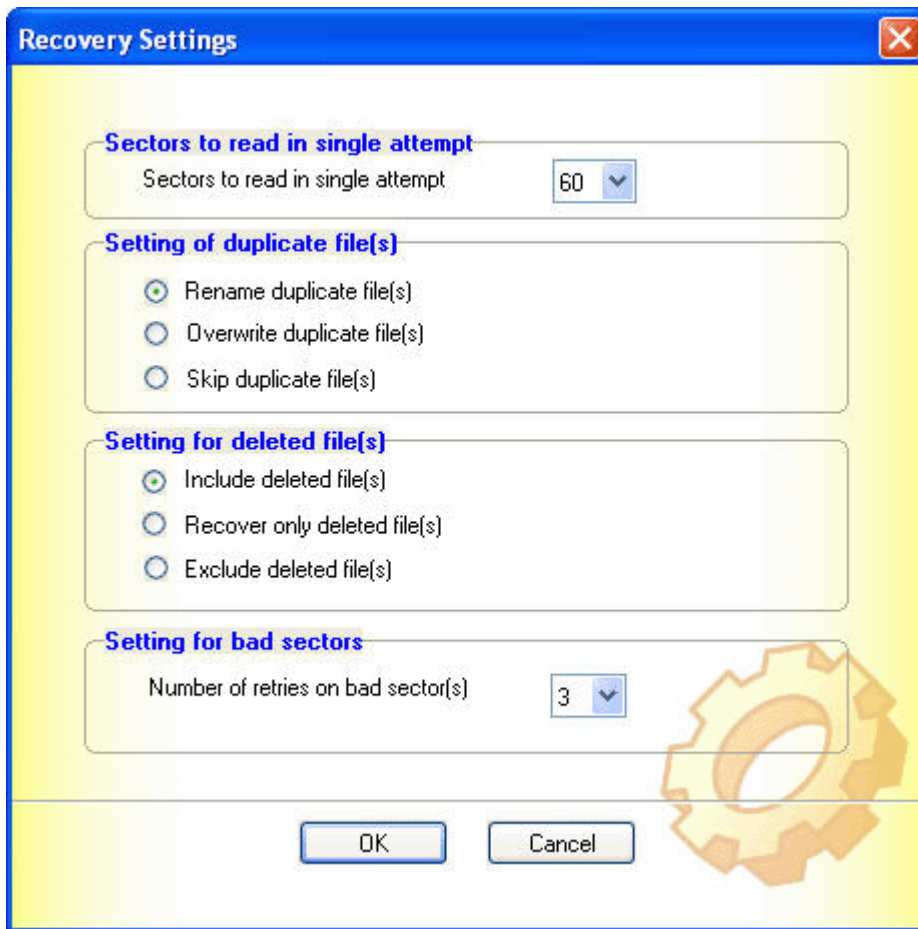


Figure 6.1: Recovery Setting Window

Sectors to read in single attempt

This is the setting for the number of sector(s) to read in a single attempt. Increasing this value will make the software run faster. But in general this value should be set to a lesser value in the disks with bad sectors; you can increase this value for disks with good physical condition for faster recovery.

Settings of duplicate file(s)

This is the setting for duplicate file(s); there may be a situation that the folder where you are recovering the files may contain file(s) with the same name.

- By default the selected option is Rename Duplicate File(s) , so it renames the file(s)
- By selecting Overwrite Duplicate File(s), it overwrites the existing file(s) with the new file(s)
- By selecting Skip Duplicate File(s), it will not save those duplicate file(s)

Settings for Deleted File(s)

This option gives you control over the recovery of deleted file(s).

- By default the selected option is Include Deleted file(s), at the time of copying the data it includes deleted file(s).
- By selecting Recover only Deleted File(s), it will copy only deleted file(s).
- By selecting Exclude Deleted File(s), it will not copy deleted file(s).

Settings for Bad sectors

Number of retries on bad sector(s): This is the option that how many times the software will try to read a sector if the sector is not readable in single attempt.

7. Save Recovery Snapshot

Kernel for Linux provides the option to resume the recovery; it can load a saved recovery state file to resume a previous recovery session. There are times when a scan seems to take forever. They can last for hours, sometimes days depending upon the size of the drive as well as the damage to the file system. In order to avoid rescanning, you can use the Save Recovery Snapshot.

1. Click **Recovery menu > Save recovery snapshot** or click **Save recovery snapshot** button from toolbar. A screen to save the recovery snapshot will appear.
2. Select the desired location and save your recovery snapshot to that location.
3. To resume recovery, use **Load Recovery Snapshot** when you have selected storage device.
4. Click **Recovery Menu > Load Recovery Snapshot** or click **Load Recovery Snapshot** button from toolbar, then it displays a screen to select the location for loading last recovery summary.
5. Select the desired location and your last recovery summary.

8. Full Version

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

8.1 Requirement of Full Version

By using the evaluation version of Kernel for Linux, you can repair corrupt, damaged and deleted; Linux partitions. However, you cannot save the recovered data.

You will need to buy the full version of the software to save the recovered data.

8.2 Purchasing Full Version

You can buy the full version of Kernel for Linux 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 Linux and activation details of the software.

9. Support

We have an extensive and efficient support system in place to assist our customers with all issues related to using Kernel for Linux. The software comes with an embedded help manual that can be accessed by clicking **Help→Software Help** 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 Linux.

You can access the online help for Kernel for Linux at <http://www.nucleustechnologies.com/Online-Helps.html>

View Animated Working demo of the software at http://www.nucleustechnologies.com/Animated_Demo_Linux.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

10. Troubleshooting

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

10.1 Common Issues

Why does Kernel for Linux have limitations in evaluation copy?

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

10.2 Frequently Asked Questions

How to Buy Kernel for Linux?

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

I have lost my full version for Kernel for Linux. 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.

11. Legal Notices

This section comprises the legal specification about Kernel for Linux and the company NUCLEUS DATA RECOVERY.COM PRIVATE LIMITED

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