



Kernel for SQL Database

Perform Flawless Recovery for Damaged MDF
Database Files

PRODUCT GUIDE

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1. Introduction to Kernel for SQL Database

Welcome to the user manual for Kernel for SQL Database, an effective and powerful data recovery software to recover data from the corrupt SQL databases (.mdf). This user manual comprises step by step guidelines on using Kernel for SQL Database.

1.1 Using this Manual

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

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. This user manual comprises following sections:

- Introduction
- Getting Started
- Software Interface
- Repairing .mdf Files
- Full Version
- Support
- Troubleshooting
- Legal Notice

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

SQL: Structured Query Language

QFSCI: Quick File System Component Identification

RAM: Random Access Memory

MB: Mega-Byte



GB: Giga-Byte

1.2 About Kernel for SQL Database

Kernel for SQL Database is database recovery software that recovers data from corrupt, damaged .mdf database files. Kernel for SQL Database software is equipped with powerful QFSCI algorithm which efficiently scans and retrieves data from the corrupt databases.

The common reasons which lead to SQL database corruptions are:

- Invalid database file header
- Not able to associate database file with different databases
- Internal Program Error(s)
- Crash or failure of hard drive
- Media contamination or damage
- Accidental deletion of data and files
- Accidental deletion of data and files
- Accidental reformatting of partitions
- Virus attacks
- Data corruptions

1.3 Salient Features

Salient features of Kernel for SQL Database include:

- Supports recovery of data from SQL Server version 2000, 2005 and 2008.
- Effectively repairs and extracts data from the corrupt SQL database (.mdf).
- Creates script file(s) where the recovered files are saved.
- Deleted records can be recovered and are saved in a separate SQL script.
- Recovery of Microsoft SQL server backup files.
- Recovery of tables, triggers, views, and stored procedures.
- Recovery of primary keys, indexes, unique keys and foreign keys.
- Recovery of predefined defaults, default values, rules, checks, and user data types (default, rule, Allow null).



- Efficiently repairs large databases

1.4 Who Should Use this Software?

The capability of Kernel for SQL Database to repair large SQL databases makes it appropriate for use by SQL server administrators, who need to recover data from corrupt or damaged .mdf database files. The corruption could have been caused due to virus attacks, improper system shutdown, network problems, database file header corruption etc.

2. Getting Started

Now that you have understood the features and potential of Kernel for SQL Database, you are ready to get a hand on experience of the software. To start repairing .mdf files, you will first need to download and install this software.

It is strongly recommended that before installing Kernel for SQL Database, 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 SQL Database 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 store the repaired files

 You should have at-least 40 MB of free disk space if you want to repair and save a 40 MB.mdf file.

2.1.2 Software Requirements:

The software requirements for installing the software can further be grouped into two categories– Operating system requirements and SQL Server version requirements. The requirements are as follows:

2.1.2.1 Operating System Requirements

Supported operating systems:

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

2.1.2.2 SQL Server Version Requirements

Supported SQL Server versions:


- SQL Server 2000
- SQL Server 2005
- SQL Server 2008

2.2 Downloading Kernel for SQL Database for the First Time

After checking your computer with the prescribed system requirements for Kernel for SQL Database, 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 SQL Database before buying it, you can download the evaluation version from the following link:

<http://www.nucleustechologies.com/download-sql-recovery.php>

 You can repair .mdf files saved on your system by using the evaluation version of Kernel for SQL Database; however, the repaired file will not be saved until you purchase the full version of the software.

2.3 Install Kernel for SQL Database

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

1. Double-click the Kernel for SQL Database installer.
2. Follow the on-screen instructions.

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

3. Click Finish to launch the software.

2.4 Start Kernel for SQL Database

To start Kernel for SQL Database:

Click the **Start → All Programs → Kernel for SQL Database**

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


2.5 Uninstall Kernel for SQL Database

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

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

A warning message will be displayed.

2. Click '**Yes**' to uninstall Kernel for SQL Database.

 Before proceeding to uninstall Kernel for SQL Database, you must ensure that the software is not running.

You can alternatively uninstall Kernel for SQL Database 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 SQL Database** and click **Remove**.

A warning message will be displayed.

3. Click **Yes** to uninstall Kernel for SQL Database.

3. Software Interface

Now that Kernel for SQL Database 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 SQL Database comprises four main menus– File, Tools, View, and Help.

3.1.1 File Menu

The **File** menu comprises five menu items.

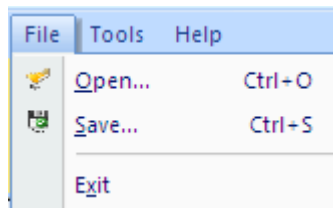


Figure 3.1: File Menu

Menu items in the **File** menu:

Field Name	Field Description
Open	Select to browse and list corrupt .mdf file from your disk
Save	Select to save the recovered results from .mdf file
Exit	Select to close the software

3.1.2 Tools Menu

The **Tools** menu comprises one menu item.

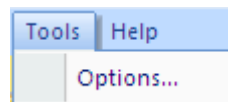


Figure 3.2: Tools Menu

Menu Items in the **Tools** menu:

Field Name	Field Description
------------	-------------------

Options

Select this option if you want to scan the entire database for possible corruption. This option is recommended to be selected while performing SQL database repair.

3.1.3 Help Menu

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

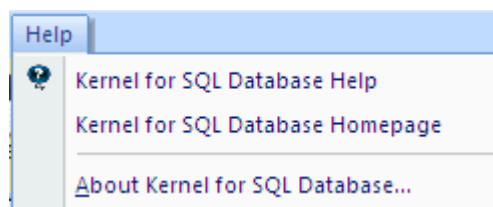


Figure 3.3: Help Menu

Menu items in the **Help** menu:

Field Name	Field Description
Kernel for SQL Database Help	Select to view user's help guide of Kernel for SQL
Kernel for SQL Database Homepage	Select to view software website
About Kernel for SQL database	Select to view version information of the software

3.2 Tool-bar

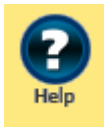
The tool-bar in Kernel for SQL Database is displayed below the menu-bar. The tool-bar provides a convenient and user-friendly method to perform certain actions that can also be performed by using the menu-bar. Read the information in the table below to find out about the tool-bar buttons:

Button	Button Name	Button Description
	Select	Click to select corrupt .mdf file from your disk



Save

Click to save the recovered results on your disk


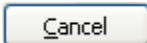
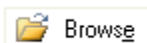
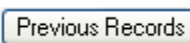
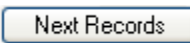
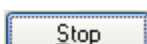



Help

Click to view Kernel user's guide

3.3 Buttons Used

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

	This option initiates the recovery process of the selected database
	This option cancels the action and closes the dialog
	This option lets you locate the affected SQL database
	This option takes you to the previous page in the record
	This option takes you to the next page in the record
	This option lets you stop the ongoing process
	This option allows you to refresh the process

4. Repairing .mdf Files

Now that you have complete familiarity of the user interface of Kernel for SQL Database, you are ready to repair .mdf files. To repair .mdf files:

1. Launch Kernel for SQL Database.

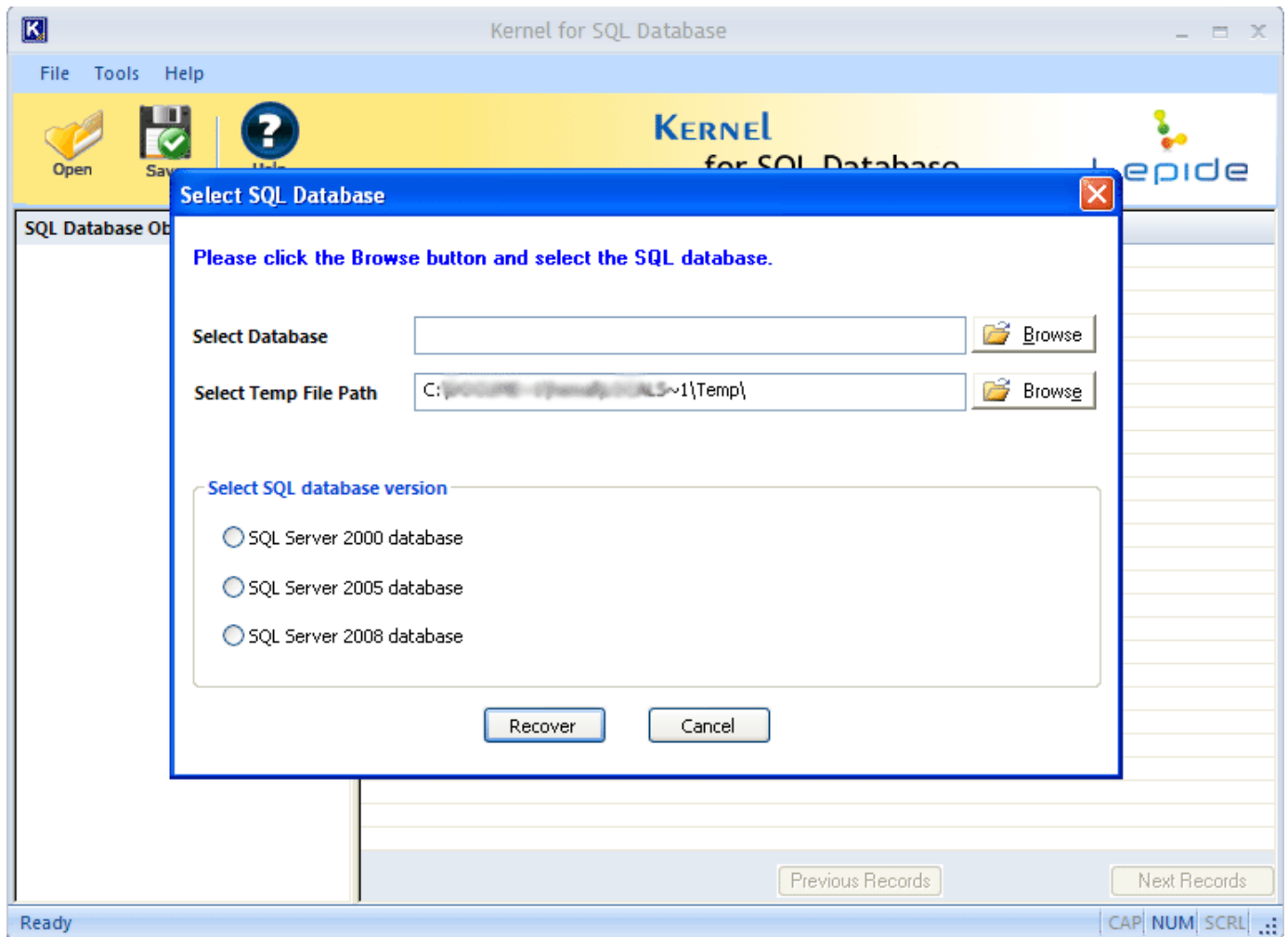



Figure 3.4: Software Welcome Page

 "Select SQL Database" dialog appears by-default when the software is launched. This dialog can be launched by clicking the **Open** button in **Tool** bar or by selecting **File** menu > **Open**.

2. Click the **Browse** button to locate the corrupt SQL Database:

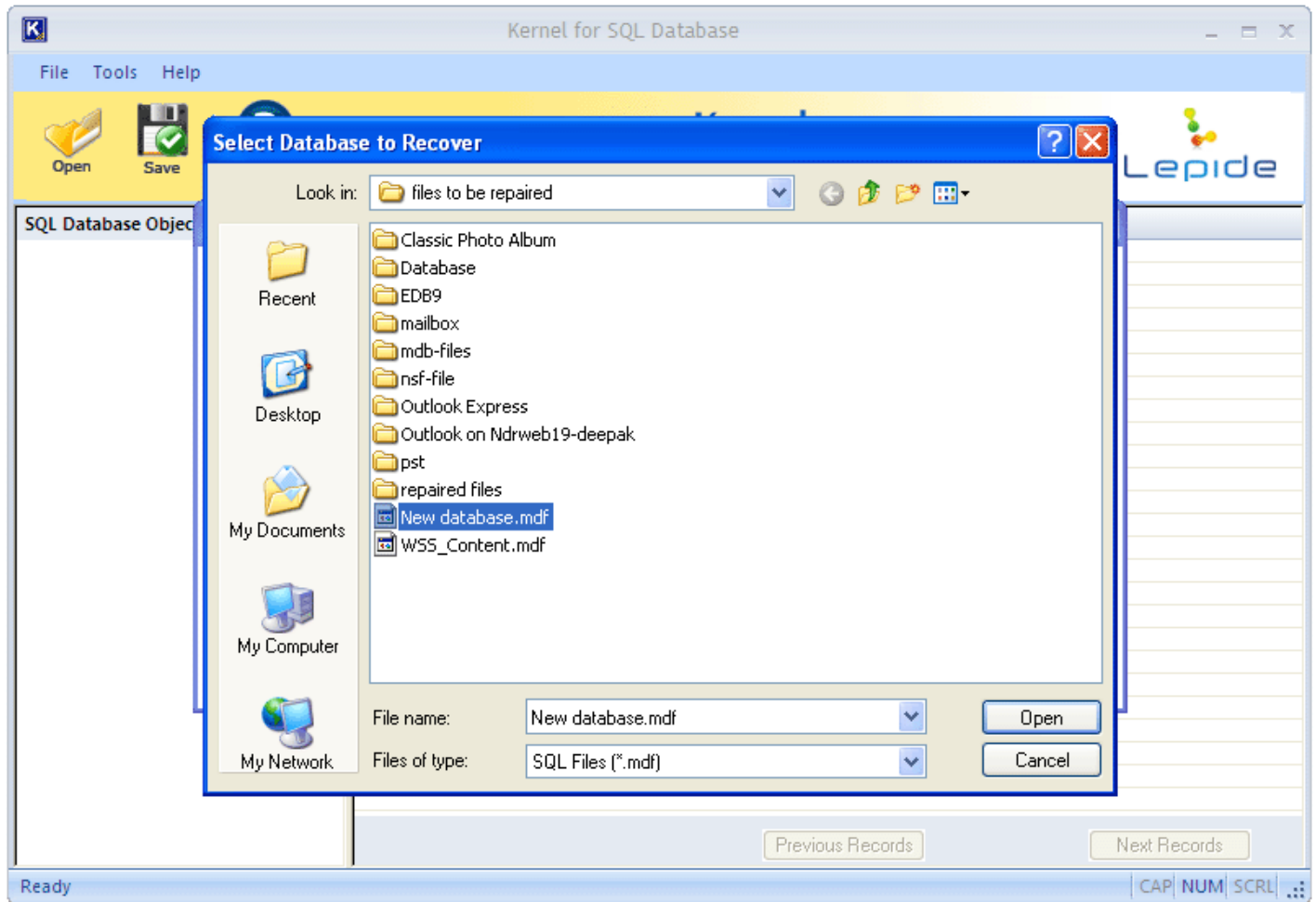


Figure 3.5: Select Database to Recover

3. Select the SQL Database version with which the MDF file is created:

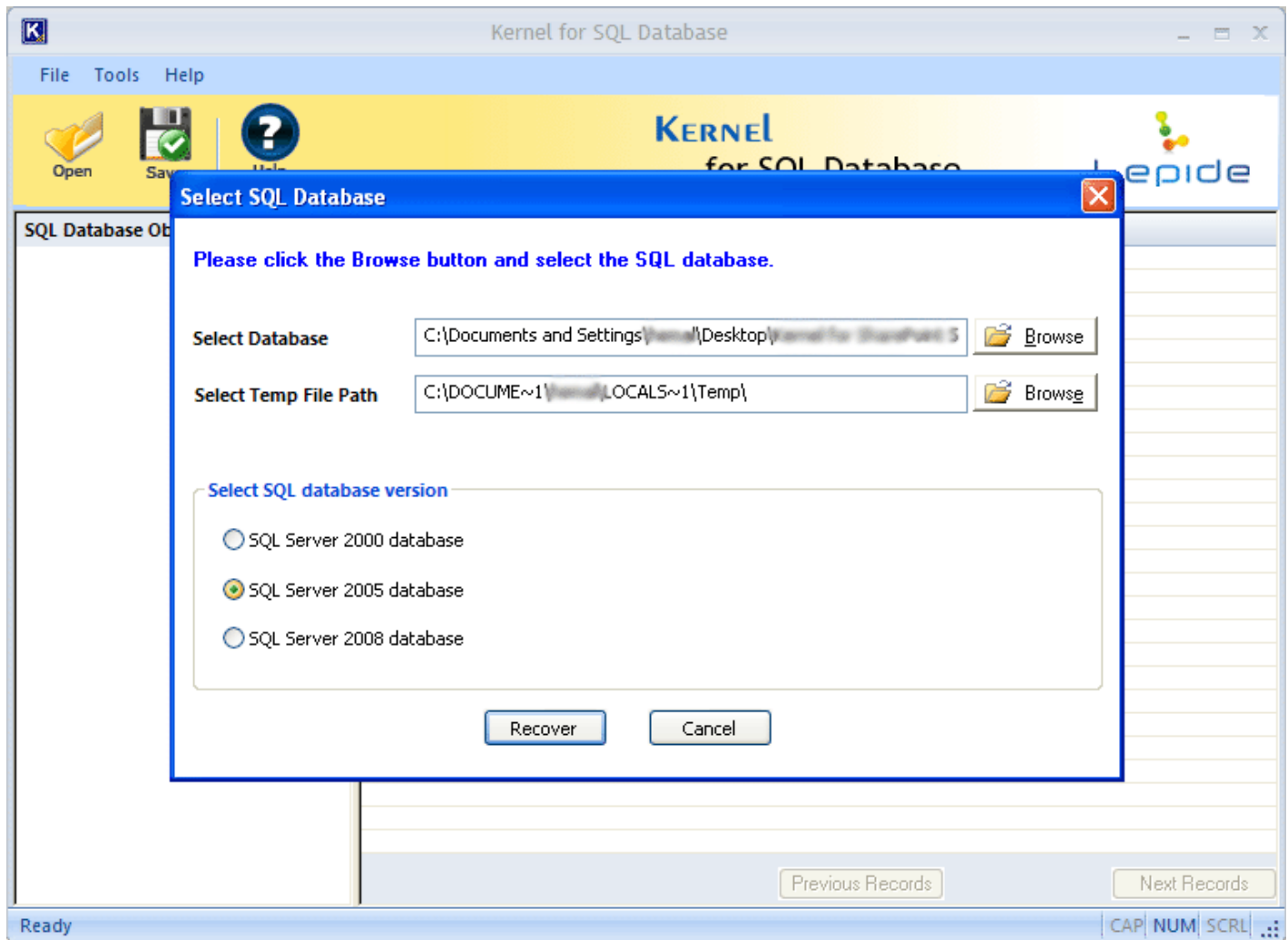


Figure 3.6: Select SQL Server Version

4. Click the **Recover** button to start the recovery process.

After repairing the corrupt .mdf file, Kernel for SQL Database will enlist the SQL database objects in the left pane:

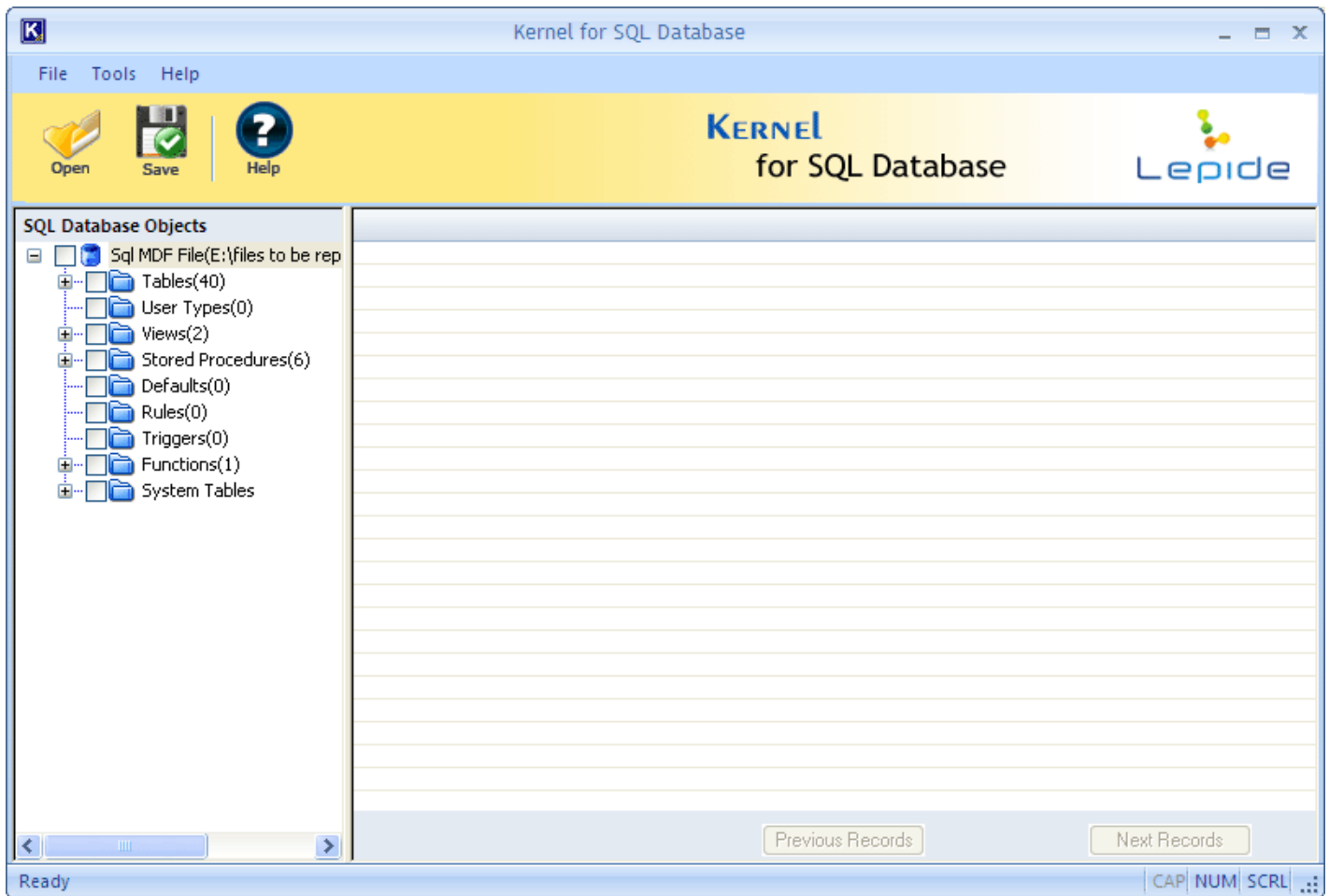


Figure 3.7: Recovered Objects

Note that, if the user selects the wrong SQL Server version, software displays the following error:



5. Select an object in the left tree whose content you want to verify before saving. When you select the folder, its content will be displayed in the right pane:

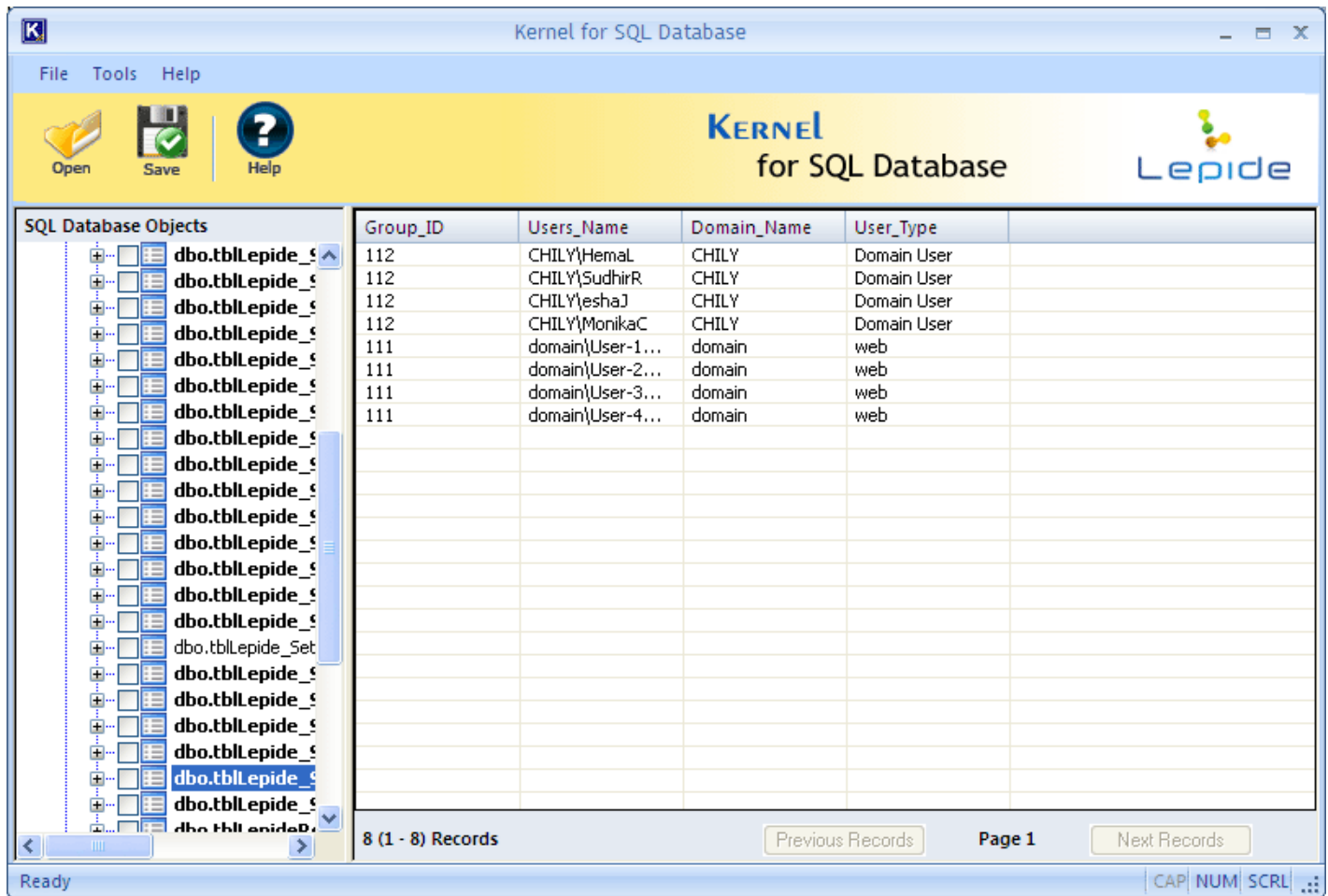



Figure 3.8: Preview of Recovered Objects

- After previewing the required items, select the data for saving and then click the **Save** button. The 'Saving Mode' dialog box appears: Click the **Save** button to start the process of saving.

Figure 3.9: Saving Options

 To save the data you can click the **Save** button on the Tool bar or go to **File** menu > **Save**

You can save the recovered objects in two different modes which are:

SQL Server: Using this option, the recovered objects can be saved on SQL Server directly, even if the Server is running. To save the data on SQL Server:

- Mention Server Name and Name of the database in **Server Name** and **Database name** fields respectively. Do not provide name of existing database in **Database name** field. Create a new database in SQL Server Management Studio and enter the name of new database in **Database name** field. However, existing database name can also be provided but in case of existing database restored objects will get merged with existing objects.
- Select the Authentication option with which you wish to access the SQL Server i.e. **Windows Authentication** or **Server Authentication**

To access SQL Server with Server Authentication, you need to enter User Name and Password in the respective fields.

Batch File: Using this option, you can save the batch file of the rebuilt SQL database on a desired location. To save the recovered, you need to browse the location using the **Browse** button. The data so recovered is saved in separate script files at the desired location. Also, a script file (commit.bat) is also created that enables the user to easily copy the recovered objects to a new database created on SQL Server. To copy recovered objects to new database on SQL server:

- Go to SQL Server Management Studio
- Create a New Database
- Double click on commit.bat

OR

- (Run->cmd) Change the path to recovered folder (cd PathName)
- Use following syntax:

>commit.bat servername newcreateddatabase sqlserverusername sqlserverpassword

Press Enter key and all tables will be copied to the new created database.

7. After selecting the required Saving mode option, click the **OK** button. The software starts saving the recovered objects:

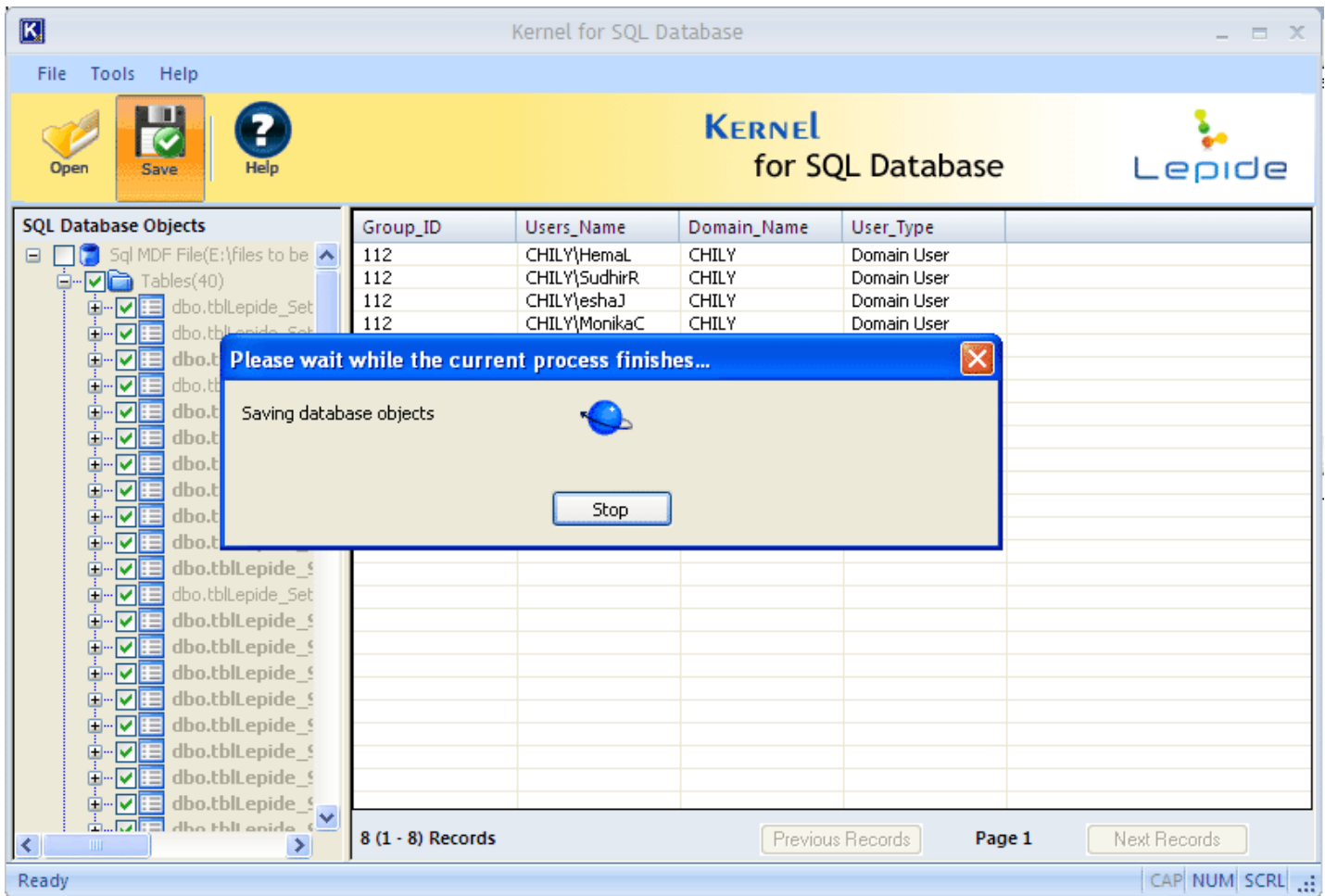


Figure 3.10: Saving Process

- The software displays following 'Process Completed' dialog box when the data is saved successfully at the desired location:

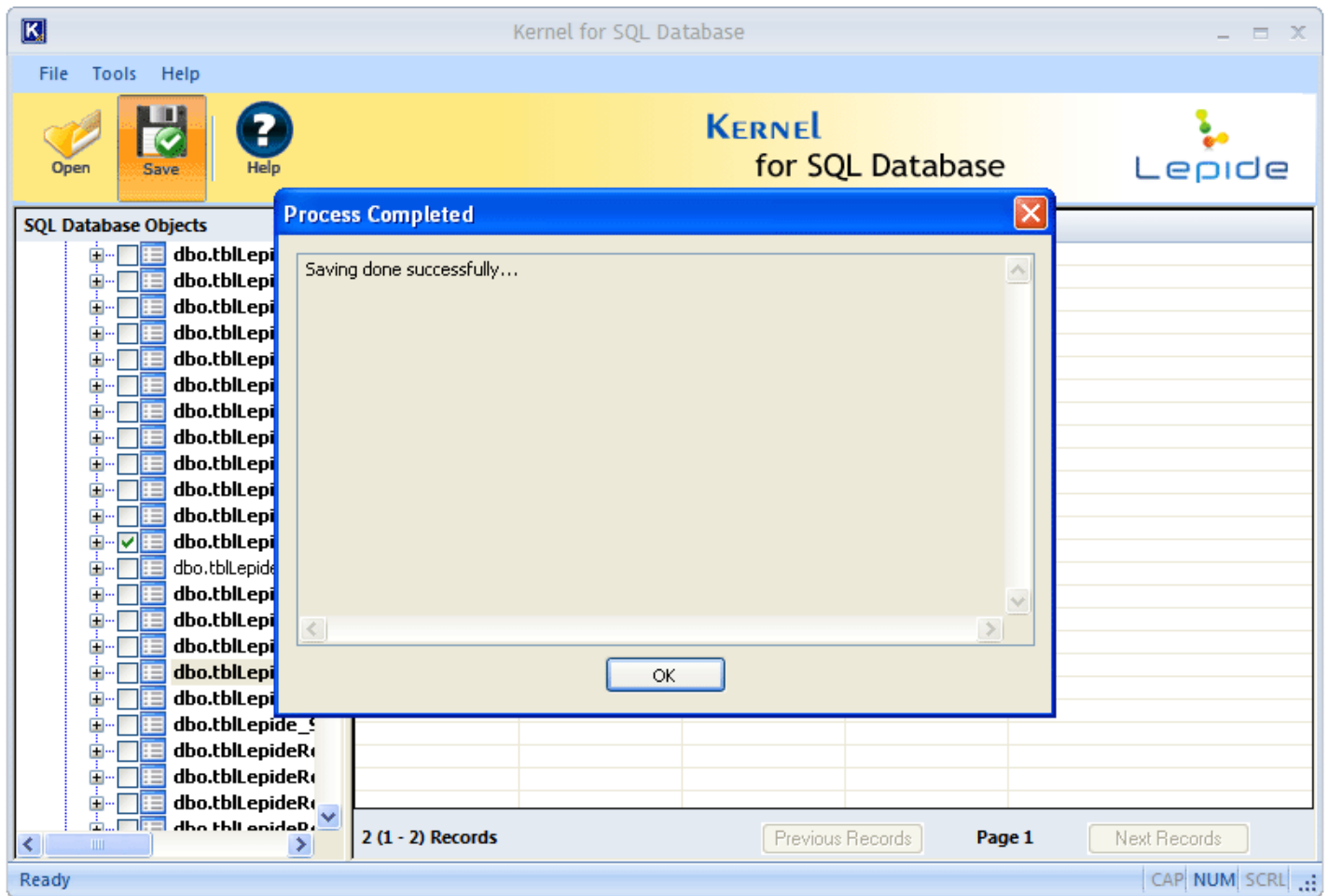


Figure 3.11: Saving Process Completed

9. Click the **OK** button to close the 'Process Completed' dialog box.

10. Full Version

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

10.1 Requirement of Full Version

By using the evaluation version of Kernel for SQL Database, you can repair corrupt .mdf files; however, you cannot save the recovered data.

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

10.2 Purchasing Full Version

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

11. Support

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

You can access the online help for Kernel for SQL Database at <http://www.nucleustechnologies.com/Online-Helps.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 US/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

12. Troubleshooting

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

12.1 Common Issues

Why does Kernel for SQL Database have limitations in evaluation copy?

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

12.2 Frequently Asked Questions

How to Buy Kernel for SQL Database?

You can buy Kernel for SQL Database online at <http://www.nucleustechnologies.com/buy-sql-recovery.php>

I have lost my full version for Kernel for SQL Database. 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.

13. Legal Notices

This section comprises the legal specification about Kernel for SQL Database and the company LEPIDE SOFTWARE PRIVATE LIMITED

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