

Vembu Universal Explorer User Guide

VEMBU TECHNOLOGIES
www.vembu.com



Vembu Universal Explorer User Guide

Introduction

Vembu universal explorer is a utility used to perform granular level content recovery of Microsoft applications which can be sourced from image backups of both physical(Physical server backup) and virtual environments(VMware and Hyper-V backup).

Key Features

Microsoft Exchange Server

- Perform Mail Level Restore by using .edb file sourced from VHD and restore to live Microsoft Exchange server.
- Export email(s) as .pst files.
- Perform Mail Level Recovery from .pst files.
- View mails without restoring them.
- Option to restore one user's data to another user.

Microsoft SharePoint Server

- Perform granular recovery of files and folders that reside in a SharePoint site.
- Recover the contents of built-in lists like calendar, announcement, contacts in text file.

Microsoft SQL Server

- Export MS SQL database object schema and object data of Tables, View, Stored Procedures in .sql file.
- Export MS SQL database object schema and object data of Table, View, Stored Procedures in .xsl file.
- Perform granular level restore to live MS SQL Server.
- Perform restore to different database without affecting the live database

Microsoft Active Directory

- Perform granular level restore of active directory data.
- Perform Export/Restore any selected container(s).
- Perform Export/Restore any selected object(s).
- Exported data will be in .ldf file format.
- User can edit the exported file (.ldf), before importing it to target server.

Supported Version

Microsoft Exchange Server

- Exchange Server 2007
- Exchange Server 2010
- Exchange Server 2013
- Exchange Server 2016

Microsoft SharePoint Server

- SharePoint 2007
- SharePoint 2010

Microsoft SQL Server

- SQL Server 2005
- SQL Server 2008
- SQL Server 2008 R2
- SQL Server 2012
- SQL Server 2014

Microsoft Active Directory

- Windows Server 2008 R2 STD
- Windows Server 2012 DC
- Windows Server 2012 R2 DC

Prerequisites

To work with Vembu Universal Explorer the following prerequisites must be met in the deployment machine.

Microsoft Exchange Server

- 64-bit version of Microsoft Outlook 2010 / Outlook 2013
- .NET Framework 4.0

Microsoft SharePoint Server

- .NET Framework 4.0
- SQL Server 2014
- SQL Server Management Studio

Microsoft SQL Server

- MS SQL Server 2014
- .Net framework 4.0
- Microsoft Excel 2010 (for xls file format recovery)

Microsoft Active Directory

- .NET Framework 4.0/4.5

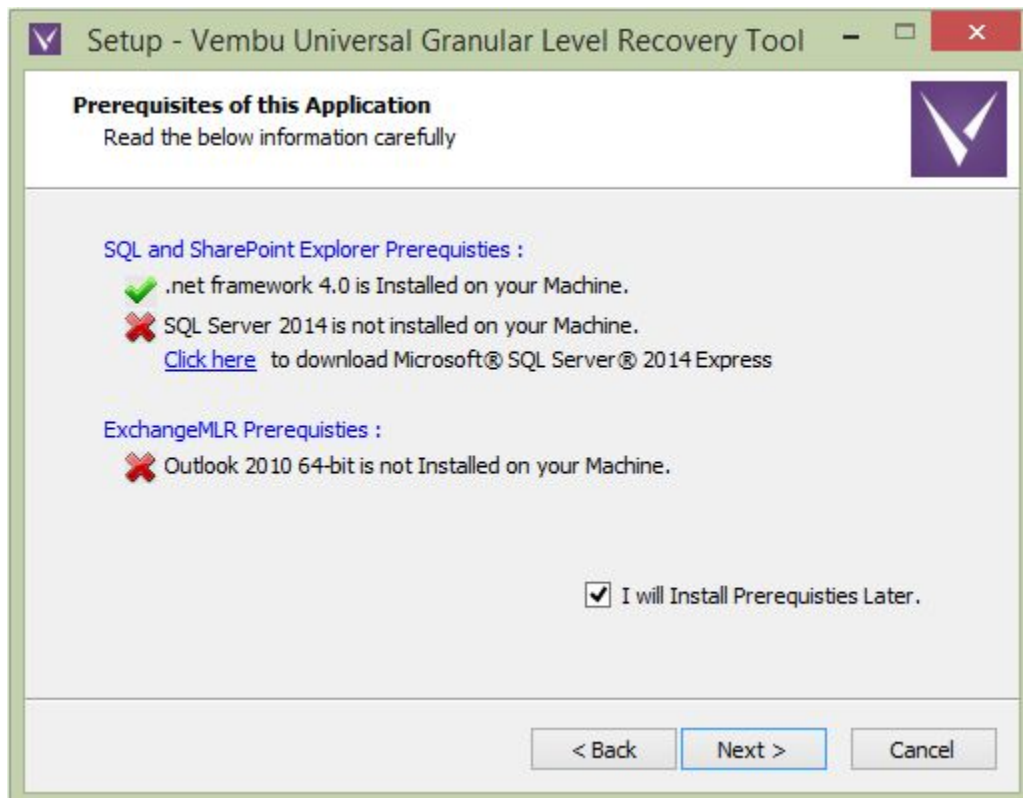
Installation

- Download Vembu Universal Explorer from <https://www.vembu.com/builds/v360>.
- Run the application with administrator access.
- The installation of Vembu Universal Explorer will open with a welcome window.
- Click Next to proceed.



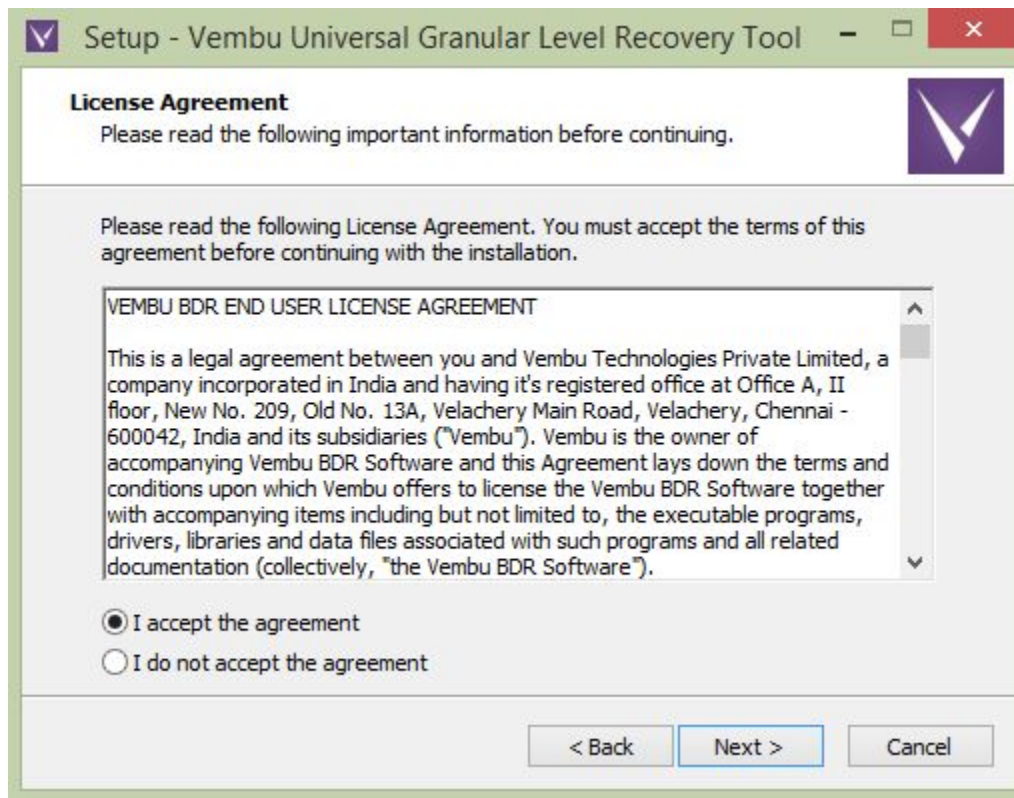
- You will see a window with prerequisites necessary to run the application.
- Click Next to continue if your machine meets the requirements.

- If any of the prerequisites are not installed, then you will see a window like the one below

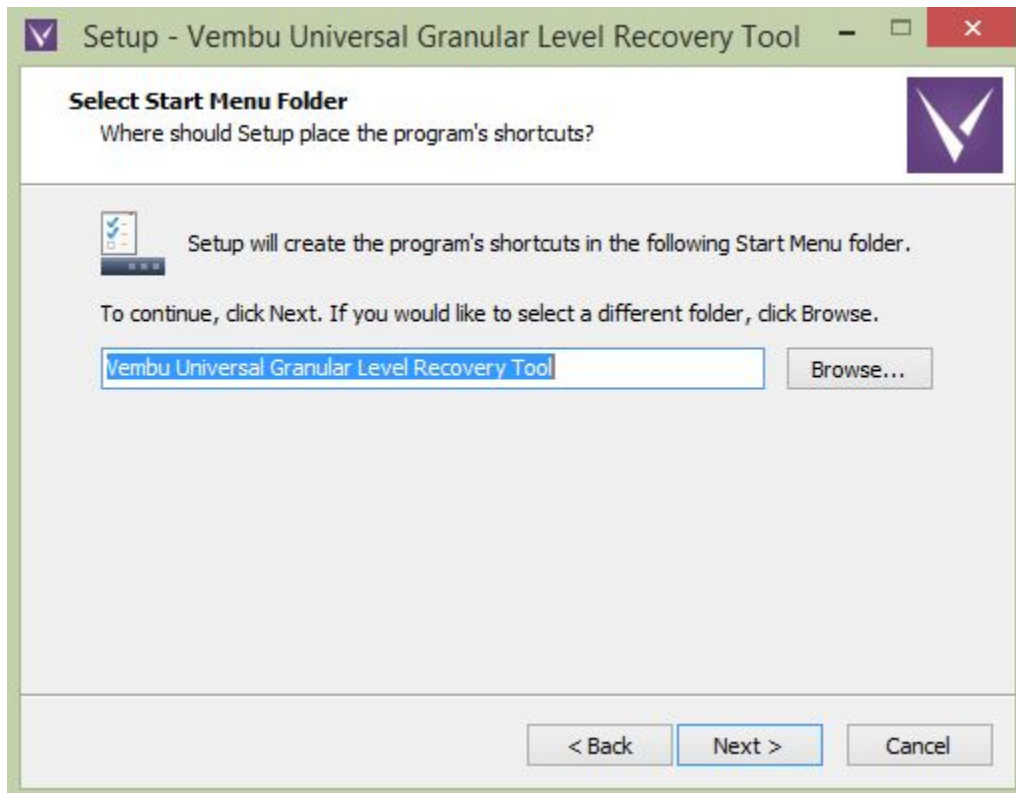


- Opt to "Click here" option to download the installer to install MS SQL Server 2014 Express.
- If you prefer to install later then check "I will install prerequisites later" option and click Next.

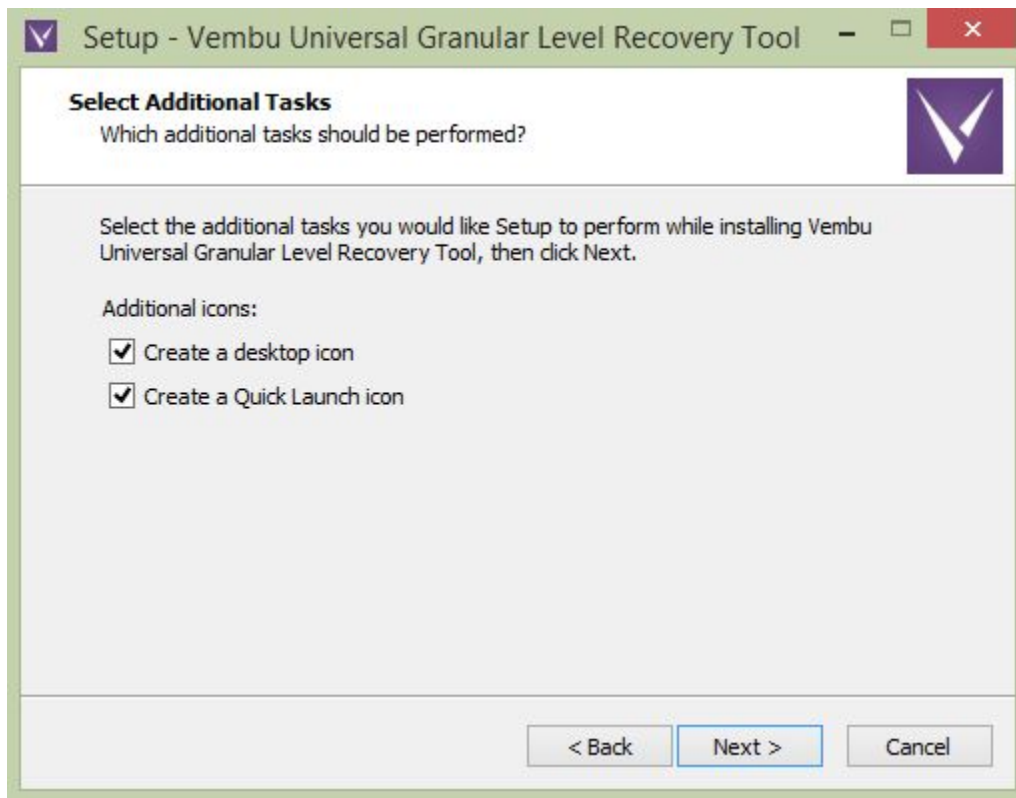
- Read and accept the License Agreement and click Next to proceed.



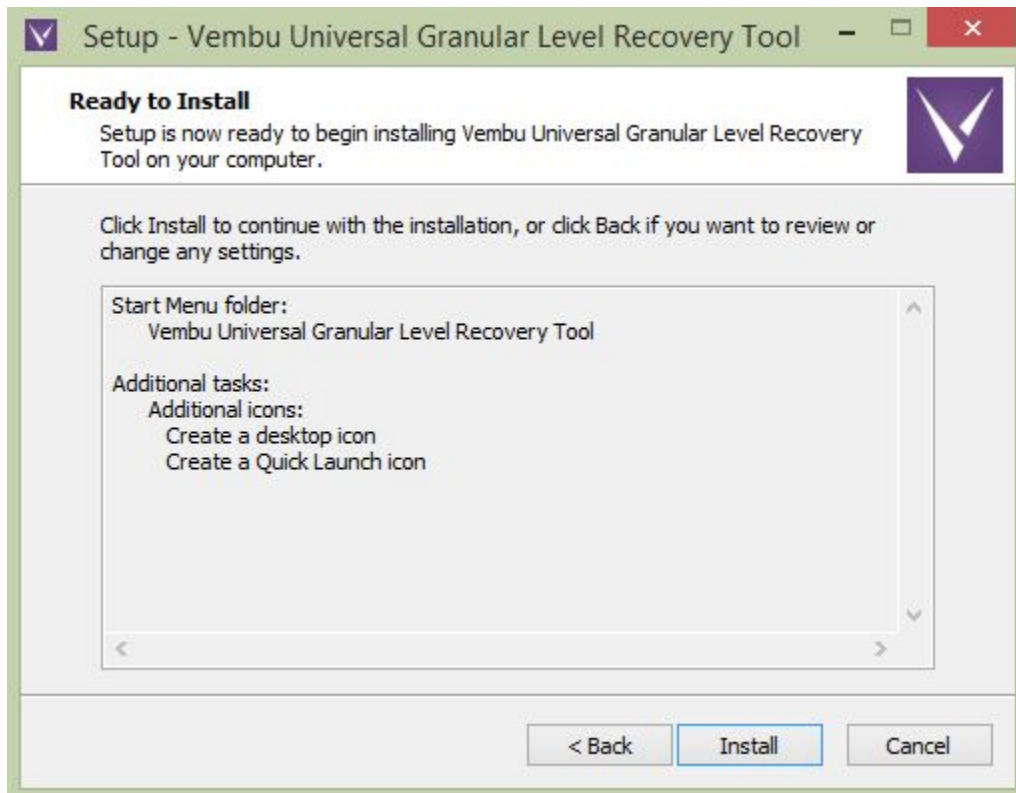
- Specify the folder in which you want the setup to configure shortcut for the application and click Next.



- Select additional tasks by checkboxing the options you require and hit Next.



- You should see a window with the summary of the chosen configuration. Click on install to proceed with the installation of Vembu Universal Explorer.



- Once installation process completes, you can launch the application on exit by checking the option "Start Vembu Universal Explorer application" and click Finish.



Usage

- Start Vembu Universal Explorer application.
- Click Next, once done reading introduction to Vembu Universal Explorer.
- Select application to recover granular contents.
- Follow the below steps of respective application to use

Microsoft Exchange Server

Requirements

- To open database files, Vembu Explorer for Exchange requires a service dynamic link library (ese.dll) which is installed together with Microsoft Exchange.
- For 2007 Edb files, please copy ese.dll, exchmem.dll and jcb.dll file from installation location of Microsoft Exchange to Vembu Explorer for Exchange location

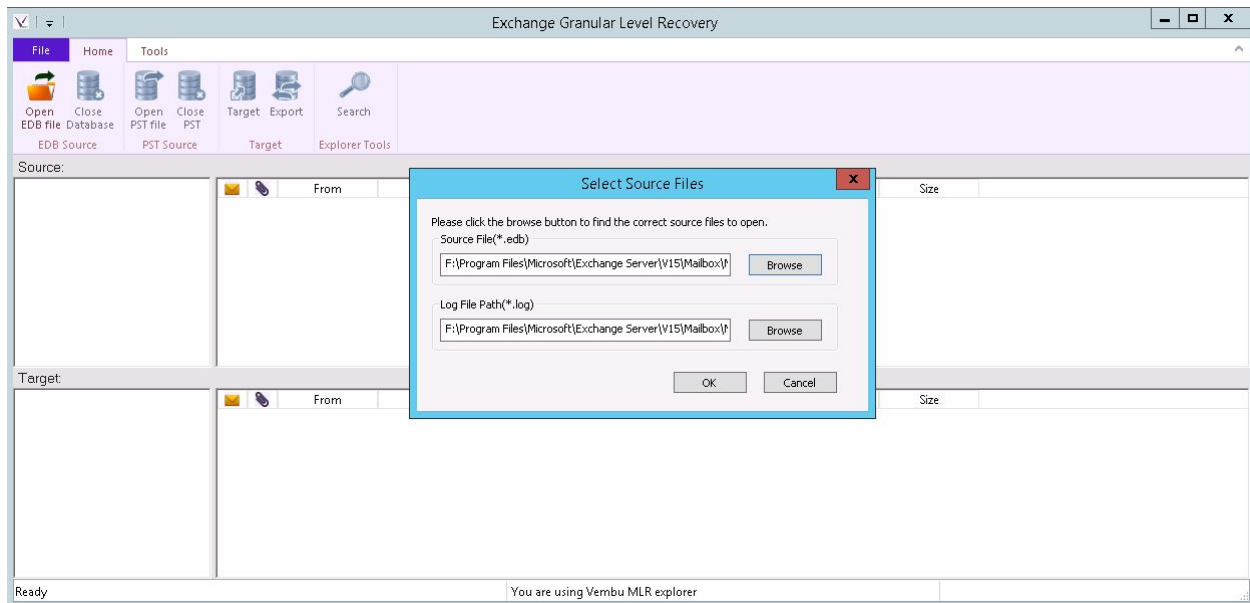
- (<Vembu_Explorer_For_Exchange_Installation_location>\esecomponents\ex2007).
- For Exchange server 2007 EDB and for Exchange server 2010/2013, we can configure the ese.dll by going through the menu "File → Settings" and browse the location of ese.dll and select.
- Vembu Explorer for Exchange only supports database files (.edb) created with the 64-bit version of Microsoft Exchange Server 2007, 2010 and 2013.
- If you are planning to export mailbox items as Personal Folder Files (.pst) or Restore to Exchange Server, it is necessary to have the 64-bit version of Microsoft Outlook 2010 installed in the system.
- The mailbox which is used for creating the MAPI profile should have administrator privileges, and we need to run our exe from that user only.
- Need to Install .NET framework 4.0 or 4.5 in the machine to perform save msg.

How to restore mails, calendar and contacts to the Exchange server by using edb files.

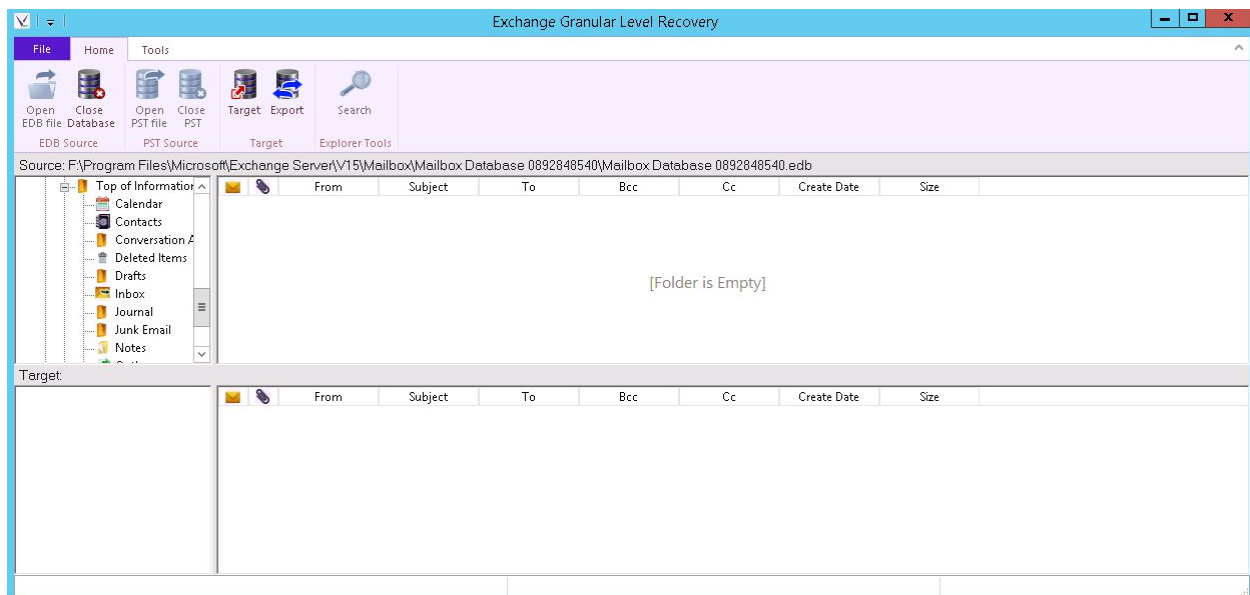
- Start Vembu Explorer for Exchange server; Home page looks like the below window.



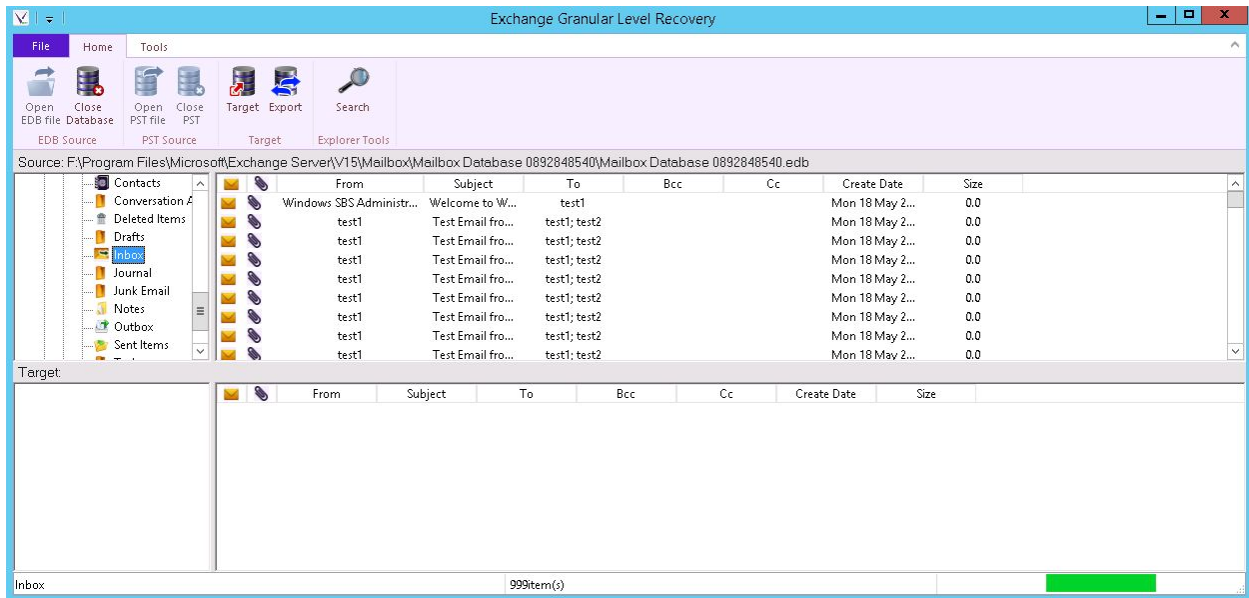
- Go to Home tab and click open EDB file → Select source. Browse edb files and click OK



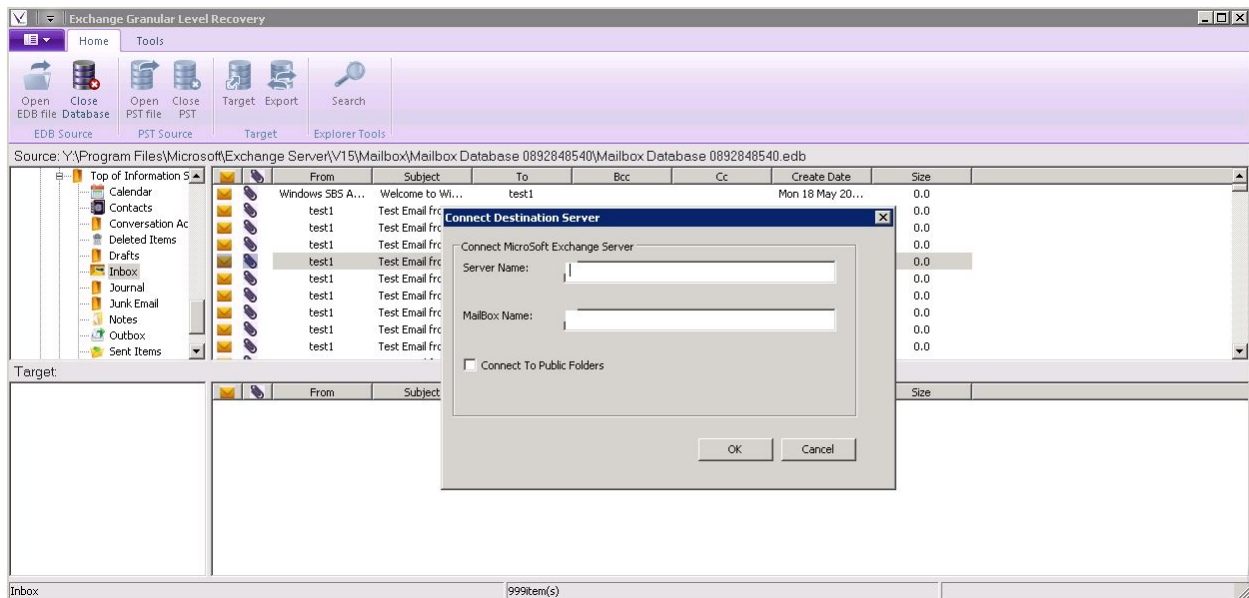
- You should see all the mailbox items in the Source.



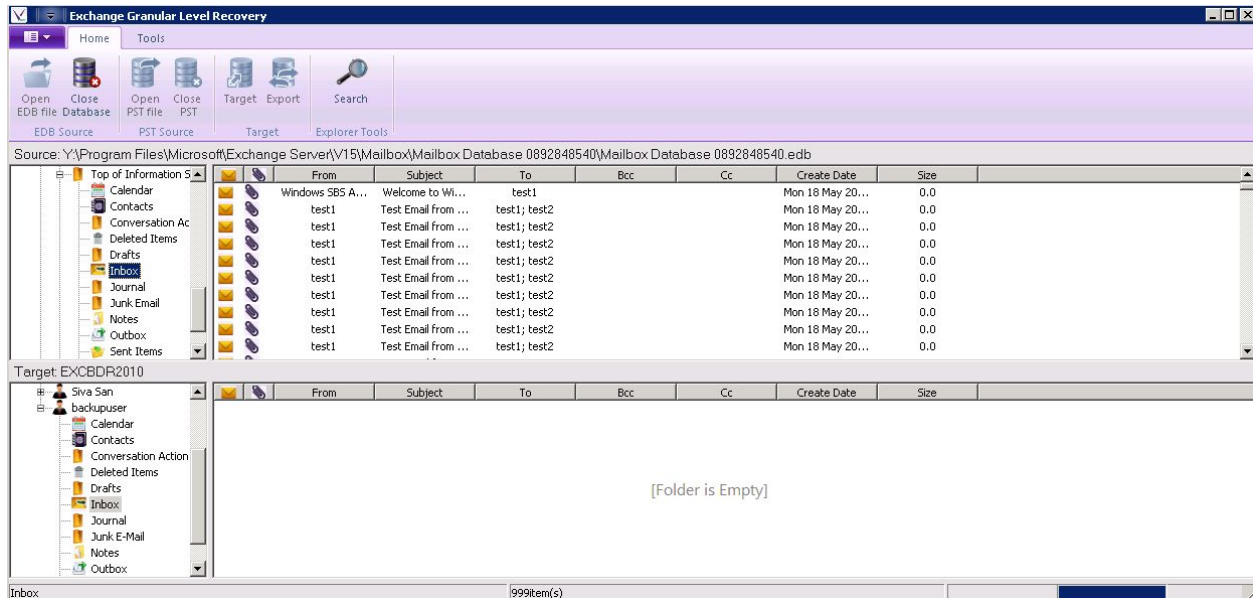
- Click on Mailbox and open Inbox.



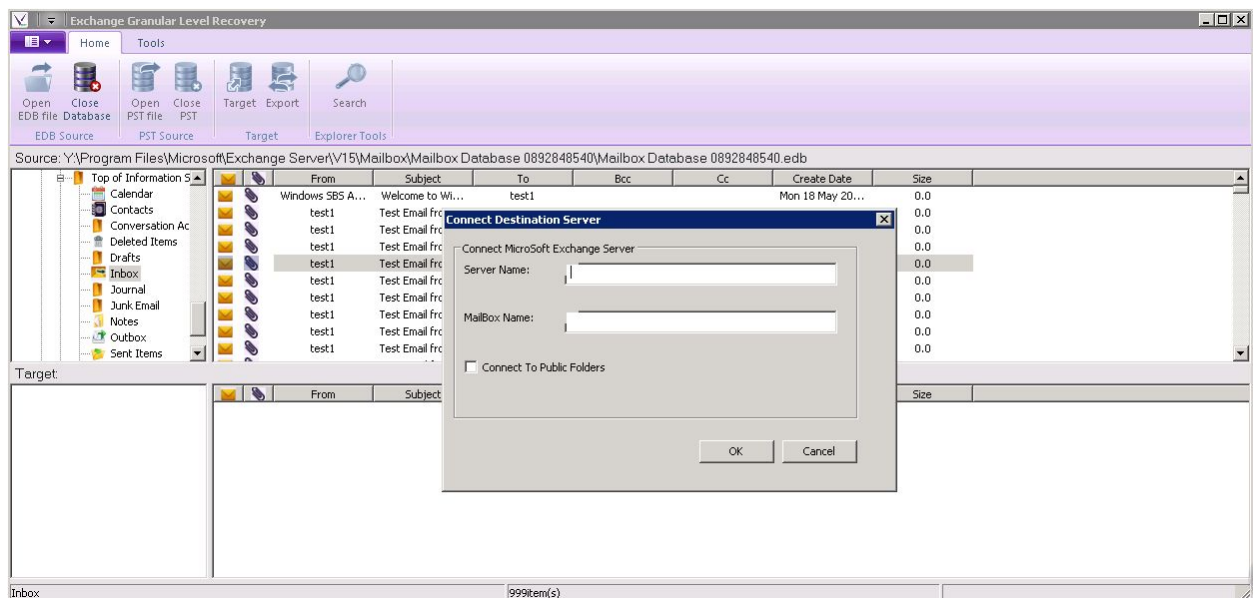
- Go to home and click target to open target Exchange server. You will see a window that asks for the server and mailbox names.
- Click OK, once done providing required information.



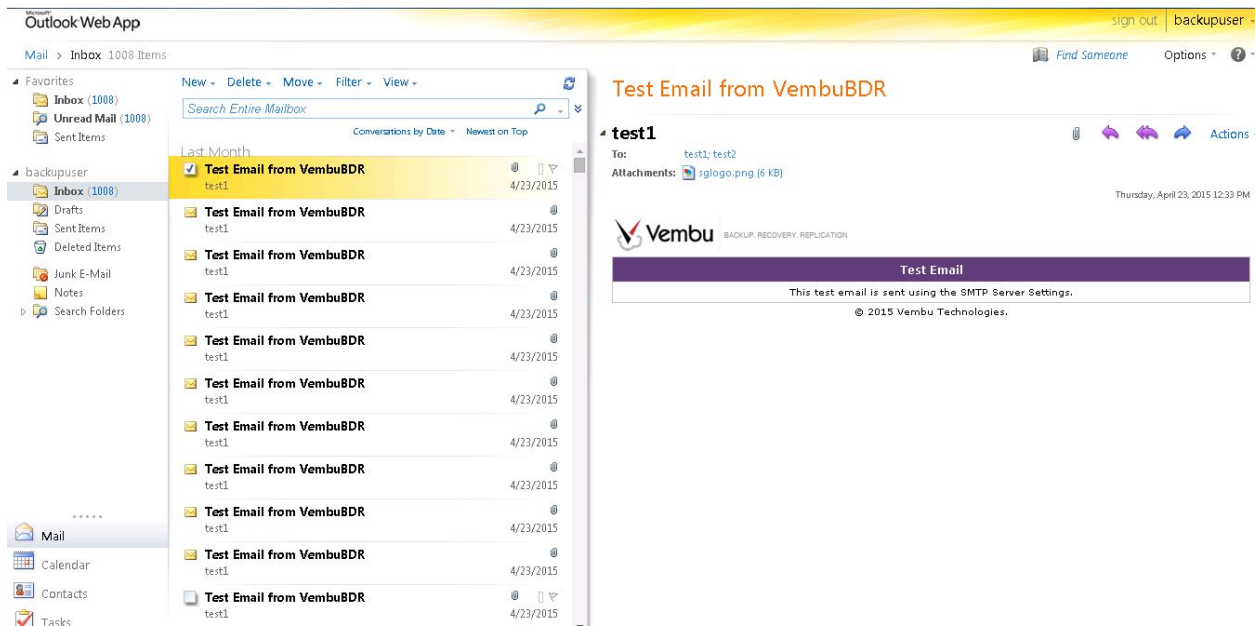
- You will see all emails in the target of a particular Exchange server.



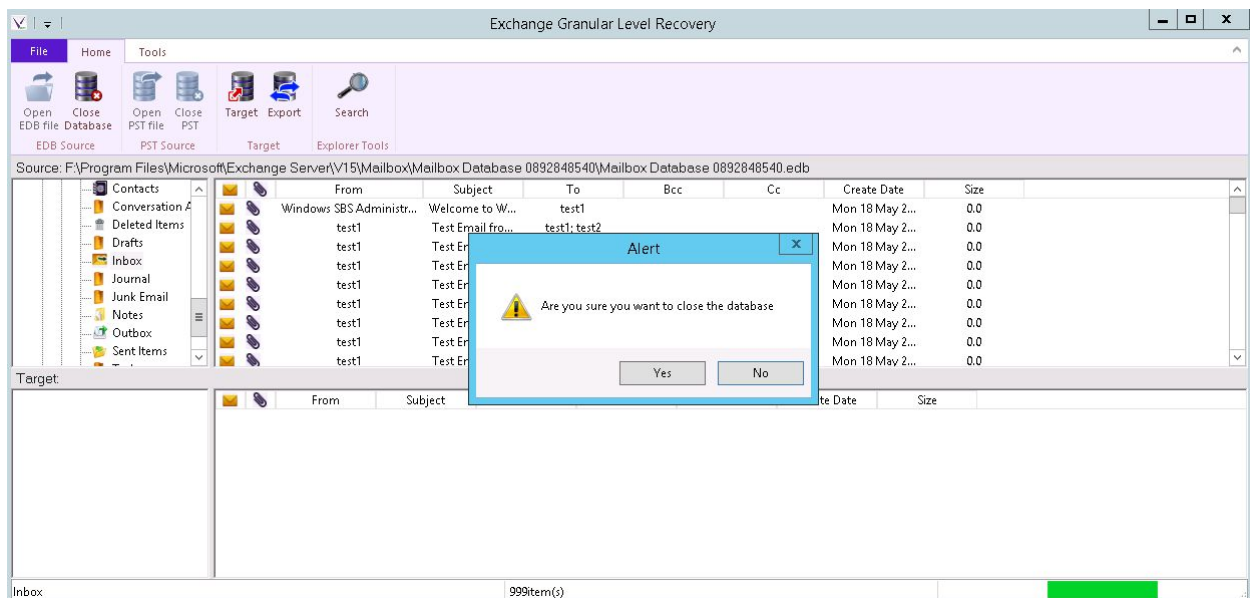
- Drag emails from Inbox to Target.



- When you open MS Outlook, you will see all your copied emails.



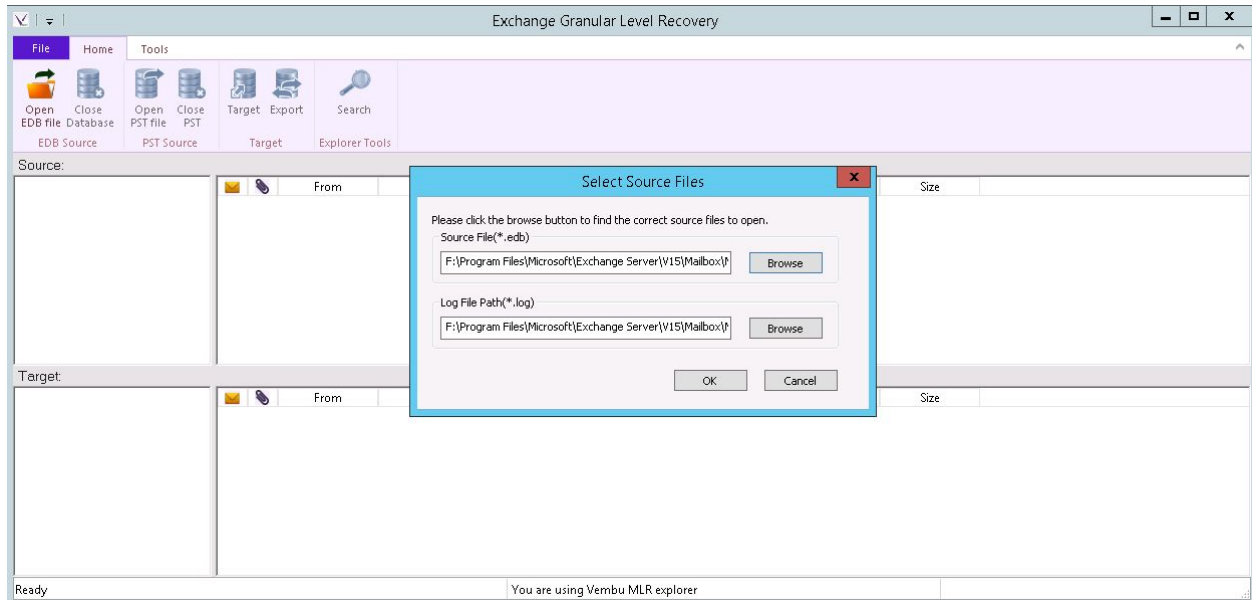
- Click the Close Database icon from Home; Then click yes to close the source database (Similarly you have to close the source edb files if you want to browse other edb files).



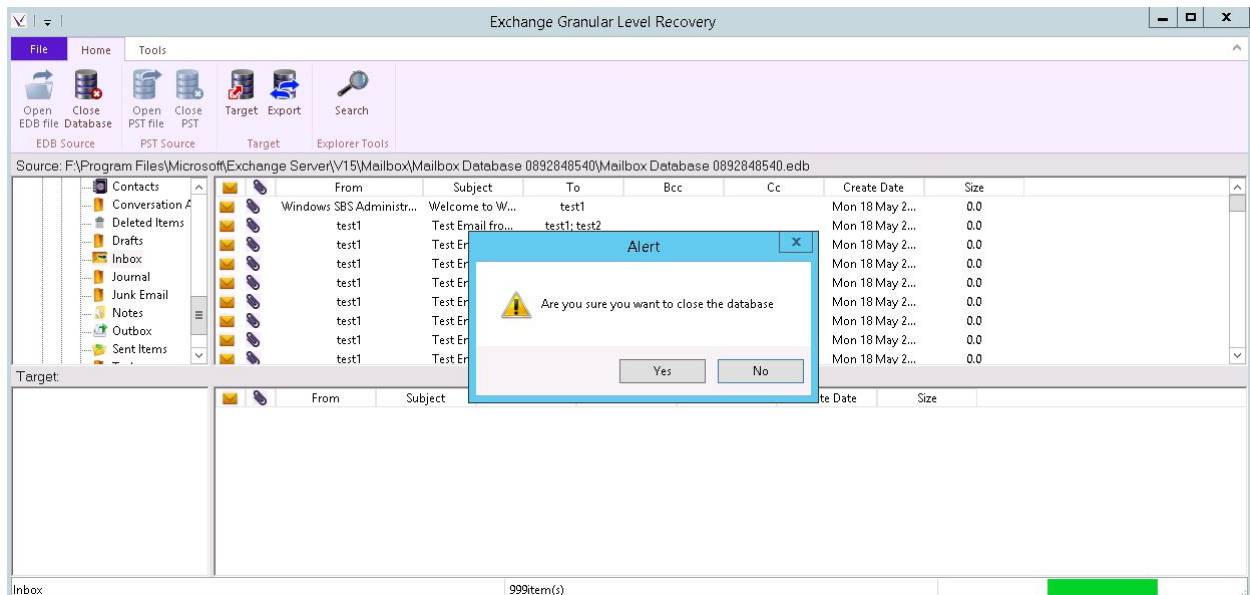
Note: The above procedure is used to Restore emails to Exchange server. The next sections will examine the procedure to Export emails to Pst files.

How to export mails, calendar and contacts to the Pst file by using edb files:

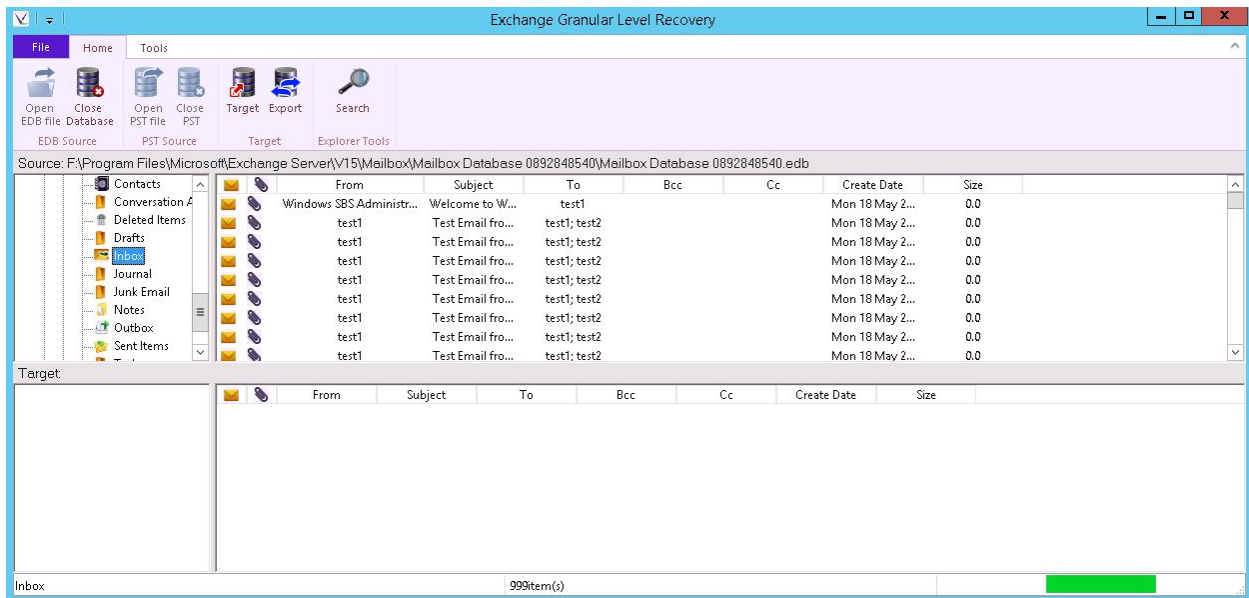
- Go to Home and Click the open EDB file icon→Select Source.
- Browse the edb files and click OK.



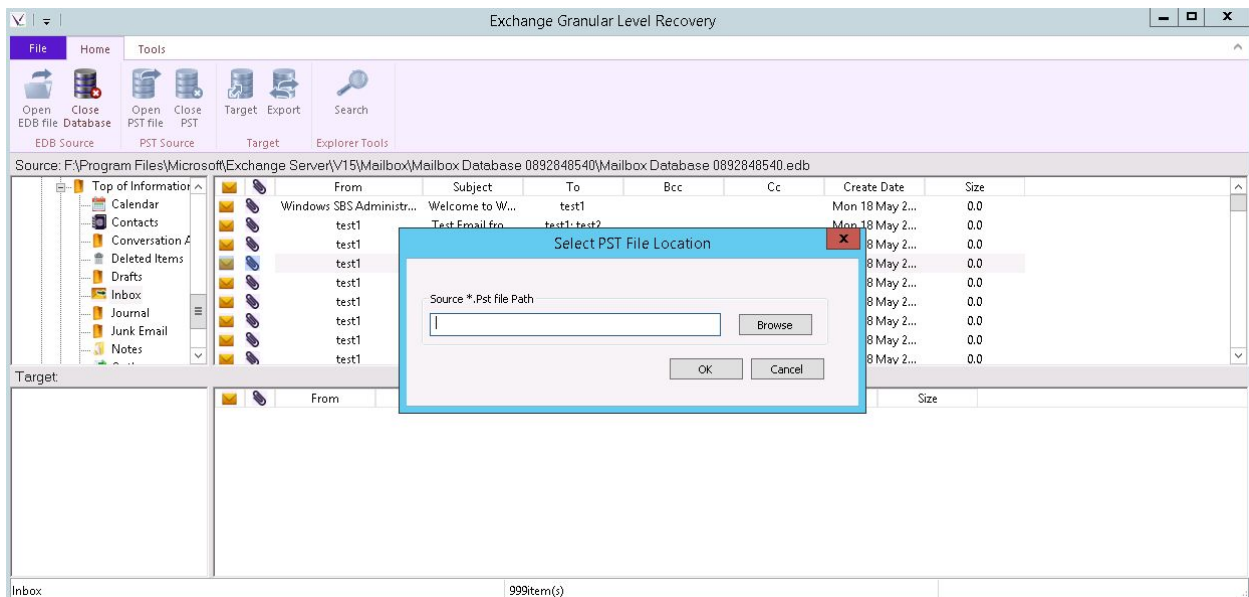
- You should see all the mailbox items in source.



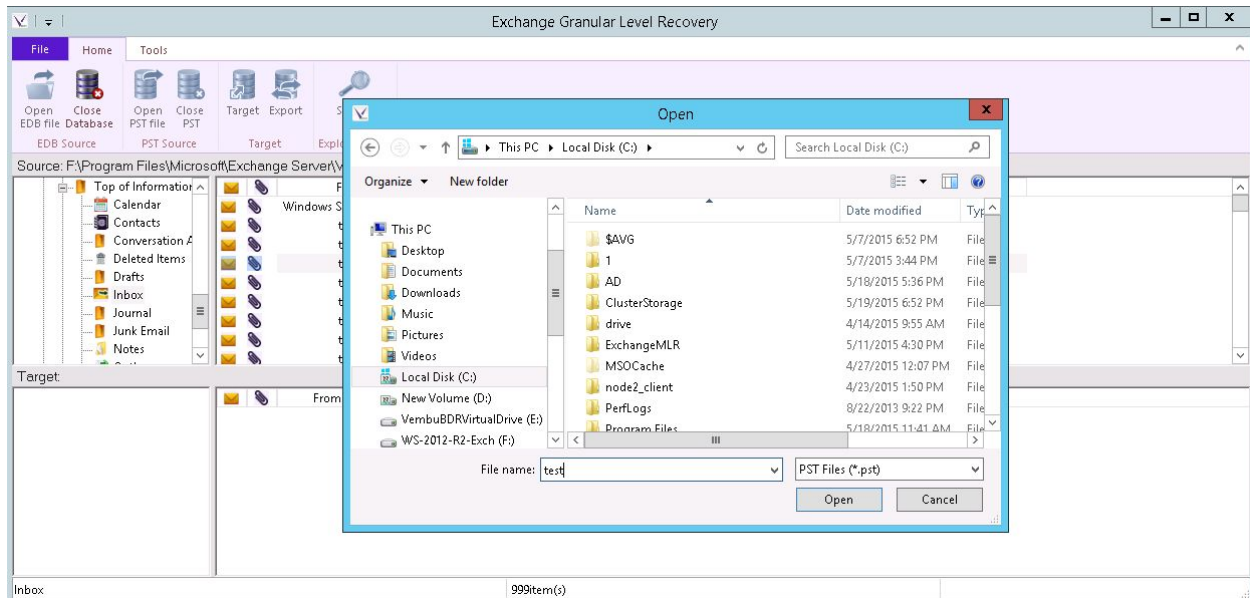
- Click on Mail Box then open the Inbox or Notes.



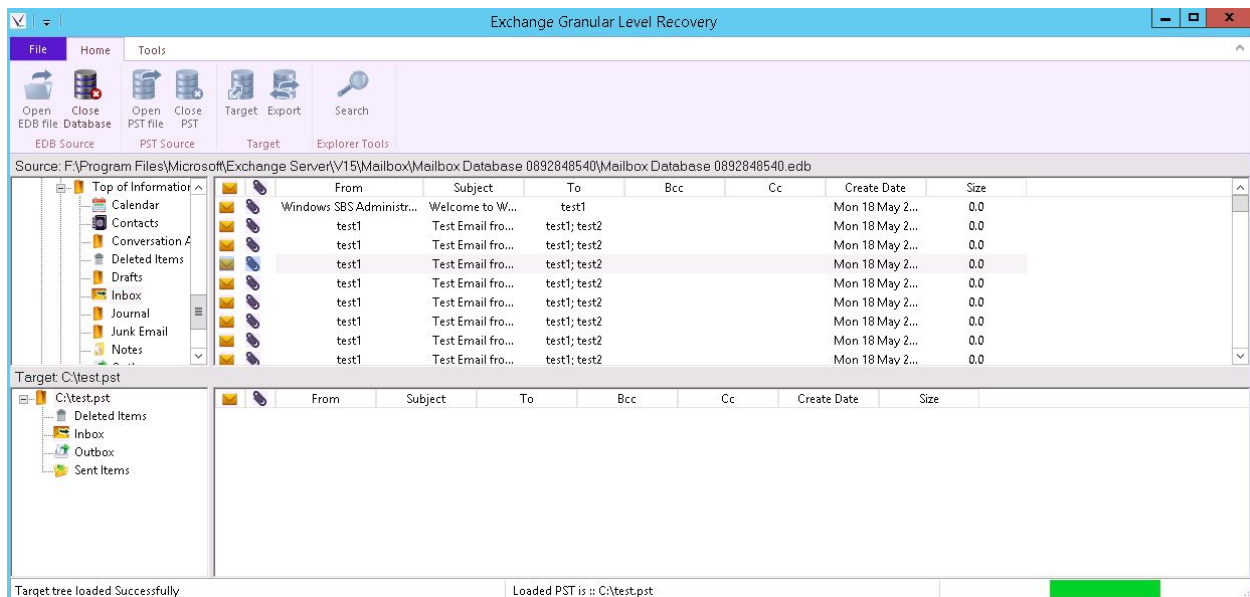
- Go to home and click the Export icon.



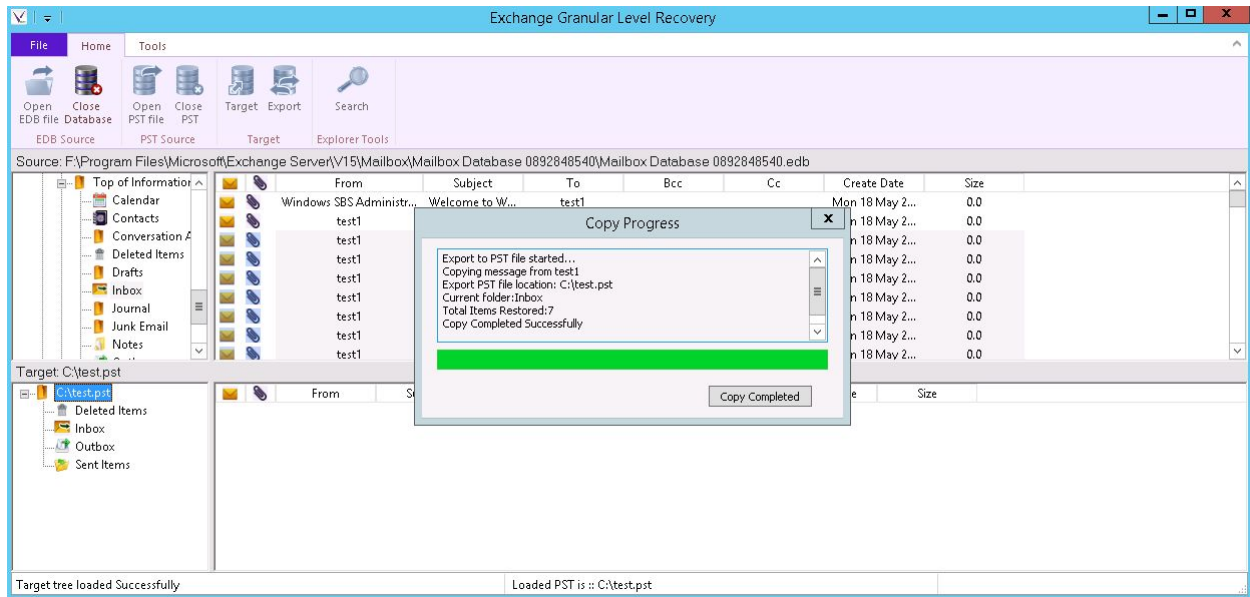
- Select the path where you want to restore pst files. Then enter filename. (It will create a new pst file with the given name)



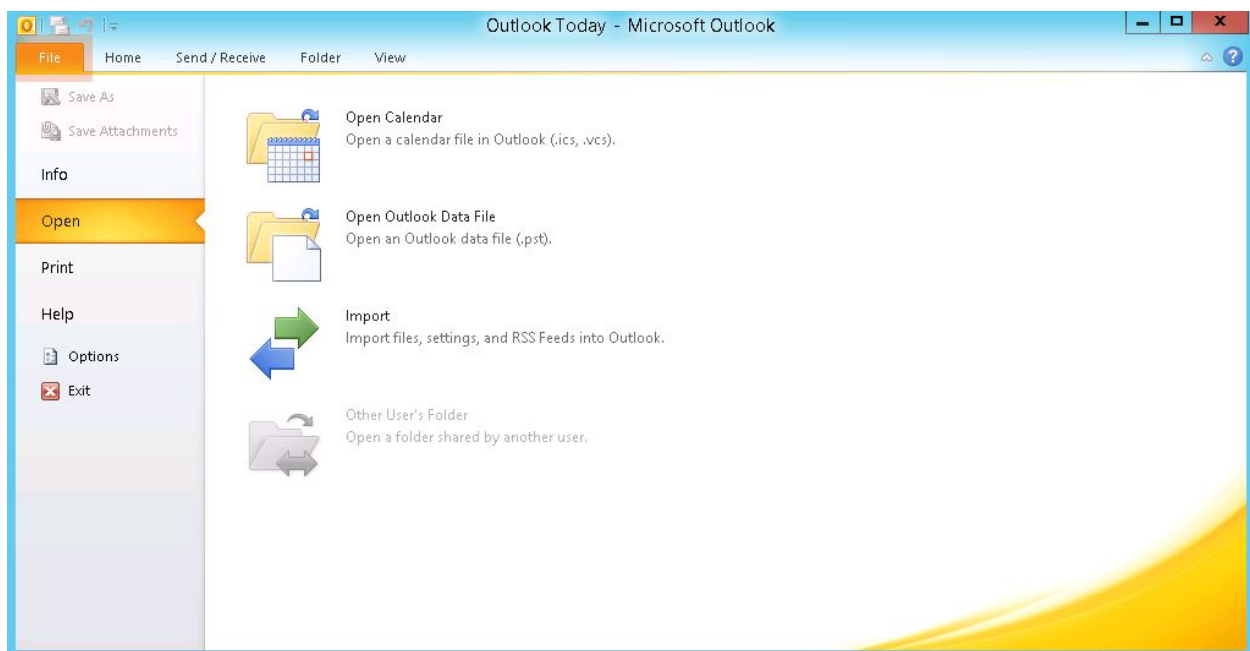
- You will now have the Export pst location in the target.



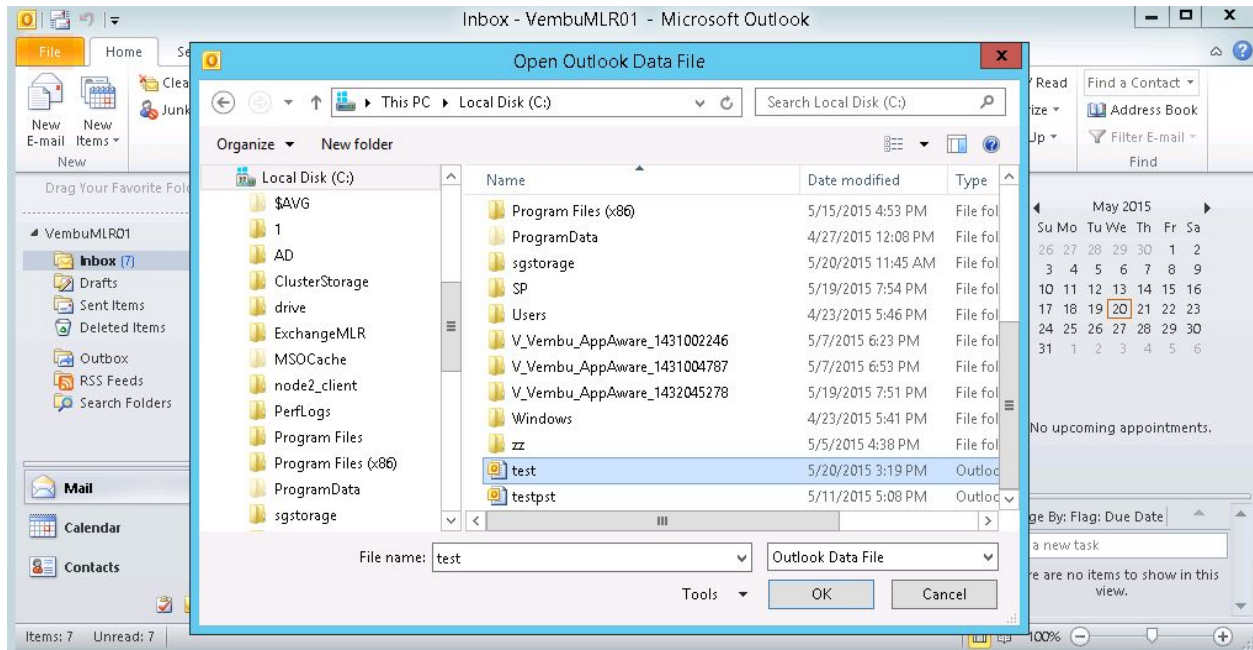
- Drag email from inbox to target.



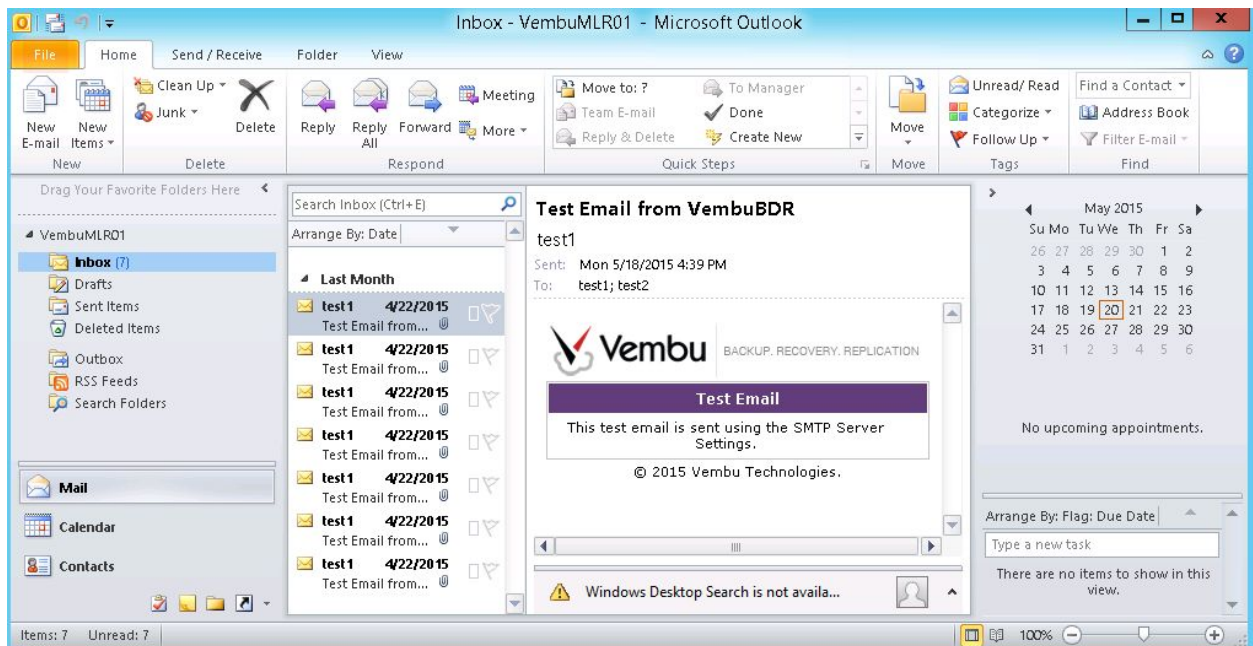
- Open MS Outlook. Go to File→Click on Open and select Open Outlook Data File (.Pst File).



- Select the Pst location and then click OK

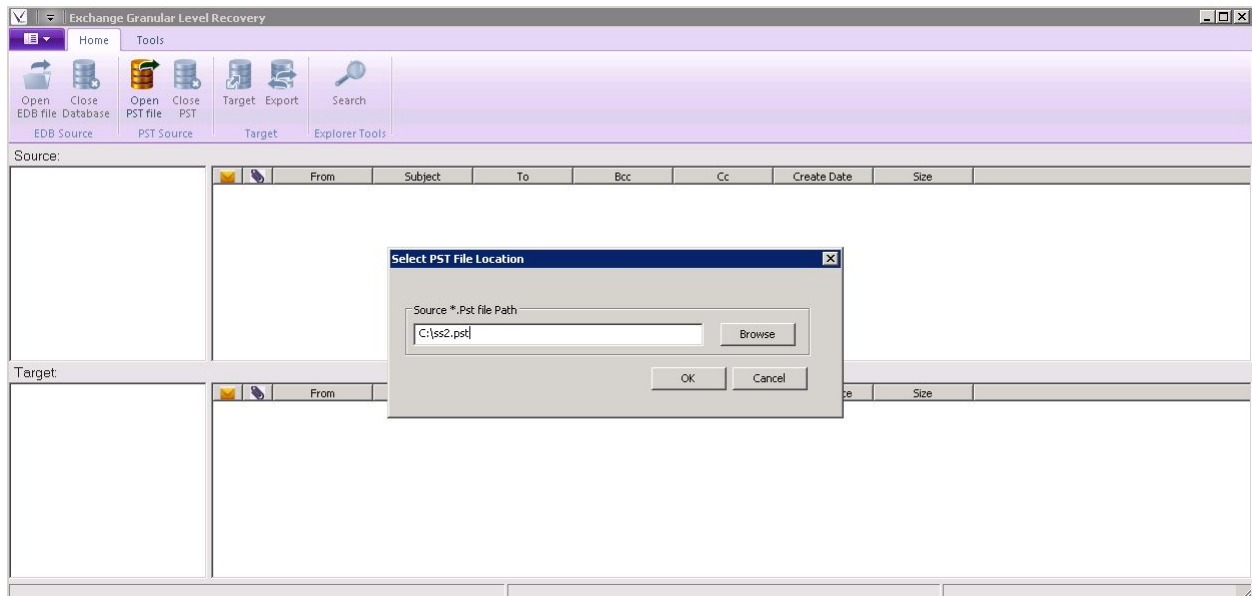


- A new account Vembu MLR 01 in the MS Outlook with all Exported emails should be visible.

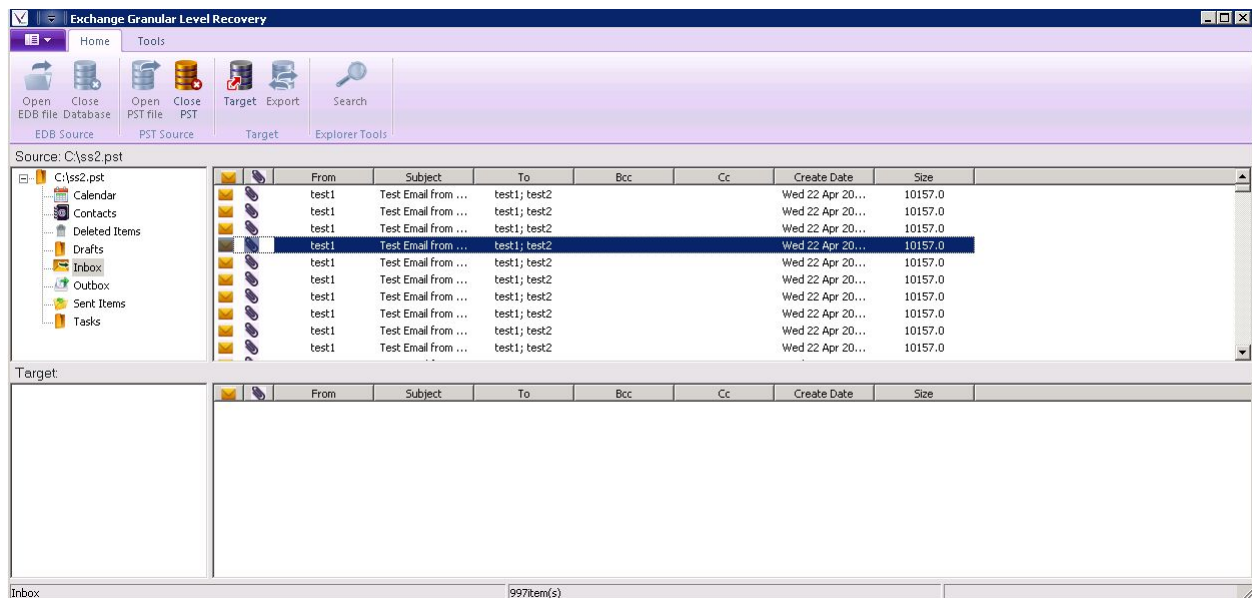


How to export mails, calendar and Contacts to the Exchange server by using the pst files.

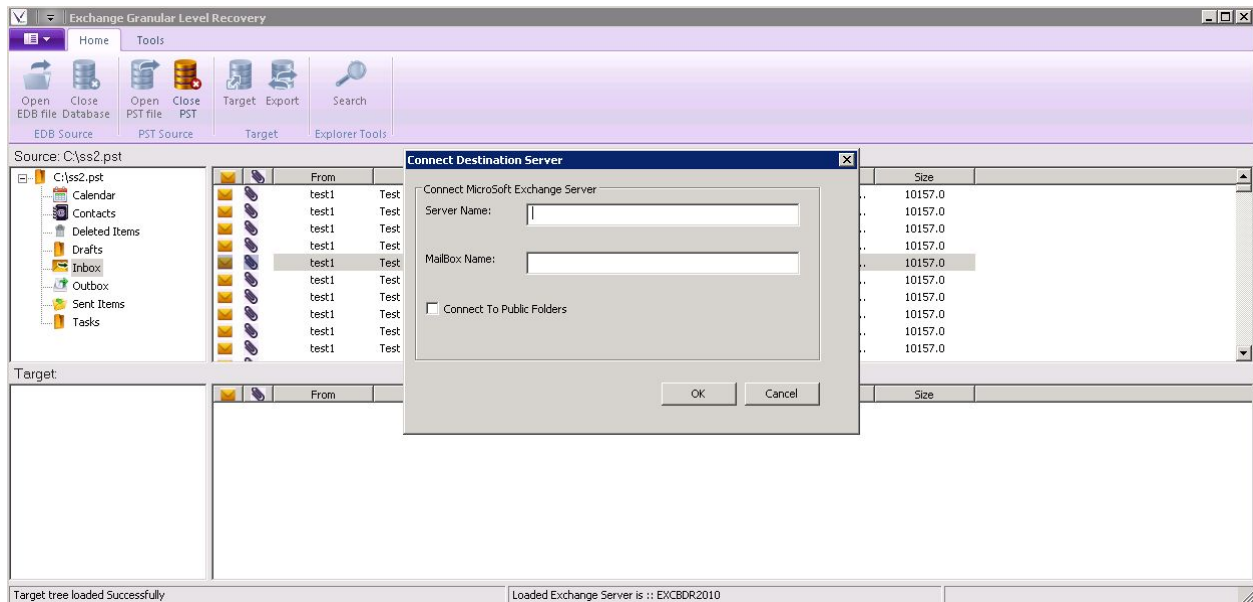
- Go to Home and Click the open PST file→Select Source. Browse the pst files and click OK.



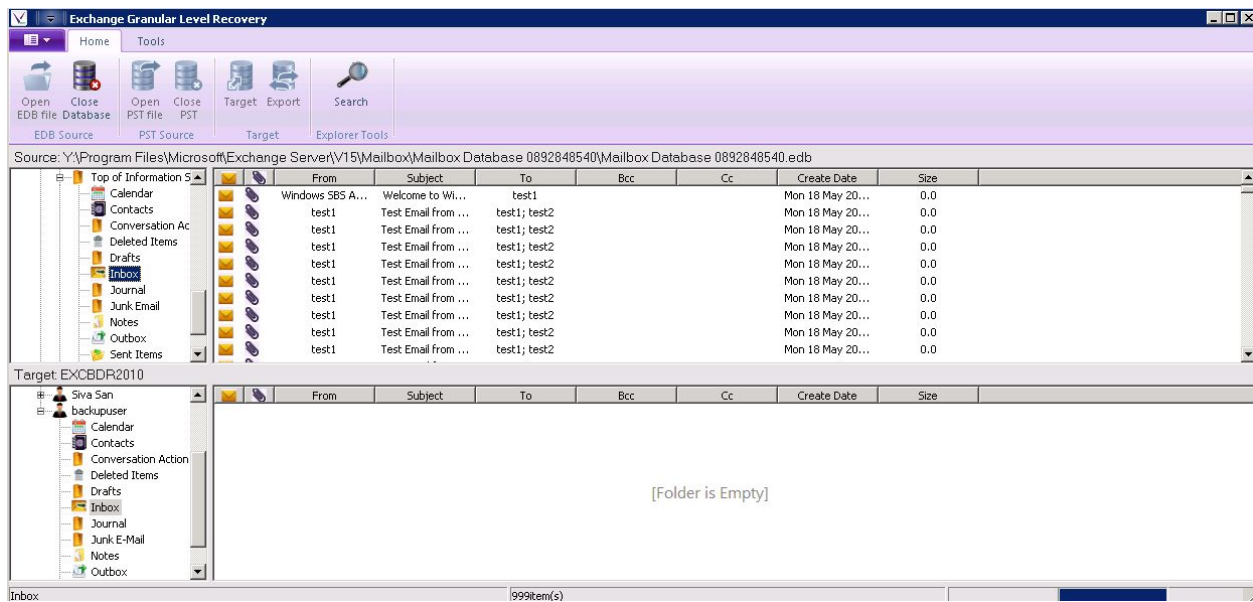
- You should see all the mailbox items in the Source.



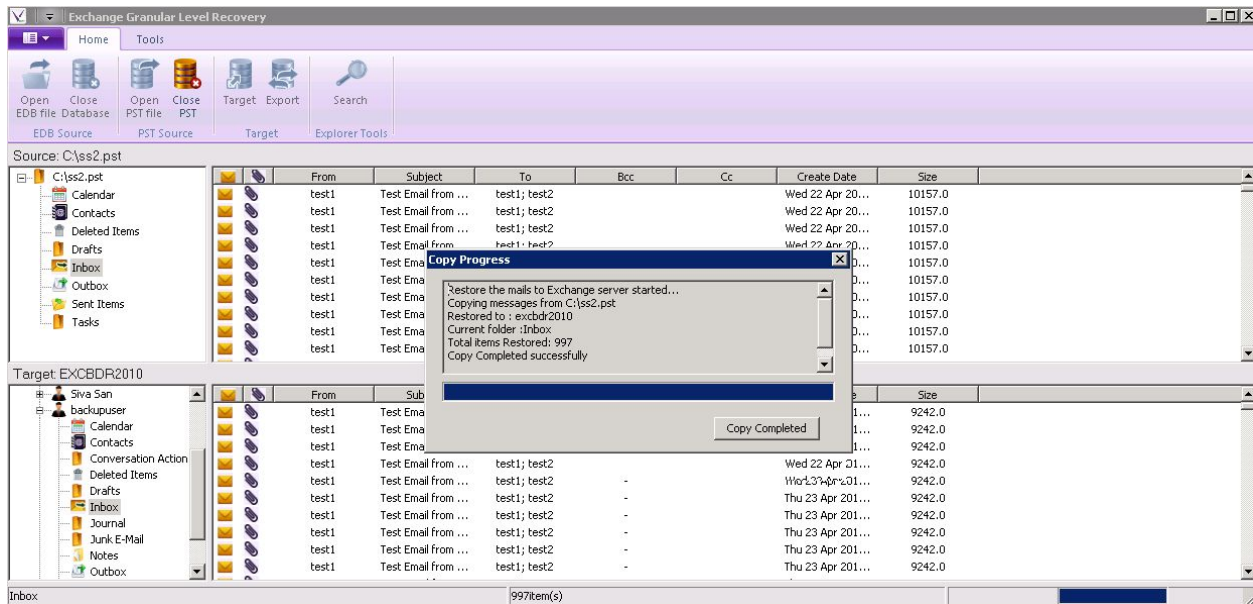
- Go to home and click target to open target Exchange server. You will see a window that asks for the server and mailbox names. Click OK after entering the information.



- You will see all the email items in the target of a particular Exchange server.

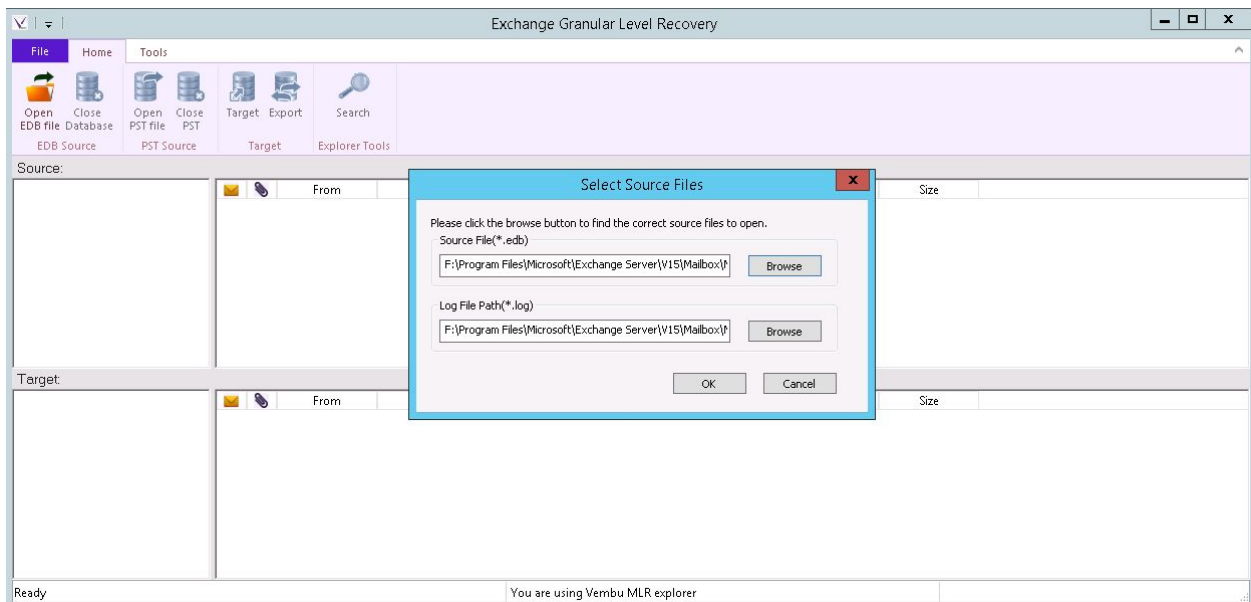


- Drag the email items to Target.

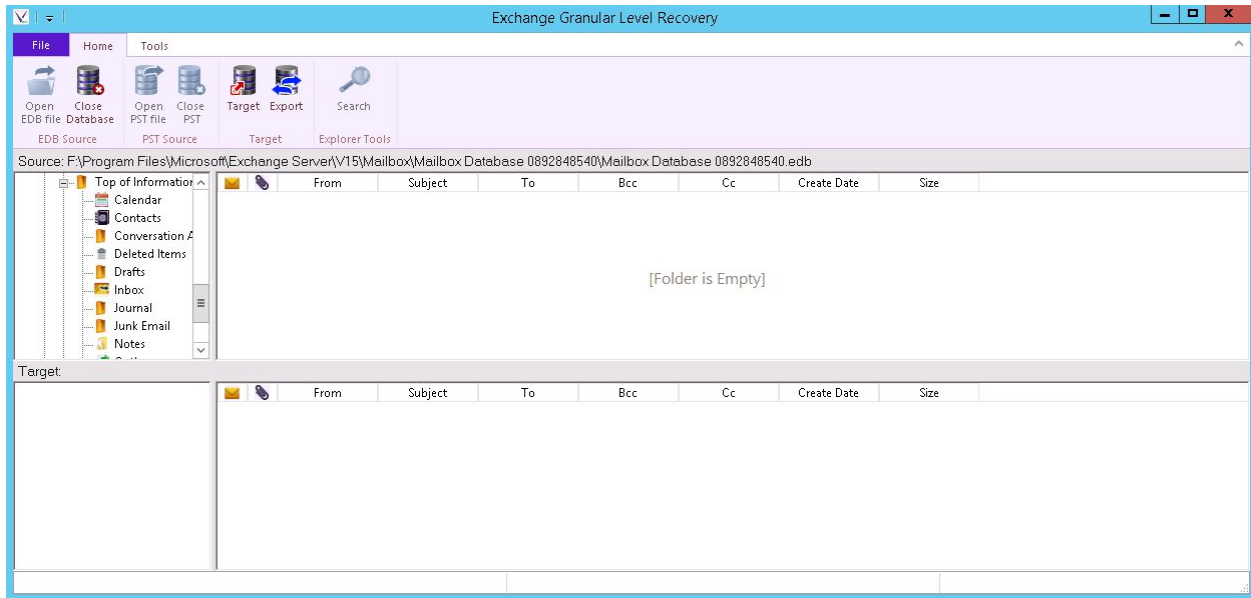


How to save the message from EDB File:

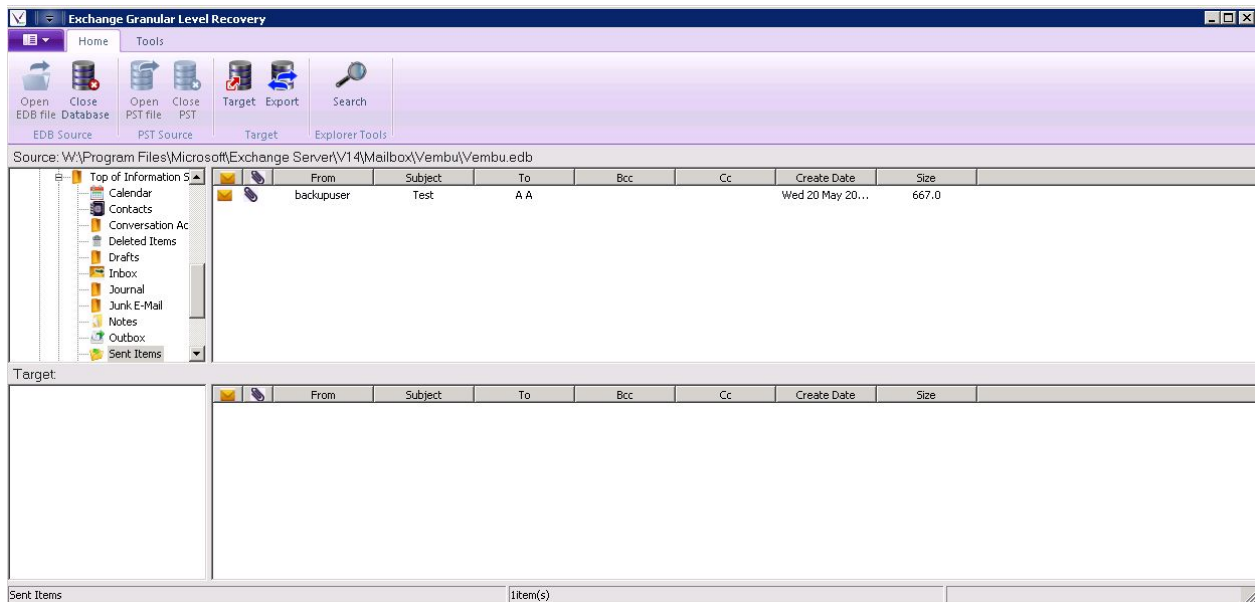
- Go to Home and Click the open EDB file icon→Select Source. Browse the edb files and click OK.



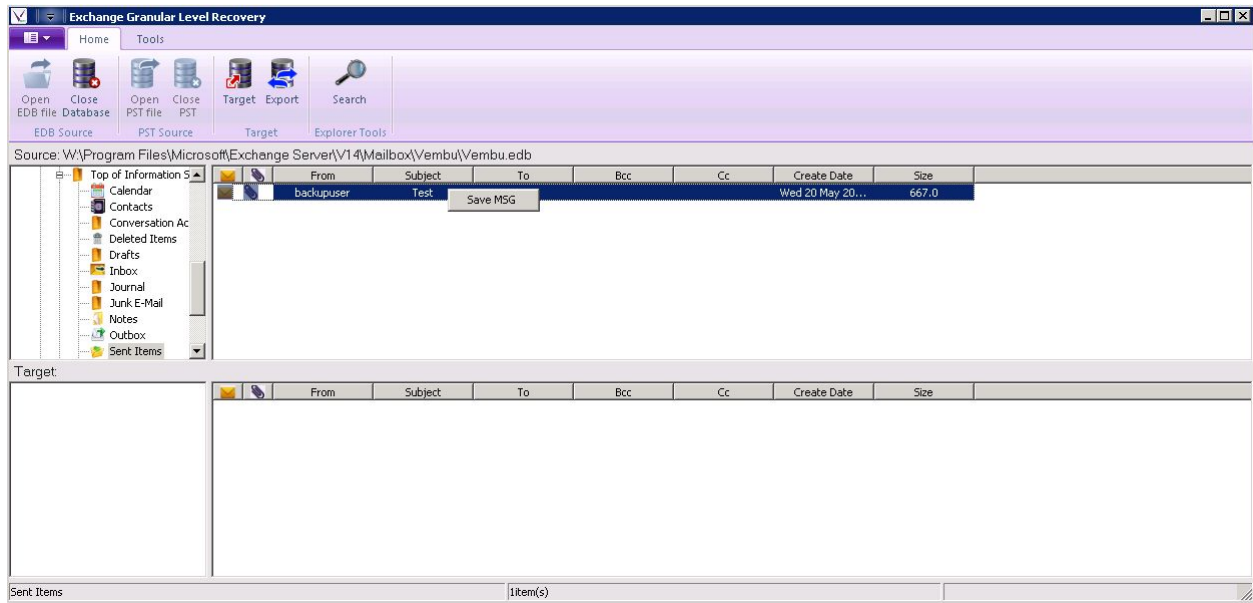
- You should see all the mailbox items in the Source.



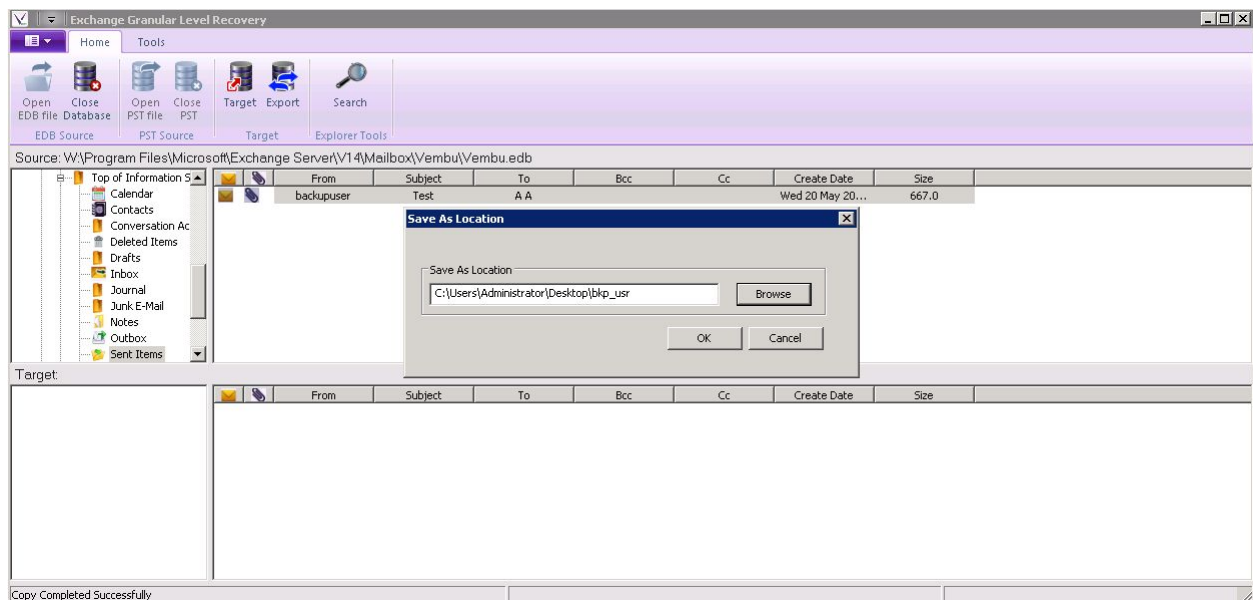
- Click the e-mail items such as Inbox, Sent Items etc.



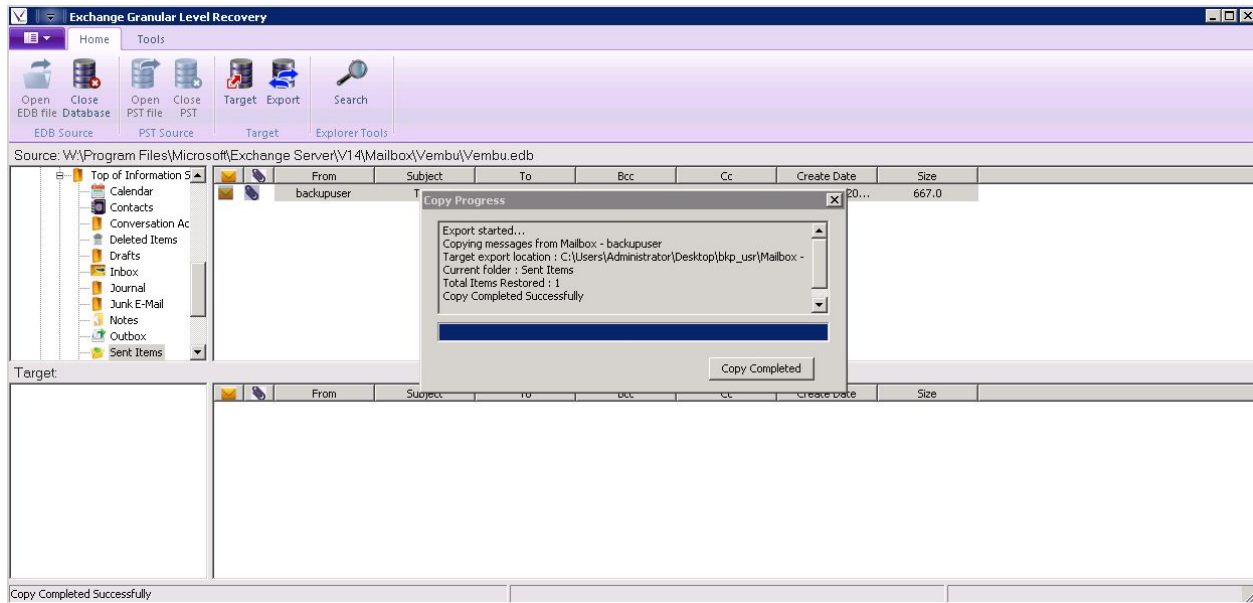
- Right click over message and hit save.



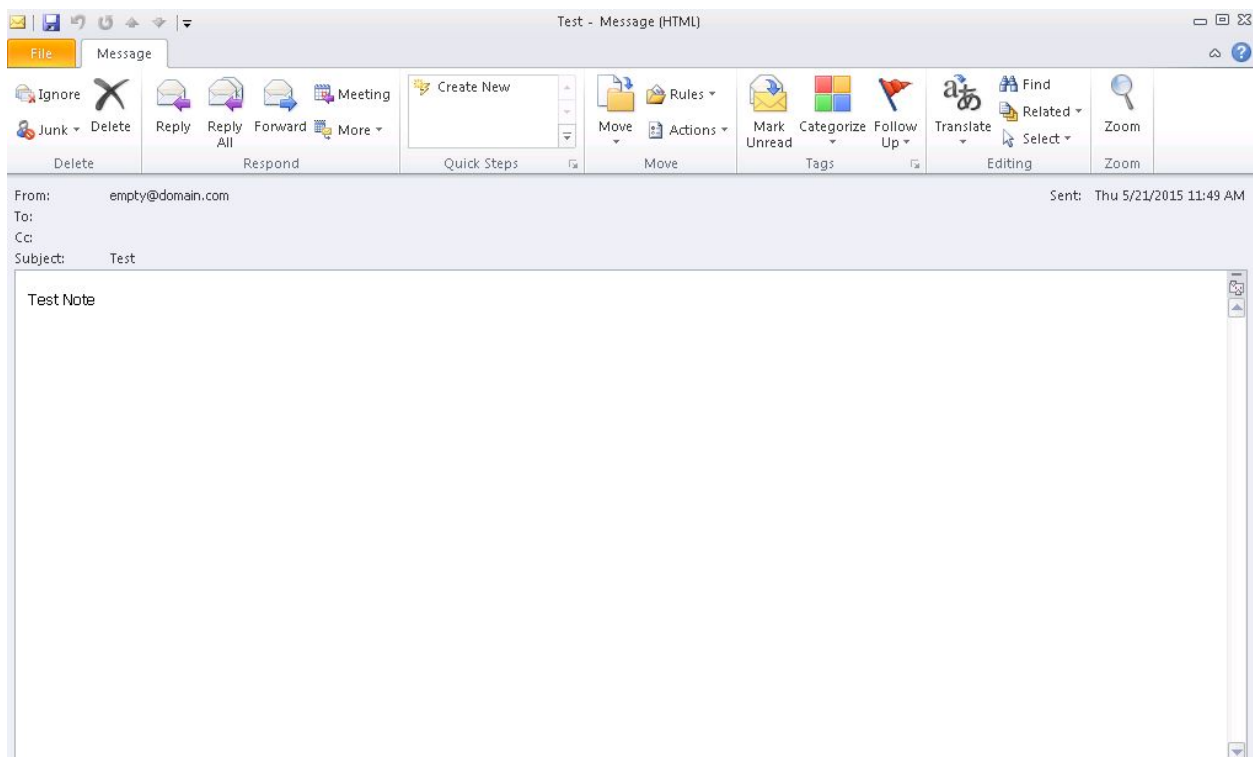
- Enter location to save the message.



- The message will be saved in given location.

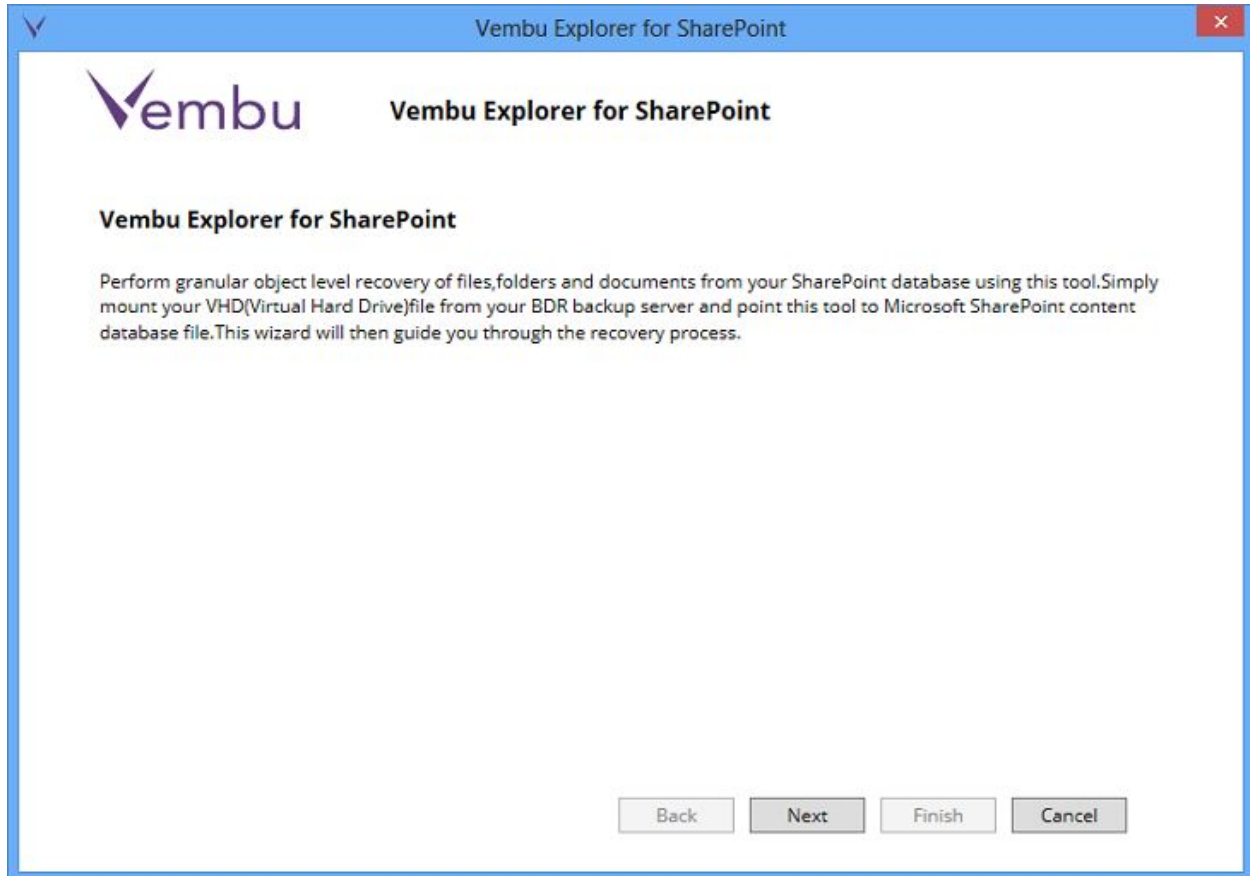


- We can open the saved message with outlook.

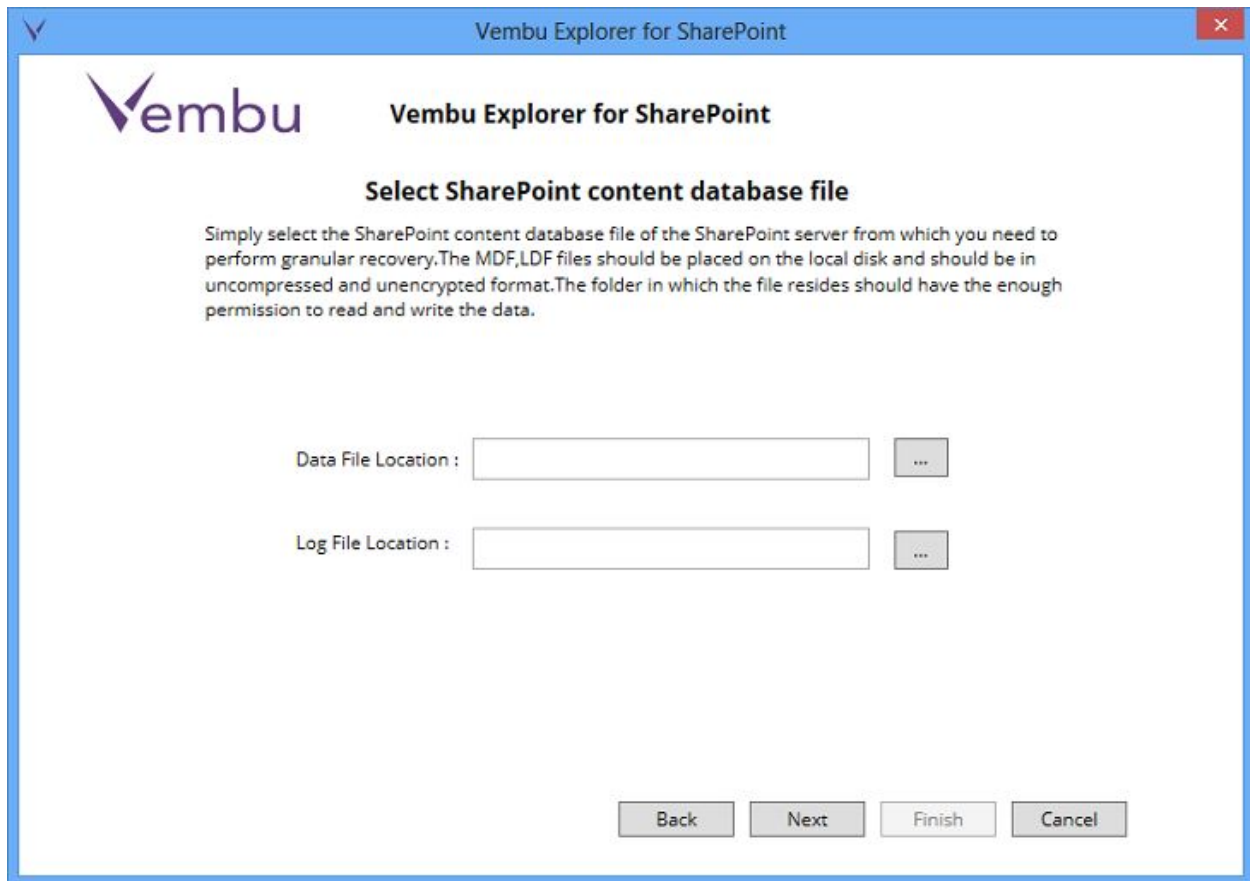


Microsoft SharePoint Server

- Start Vembu Explorer for SharePoint application.
- Click Next, once done reading the brief introduction to Vembu Explorer for SharePoint.

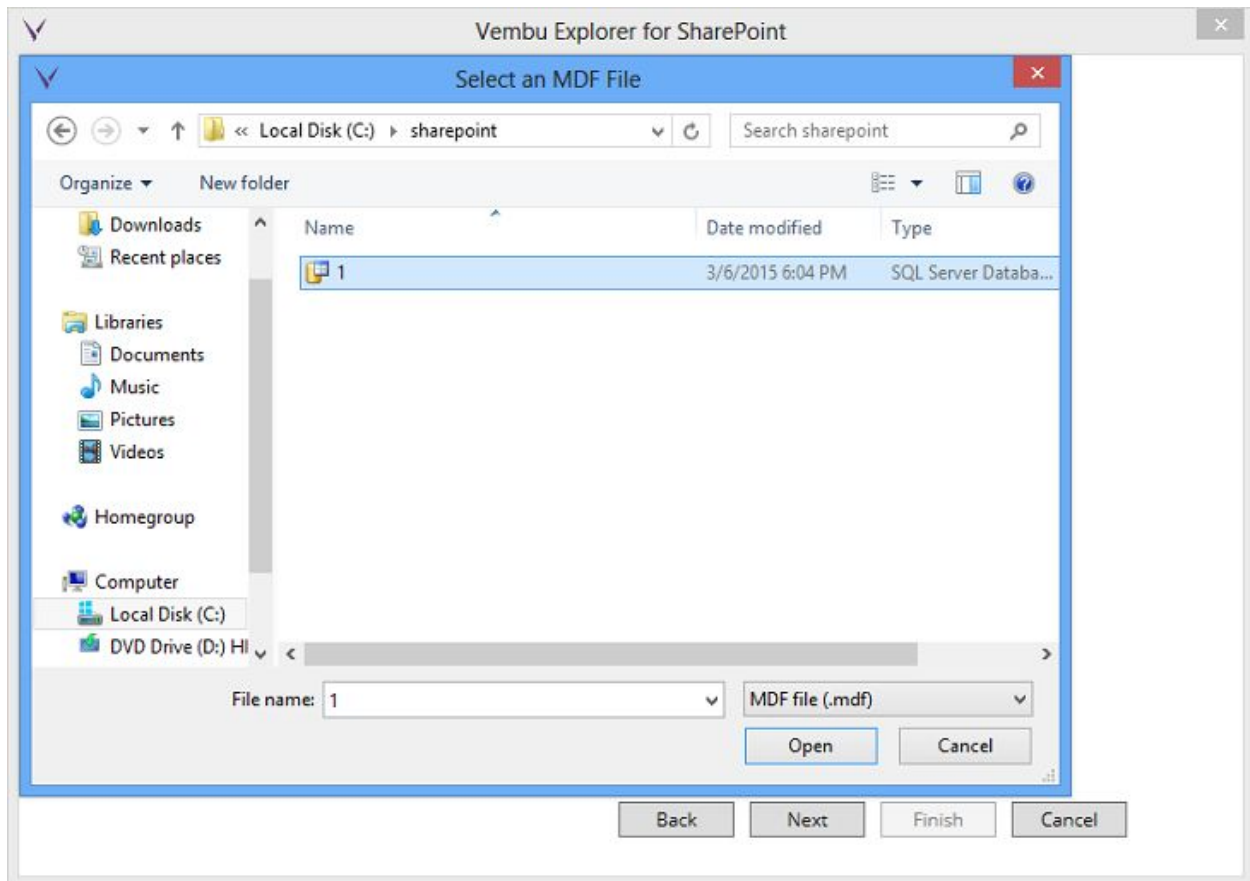


- In the window that appears, enter the .mdf database file of the Sharepoint sites that you want to recover.

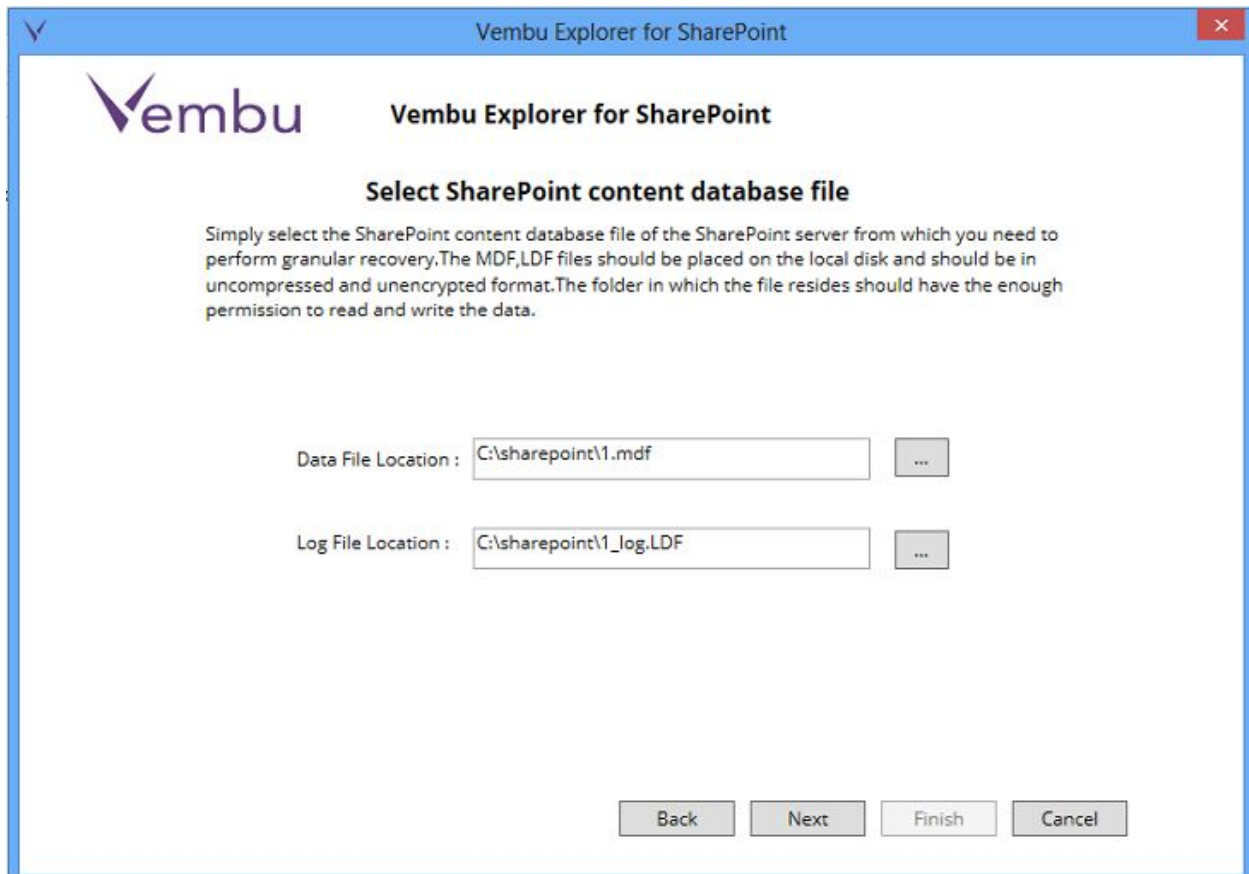


The screenshot shows a window titled "Vembu Explorer for SharePoint". Inside the window, the Vembu logo is on the top left. The main heading is "Vembu Explorer for SharePoint". Below it, the section is titled "Select SharePoint content database file". A paragraph of instructions follows: "Simply select the SharePoint content database file of the SharePoint server from which you need to perform granular recovery. The MDF, LDF files should be placed on the local disk and should be in uncompressed and unencrypted format. The folder in which the file resides should have the enough permission to read and write the data." Below this text, there are two input fields. The first is labeled "Data File Location :" and the second is labeled "Log File Location :". Each input field has a small button with three dots ("...") to its right. At the bottom of the window, there are four buttons: "Back", "Next", "Finish", and "Cancel".

- Select the .mdf file respective to the sharepoint site that you want to recover.

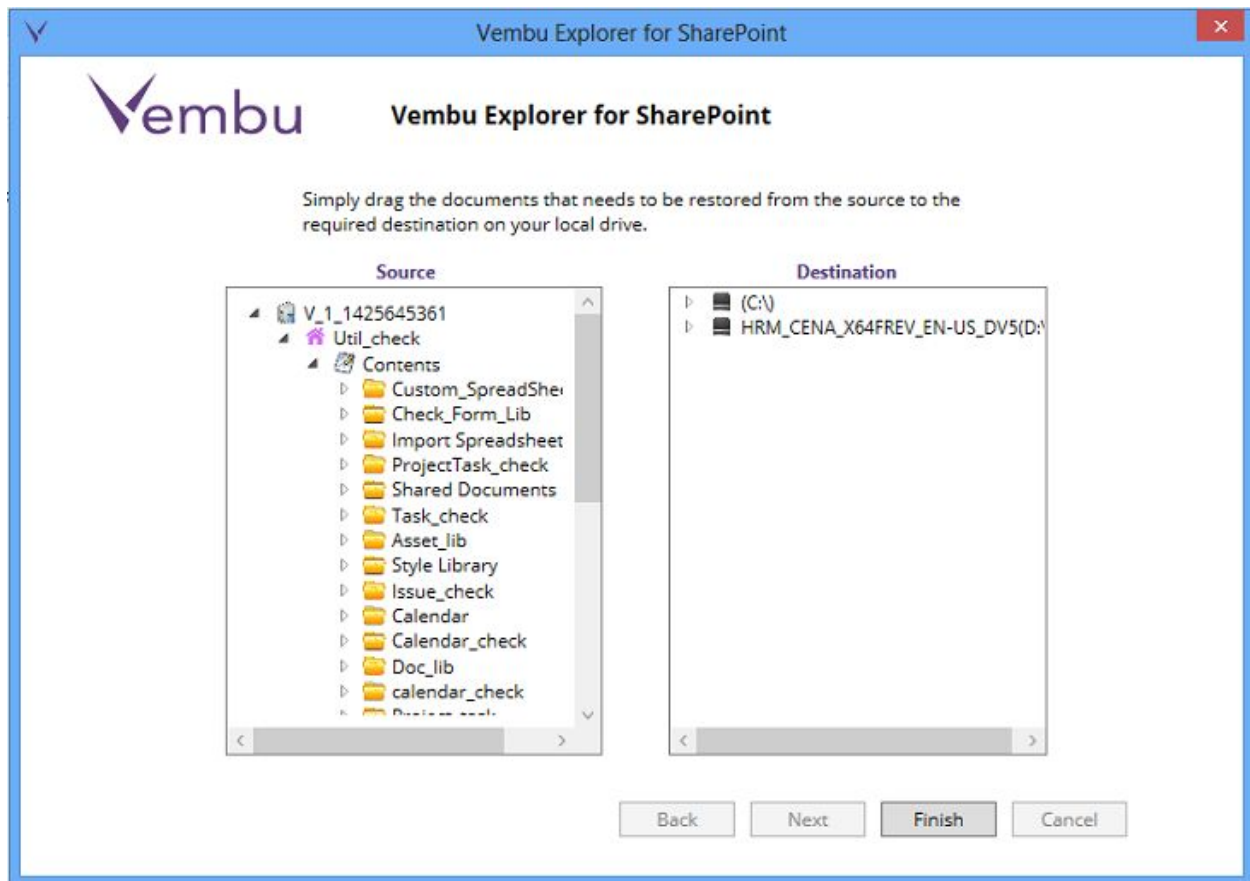


- Once you select .mdf file, respective .ldf file will be selected automatically.
- Click Next.

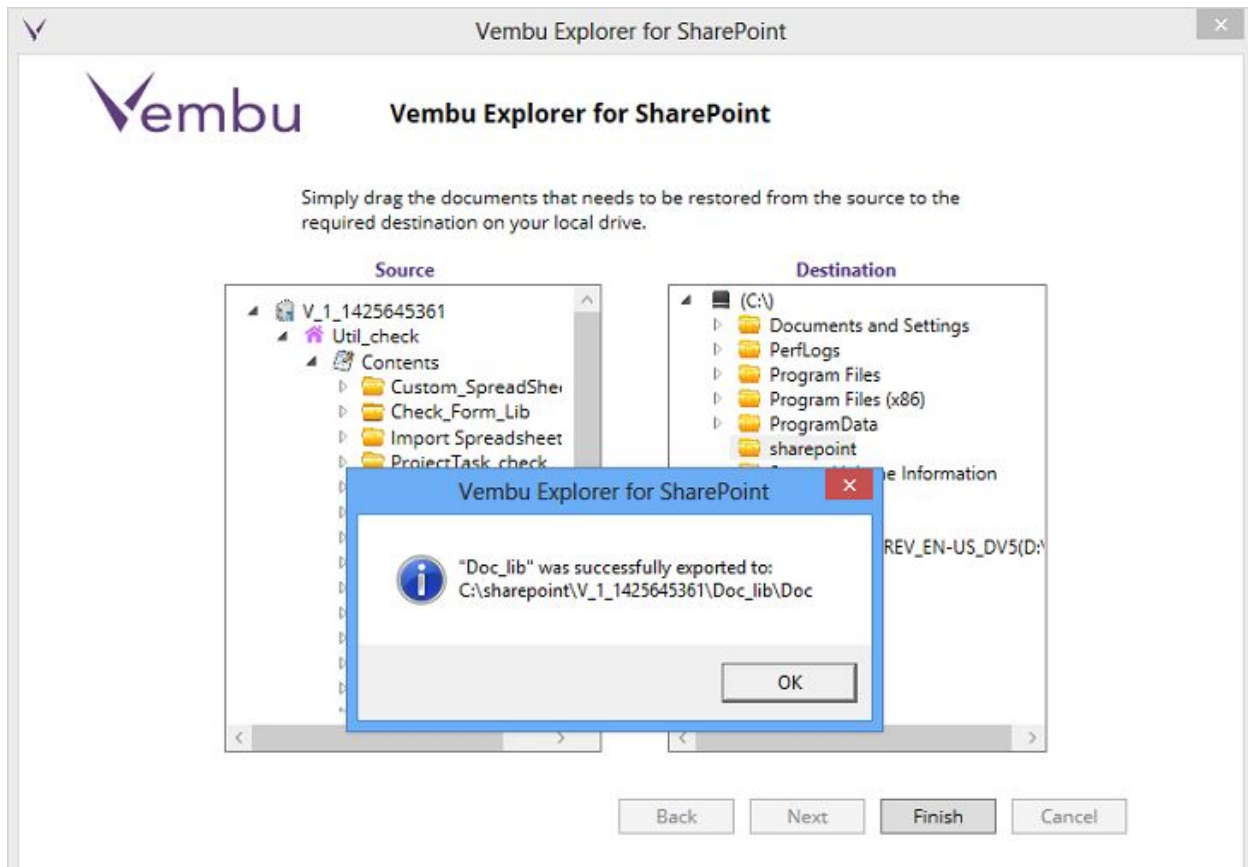


The screenshot shows a window titled "Vembu Explorer for SharePoint". Inside, the Vembu logo is on the left, and the title "Vembu Explorer for SharePoint" is on the right. Below the title, the section "Select SharePoint content database file" is displayed. A paragraph of instructions follows: "Simply select the SharePoint content database file of the SharePoint server from which you need to perform granular recovery. The MDF, LDF files should be placed on the local disk and should be in uncompressed and unencrypted format. The folder in which the file resides should have the enough permission to read and write the data." Below this text, there are two input fields. The first is labeled "Data File Location :" and contains the text "C:\sharepoint\1.mdf". To its right is a button with three dots "...". The second is labeled "Log File Location :" and contains the text "C:\sharepoint\1_log.LDF". To its right is also a button with three dots "...". At the bottom of the window, there are four buttons: "Back", "Next", "Finish", and "Cancel".

- The next window will display the contents of the Sharepoint site explored in the Source column.

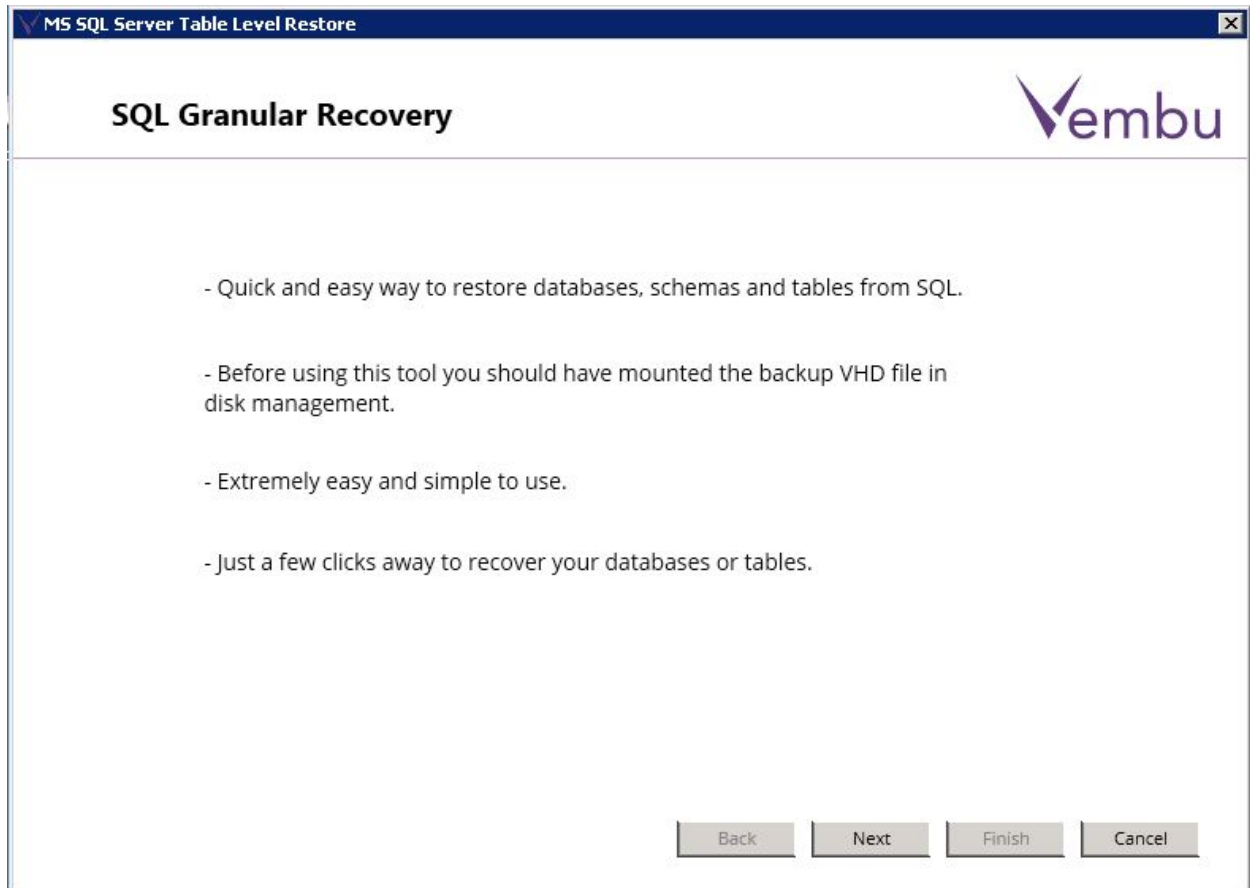


- Simply drag the content that you want to recover from the source and drop them into a folder at the Destination.

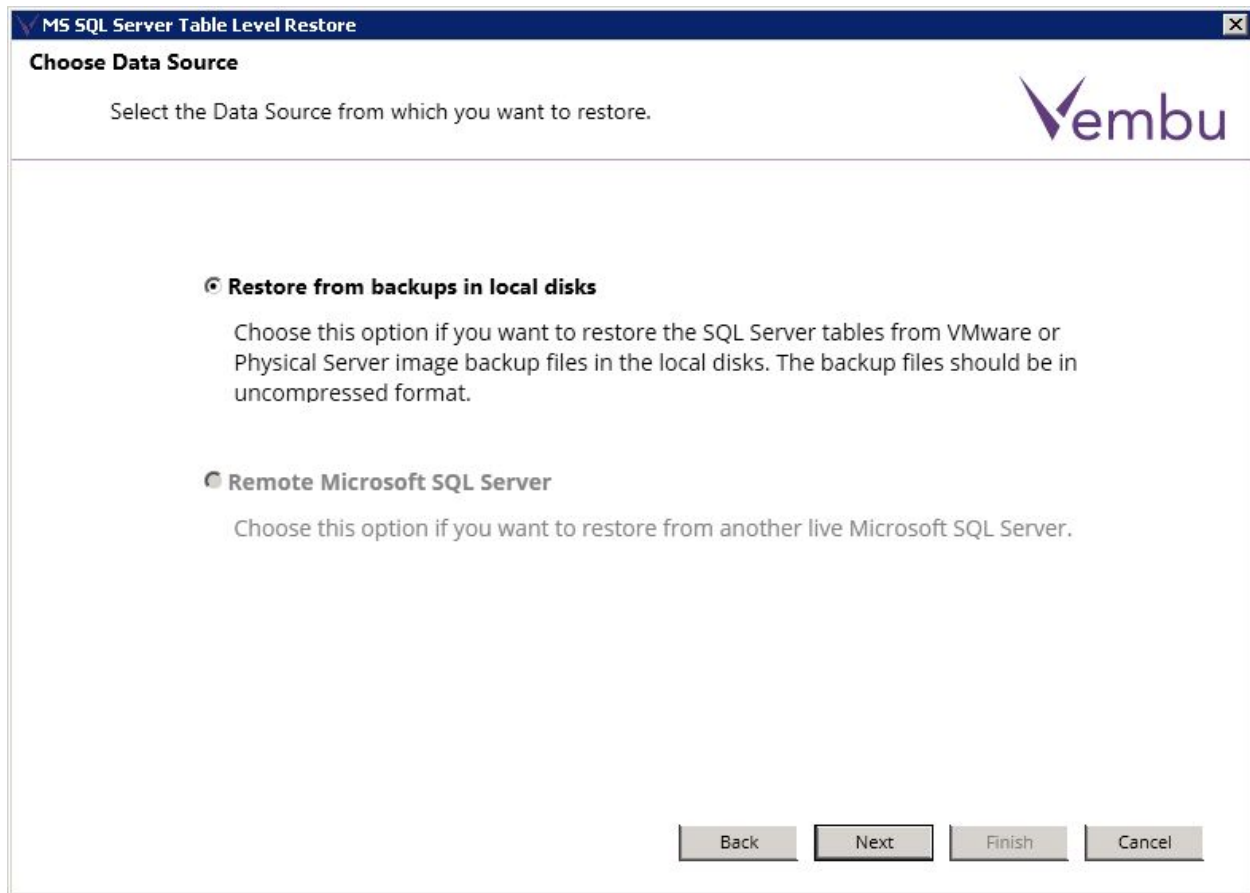


Microsoft SQL Server

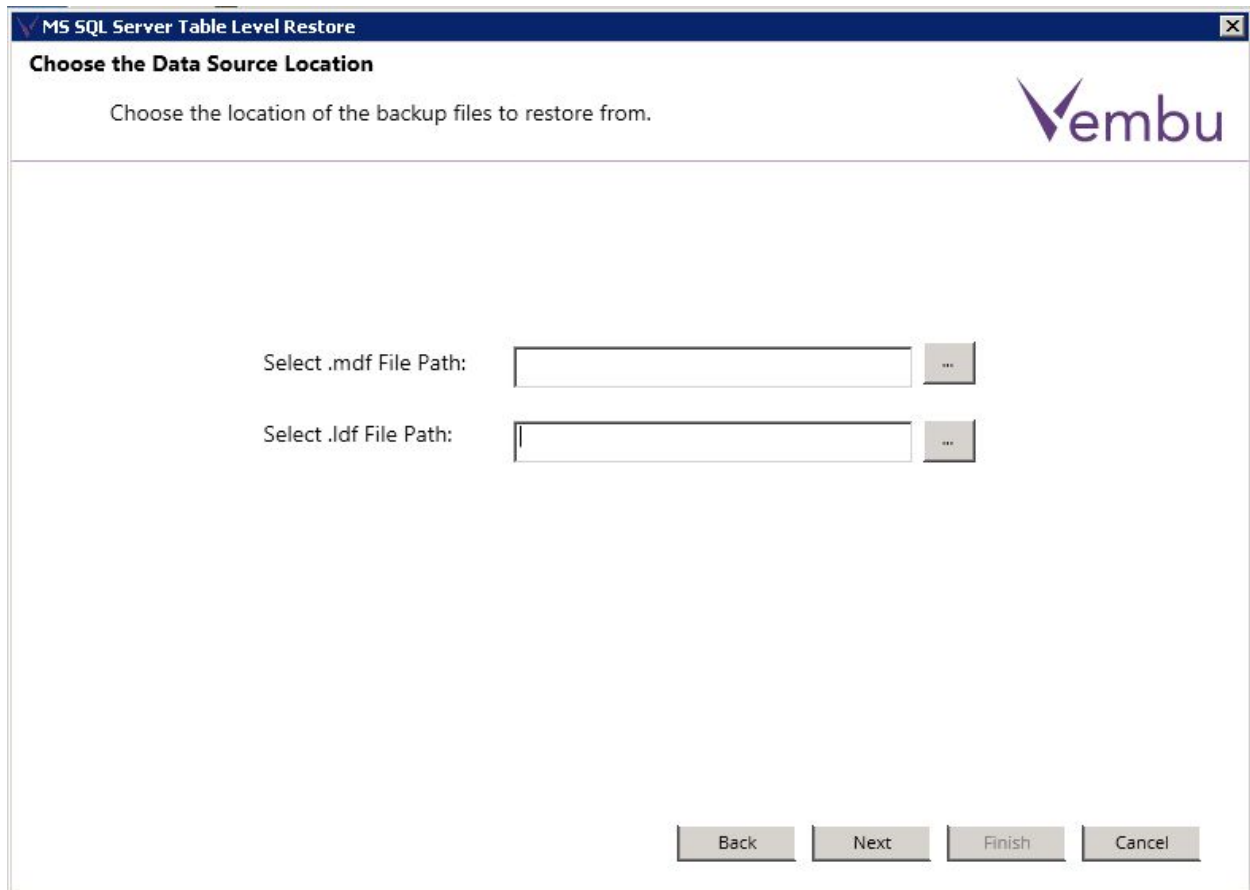
- Start the Vembu Explorer for SQL application.
- Click Next after reading the brief introduction to Vembu Explorer for SQL



- In the window by default “Restore from backups in local disks” is selected.



- In the window that appears, enter the .mdf database file of the SQL Database that you want to recover.



MS SQL Server Table Level Restore

Choose the Data Source Location

Choose the location of the backup files to restore from.

Select .mdf File Path: ...

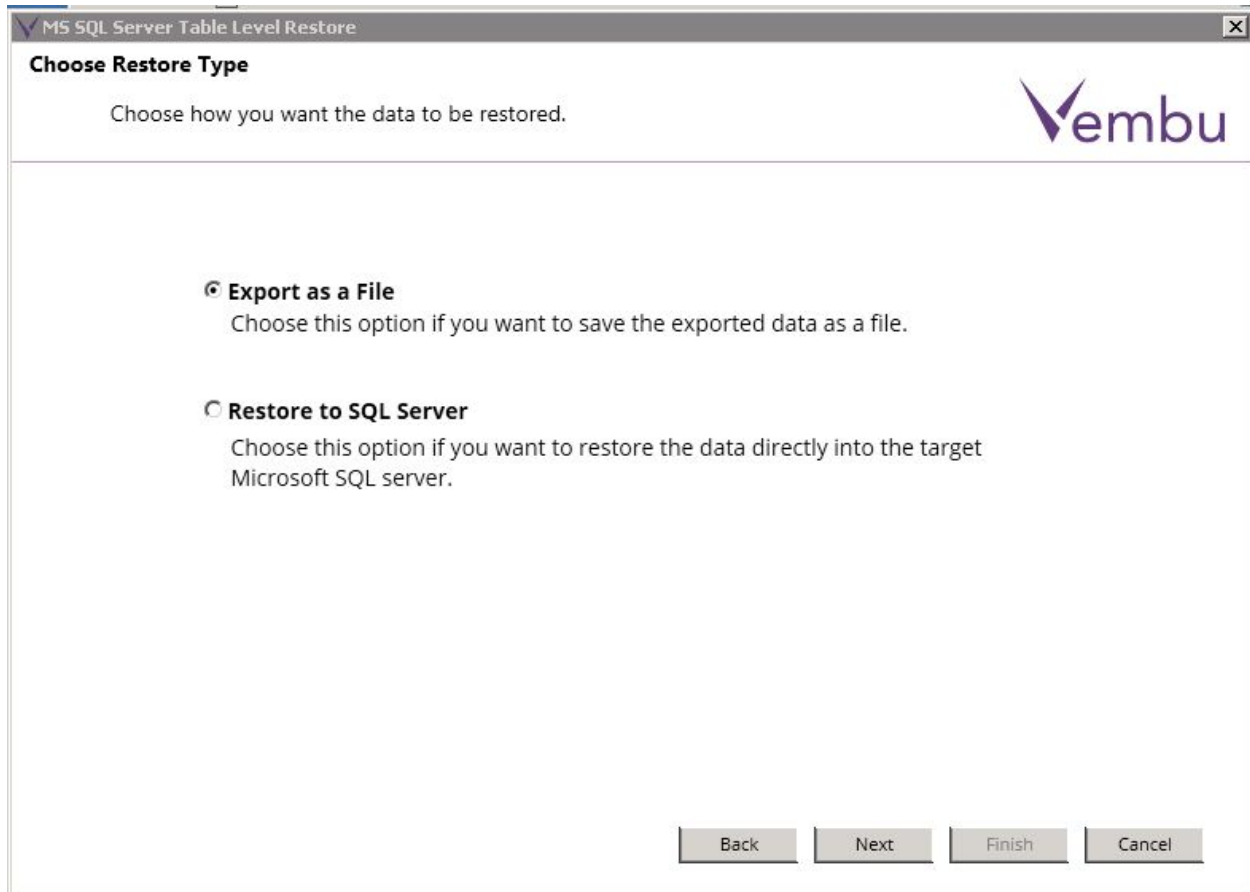
Select .ldf File Path: ...

Back Next Finish Cancel

- Select the .mdf file respective to the SQL Database that you want to recover.
- Once you select the .mdf file, the respective .ldf file will be selected automatically. Click Next.

Choose Restore Type

At this step of wizard, you can choose Export as a File or Restore to SQL Server option. Export as a File is a default option.



If you choose **Export as a File** option the next window will be:

What to Export

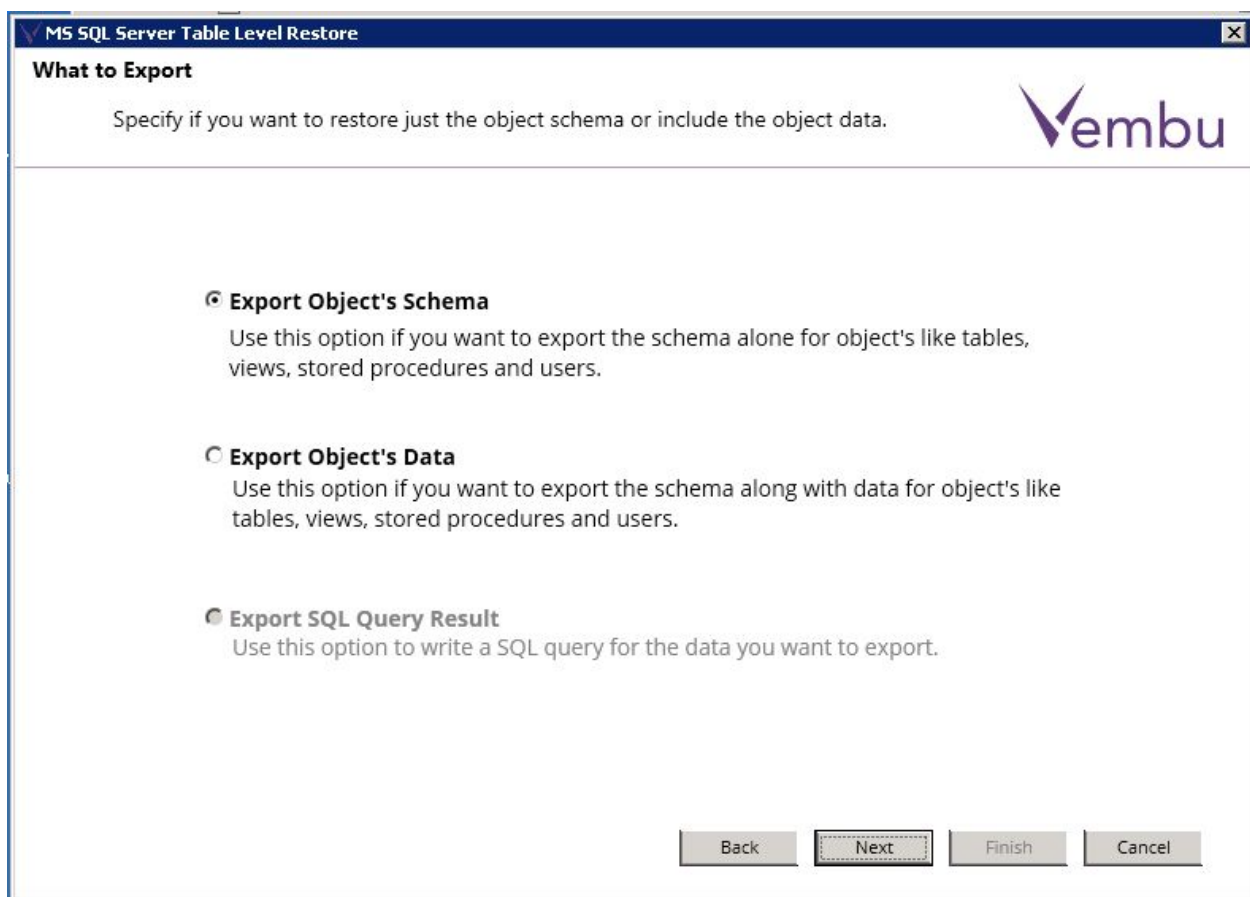
At this step of wizard, select one of the export option.

Export Object's Schema

This option will export the structure or schema of the selecting object's.

Export Object's Data

This option will export the schema and data of the selecting object's.



Choose Export Format

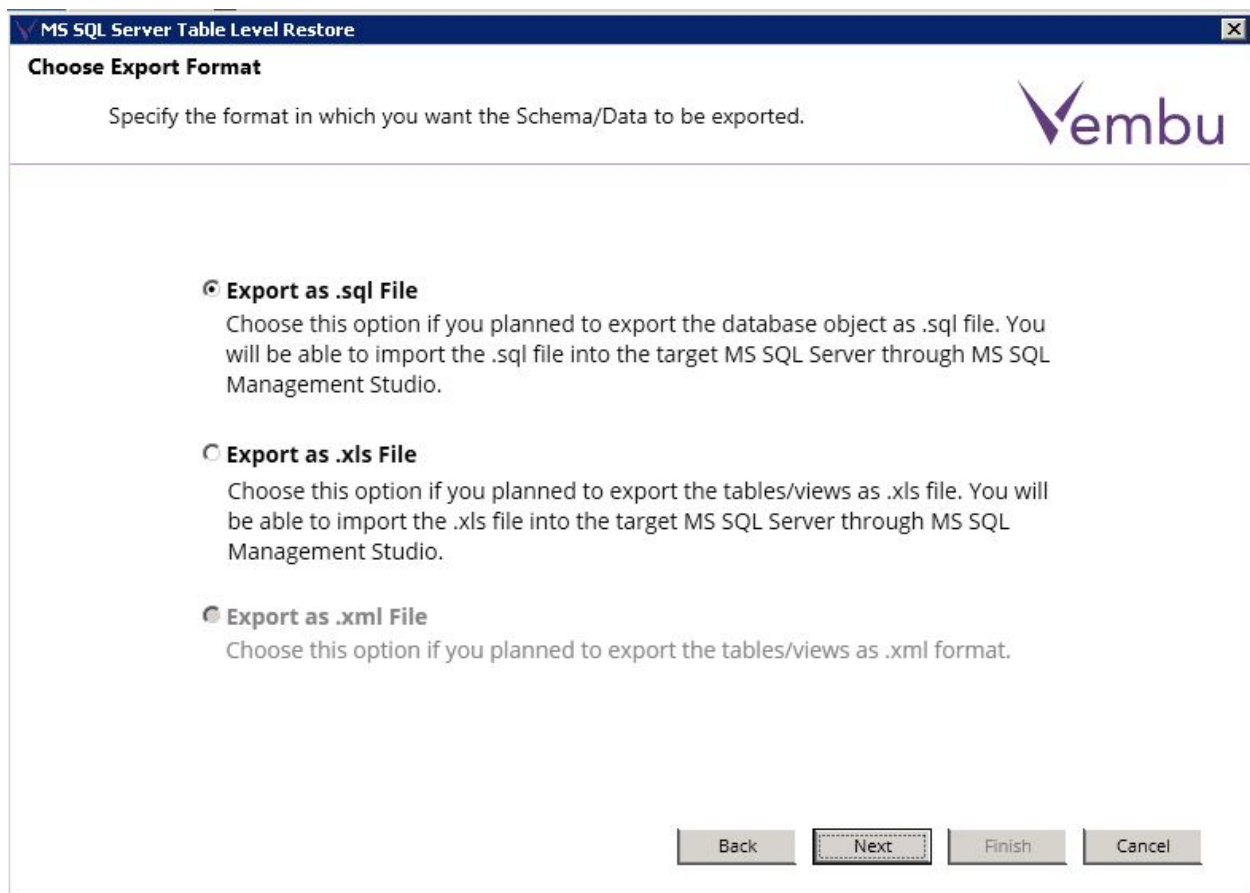
At this step of wizard, select one among below export formats:

- **Export as .sql File**

Using .sql format you can export the query for schema or data of the object's as a .sql file. This file can be opened in microsoft sql server management studio and you can run that query to generate the database objects.

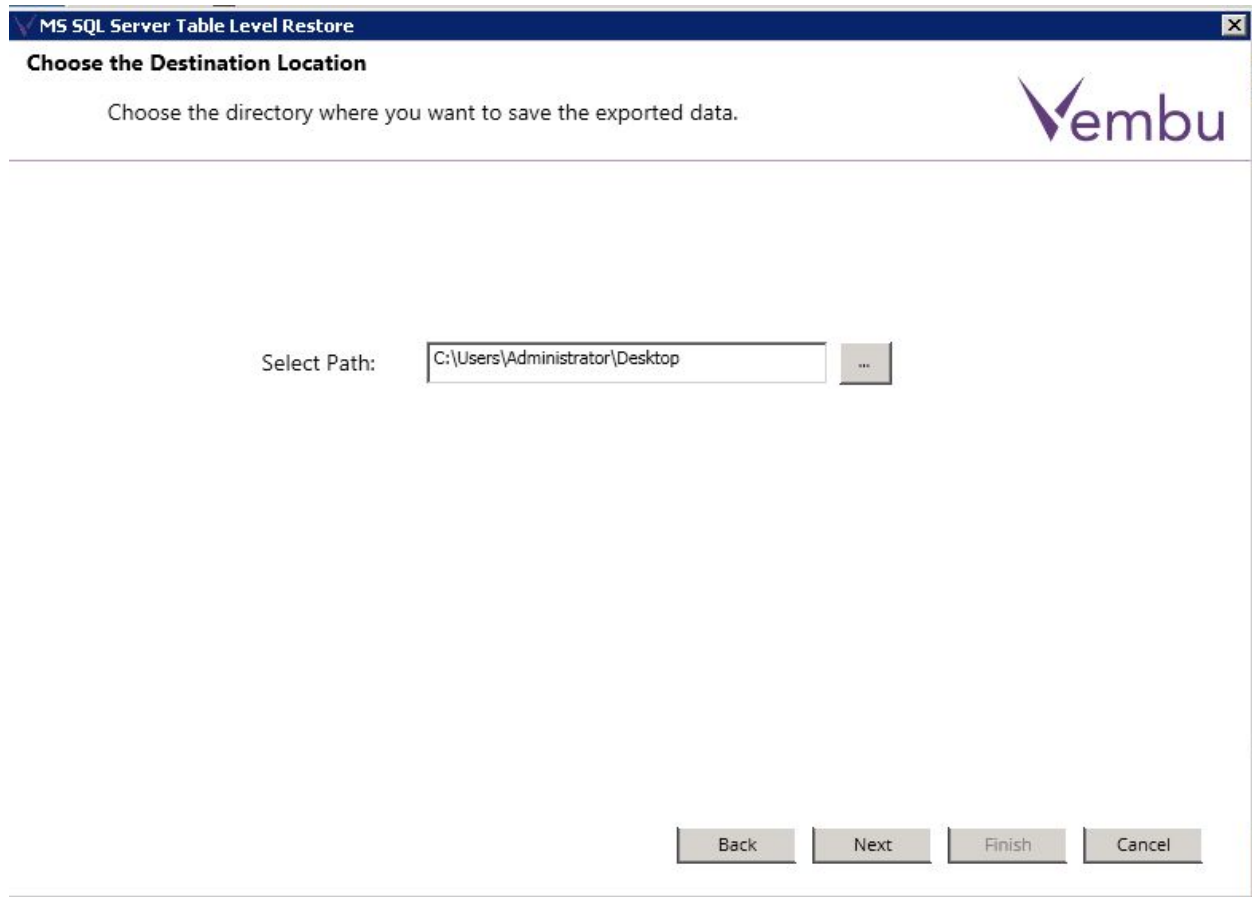
- **Export as .xls File**

Using .xls format you can export schema and data of objects. You can view the data available in .xls file and then you import that file into database using import data option in the MS SQL Server Management Studio.



Choose the Destination Location

At this step of wizard, choose location to export files in given format.

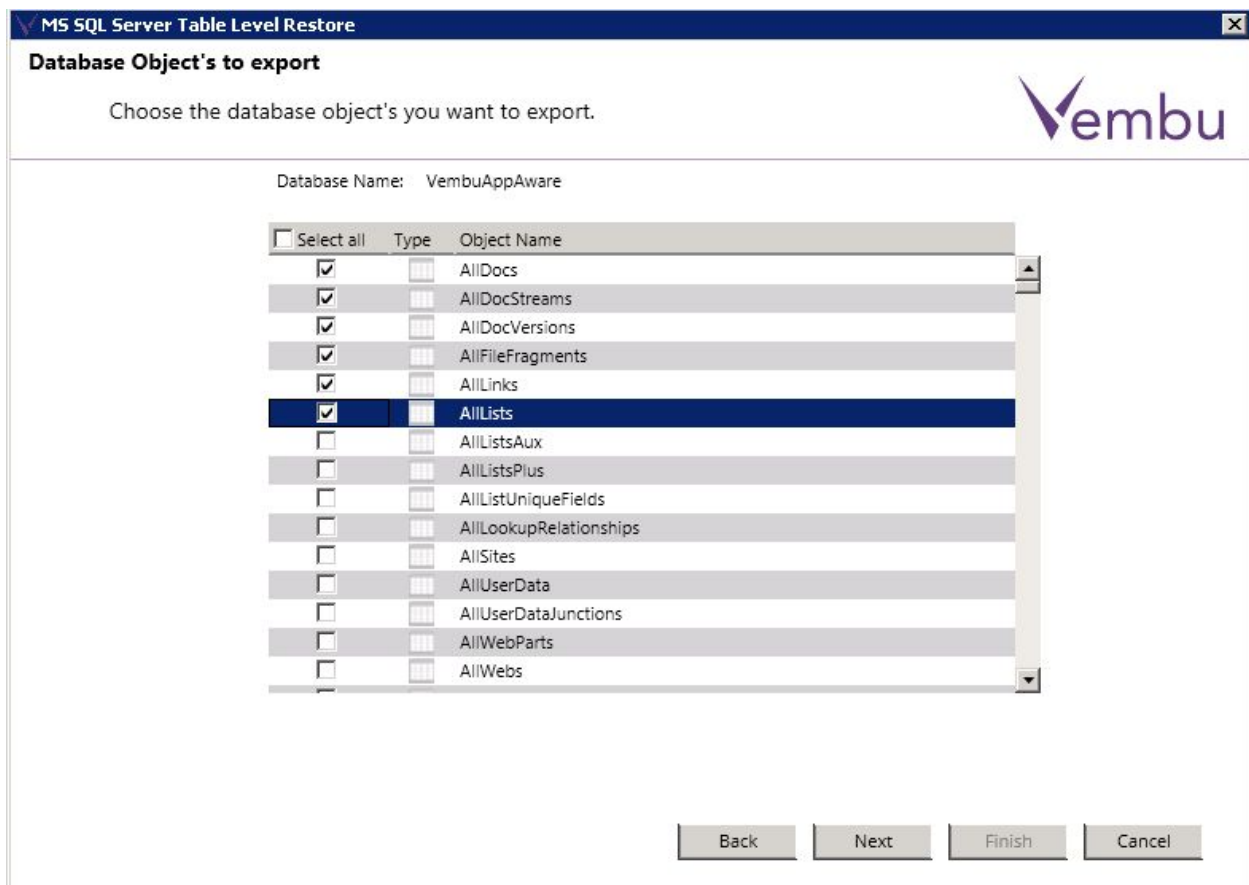


The screenshot shows a Windows-style dialog box titled "MS SQL Server Table Level Restore" with a close button (X) in the top right corner. Below the title bar, the text "Choose the Destination Location" is displayed. Underneath, a message reads: "Choose the directory where you want to save the exported data." The Vembu logo is positioned in the top right area of the dialog. A horizontal line separates the header from the main content area. In the center, the text "Select Path:" is followed by a text input field containing the path "C:\Users\Administrator\Desktop". To the right of the input field is a small button with three dots "...". At the bottom right of the dialog, there are four buttons: "Back", "Next", "Finish", and "Cancel".

Database objects to export

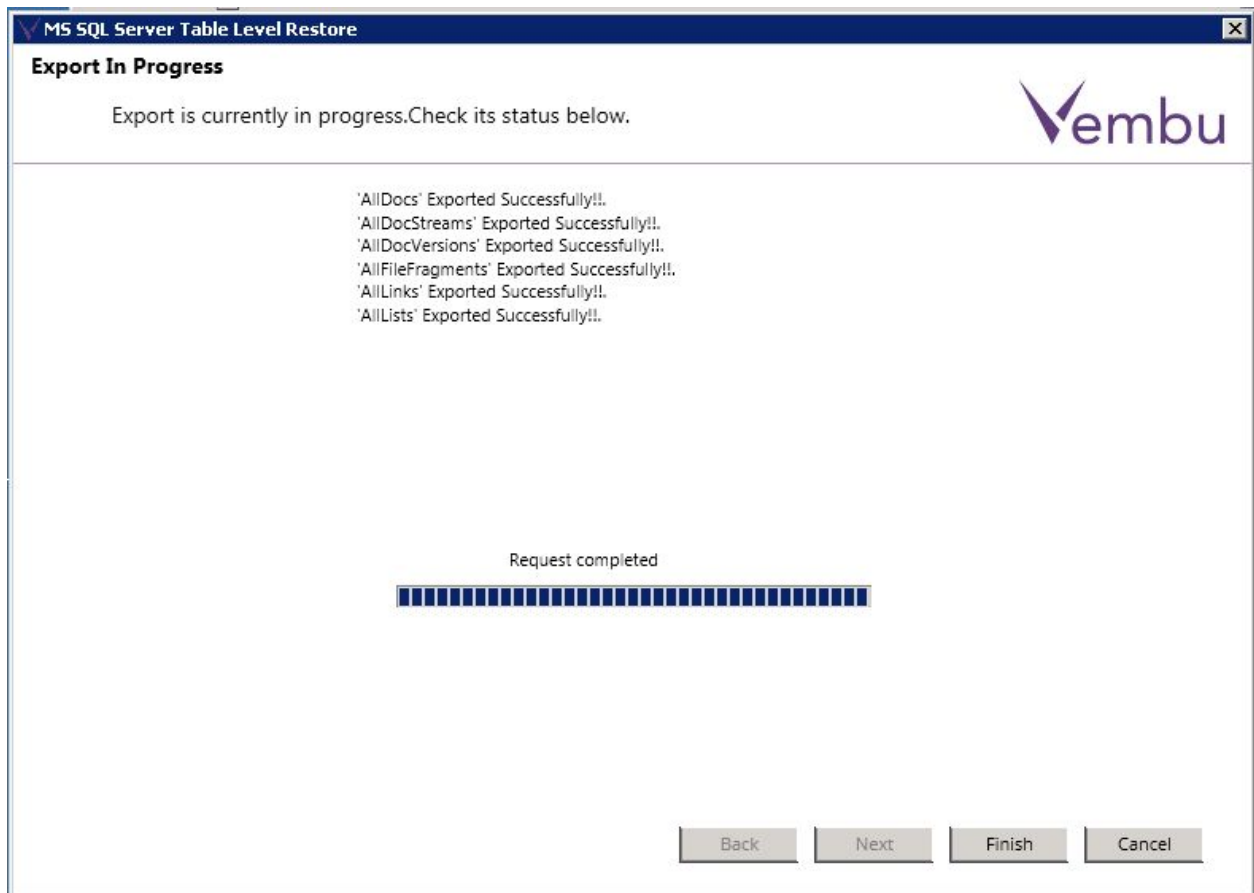
This wizard is populated by database objects present in the given database file.

- Select the database objects to export.
- By using select all checkbox you can select all the objects.
- Type column of datagrid will tell you the type of object whether it's table, view, stored procedure or user.
- In Object Name column the name of tables, views, stored procedure and users will be there.



Restore In Progress

- At this step of wizard, you can view the progress of export process.

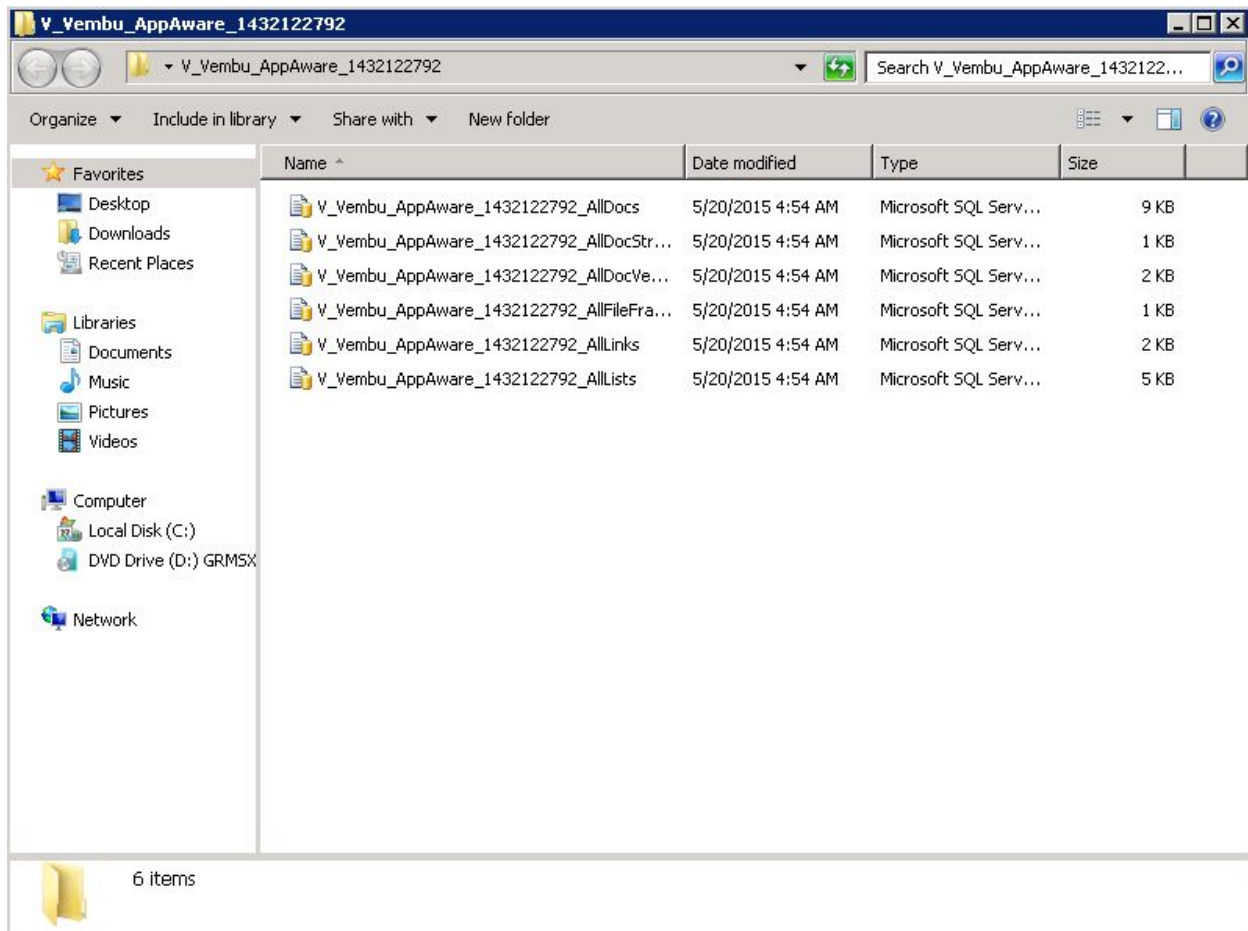


- Click finish button, after export process is finished.

Go to Export Location

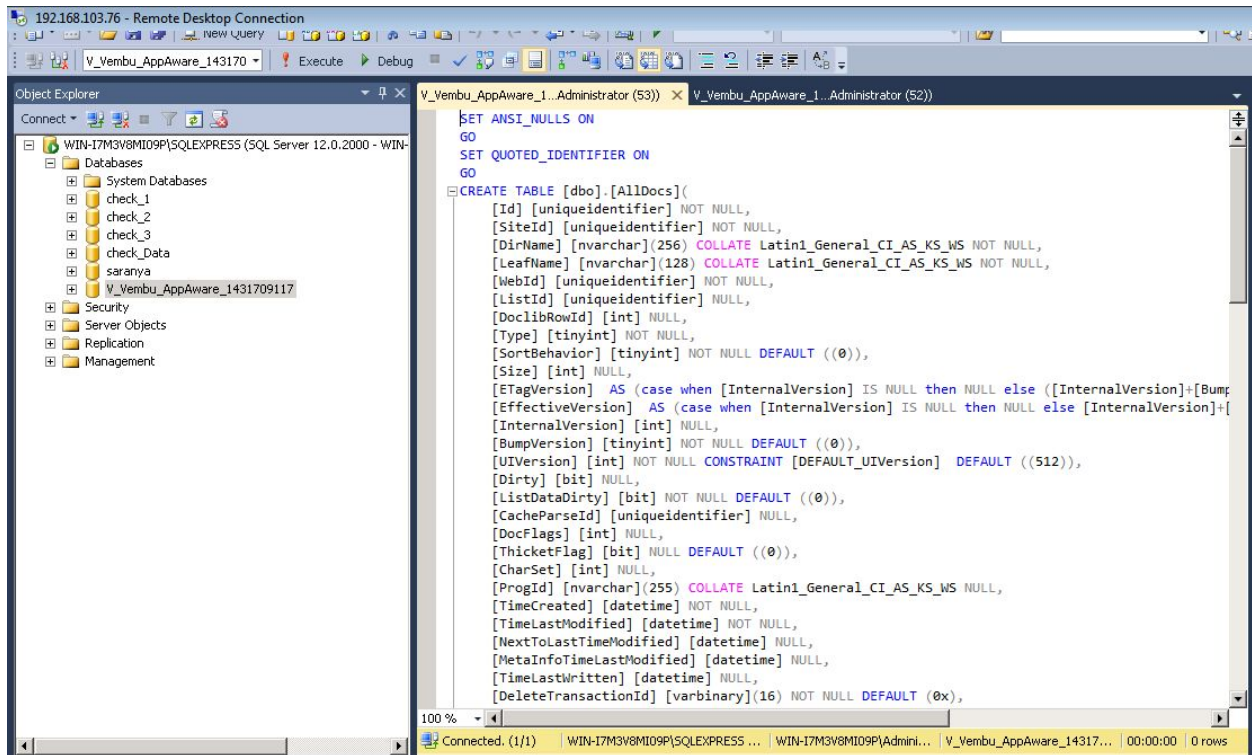
The exported file name will be in below format:

V_Database Name_Time Stamp During Export_Object Name.



If the exported format is .sql, then follow below steps to use that file:

Right click over the file and hit open. The file will be opened in MS SQL server management studio and will look like the below picture.

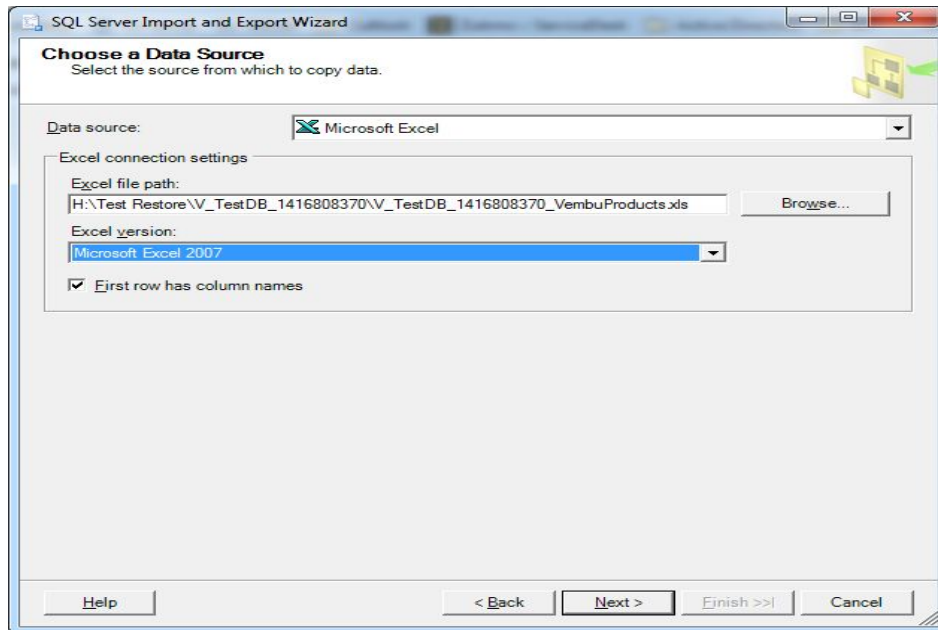


If the exported format is .sql, then follow below steps to use that file:

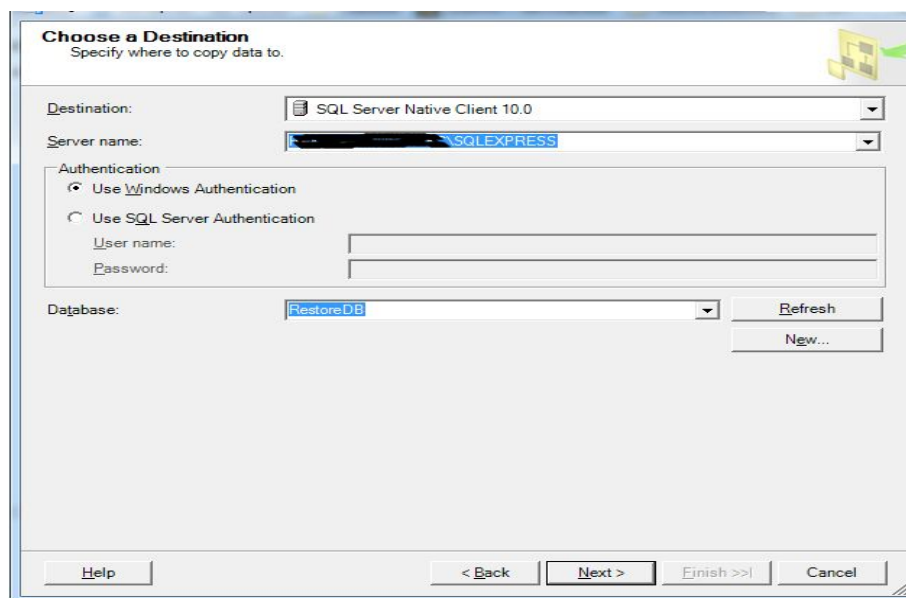
- Go to MS SQL Server Management studio.
- Choose Database to Import Data in the .xls file. Right click on the database.
- Go to tasks and then Import Data... option. MS SQL Server Import and Export wizard will open.



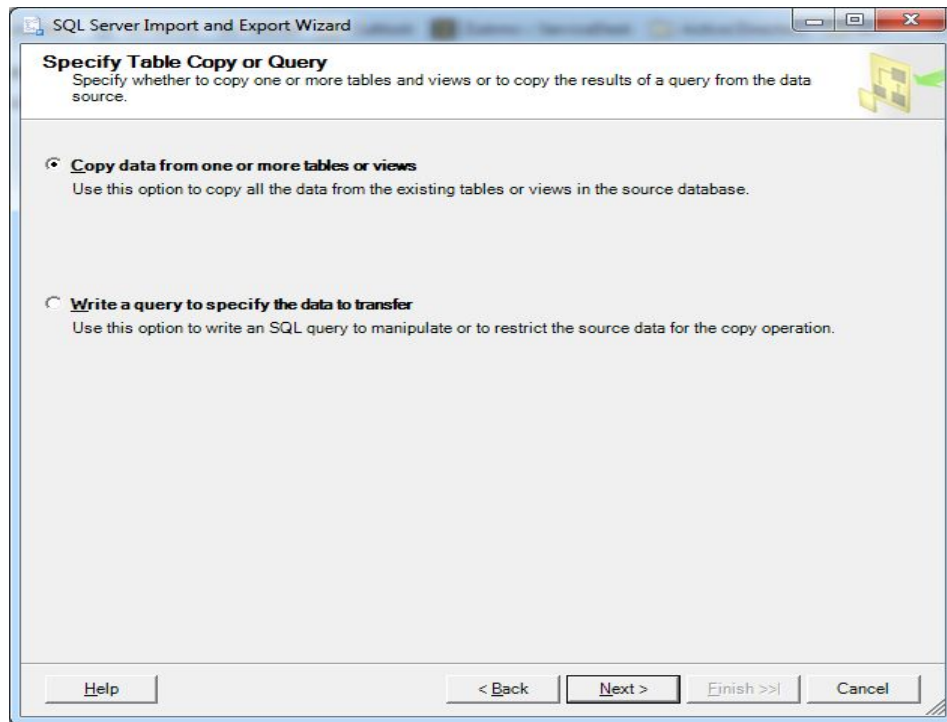
- Press Next. The wizard navigates you to **Choose a Data Source wizard**.
- In Data Source field select Microsoft Excel.
- In Excel file path browse the exported .xls file path, choose the path and hit next



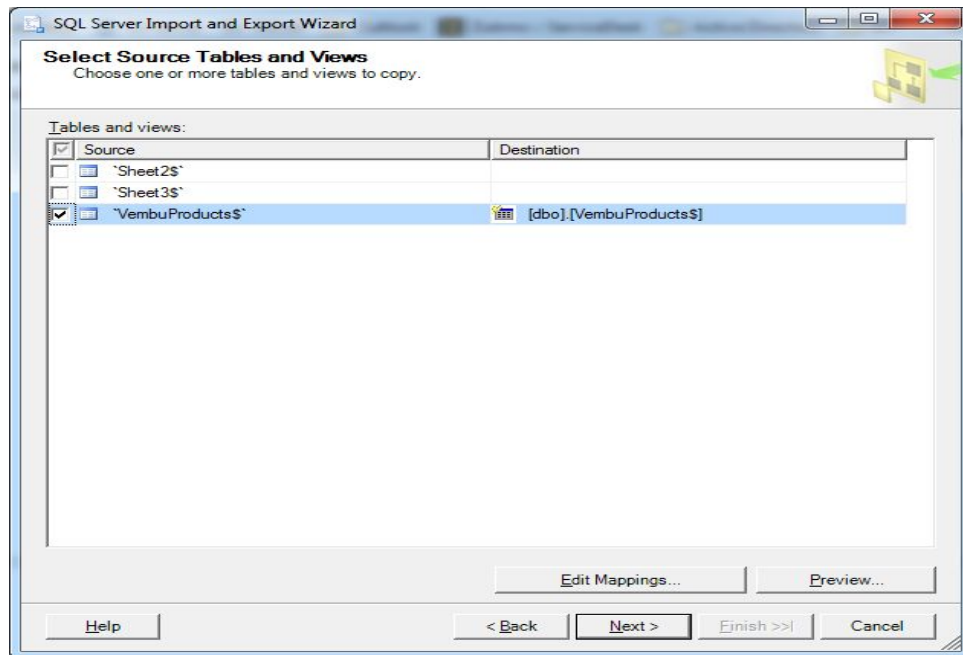
- Now select server name, authentication and database to import the data in the xls file.



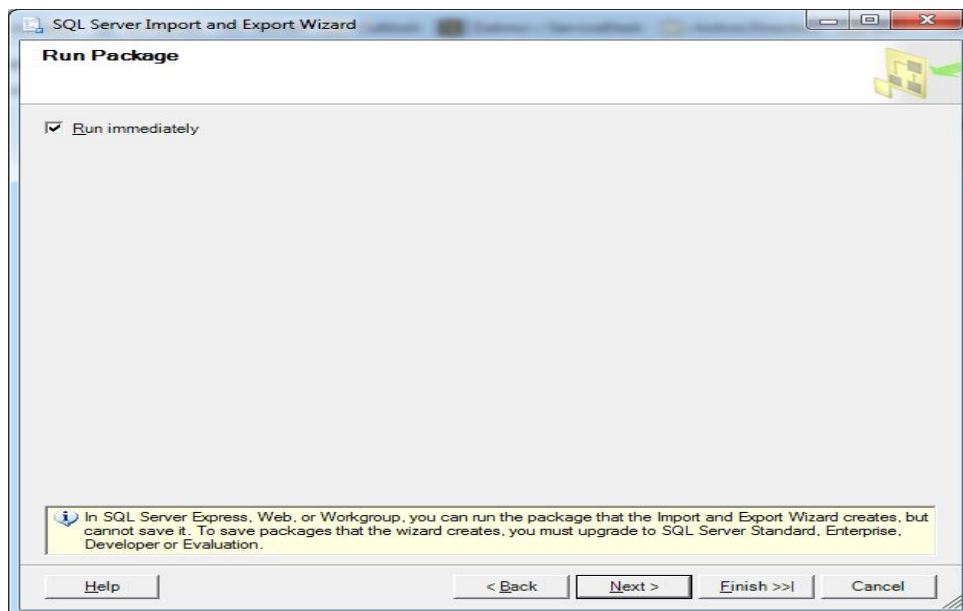
- Specify Table Copy and Query step, copy data from one or more tables choose this option and click next.



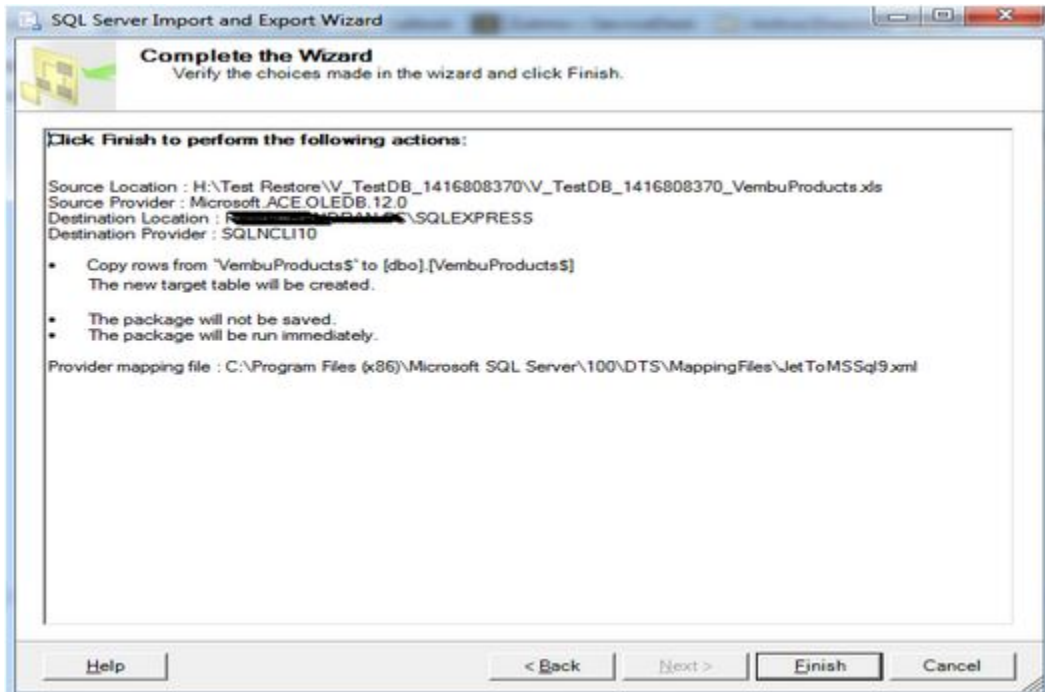
- In Select Source Tables and Views wizard, select the sheet from which you want to import data and proceed.



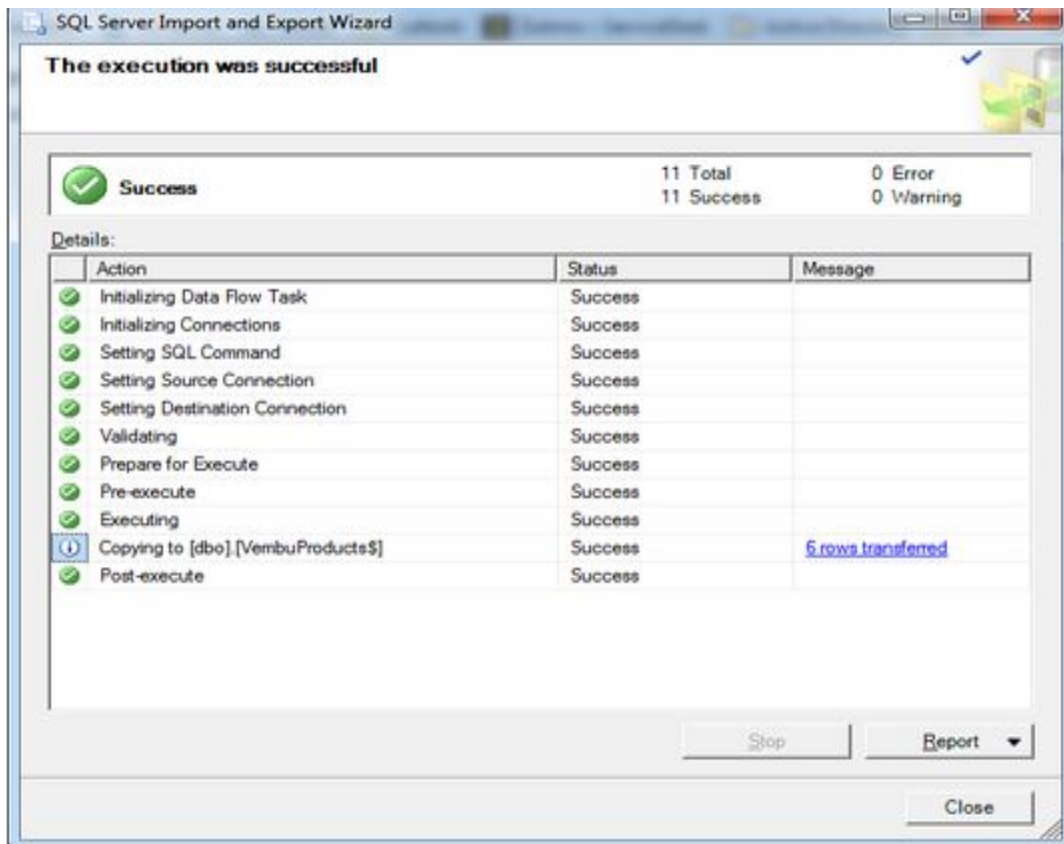
- In Run Package wizard, check Run Immediately option and hit next.



- Verify the provided details and click finish.



- You will get the below wizard after importing data.



- Once done importing data, go to database and verify imported data.

- If you choose **Restore to SQL Server**, the application wizard leads you to below process:

MS SQL Server Table Level Restore

Choose Restore Type

Choose how you want the data to be restored.

☐ **Export as a File**
Choose this option if you want to save the exported data as a file.

☒ **Restore to SQL Server**
Choose this option if you want to restore the data directly into the target Microsoft SQL server.

Back Next Finish Cancel

Specify object copy method

- At this step of wizard, choose whether you need to restore schema or schema along with data of objects to the target database and proceed to Next.

MS SQL Server Table Level Restore

Specify Object copy method

Determine whether to copy database object schema or data.

☒ Restore Object's schema
Use this option if you want to restore the schema alone for object's like tables, views, stored procedures and users.

☐ Restore Object's Data
Use this option if you want to restore the schema along with data for object's like tables, views, stored procedures and users.

☐ Restore SQL query result
Use this option to write a SQL query for the data you want to restore.

Back Next Finish Cancel

Choose the Destination Database:

At this step of wizard:

- In instance field choose SQL Server instance of target database in which you are going to restore objects.
- In authentication field choose the authentication for SQL Server, by default it is windows authentication. If you choose SQL Server Authentication then provide username and password in respective fields.
- In target database field select the target database to restore the database objects.
- If 'Display system database' checkbox is checked, then system databases are available in target database combobox.
- In target database combobox there is an option called "Choose different Database"; If you select it, a new textbox asking new database name will be visible. Provide database name in that textbox.
- Once restore process completes, you can find the newly created database in SQL server with the provided name with restored objects stored in it.

MS SQL Server Table Level Restore

Choose the destination database

Choose the database to which you desire to keep the restore object.

Instance :

WIN-I7M3V8MI09P\SQLEXPRESS

Authentication :

Window Authentication

Username :

Password :

Target Database :

check_1

☐ Display system database

Back

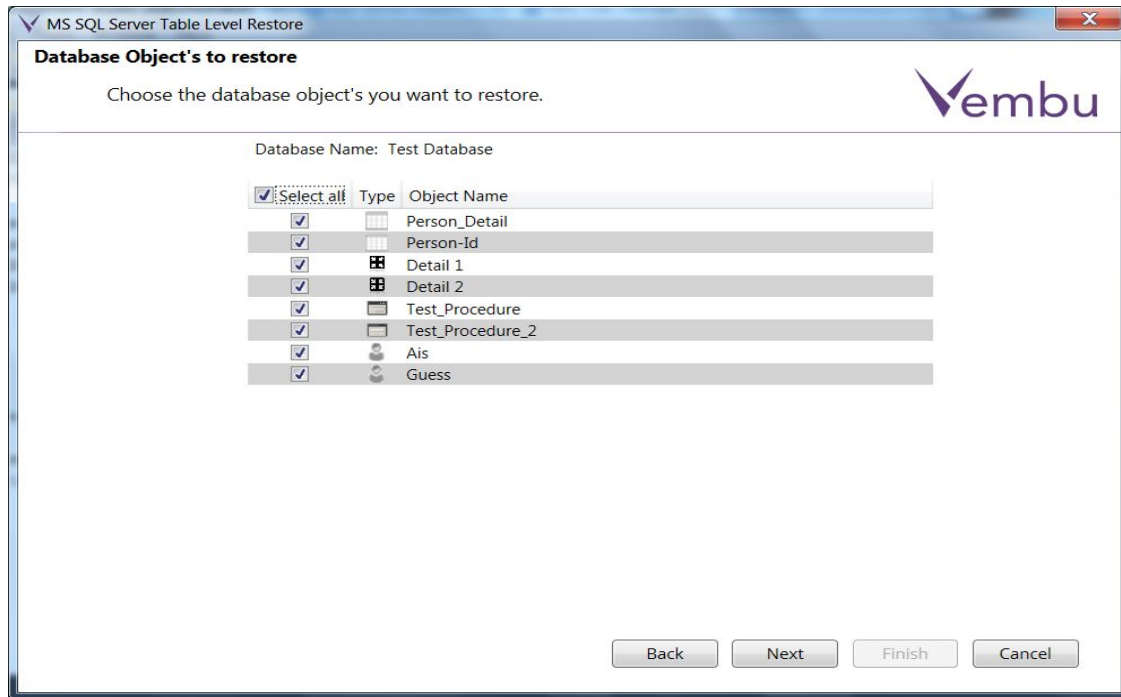
Next

Finish

Cancel

Database objects to Restore

- At this step of wizard, the datagrid in wizard is populated with the database objects available in given database.
- Select the required objects to restore from the database to production environment.



Rename Objects

- At this step of wizard, the datagrid available in the wizard is populated with the selected objects from previous step.
- Two columns will be available in datagrid, where the original name column shows the actual name of object; whereas in new name column, you can provide desired names for objects with which you want to restore.
- By default, the original names will be the name for objects.

MS SQL Server Table Level Restore

Rename Object's

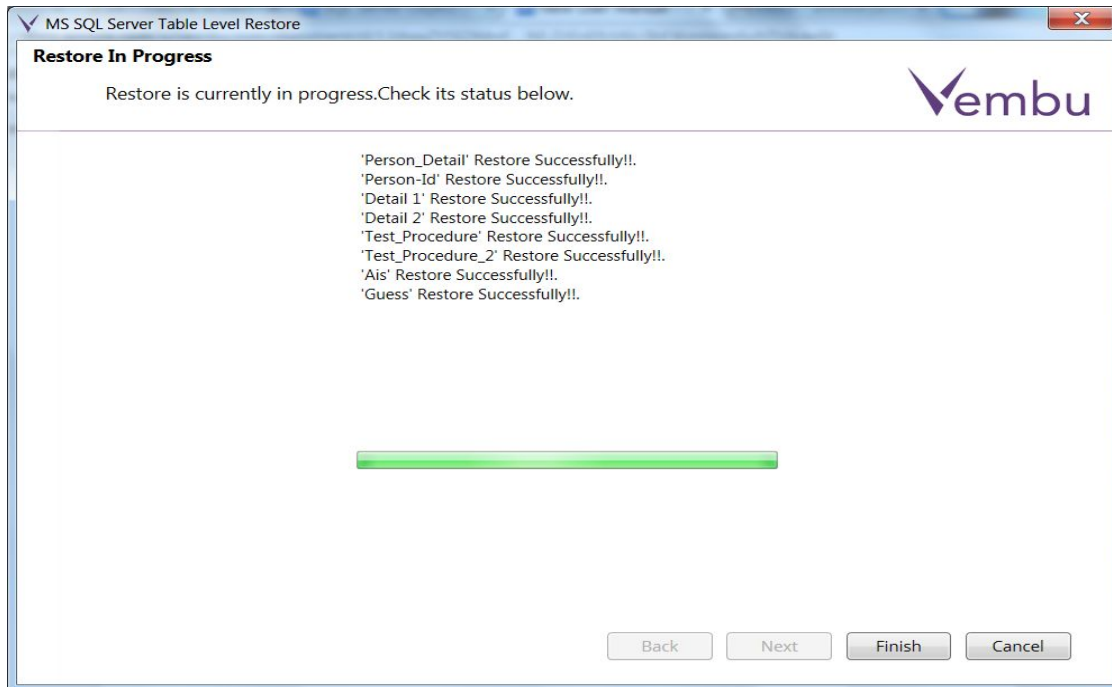
You can optionally specify a different name to the restored entities.

Original Name	New Name
Person_Detail	Person_Detail54
Person_Id	Person_Id
Detail 1	Detail 1
Detail 2	Detail 2
Test_Procedure	Test_Procedure
Test_Procedure_2	Test_Procedure_2_90000
Ais	Ais
Guess	Guess

Back Next Finish Cancel

Restore In Progress

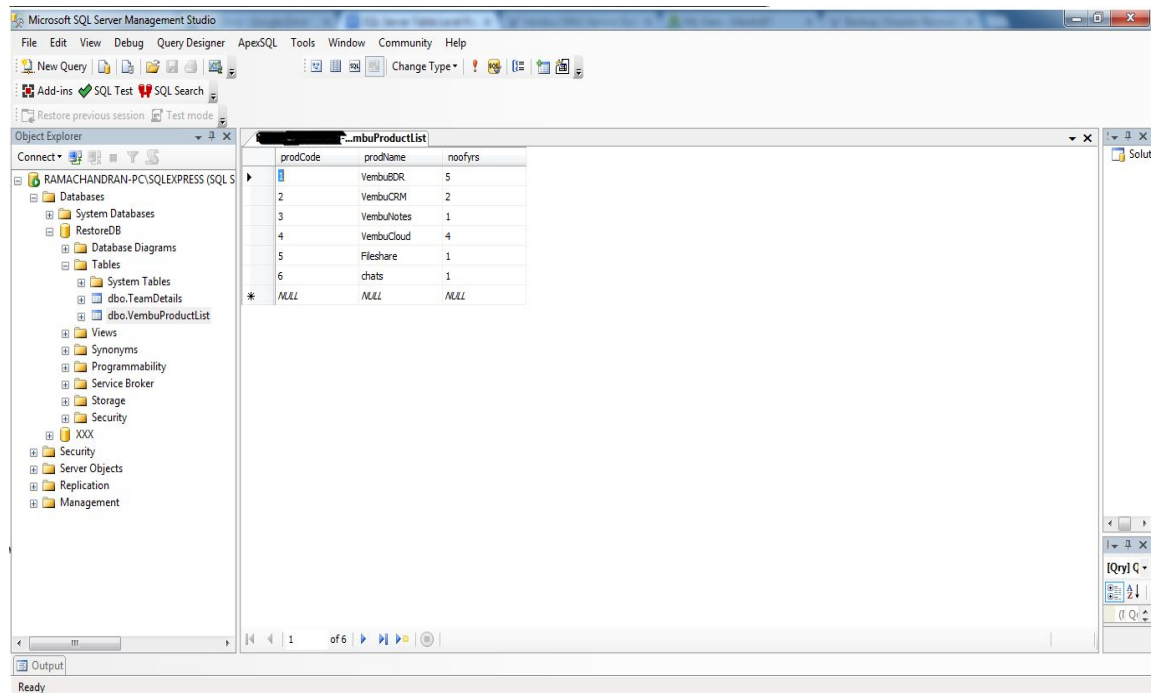
- Here you can view the progress of restore process.



- Click finish to close the wizard, once restore completes successfully.

Post completion of Restore:

- Go to MS SQL Server Management Studio.
- Connect to the instance to which you selected restore process.
- Go to the target database where you can view restored objects(Refer below).



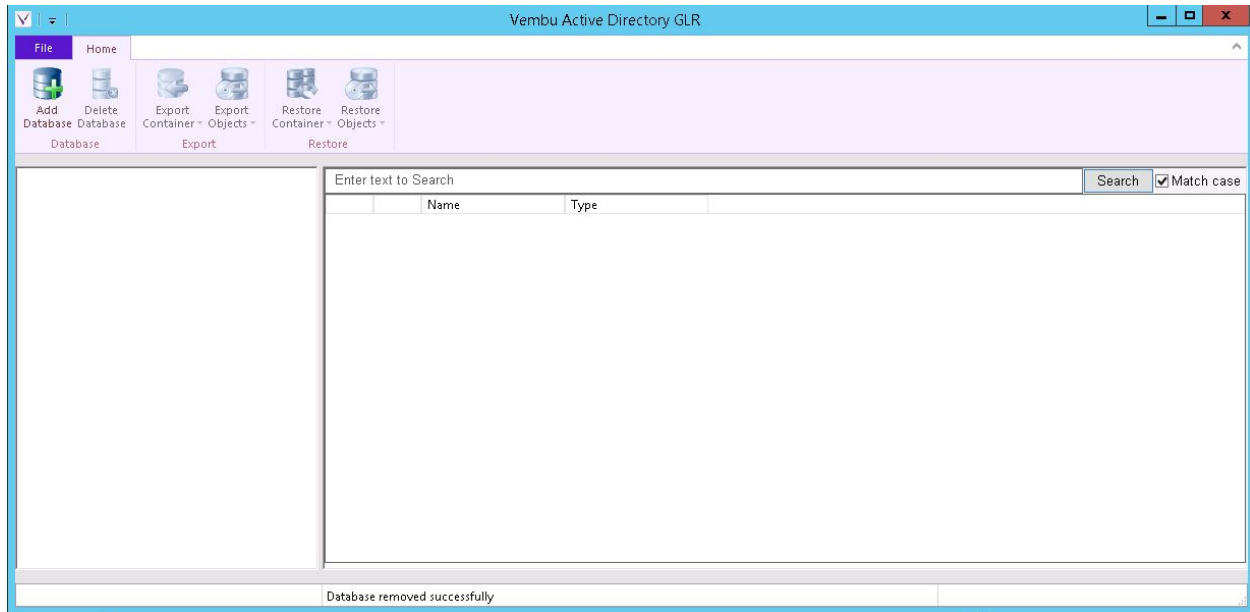
Microsoft Active Directory:

Note:

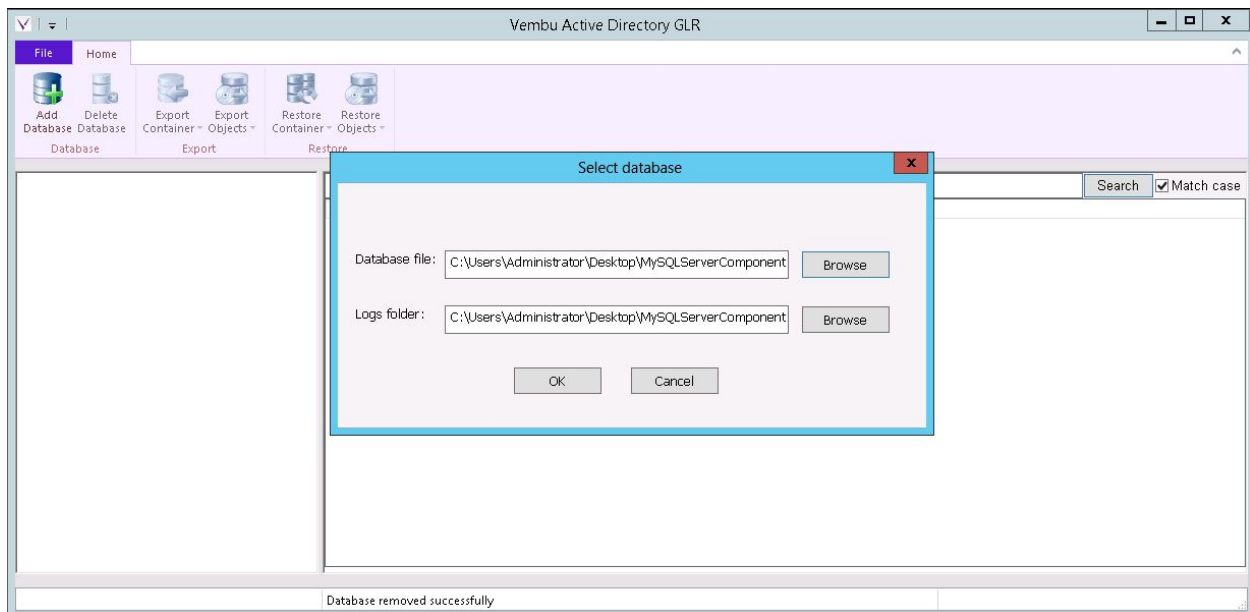
If a user plans to import the exported objects and containers to a server, make sure that the domain name is same as that of target server. A user can also edit and rename the DC attributes as target domain name.

Steps to be followed to restore Active Directory data:

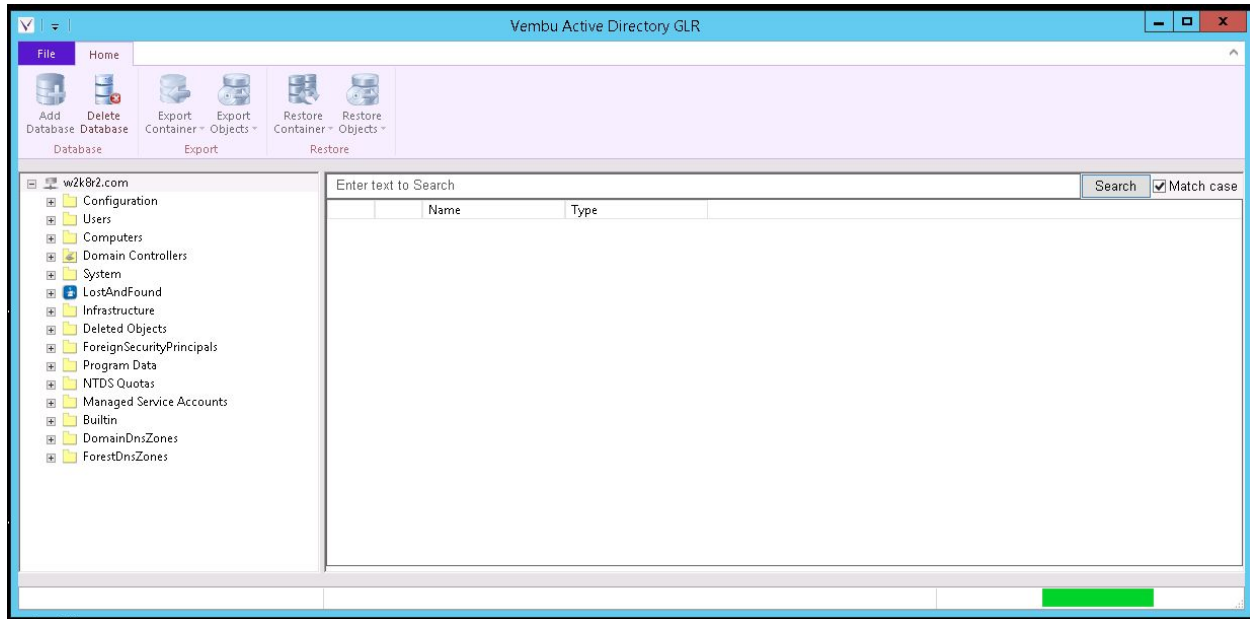
- Start Vembu Explorer for Active Directory server:



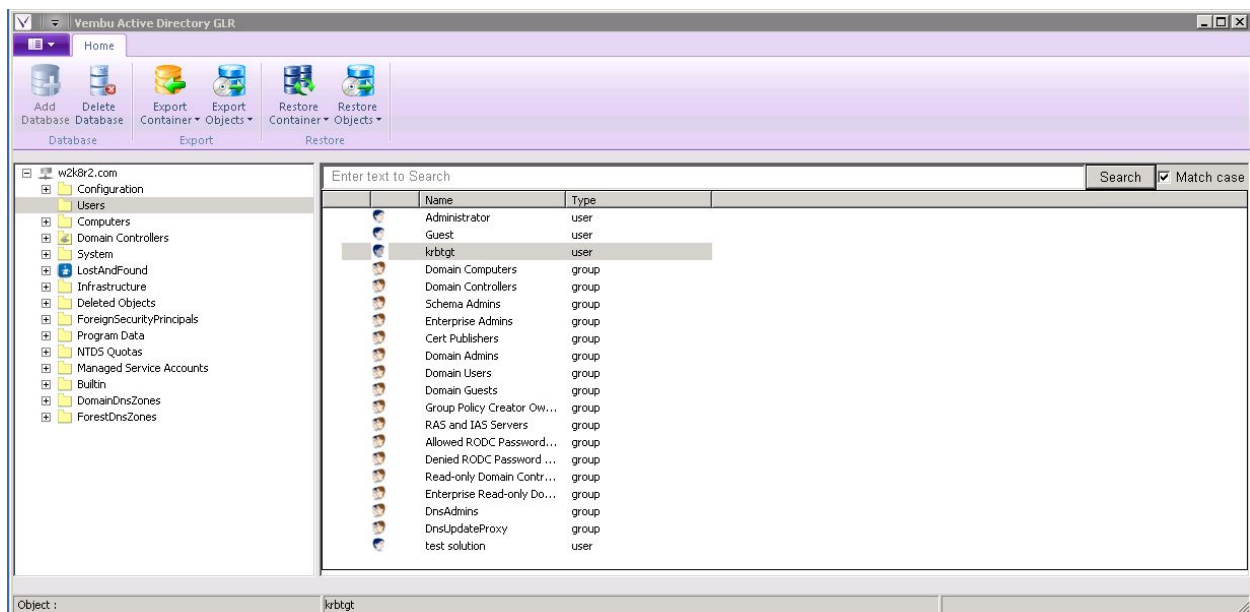
- Go to Home tab and click Add Database → Browse the database file (i.e) ntds.dit file and click OK.



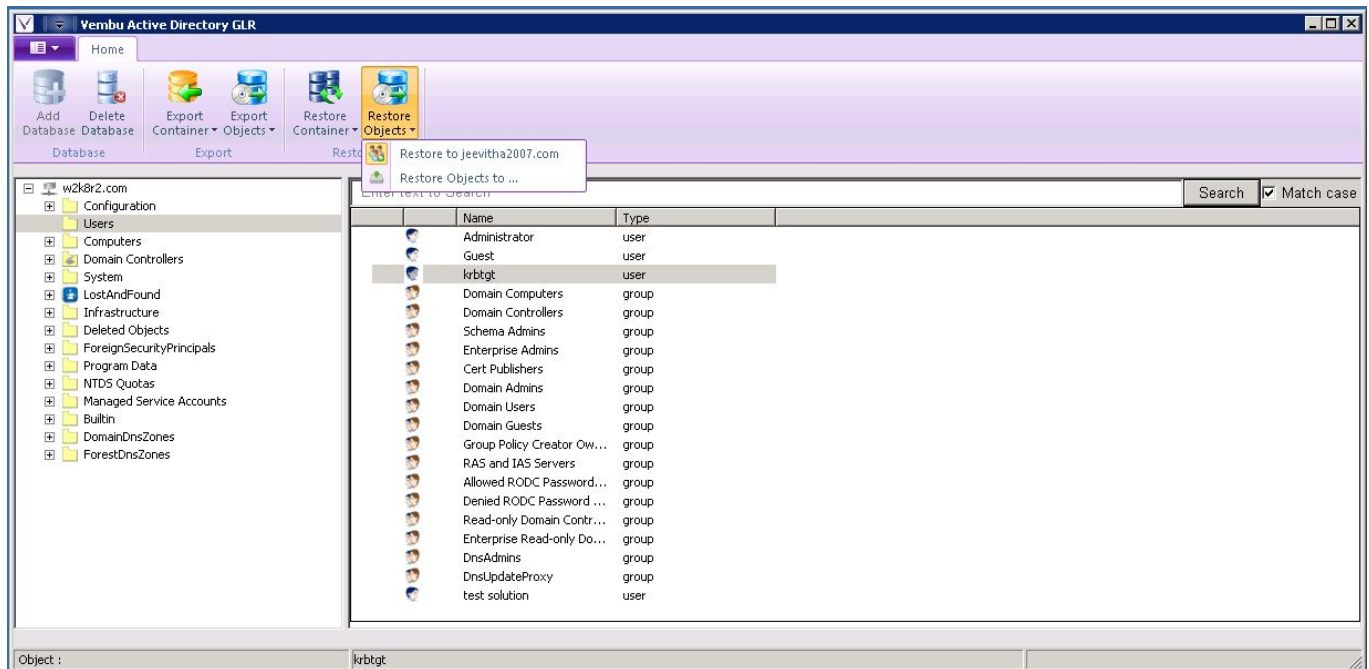
- All the objects related to the database files will be listed as shown below:



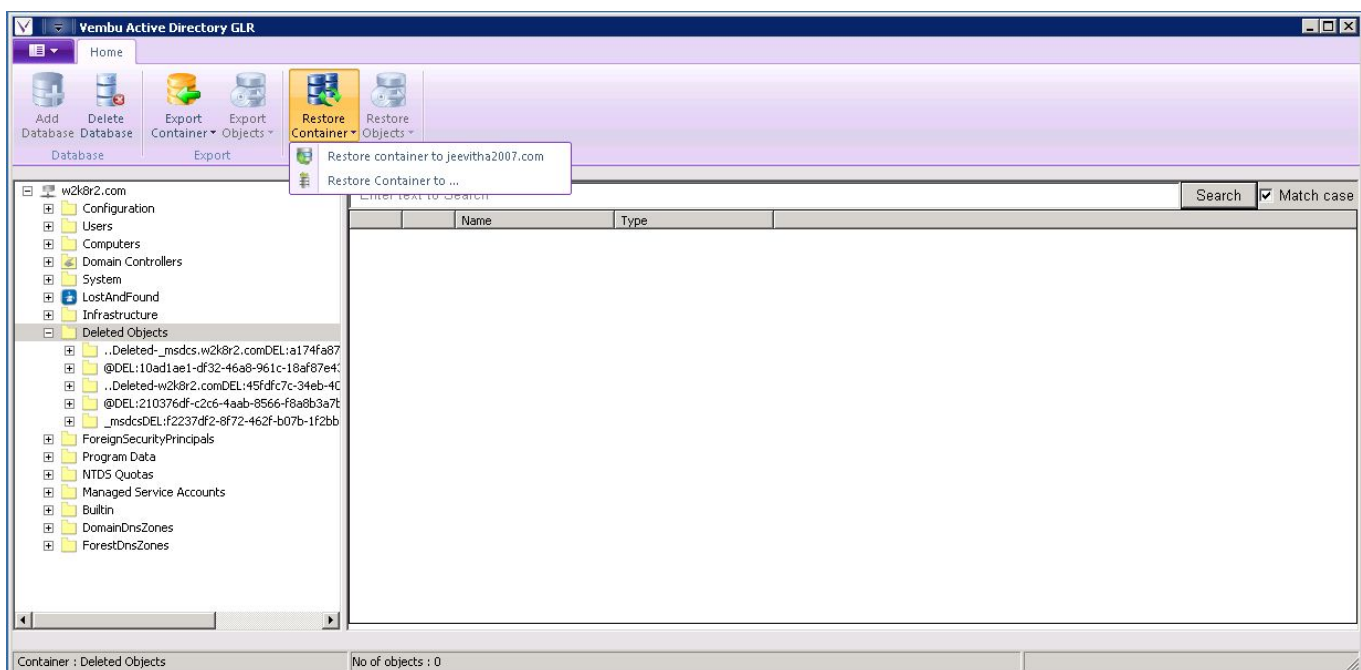
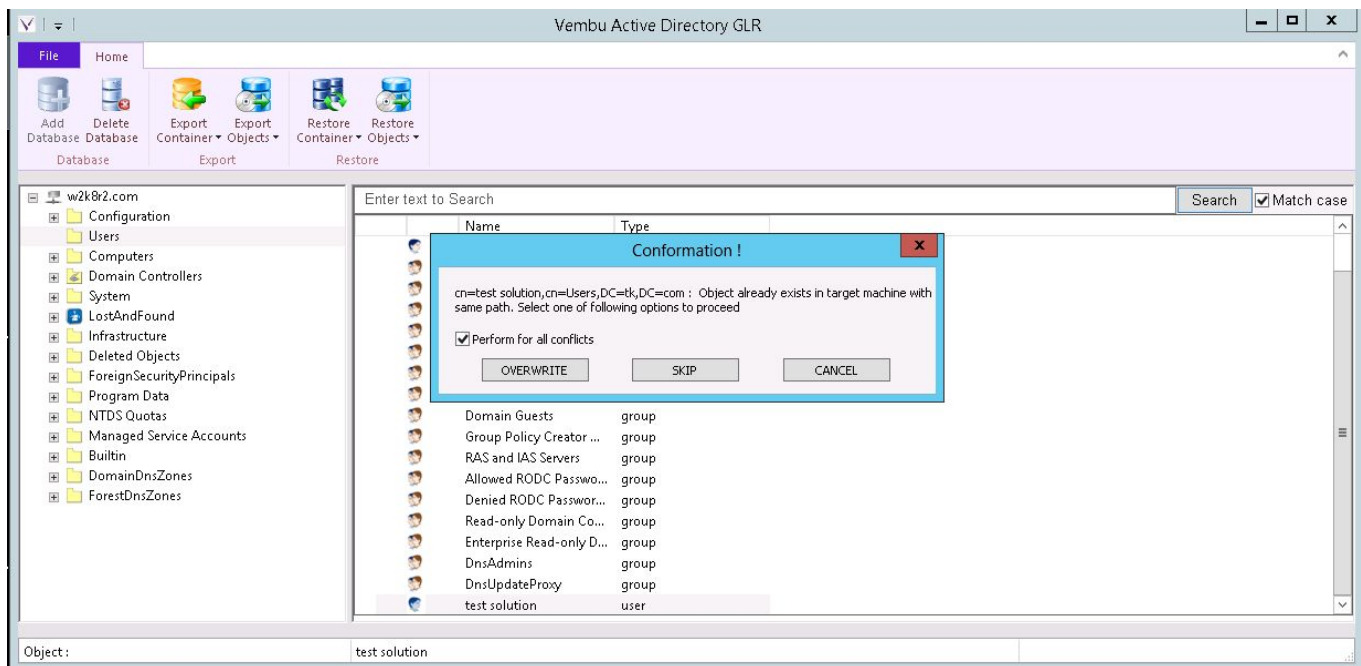
- To import user, machine and network related information:
 - Select the specific object or container to be restored as shown below:



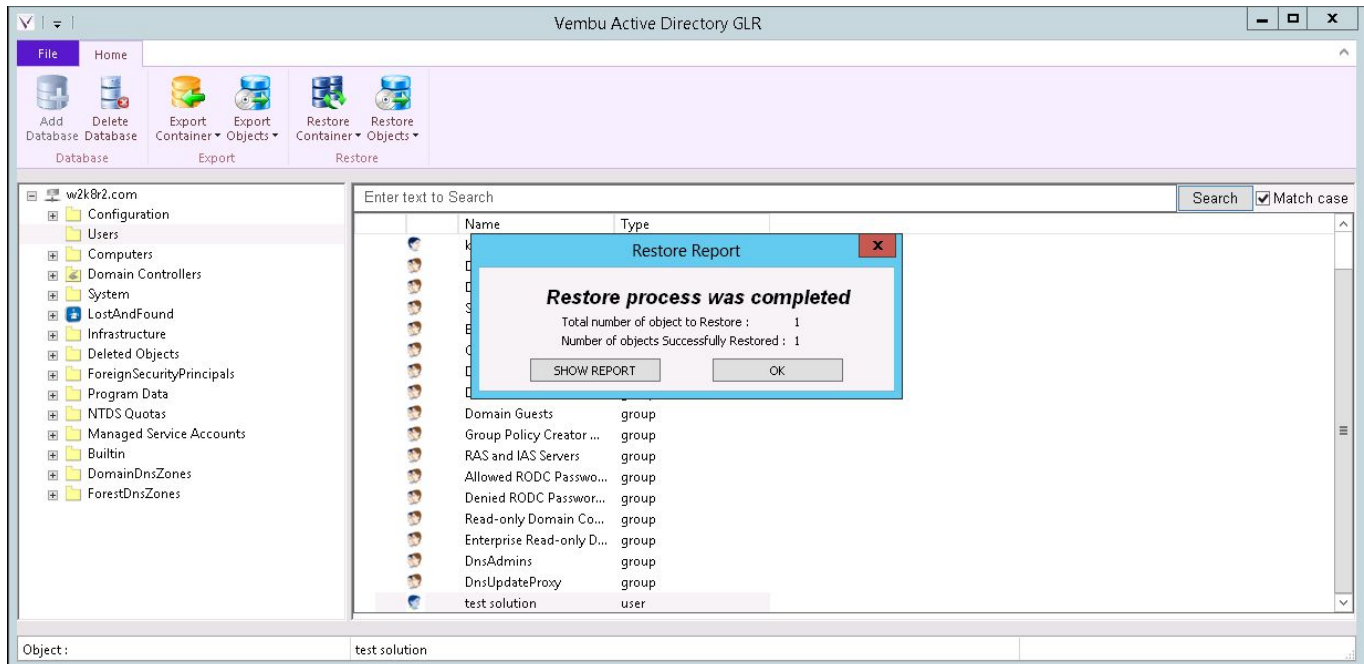
- Click Restore Objects or Restore container(any one of the options) option based on user requirement:



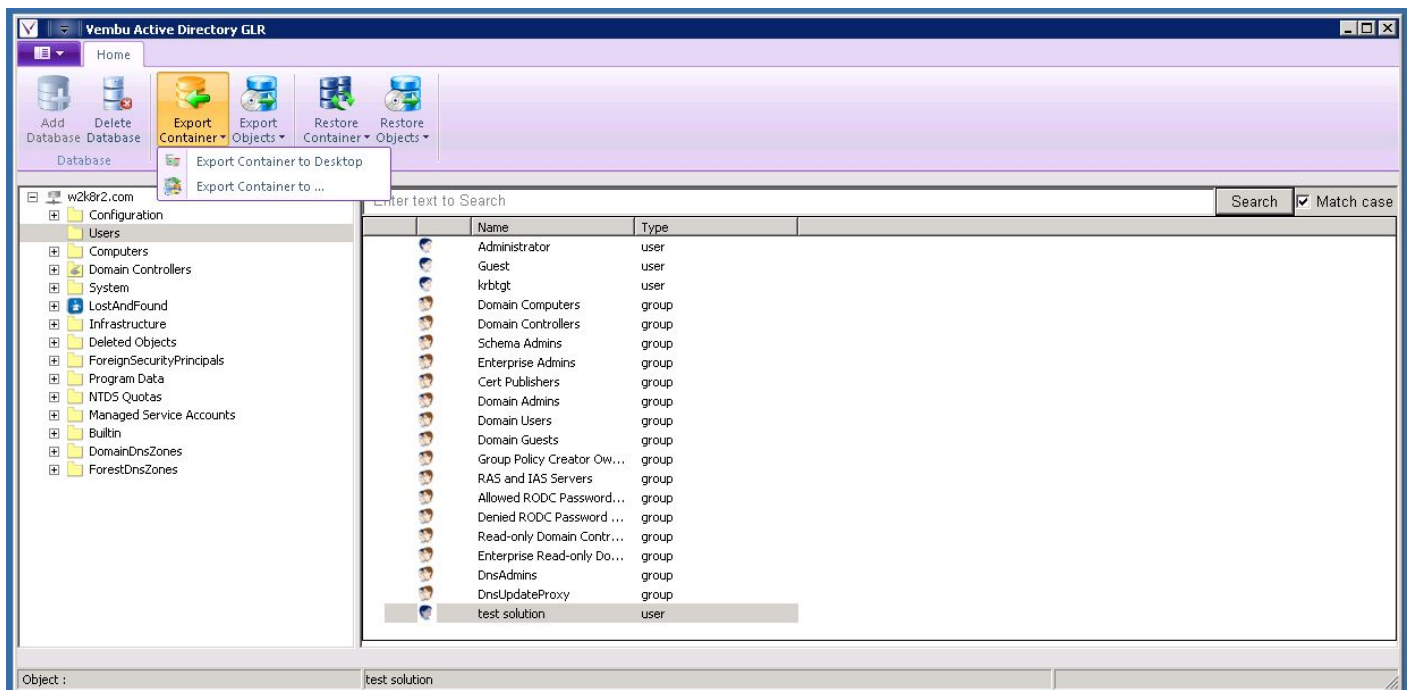
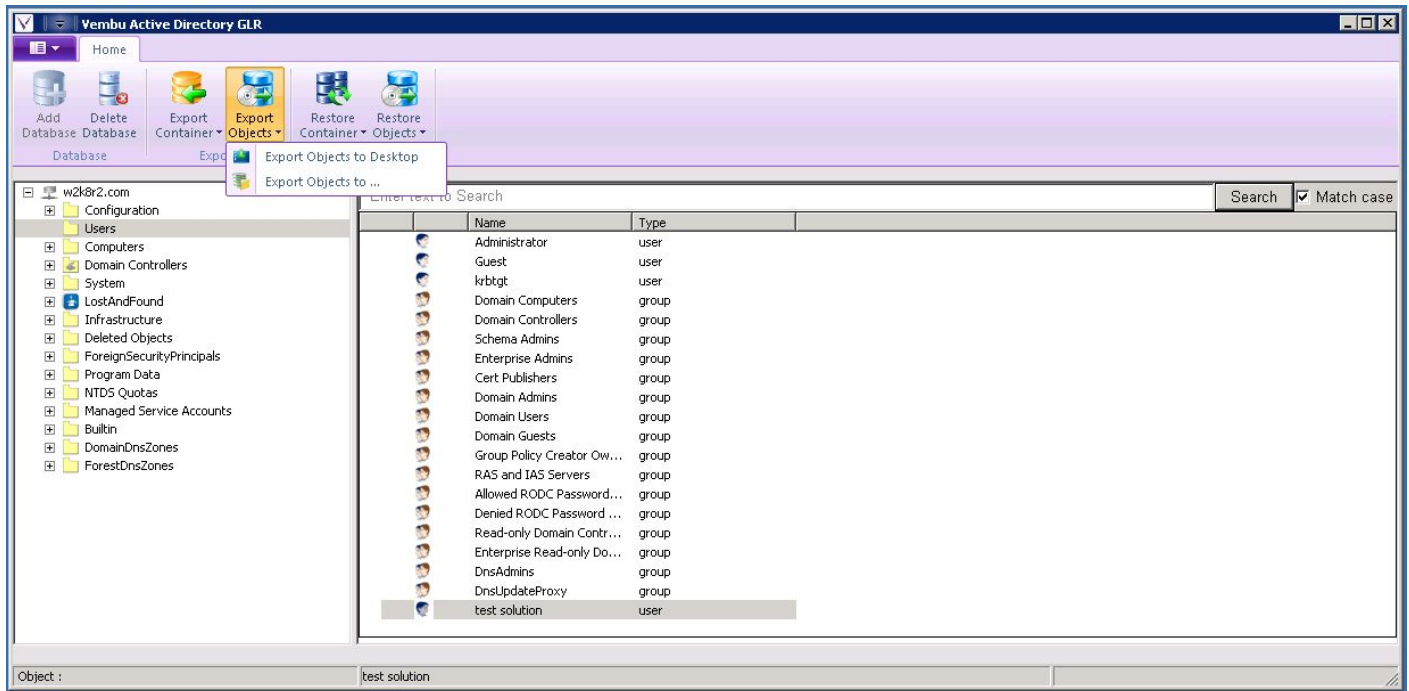
- If the selected object/container name already exists on the target machine, user will be alerted with a message as shown below. User can either overwrite or skip those files.



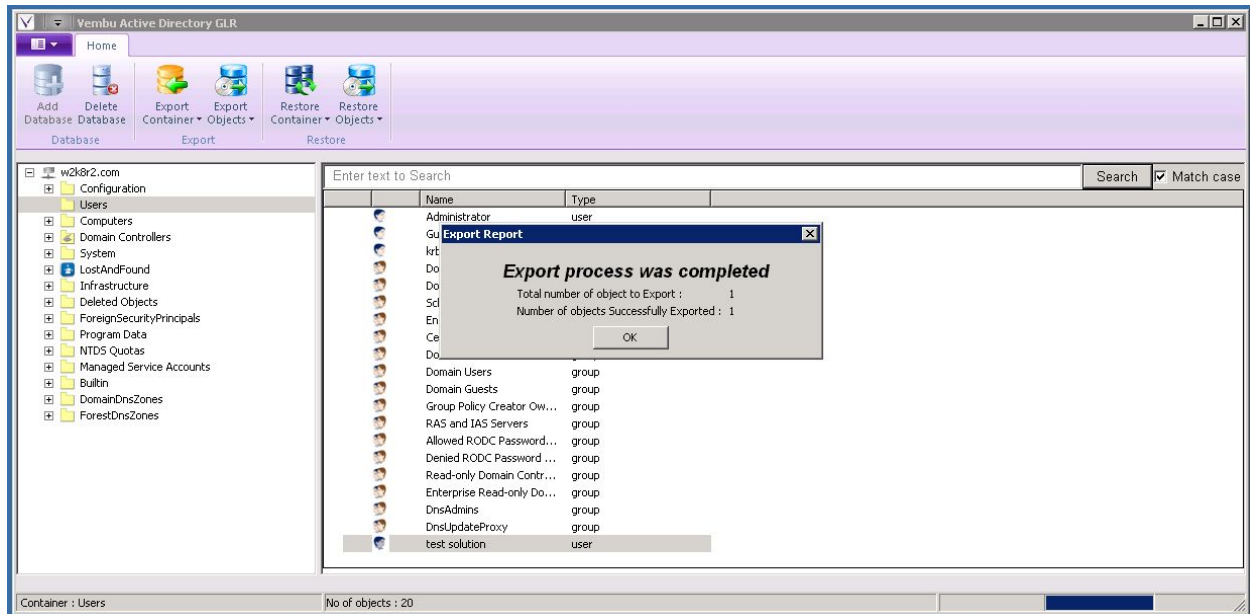
- Once restore completes successfully, user will be acknowledged with a message as shown below:



- To export user, machine and network related information:
 - Select the specific object or container to be exported and Click Export Object/ Export Container based on requirement



- Once export is done, acknowledgement message will be shown as below.



- The Exported file will be in .ldf format.
- User can import .ldf files to target server by executing below command in command prompt:

ldifde -i -f "ldf_file_path_location" -j "Logfile_location"

Ex: ldifde -i -f c:\1.ldf -j c:\

Limitations

Microsoft Exchange Server

- Configuring more than one database files at a time cannot be done.
- Mail level restore is not possible from PST file to Exchange Server.
- Mail level restore is not supported for public folder, notes and tasks.

Microsoft SharePoint Server

- MS-SQL Server Express edition will support database files upto 10 GB of size.
- If any lower version of SQL database used by this application, then it will be converted to SQL 2014 database format and then those databases will no longer be accessible to lower versions of SQL.
- The following contents could not be recovered using this application.
 - Wiki Page Library
 - External List
 - Pages and Sites

Microsoft SQL Server

- The database file location in full permission control(.mdf, .ldf file location).
- Cannot Restore users which has different domain when compared to production environment.
- Cannot export table data as .sql file which has sql_variant datatype column with datetime datatype.
- If any lower version of SQL database used by this application, then it will be converted to SQL 2014 database format and then those databases will no longer be accessible to lower versions of SQL.