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Paragon® Exchange Granular Recovery 2010

Evaluator's Guide

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Product Concept

Paragon Exchange Granular Recovery (PEGR) 2010 is a plug-in to Microsoft Outlook 2003/2007 that enables to get transparent access to backup mail databases of MS Exchange Server 2003/2007/2010 through the standard facilities of MS Outlook for easy and fast data recovery at a granular level.

What's New?

This version is already second in a row that includes a number of new features:

- Support for Windows 2003/R2 Server x86 Standard or Enterprise;
- Support for Windows XP SP2/SP3 x86 Professional;
- Support for mail databases (EDB files) of MS Exchange 2003 (32-bit) and MS Exchange 2010 (64-bit);
- Direct access to Exchange databases inside backup archives of Paragon Drive Backup 10;
- Direct access to Exchange databases inside backup archives of Paragon Exchange Protection (PEP).

Product Key Differentiators

The key differentiators of the product are:

- Full integration with MS Outlook 2003/2007;
- Support for mail databases (EDB files) of MS Exchange 2003/2007/2010;
- Direct access to Exchange databases inside backup archives of Paragon Drive Backup 10;
- Direct access to Exchange databases inside backup archives of Paragon Exchange Protection;
- Support for the Exchange log files replay to restore databases with the latest changes reflected;
- Simultaneous work with multiple Exchange databases;
- Granular data export from EDB files;
- Selection of mailboxes to work with.

Primary Audience

The product has been specially designed for MS Exchange 2003/2007/2010 administrators to help them:

- Do away with slow and unreliable “brick-level” mailbox backups;
- Recover user mailboxes or individual mail items directly from MS Outlook.

Workflow Procedure

The main advantage of the product is that it minimizes time and effort in finding and restoring lost email items.

The workflow procedure involves the following steps:

- [Connect a mail database](#) (an EDB file and transaction logs, if necessary) to MS Outlook;
- [Find the required email items](#) with the built-in facilities of MS Outlook;

- [Export them to any location](#), including a local PST file, or an MS Exchange mailbox, again with the built-in facilities of MS Outlook.

As you see there are only three simple steps, the first is accomplished with an easy to use intuitive wizard from Paragon, and the last two – familiar functionality of MS Outlook. If compared to the first version of the product, the workflow procedure has become one step shorter thanks to embedding tools that allow direct work not only with plain EDB files and their logs (stored openly), but those inside backup archives of Paragon Drive Backup 10 or Paragon Exchange Protection.

Supported Platforms

MS Exchange Databases	MS Outlook	Operating System	Edition
Exchange 2003	Outlook 2003, 2007	Windows 2003 / R2	Standard or Enterprise, x86
		Windows XP SP2/SP3	Professional, x86
Exchange 2007, 2010	Outlook 2003, 2007	Windows 2008 / R2	Standard or Enterprise, x64
		Windows 2003 / R2	Standard or Enterprise, x64
		Windows 7	Ultimate or Business, x64
		Windows Vista	Ultimate or Business, x64
		Windows XP SP2/SP3	Professional, x64

Getting Started

Target Environment

Before installing the product, please make sure the listed below conditions are met:

- [OS is supported and matches the version of Exchange databases you're going to work with;](#)
- MS Exchange ESE libraries are available* (ESE.dll, ExchMem.dll, Exosal.dll, and JCB.dll for Exchange 2003; ESE.dll, ExchMem.dll, and JCB.dll for Exchange 2007; ESE.dll, Store.exe for Exchange 2010);
- MS Outlook 2003/2007 is installed;
- At least one outlook profile is configured**.

* The product can either be installed on a computer with Exchange Server or without it. In the last case you will have to additionally provide ESE libraries during the installation, which you can find in a binary folder of an installed MS Exchange Server (by default, **C:\Program Files\Microsoft\Exchange Server\Bin**) or in its backup archive made with Paragon Drive Backup 10. It's not a limitation of the product, it's a limitation imposed by Microsoft.

** You're free to configure an outlook profile after the installation is over.



If any of the above conditions cannot be met, you won't be able to complete the installation of the product.

Installation

The setup utility has the standard user interface and set of installation steps. There are only several minor points we'd like you to focus on:

1. You need to close MS Outlook before installing the product. If you don't do that, you will anyway need to restart it after the installation process is over for the changes to take effect.
2. You need to accept Paragon License Agreement. Otherwise you won't be able to proceed with the installation.



3. If you'd like to use all functionality of the product without any restriction, you need to provide a product key and a serial number. To know more on the subject, please consult the [Demo Mode](#) section.

Product Key:

Serial Number:

- If you're going to install the product on a computer without MS Exchange, you will have to additionally provide ESE libraries of a certain version (2007 and/or 2010 for the x64 installation package; 2003 for the x86 installation package). To know more on the subject, please consult the [Supported Platforms](#) section.

You need to specify one or both ESE engines.
 You can find ESE libraries in the corresponding Exchange BIN folder.

 Copy ESE 2007 libraries, ESE.dll, ExchMem.dll and JCB.dll, from:
 C:\Users\VMVista64\Desktop\ESE2007

 Copy ESE 2010 libraries, ESE.dll and Store.exe, from:
 C:\Users\VMVista64\Desktop\ESE2010

First Start

To start using the product, please do the following:

- Configure MS Outlook (if not done yet):
 - Click on the MS Outlook icon to launch the e-mail client. During the installation a special icon of MS Outlook will also be added to the program group of PEGR 2010. It will allow launching the client with the administrative privilege, which is obligatory when connecting Exchange databases directly from backup archives of Paragon Drive Backup 10 or Paragon Exchange Protection;
 - Complete the initial configuration wizard.

To know more on the subject, please consult documentation that comes with MS Outlook.



If you haven't closed MS Outlook before installing the product, please restart it after the installation process is over for the changes to take effect.

- [Connect a mail database of the supported version of MS Exchange](#) by clicking on the **Add an Exchange Database Archive** icon  found in the MS Outlook toolbar.

Demo Mode

By default, the product comes as a demo version, which is limited in functionality:

- Despite the fact that the full text search works, you're not allowed to see message bodies and attachments;
- You're not allowed to copy or export message bodies or attachments to another mailbox or a local disk either.

Anyway you can unlock the product [during the installation](#), or any time you like [through the configuration wizard](#).



If a connected EDB file is less than 100 MBs in size, all restrictions will be automatically lifted.

Lost Email Recovery

Connecting MS Exchange Mail Database

1. [Launch MS Outlook with administrative rights.](#)
2. Click on the **Add an Exchange Database Archive** icon  found in the MS Outlook toolbar.
3. Provide your registration info (if not done yet). To know more on the subject, please consult the [Demo Mode](#) section.



Product Key:
test

Serial Number:

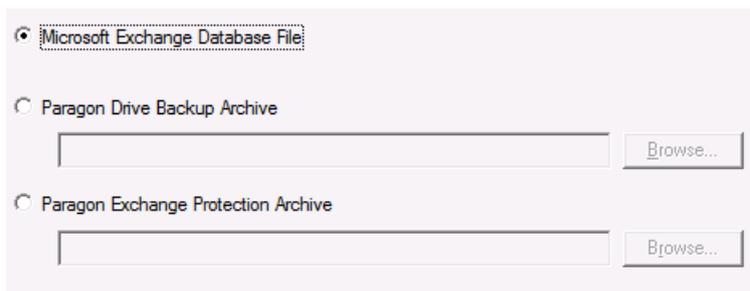
4. Specify where the required Exchange database (EDB file) is located. As already mentioned, besides working with plain EDB files and their logs (stored openly), the product allows opening databases directly from backup archives of Paragon Drive Backup 10 or Paragon Exchange Protection. Since each scenario has its peculiarities, let's take a closer look at them all:



Processing an EDB file with logs is rather a time-consuming operation, as the program has to play back all logs of the corresponding data store to open the mail database correctly. Anyway everything depends on the number of processed files and the system performance.

For plain EDB

- Select **Microsoft Exchange Database File.**



Microsoft Exchange Database File

Paragon Drive Backup Archive

Paragon Exchange Protection Archive

- Browse for an EDB file and logs of the corresponding data store (if necessary) or set full paths to them manually. Though use of transaction logs is optional, you should understand that a database copied from an incorrectly stopped or a crashed server does not contain all the latest changes, they are in logs, so if you need to open that database correctly, you need those logs to let the program play them back to update the database accordingly. There's no need in logs only if Exchange Server has been correctly stopped, i.e. all transactions have been accomplished.

Exchange EDB file:

F:\Mailbox Database.edb

Exchange log file path (optional):

Note: The specified path must contain only the log files related to EDB file specified above!

Connection of an EDB file leads to its modification. Moreover, after playback all transaction logs are automatically deleted. That's why we strongly recommend you to use copies instead of the originals.



If you're going to open several EDB files of the same storage group, you need to copy every EDB file and logs of that group to separate folders, this is the only way you can guarantee them open correctly, i.e. with the latest changes reflected.

If you don't have logs, you can still open the required EDB file, but only after fixing it up with MS Eseutil (<http://technet.microsoft.com/en-us/library/aa998249.aspx>).

For Drive Backup Archive

- Select **Paragon Drive Backup Archive**.

Microsoft Exchange Database File

Paragon Drive Backup Archive

Paragon Exchange Protection Archive

- Browse for a folder that contains a backup archive of MS Exchange created by Drive Backup 10 (a PBF file) or set a full path to it manually.

Select Archive Folder

Boot
 Documents and Settings
 MSOCache
 PDB backups
 Exchange server backup
 arc_290310135000990
 PerfLogs
 Program Files

Folder: arc_290310135000990

Microsoft Exchange Database File
 Paragon Drive Backup Archive

 Paragon Exchange Protection Archive

The program does not currently allow selection of archives located on network.



The Paragon Backup archive should be located at a drive with fixed or removable media.

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- Select a volume, which contains Exchange databases, and then click **Database** -> to accept. After that select a volume, which contains transaction logs, and then click **Logs** -> to accept. The use of logs is obligatory in this case, for they are required to take mail databases to a consistent state, which are not during backup of a running MS Exchange.

Volume Selection
Please select volume(s) containing database and log files

Backed up on

Label	Size	Used
C:	32.00 GB	17.39 GB
E: E:\vhd	1.00 GB	0.10 GB

Database -> C:\PDB backups\Exchange server backup\arc_010710085837044\img_0_0

Logs -> C:\PDB backups\Exchange server backup\arc_010710085837044\img_1_0

- Browse for the required EDB file and logs of the corresponding data store or set full paths to them manually.

Exchange EDB file:

Exchange log file path (optional):

Note: The specified path must contain only the log files related to EDB file specified above!

This type of connection does not modify data stored inside backup archives.



Transaction logs are played back only once at the first connection, the results of which will be kept in a special file until you disconnect the database.

For Exchange Protection Archive

- Select **Paragon Exchange Protection Archive**.

- Click on the required mail database, then select a time stamp from the list.

This type of connection does not modify data stored inside backup archives.



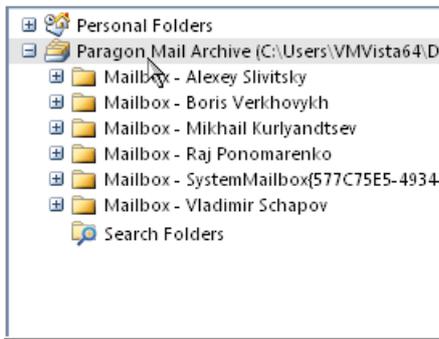
Transaction logs are played back only once at the first connection, the results of which will be kept in a special file until you disconnect the database.

-
5. If you've got to do with a private store, you can select a mailbox you want to work with by marking a checkbox next to it. You're also free to select several mailboxes. If working with a public store (a "Public Folders" database) – this option will be unavailable.



One Exchange data store may contain hundreds of mailboxes. The program enables to select mailboxes to be shown in MS Outlook, so you can improve usability and cut the system resources.

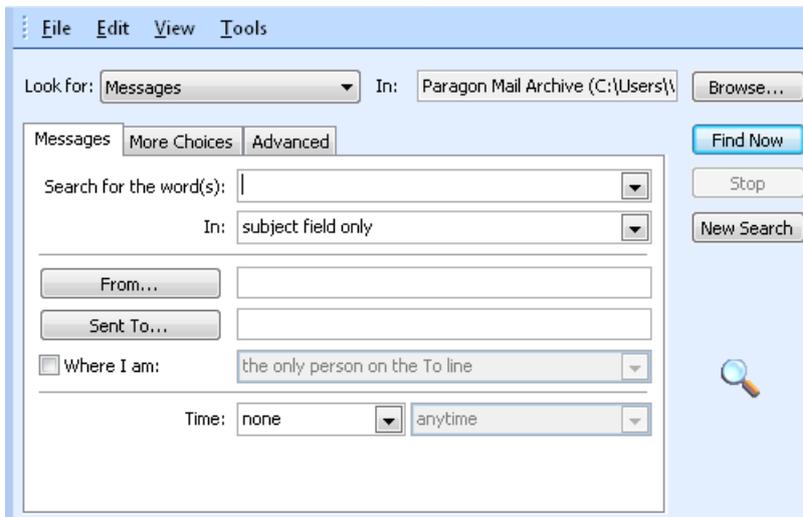
-
6. Click **Finish** to complete the wizard.
 7. As a result you'll get a new mail folder called **Paragon Mail Archive**.



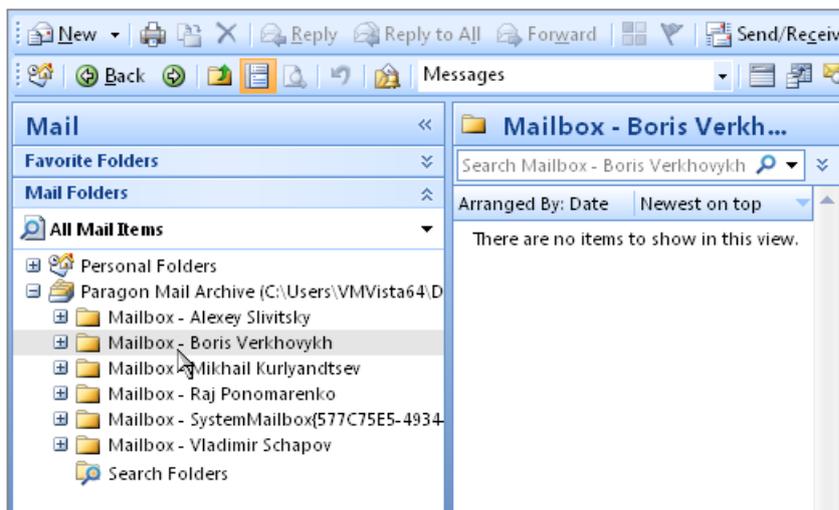
Searching for Lost Email Items

The product enables to use all search and preview capabilities of MS Outlook. Thus you can easily find the required mail, preview its contents, and finally export it to the active MS Exchange Server, or a standard PST, or even a file of the desired extension (HTM, MSG, TXT, etc.):

- Advanced Find (Ctrl+Shift+F);



- Instant Search (Ctrl+E).



To know more on the subject, please consult documentation that comes with MS Outlook.

Exporting Lost Email Items

The product enables to export email items from EDB files just the way it's done with ordinary MS Outlook mailboxes, so you can export data to the active MS Exchange Server, or a standard PST, or even a file of the desired extension (HTM, MSG, TXT, etc.):

For a single message

- Export the selected message to a standard PST or Exchange mailbox with the drag-and-drop technique;
- Save the selected message as a file (HTM, MSG, TXT, etc.) through the **Save As...** dialog (**File > Save As...**);

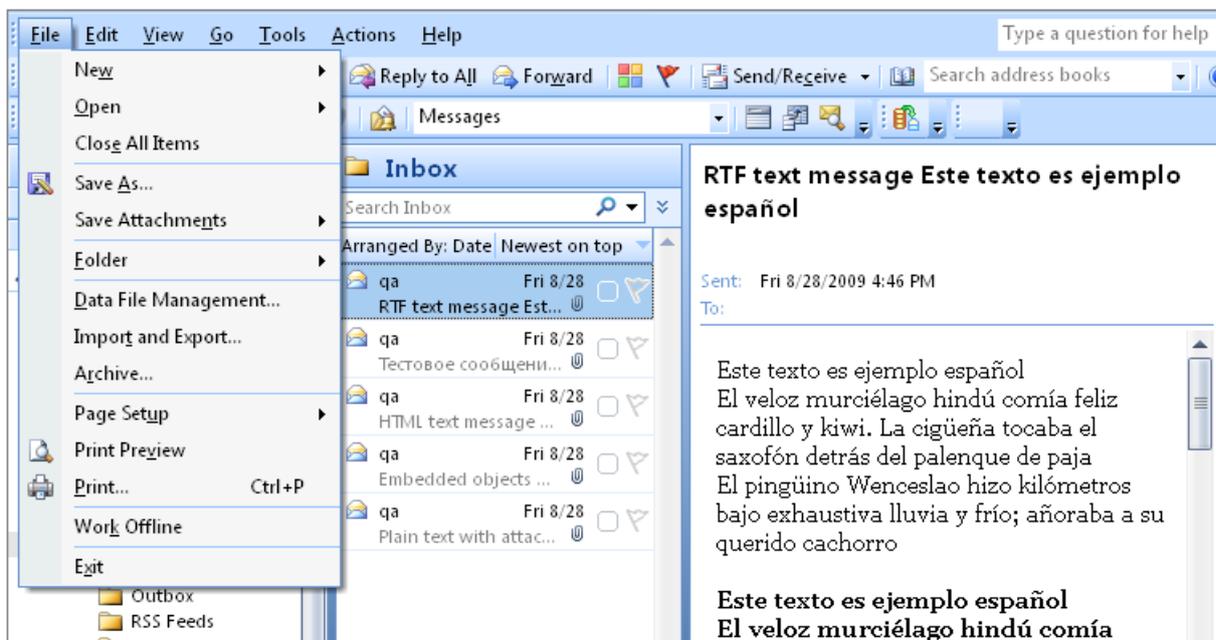
For multiple messages/folders

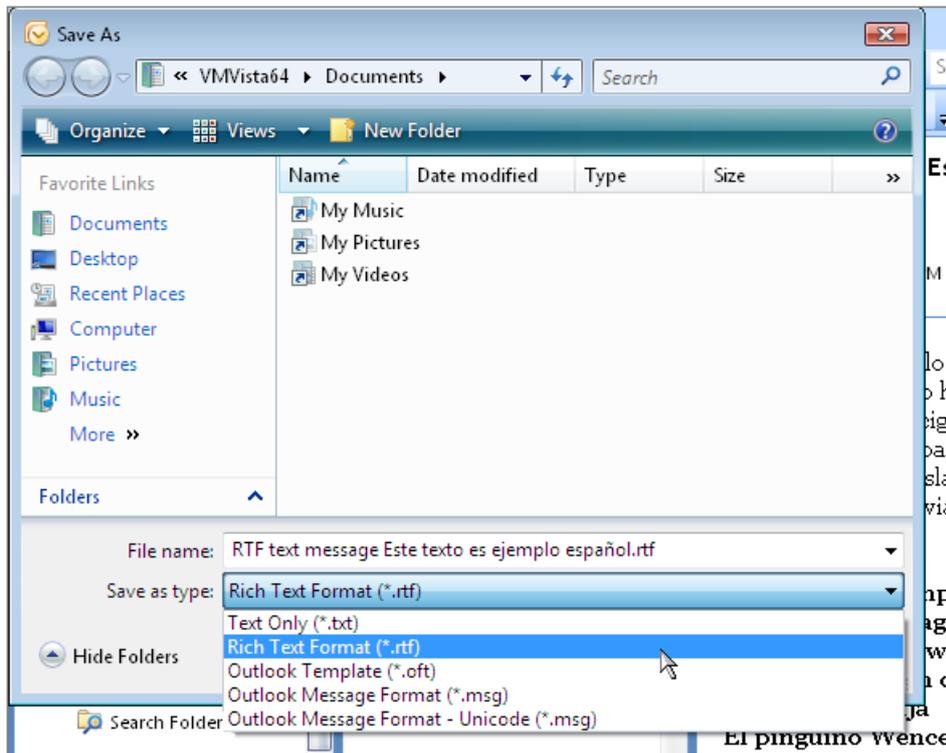
- Export multiple messages/folders to a standard PST or Exchange mailbox with the drag-and-drop technique;
- Export multiple messages/folders to a new PST file through the **Import and Export...** wizard (**File > Import and Export... > Export to a file > Personal Folder File**).

Exporting a single message

To export a single message from an MS Exchange EDB file, please do the following:

1. [Launch MS Outlook](#).
2. [Connect the required EDB file and transaction logs](#) (if necessary).
3. [Search for a message you need to export](#).
4. Either save the selected message as a file (**File > Save As...**),





or drag-and-drop it to a standard PST folder, Exchange mailbox, or any other folder of the file system (in this case the message will be saved as an **.msg** file).

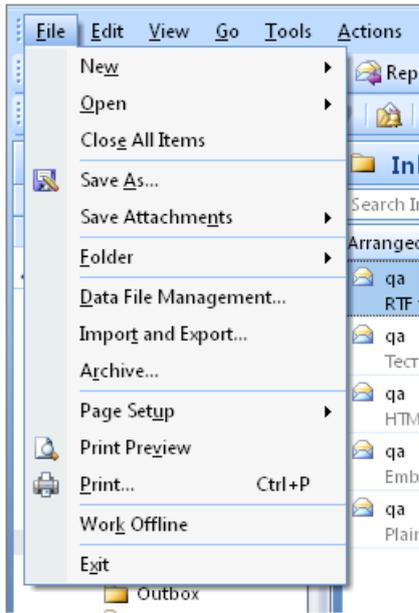


To know more on the subject, please consult documentation that comes with MS Outlook.

Exporting multiple messages/folders

To export multiple messages from an MS Exchange EDB file, please do the following:

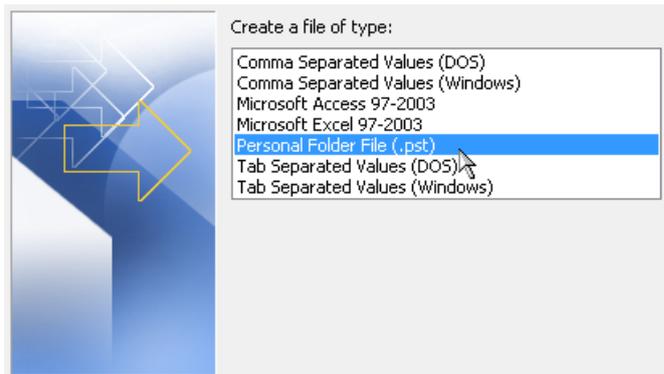
1. [Launch MS Outlook](#).
2. [Connect the required EDB file and transaction logs](#) (if necessary).
3. Launch **Import and Export** wizard (**File > Import and Export...**).



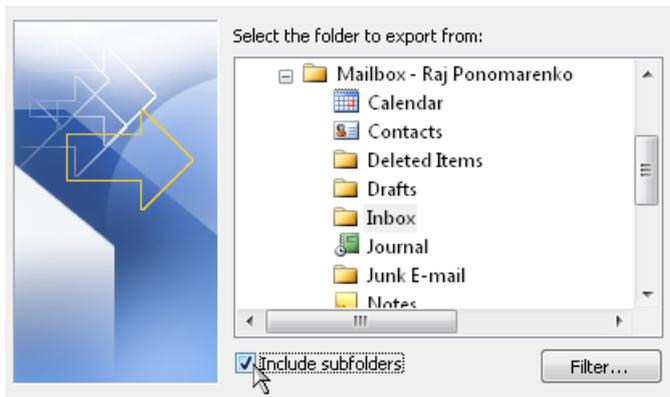
4. Select Export to a file.



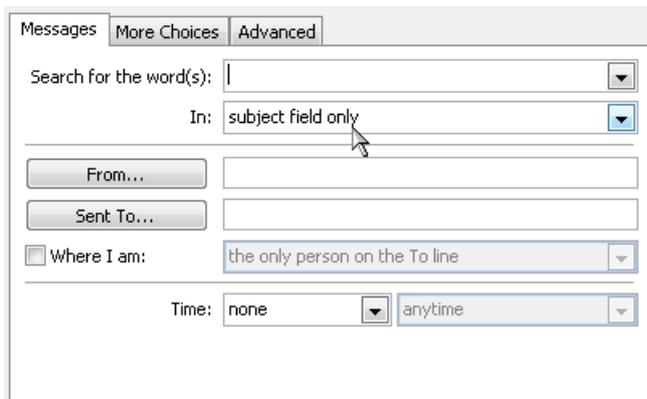
5. Then select **Personal Folder File (.pst)**.



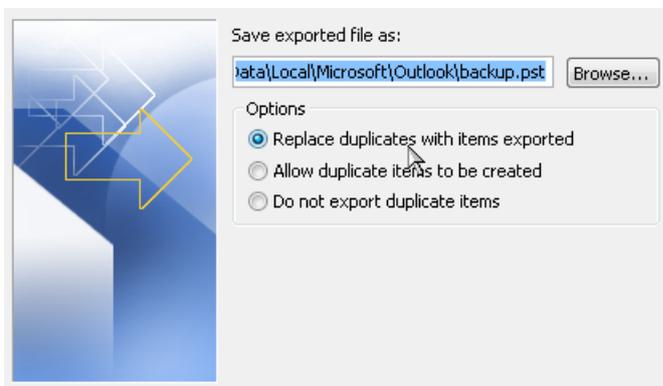
6. Select a mailbox or a folder to export from.



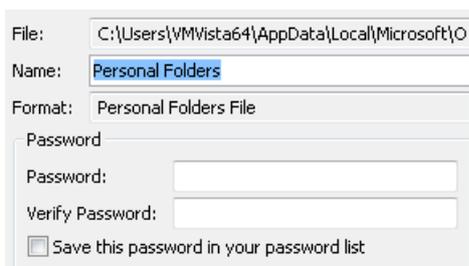
7. Set a filter if necessary by clicking the **Filter** button.



8. Choose how to treat duplicates.



9. On the last page you've got the option to set a password to the newly created PST file.



or drag-and-drop the selected messages to a standard PST folder, Exchange mailbox, or any other folder of the file system (in this case the message will be saved as an **.msg** file).



To know more on the subject, please consult documentation that comes with MS Outlook.

Conclusion

Introducing the option to directly access Exchange databases inside backup archives of Paragon Drive Backup 10 or Paragon Exchange Protection as well as support for all versions of MS Exchange Server, the second generation of Paragon Exchange Granular Recovery has become more powerful, yet simpler than its predecessor or any other 3rd party solution of similar functionality presented on the market today.

Despite the fact that most of its potential can be exposed when using Paragon Exchange Protection or/and Paragon Drive Backup 10 for protecting MS Exchange Server (recommended scenario from Paragon), it's still a good choice without them, for this little plug-in saves a system administrator from the headache of maintaining slow and unreliable "brick-level" mailbox backups while still providing the option to recover not only the whole mail server, but also a single mailbox, folder, message, contacts item, note, etc. And it can do that with the latest changes reflected, by playing back transaction logs from incremental and differential backups of MS Exchange.

Troubleshooter

If you've faced a problem while using the product, please send an operation log file (you can find it in "C:\ProgramData\Paragon Software\Exchange Granular Recovery\mxtrpr32.log" or "C:\Documents and Settings\All Users\Application Data\Paragon Software\Exchange Granular Recovery\mxtrpr32.log") to support@paragon-software.com, describing your actions just before the glitch in every single detail. If possible, please make a screenshot of a program error (if any). Paragon's support team will do their best to help you out as soon as possible.