NovaBACKUP Granular Restore

Version 20.4.0

Table of Contents

| 1 Product overview | 4 |
|---|--|
| 1.1 Supported Exchange database versions | 4 |
| 1.2 Supported Outlook versions | 4 |
| 1.3 Supported SQL Server database versions | 4 |
| 1.4 System requirements | 4 |
| 1.4.1 Live Exchange Server export requirements | 5 |
| 1.4.2 Live SQL.S.erver. export. requirements | 5 |
| 1.5 Limitations | 5 |
| 1.6 Boundaries for optimal recovery and search | 6 |
| 1.7 Customer support | 7 |
| 2 Installation | 7 |
| 3 Opening a file | 10 |
| 3.1 Finding a file | 12 |
| | |
| 4 Granular Restore for Microsoft SQL | 14 |
| Granular Restore for Microsoft SQL 4.1 Finding and browsing data | |
| | 14 |
| 4.1 Finding and browsing data | 14 14 |
| 4.1 Finding and browsing data4.1.1 Browsing database tree. | 14 14 16 |
| 4.1 Finding and browsing data. 4.1.1 Browsing database tree. 4.1.2 Using search. | 14 14 16 20 |
| 4.1 Finding and browsing data | 14 14 16 20 20 |
| 4.1 Finding and browsing data | 14 14 16 20 20 25 |
| 4.1 Finding and browsing data | 14 14 16 20 20 25 26 |
| 4.1 Finding and browsing data 4.1.1 Browsing database tree 4.1.2 Using search 4.2 Exporting items 4.2.1 Restore to live SQL Server 4.2.2 Restore to SQL scripts 5 Granular Restore for Microsoft Exchange | 14 14 16 20 20 25 26 |
| 4.1 Finding and browsing data | 14 14 16 20 20 25 26 26 27 |
| 4.1 Finding and browsing data | 14 14 16 20 20 25 25 26 27 28 |

| 5.1.5 Showing notification panel | 31 |
|---|----|
| 5.2 Finding and selecting messages, folders and mailboxes | 32 |
| 5.2.1 Browsing. mail. store tree | 33 |
| 5.2.2 Using search | 35 |
| 5.3 Exporting items | 43 |
| 5.3.1 Restore to original live Exchange Server. Standard mode | 43 |
| 5.3.2 Restore to live Exchange Server. Expert mode | 47 |
| 5.3.3 Working.with.clustered.Exchange.Server.configuration | 55 |
| 5.3.4 Restore to PST files | 56 |
| 6 Command-line interface | 59 |
| 7 Glossary | 60 |

1 Product overview

NovaBACKUP Granular Restore (NBGR) is a granular data extraction software for offline SQL databases and Microsoft Exchange Server mailbox stores and Outlook files. The utility provides direct access to unmounted database tables and mail store contents, displaying file structure and its contents with selective export functionality. With a search query tool, users are able to export specific queries rather than large tables or files.

For SQL databases, recovered items can be saved as SQL scripts or exported directly to a live SQL server. For Microsoft Exchange servers, files can be saved as Personal Storage File (.pst) files, to be opened with Microsoft Outlook or other compatible email clients, or exported directly into live Exchange Server mailboxes. The utility makes no changes to the store, preserving it in original unmodified state.

Main features of NovaBACKUP Granular Restore:

SQL Database

R

- · Recovers entire tables, objects and object groups
- Recovers data obtained by specific search queries
- · Recovers keys, scripts, functions, triggers and procedures
- · Recovers default settings, user types and views
- Saves single or multiple points of data as SQL scripts or exports to live SQL database

Microsoft Exchange Server

- · Recovers mailboxes, folders, messages and file attachments
- Recovers email addresses from Active Directory storage
- · Recovers notes, contacts, tasks and appointments
- Recovers creation dates for all objects
- Saves selected items to PST files or exports to live Exchange Server mailbox(es)

1.1 Supported Exchange database versions

NovaBACKUP Granular Restore supports the following mail store versions:

2016 CU6, 2016 CU5, 2016 CU4, 2016 CU3, 2016 CU2, 2016 CU1, 2016 RTM, 2013 CU17, 2013 CU16, 2013 CU15, 2013 CU14, 2013 CU13, 2013 CU12, 2013 CU11, 2013 CU10, 2013 CU9, 2013 CU8, 2013 CU7, 2013 CU6, 2013 CU5, 2013 SP1, 2013 RTM, 2010 SP3, 2010 SP2, 2010 SP1, 2010 RTM, 2007 SP3, 2007 SP2, 2007 SP1, 2007 RTM, 2003.

1.2 Supported Outlook versions

NovaBACKUP Granular Restore supports the following versions of PST/OST files: 2016, 2013, 2010, 2007, 2003, XP, 2000, 98 and 97

Note

OST file of 2013, 2016 version is not supported.

1.3 Supported SQL Server database versions

NovaBACKUP Granular Restore supports the following versions of MDF/BAK files: 2016, 2014, 2012, 2008R2, 2008 and 2005

1.4 System requirements

Basic system requirements:

- Operating systems: Windows 10, Windows 8.1, Windows 8, Windows 7, Vista, 2016 Server, 2012 Server R2, 2012 Server, 2012 Server, 2008 Server, 2003 Server or XP
- RAM: 1024MB, depends on store size and OS version
- Hard Disk: minimum 50MB of free space required for installation
- Display: 800 x 600 or higher resolution, 256 colors



Additionally, NovaBACKUP Granular Restore may require free space on disk 1.5x the size of mail store being processed. For example, for 300MB store, 450MB free space should be available.

1.4.1 Live Exchange Server export requirements

Exchange Server

Exchange Server 2016, 2013, 2010 or 2007

Exchange Web Services enabled on Exchange Server

Network

Port 443 open on the network. The EWS messages are transported via SOAP-based API, which is essentially sending XML data using https protocol.

Restore client

NBGR installed. Access to Exchange server(s) over network.

1.4.2 Live SQL Server export requirements

SQL Server

SQL Server 2016, 2014, 2012, 2008R2, 2008 or 2005

SQL Server Browser running on SQL Server

Network

To establish connection to live SQL Server, remote network access must be allowed on the server and TCP/IP protocol must be enabled in SQL Server Configuration Manager. For detailed instructions on how to do it, visit http://blogs.msdn.com/b/walzenbach/archive/2010/04/14/how-to-enable-remote-connections-in-sql-server-2008.aspx

Restore client

NBGR installed. Access to SQL Server(s) over network.

1.5 Limitations

Current version of the product has the following limitations:

- While processing dirty shutdown databases storages may be restored not to the topical condition
- Messages in the Outbox folder are not restored if they haven't been syncronized with the server
- Simultaneous recoveries are not supported
- · Simultaneous running of more than one instance of the product is not supported
- Encrypted emails are not restored
- Messages with size over 64MB are not supported
- Windows 2000, 98, ME and 95 are not supported
- Recovery of delivery receipts and non delivery reports is not supported
- Tool doesn't support usage in "Run as different user" mode
- OST files, created in Outlook 2013,2016, are not supported
- Password-protected PST files are not restored in command-line interface
- · Command-line interface is not supported for MDF and BAK files
- Compressed SQL Server 2014, 2016 BAK files are not currently supported
- System MDF and BAK files are not currently supported
- Encrypted SQL databases are not currently supported
- Calculated fields and fields of type [sql_variant] in indexes cannot be used in SQL database search
- Sparse columns in SQL database are not supported
- Filestream data type and Filetables in SQL databases are not currently supported
- Searching by 'real' data type may return not full results
- Approved status of Calendar Events is not supported
- Links to the Exchange Global Address List are not supported

Injection limitations for Exchange Server

- To restore a mailbox, an empty mailbox must be created in advance using the standard Exchange Server administration tools. In existing mailboxes folders and individual messages can be created without any additional administrative actions.
- It is possible to rename/delete folders in the attached mailbox only within one program session.
- Injection will not be supported for Exchange Server 2003 and earlier versions. These versions do not support EWS.
- Archived mailboxes (and items from such mailboxes) are not exported to live Exchange Server.
- Photos of contacts are not exported to original live mailbox in Exchange Server 2007.
- Emails with embedded images are displayed with an attachments icon after exporting into live Exchange Server.
- Creation time and modified time are not restored.
- Exporting data into live public folder is not supported.
- Exporting data from PST/OST files into original mailbox is impossible.
- Contact groups and meeting requests cannot be exported into live Exchange Server 2007 instances. Use export through PST for these item types.
- Missing sent date is exported as current date/time into live Exchange Server.

Limitations for search in attachments content (available for EDB/PST/OST files)

Search in attachments does not work for:

- Text contained in embedded OLE objects, WordArt and smart objects, charts etc. Documents metadata (author, comments, tags etc.).
- Marker symbols in lists (numbered or bulleted).
- Text in header/footer.
- XLS/XLSX: number values, formulas, cell comments.
- PPT: tables content.

Тір

R

Note that the utility is best used for granular item extraction. The user interface of the program is designed for ease of locating, selecting and exporting specific messages, folders or mailboxes. Entire databases can be exported as well, but the restore time will significantly increase over a slow connection. For bulk operations that involve exporting more than one mailbox it is typically better to work with a local copy of the database.

1.6 Boundaries for optimal recovery and search

Usage of NovaBACKUP Granular Restore is optimal for files that do not exceed: **EDB**:

- EDB size: 2TB
- Mailbox size: 100GB
- Number of messages in the EDB file: 2,000,000
- Number of mailboxes in the EDB file: 2,000
- Number of messages in one mailbox: 100,000

PST/OST:

- PST/OST size: 100GB
- Number of messages in the PST/OST file: 200,000
- Number of folders in the PST/OST file: 1,000
- Number of messages in one folder: 100,000

MDF/BAK:

- MDF/BAK size: 1TB
- Number of tables in the MDF/BAK file: 1,000
- Number of rows in one table: 10,000,000

1.7 Customer support

For customer support, please contact NovaStor using one of the methods listed below.

| Online: | http://www.support.novabackup.com |
|---------|-----------------------------------|
| Email: | support@novastor.com |
| Phone: | 1 (805) 409-3140 |

Tip

G

When contacting customer support with a technical issue, please have ready the program's log files and the store you are having difficulty with.

To get log files, click File menu and choose Open log folder. Zip the contents of the folder and attach the resulting archive to your support request.

If the log archive and/or mail store exceeds 10MB, it may be impossible to send them as an email attachment. In that case, upload instructions will be provided to you upon request.

2 Installation

This chapter describes the steps required to install NovaBACKUP Granular Restore.

Depending on your preferences, it is possible to install the product in default or advanced mode.

Default mode

Default mode provides simple setup that requires just a few mouse clicks to complete. For the sake of simplicity, it does not offer any customization capabilities and uses the following default settings:

- NovaBACKUP Granular Restore will be installed in a per-user folder and be available just for your user account. You do not need local administrator privileges in this case.
- The default installation location is "C:\Program Files (x86)\NovaStor\Granular Restore\"
- A shortcut for this program will be created on the desktop automatically.

Step by step instructions:

- 1. Double-click on the setup file to start the installation process.
- 2. The Software License Agreement appears. Read it and accept the terms in the License Agreement.



- 3. Click Install to start setup .
- 4. The installation will start. When finished, you will have an option to launch the installed product.

Advanced mode

R

Advanced setup mode allows changing default installation options.

Step by step instructions:

- 1. Double-click on the setup file to start the installation.
- 2. The Software License Agreement appears. Read it and accept the terms in the License Agreement.



3. Click **Advanced** to change installation options described above.

G

4. Click **Next** to install the product to the default folder or **Change to choose another folder**. To add an icon shortcut to the desktop for quick start of the program, check **Create a shortcut for this program on the desktop**.

| 閿 | NovaBACKUP Granular Restore Setup 🛛 🗕 🔍 |
|------|--|
| | cination Folder ck Next to install to the default folder or click Change to choose another. |
| Inst | all NovaBACKUP Granular Restore to: |
| | Program Files (x86)\WovaStor\ hange |
| • | Create a shortcut for this program on the desktop. |
| | |
| | Back Next Cancel |

- 5. Click Install to begin the installation. Click **Back** to change any of your installation settings. Click **Cancel** to exit the setup wizard.
- 6. After the installation finishes you can choose to Launch NovaBACKUP Granular Restore when setup exits to start the program automatically by clicking the appropriate checkbox. Click the Finish button to exit the setup wizard.

3 Opening a file

R

To directly open a file for browsing and export, launch NovaBACKUP Granular Restore and click file open button on the taskbar or select **File|Open** from the menu. On first launch, the file open dialog will be shown automatically.

Select the store you will be working with and click Open.

| B | | Open | | × |
|----------------|--------------------|---|------------------------|-----------------|
| Look in: |) Exchange Ser | ver Database 🗸 🗸 🗸 | G 🤌 📂 🛄 - | |
| æ | Name | * | Date modified | Туре |
| Recent places | G Mailbox Data | ibase | 3/13/2014 3:51 AM | Exchange Server |
| incluin proces | | | | |
| Desktop | | | | |
| Cibraries | | | | |
| This PC | | | | |
| | | | | |
| Network | < | | | > |
| | File name: | Mailbox Database | ~ | Open |
| | Files of type: | All supported formats (*.edb, *.pst, *. | ost, *.mdf, *.bak) 🗸 🗸 | Cancel |
| | Path to log files: | | Browse | |
| | | | | |

By default, a progress window will accompany opening the selected file. The window displays overall progress and information about the number of items and objects in the file (1). The window can be disabled by unchecking the **Show the dialog next time** check box (2) or from the **Options** menu. The progress window will be automatically closed in 3 seconds after database opening (3).

| | Progress | |
|--------------|----------------|-------------|
| Completed | | |
| Mailboxes | 22 1 | |
| Read speed | 0 B/s | |
| Elapsed time | 00:00:02 | |
| | | |
| | | |
| Show the dia | alog next time | 3 Close (1) |

Current operation can be cancelled right on the progress dialog, by clicking an appropriate link.

After loading the file is complete, it will be available for browsing and export. The opened store will also become the default store and will be automatically reopened next time you launch the utility.



Opened database can be reloaded with database log files. Go to the File menu and select **Reload database** using transaction logs.

| 9 | | | NovaBACKUP Granular Restore – 🗖 💌 |
|------|---|----------------------------|---|
| File | Options Help Open file Recent Close file Reload database using transaction logs Search for files to open Export selected items into PST Export into original Exchange mailbox | Ctrl+O Ctrl+S Ctrl+G | Select mailboxes or folders to search allbox Database.edb (Exchange Server Database\Mailbox Database.edb te: 904 Mb |
| | Open log folder Delete saved temp files and logs Exit | Ctrl+N Alt+X | ate: 3/13/2014 rsion: Exchange Server 2013 ansaction logs not used. I mailboxes. Select a mailbox to display folders. Load time: 00:00:03 |
| | Maria Woods Michael Michael Personal Archive - HealthMailboxade Personal Archive - HealthMailboxbaa Rohard Robert Rise Moneo Montague Suda Rudy Raid SystemMailbox(ade9ae7re5b5-4860- Tim Goodler | 9ae7fe5b4 8042e260 | |
| mpl | eted | > | File info |

Note

If you closed the progress window, it can easily be shown again by clicking on the progress bar on the status panel.

3.1 Finding a file

G

In case when the location of the file is unknown, it is recommended to scan existing drives to find the data. NovaBACKUP Granular Restore scans local drives, both mounted and unmounted, as well as network drives and searches for PST/OST, MDF/BAK and EDB files.

To start a new search click **Search for files to open** in the **File** menu.

| G | | | NovaBACKUP Granular Restore – 🗖 | × |
|------|--|-----------|---|-----|
| File | Options Help | | | |
| | Open file | Ctrl+O | | |
| | Recent | | Select mailboxes or folders to search | 9 |
| | Close file | | | |
| | Reload database using transaction logs | | | |
| C | Search for files to open | | ailbox Database.edb | |
| | Export selected items into PST | Ctrl+S | Exchange Server Database | |
| | Export into original Exchange mailbox | Ctrl+G | re: 904 Mb | |
| | Cancel current operation | Ctrl+N | ate: 3/13/2014 | |
| | Open log folder | | rsion: Exchange Server 2013 | |
| | Delete saved temp files and logs | | ansaction logs not used. | |
| | Exit | Alt+X | mailboxes. Select a mailbox to display folders. | |
| | Maria Woods Michael Personal Archive - HealthMailboxad Personal Archive - HealthMailboxad Robert Rise Robert Rise Romeo Montague Rudy Raid Susane Tyler SystemMailbox(ade 9ae 71-e5b5-4860 Tim Goodler | a8042e260 | Load time: 00:00:03 | |
| < | | > | File info | |
| Comp | leted | | | .:: |

The following form appears, displaying the list of mounted disks:

| G | 9 | Search for files to op | en | | x |
|---------------------------------------|-------------|------------------------|---------------|---|---|
| Select source: | | | | File types by application: ✓ Exchange Server (*.edb) ✓ Outlook (*.pst, *.ost) ✓ SQL Server (*.mdf, *.bak) Custom match: Example: *.edb;*.ost | |
| Add location to search Include unmoun | ted volumes | | Filter: | All | ~ |
| File | Size | Date created | Date modified | Туре | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Open file | | | Start | search Exit | |



Select a location to search in.

| R | 9 | Search for files to op | en | | | × |
|------------------------|-------------|------------------------|---------------|---------|---|---|
| Select source: | | | | | File types by application: Exchange Server (*.edb) Cutlook (*.pst, *.ost) SQL Server (*.mdf, *.bak) Custom match: Example: *.edb;*.ost | |
| Add location to search | ted volumes | | | | | |
| Found files: | | | | Filter: | All | ~ |
| File | Size | Date created | Date modified | ł | Туре | |
| | | | | | | |
| | | | | | | |
| Open file | | | | Start | search Exit | |

List of found files will be displayed. Double-click a file to open it.

| a | | Search for files to o | pen | | × |
|---|---|--|---|--|---|
| Select source: Select source: Select source: Select source: Add location to search Include unmour | nted volumes | | | File types by application: ✓ Exchange Server (*.edb) ✓ Outlook (*.pst, *.ost) ✓ SQL Server (*.mdf, *.bak) Custom match: Example: *.edb;*.ost | |
| Found files: | | | Filter: | All | ۷ |
| File | Size | Date created | Date modified | Туре | ^ |
| C:\Exchange Server Data\Mailbox Database.edb C:\DRTC_9\DREXATest\S\AddFunctions.sj.bak C:\DRTC_9\DREXATest\Script\Config.sj.bak C:\Windows\SoftwareDistribution\DataStore.edb C:\ProgramData\Microsoft\RAC\StateData\tmp C:\ProgramData\Micros\PackageRepository.edb C:\Program Files (x86)\SmartB\tcFFHook.xml.bak C:\Users\All Users\Microsoft\RAC\Stat\tmp.edb C:\Users\All Users\Micr\PackageRepository.edb | 34.1 KB 2.89 KB 94.0 MB 1.00 MB 24.0 MB 21.0 KB 1.00 MB | 1/24/2016 8/18/2015 6/21/2016 11/25/2013 6/21/2016 11/25/2013 6/24/2015 6/21/2016 11/25/2013 | 3/13/2014 1/25/2016 1/25/2016 6/21/2016 6/21/2016 6/21/2016 6/21/2016 6/21/2016 6/21/2016 | Exchange Server (*.edb) SQL Server (*.mdf, *.bak) SQL Server (*.mdf, *.bak) Exchange Server (*.edb) Exchange Server (*.edb) SQL Server (*.mdf, *.bak) Exchange Server (*.edb) Exchange Server (*.edb) | ~ |
| Open file Search complete. 18 file(s) found. | | | Clear list an | d search again Exit | |

4 Granular Restore for Microsoft SQL

4.1 Finding and browsing data

R

In general, NovaBACKUP Granular Restore provides two modes of processing file data: browsing the file tree and search. Using these, it is possible to efficiently form a set of objects for subsequent export, including the necessary ones and excluding ones to be skipped.

A newly opened database is shown in the **Browse** mode.



4.1.1 Browsing database tree

Browse mode shows database in a tree-like structure and allows browsing folders and previewing individual objects.

This mode is best for navigating to a specific object, when it is precisely known what data needs to be extracted.

For example, a user may ask to restore some specific table. Expand the folder 'Tables' in the tree and select the table. Available rows will be listed to the right of the tree. Please note that product will not try to load all rows in table. Instead of that rows will be loaded by portions each time you navigate to the end of list.

| i de la construcción de la constru | | NovaBACKUP Gra | nular Restore | | | | |
|--|----------------------|-----------------------|----------------|---------------|-----------------|----------------|-----------------|
| File Options Help | | | | | | | |
| | | | Search in Pers | on.Address | | | 2 |
| | | | | | | | |
| Browse | | | | | | | |
| | AddressID | AddressLine1 | AddressLine2 | City | StateProvinceID | PostalCode | SpatialLocation |
| 🗄 📄 📴 Programmability (4) | 1 | 1970 Napa Ct. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| 🚊 🗌 🚞 Tables (71) | 2 | 9833 Mt. Dias Blv. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| dbo.AWBuildVersion (1) | 3 | 7484 Roundtree Drive | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| dbo.DatabaseLog (1,597) | 4 | 9539 Glenside Dr | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| dbo.ErrorLog (0) | 5 | 1226 Shoe St. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| HumanResources.Department (16) | 6 | 1399 Firestone Drive | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Human Resources.Employee (250) | 7 | 5672 Hale Dr. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Human Resources. Employee PayHistory | 8 | 6387 Scenic Avenue | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Human Resources. Job Candidate (13) | 9 | 8713 Yosemite Ct. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Human Resources.Shift (3) | 10 | 250 Race Court | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.Address (19,614) | 11 | 1318 Lasalle Street | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person, Address Type (6) | 12 | 5415 San Gabriel Dr. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.BusinessEntity (20,777) | 13 | 9265 La Paz | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.BusinessEntityAddress (19,614) | 14 | 8157 W. Book | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.BusinessEntityContact (909) | 15 | 4912 La Vuelta | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.ContactType (20) | 16 | 40 Ellis St. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.CountryRegion (238) | 17 | 6696 Anchor Drive | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.EmailAddress (19,972) | 18 | 1873 Lion Circle | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.Password (19,972) | 19 | 3148 Rose Street | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person (19,972) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.PersonPhone (19,972) | 20 | 5747 Shirley Drive | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.PhoneNumberType (3) | 21 | 636 Vine Hill Way | NULL | Portland | 58 | 97205 | 0xE61000000100 |
| Person.StateProvince (181) | 22 | 6657 Sand Pointe Lane | NULL | Seattle | 79 | 97205 | 0xE61000000100 |
| Production.BillOfMaterials (2,679) Production.Culture (8) | 23 | 80 Sunview Terrace | NULL | Duluth | 36 | 55802 | 0xE61000000100 |
| Production.Culture (8) | 24 | 9178 Jumping St. | NULL | Duluth | 36 73 | 55802 75201 | 0xE6100000100 |
| Production.Document (13) | 25 | 5725 Glaze Drive | NULL | | 73 9 | 75201 94109 | 0xE61000000100 |
| | <pre>/ 26 </pre> | 5725 Giaze Drive | NULL | San Francisco | 3 | 34103 | UXE6100000100 |
| mpleted | | | | | | | |



In case if SQL script of a table is necessary, just right-click on the table in the database tree and select **'Show SQL script'** in the context menu.

| | | NovaBACKUP Gra | iulai Nestore | | | | |
|---------------------------------------|-------------|-----------------------|----------------|---------------|-----------------|------------|-----------------|
| e Options Help | | | | | | | |
| - | | | Search in Pers | on.Address | | | |
| | | | | | | | |
| rowse AdventureWorks2012 CS Data.mdf | | | | - | | | - |
| <u> </u> | ▲ AddressID | AddressLine1 | AddressLine2 | City | StateProvinceID | PostalCode | SpatialLocation |
| Trogrammability (4) | 1 | 1970 Napa Ct. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| dbo.AWBuildVersion (1) | 2 | 9833 Mt. Dias Blv. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| dbo.DatabaseLog (1,597) | 3 | 7484 Roundtree Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| dbo.ErrorLog (0) | 4 | 9539 Glenside Dr | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources. Department (16) | 5 | 1226 Shoe St. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources. Employee (290) | 6 | 1399 Firestone Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources.EmployeeDepartmen | 7 | 5672 Hale Dr. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources. Employee PayHistory | 8 | 6387 Scenic Avenue | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources JobCandidate (13) | 9 | 8713 Yosemite Ct. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources. Shift (3) | 10 | 250 Race Court | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.Address (19,614) | 11 | 1318 Lasalle Street | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.Add Show SQL script | | 5415 San Gabriel Dr. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.BusinessEntity (20,777) | 13 | 9265 La Paz | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.BusinessEntityAddress (19,614) | 14 | 8157 W. Book | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.BusinessEntityContact (909) | 15 | 4912 La Vuelta | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.ContactType (20) | 16 | 40 Ellis St. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.CountryRegion (238) | 17 | 6696 Anchor Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.EmailAddress (19,972) | 18 | 1873 Lion Circle | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.Password (19,972) | 19 | 3148 Rose Street | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person Person (19,972) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.PersonPhone (19,972) | 21 | 5747 Shirley Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person, StateProvince (181) | 22 | 636 Vine Hill Way | NULL | Portland | 58 | 97205 | 0xE610000010 |
| Production.BillOfMaterials (2.679) | 23 | 6657 Sand Pointe Lane | NULL | Seattle | 79 | 98104 | 0xE610000010 |
| Production.Culture (8) | 24 | 80 Sunview Terrace | NULL | Duluth | 36 | 55802 | 0xE6100000010 |
| Production.Document (13) | 25 | 9178 Jumping St. | NULL | Dallas | 73 | 75201 | 0xE610000010 |
| Production Illustration (5) | ✓ 26 | 5725 Glaze Drive | NULL | San Francisco | 9 | 94109 | 0xE6100000010 |
| > | < | | | | - | | 3 |

Any particular row can also be scripted via context menu. By right click on the row, SQL script can be either shown or at once copied to clipboard.

| | | NovaBACKUP Gra | nular Restore | | | | |
|---------------------------------------|-----------|----------------------------|----------------|---------------|-----------------|------------|-----------------|
| le Options Help | | | | | | | |
| <u> </u> | | | Search in Pers | son.Address | | | |
| | | | L | | | | |
| rowse | AddressID | AddressLine1 | AddressLine2 | City | StateProvinceID | PostalCode | SpatialLocation |
| 🗄 ··· 🗌 🛅 Programmability (4) | 1 | 1970 Napa Ct. | NULL | Bothell | 79 | 98011 | 0xE6100000100 |
| | 2 | 9833 Mt. Dias Blv. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| dbo.AWBuildVersion (1) | 3 | 7484 Roundtree Drive | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| dbo.DatabaseLog (1,597) | 4 | 9539 Glenside Dr | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| dbo.ErrorLog (0) | 5 | 1226 Shoe St. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Human Resources. Department (16) | 6 | 1399 Firestone Drive | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| Human Resources. Employee (290) | 7 | 5672 Hale Dr. | NULL | Bothell | 79 | 98011 | 0xE61000000100 |
| | 8 | 6387 Scenic Avenue | NULL | Bothell | 79 | 98011 | 0xE6100000010 |
| Human Resources JobCandidate (13) | 9 | asta V | NOLL | Bothell | 79 | 98011 | 0xE6100000010 |
| Human Resources. Shift (3) | 10 | Copy SQL script to clipb | oard | Bothell | 79 | 98011 | 0xE6100000010 |
| Person Address (19,614) | 11 | Show SQL script | | Bothell | 79 | 98011 | 0xE61000000100 |
| Person.AddressType (6) | 12 | Search for similar data | | Bothell | 79 | 98011 | 0xE6100000010 |
| Person.BusinessEntity (20,777) | 13 | | | Bothell | 79 | 98011 | 0xE610000010 |
| Person.BusinessEntityAddress (19,614) | 14 | Search for data related to | o [AddressID] | Bothell | 79 | 98011 | 0xE6100000100 |
| Person.BusinessEntityContact (909) | 15 | 4912 La Vuelta | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.ContactType (20) | 16 | 40 Ellis St. | NULL | Bothell | 79 | 98011 | 0xE6100000100 |
| Person.CountryRegion (238) | 17 | 6696 Anchor Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.EmailAddress (19,972) | 18 | 1873 Lion Circle | NULL | Bothell | 79 | 98011 | 0xE6100000100 |
| Person.Password (19,972) | 19 | 3148 Rose Street | NULL | Bothell | 79 | 98011 | 0xE6100000100 |
| Person.Person (19,972) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000100 |
| Person Phone NumberType (3) | 21 | 5747 Shirley Drive | NULL | Bothell | 79 | 98011 | 0xE6100000100 |
| Person.StateProvince (181) | 22 | 636 Vine Hill Way | NULL | Portland | 58 | 97205 | 0xE6100000100 |
| Production.BillOfMaterials (2.679) | 23 | 6657 Sand Pointe Lane | NULL | Seattle | 79 | 98104 | 0xE6100000100 |
| Production.Culture (8) | 24 | 80 Sunview Terrace | NULL | Duluth | 36 | 55802 | 0xE6100000100 |
| Production.Document (13) | 25 | 9178 Jumping St. | NULL | Dallas | 73 | 75201 | 0xE6100000100 |
| Production.Illustration (5) | 26 | 5725 Glaze Drive | NULL | San Francisco | 9 | 94109 | 0xE6100000100 |
| > | < | | | | | | > |

Rows filtering provides the ability to easily find specific values in tables. To enable filtering, just start typing necessary data, when focus is on the list or press **Ctrl+F** keys. Please note that rows filtering works only for



rows that was already loaded in current view.

| a | | NovaBACKUP G | ranular Restore | | | | - 🗆 × |
|---------------------------------------|-----------|----------------------------------|-----------------|-------------|-----------------|------------|------------------|
| File Options Help | | | | | | | |
| | | | Search in Per | son.Address | | | Q |
| Browse | | | | | | | |
| AdventureWorks2012_CS_Data.mdf | AddressID | AddressLine1 | AddressLine2 | City | StateProvinceID | PostalCode | SpatialLocation |
| 🗄 ··· 🗌 🚞 Programmability (4) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000010C03 |
| | 46 | 5669 Ironwood Way | NULL | Kenmore | 79 | 98028 | 0xE6100000010C76 |
| dbo.AWBuildVersion (1) | 55 | 591 Merriewood Drive | NULL | Snohomish | 79 | 98296 | 0xE6100000010C10 |
| dbo.DatabaseLog (1,597) | 61 | 7726 Driftwood Drive | NULL | Monroe | 79 | 98272 | 0xE6100000010CC4 |
| dbo.ErrorLog (0) | 77 | 9693 Mellowood Street | NULL | Duvall | 79 | 98019 | 0xE6100000010C2D |
| Human Resources. Department (16) | 86 | 390 Ridgewood Ct. | NULL | Camation | 79 | 98014 | 0xE6100000010C8B |
| Human Resources.Employee (290) | 00 | 350 hidge <mark>woo</mark> d Ct. | NULL | Carriation | 75 | 30014 | 0.2010000010200 |
| | | | | | | | |
| Human Resources.EmployeePayHistory | | | | | | | |
| | | | | | | | |
| Person Address (19,614) | | | | | | | |
| Person.Address Type (6) | | | | | | | |
| Person.BusinessEntity (20,777) | | | | | | | |
| Person.BusinessEntityAddress (19,614) | | | | | | | |
| Person.BusinessEntityContact (909) | | | | | | | |
| Person.ContactType (20) | | | | | | | |
| Person.CountryRegion (238) | | | | | | | |
| Person.EmailAddress (19,972) | | | | | | | |
| Person.Password (19,972) | | | | | | | |
| Person.Person (19,972) | | | | | | | |
| Person.PersonPhone (19,972) | - | | | | | | |
| Person.PhoneNumberType (3) | | | | | | | |
| Person.StateProvince (181) | | | | | | | |
| Production.BillOfMaterials (2,679) | woo | W | here: All | ~ | | | T |
| Production.Culture (8) | | | | | | | |
| Production.Document (13) | Filter: o | n Select filtered | items | | | | |
| Production.Illustration (5) | | | | | _ | | |
| < >> | < | | | | | | > |
| Completed | | | | | | | |

4.1.2 Using search

NovaBACKUP Granular Restore provides several ways to search for data:

- Standard search
- Search for related data
- SQL Query search

To access the Search tool, select a table where the search will be performed and click on the Search Bar (1) located at the top of the window.

| e Options Help | | | | | | | |
|---|-----------|-----------------------|----------------|---------------|-----------------|------------|-----------------|
| 2 | | | | | | | |
| | | | Search in Pers | son.Address | | | |
| | | | | | | | |
| rowse AdventureWorks2012_CS_Data.mdf | AddressID | AddressLine1 | AddressLine2 | City | StateProvinceID | PostalCode | SpatialLocation |
| 🗄 ··· 🦳 🚞 Programmability (4) | 1 | 1970 Napa Ct. | NULL | Bothell | 79 | 98011 | 0xE6100000010 |
| 🚊 🗋 🚞 Tables (71) | 2 | 9833 Mt. Dias Blv. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| dbo.AWBuildVersion (1) | 3 | 7484 Roundtree Drive | NULL | Bothell | 79 | 98011 | 0xE6100000010 |
| dbo.DatabaseLog (1,597) | 4 | 9539 Glenside Dr | NULL | Bothell | 79 | 98011 | 0xE6100000010 |
| dbo.ErrorLog (0) Human Resources.Department (16) | 5 | 1226 Shoe St. | NULL | Bothell | 79 | 98011 | 0xE6100000010 |
| Human Resources. Department (16) | 6 | 1399 Firestone Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources.Employee Departmen | 7 | 5672 Hale Dr. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources. Employee PayHistory | 8 | 6387 Scenic Avenue | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources, JobCandidate (13) | 9 | 8713 Yosemite Ct. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Human Resources. Shift (3) | 10 | 250 Race Court | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.Address (19,614) | 11 | 1318 Lasalle Street | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.AddressType (6) | 12 | 5415 San Gabriel Dr. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.BusinessEntity (20,777) | 13 | 9265 La Paz | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.BusinessEntityAddress (19,614) | 14 | 8157 W. Book | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.BusinessEntityContact (909) | 15 | 4912 La Vuelta | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.ContactType (20) | 16 | 40 Ellis St. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.CountryRegion (238) | 17 | 6696 Anchor Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.EmailAddress (19,972) | 18 | 1873 Lion Circle | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| | 19 | 3148 Rose Street | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person, Person Phone (19,972) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.PhoneNumberType (3) | 21 | 5747 Shirley Drive | NULL | Bothell | 79 | 98011 | 0xE610000010 |
| Person.StateProvince (181) | 22 | 636 Vine Hill Way | NULL | Portland | 58 | 97205 | 0xE610000010 |
| Production.BillOfMaterials (2,679) | 23 | 6657 Sand Pointe Lane | NULL | Seattle | 79 | 98104 | 0xE610000010 |
| Production.Culture (8) | 24 | 80 Sunview Terrace | NULL | Duluth | 36 | 55802 | 0xE610000010 |
| Production.Document (13) | 25 | 9178 Jumping St. | NULL | Dallas | 73 | 75201 | 0xE610000010 |
| Production.Illustration (5) | 26 < | 5725 Glaze Drive | NULL | San Francisco | 9 | 94109 | 0xE610000010 |

Search results will be displayed on separate tabs with the ability to select query results and export them either into Live SQL Server or in the form of SQL script files which can be executed on server manually.

| | | NovaBACKUP Gra | anular Restore | e | | | |
|----------------------------------|-----------|--------------------------|----------------|-----------|-----------------|------------|------------------------|
| ile <u>O</u> ptions <u>H</u> elp | | | | | | | |
| | | | 0.1. | Person Ad | | | |
| | | | Search in | Person.Ad | aress | | |
| rowse Search 1 × | | | | | | | |
| - | AddressID | AddressLine1 | AddressLine2 | City | StateProvinceID | PostalCode | SpatialLocation |
| | 1 | 1970 Napa Ct. | NULL | Bothell | 79 | 98011 | 0xE6100000010CAE8BFC28 |
| | 2 | 9833 Mt. Dias Blv. | NULL | Bothell | 79 | 98011 | 0xE6100000010CD6FA851A |
| | 3 | 7484 Roundtree Drive | NULL | Bothell | 79 | 98011 | 0xE6100000010C18E304C4 |
| | 4 | 9539 Glenside Dr | NULL | Bothell | 79 | 98011 | 0xE6100000010C813A0D5F |
| | 5 | 1226 Shoe St. | NULL | Bothell | 79 | 98011 | 0xE6100000010C61C64D8A |
| | 6 | 1399 Firestone Drive | NULL | Bothell | 79 | 98011 | 0xE6100000010CE0B4E504 |
| | 7 | 5672 Hale Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000010C18E304C4 |
| | 8 | 6387 Scenic Avenue | NULL | Bothell | 79 | 98011 | 0xE610000010C0029A5D9 |
| | 9 | 8713 Yosemite Ct. | NULL | Bothell | 79 | 98011 | 0xE6100000010C6A80AD74 |
| | 10 | 250 Race Court | NULL | Bothell | 79 | 98011 | 0xE6100000010C219D64AE |
| | 11 | 1318 Lasalle Street | NULL | Bothell | 79 | 98011 | 0xE6100000010CCEFFBBF0 |
| | 12 | 5415 San Gabriel Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000010C6A80AD74 |
| | 13 | 9265 La Paz | NULL | Bothell | 79 | 98011 | 0xE610000010CC3228C08 |
| | 14 | 8157 W. Book | NULL | Bothell | 79 | 98011 | 0xE6100000010C219D64AE |
| | 15 | 4912 La Vuelta | NULL | Bothell | 79 | 98011 | 0xE6100000010C219D64AE |
| | 16 | 40 Ellis St. | NULL | Bothell | 79 | 98011 | 0xE6100000010CF76E45EF |
| | 17 | 6696 Anchor Drive | NULL | Bothell | 79 | 98011 | 0xE610000010C034C75E4 |
| | 18 | 1873 Lion Circle | NULL | Bothell | 79 | 98011 | 0xE6100000010C219D64AE |
| | 19 | 3148 Rose Street | NULL | Bothell | 79 | 98011 | 0xE6100000010C813A0D5F |
| | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000010C034C75E4 |
| | 21 | 5747 Shirley Drive | NULL | Bothell | 79 | 98011 | 0xE6100000010CEB9115FA |
| | 40 | 1902 Santa Cruz | NULL | Bothell | 79 | 98011 | 0xE6100000010C96D19C3E |
| | 834 | 99300 223rd Southeast | NULL | Bothell | 79 | 98011 | 0xE6100000010C5755A521 |
| | 868 | 25111 228th St Sw | NULL | Bothell | 79 | 98011 | 0xE6100000010C6552336E |
| | 18249 | 5509 Newcastle Road | NULL | Bothell | 79 | 98011 | 0xE6100000010C0029A5D9 |
| | 26486 | 7057 Striped Maple Court | NULL | Bothell | 79 | 98011 | 0xE6100000010C034C75E4 |
| | < | | | | | | |

Standard search mode

R

To access Standard search click on the Search Bar and select 'Standard search' tab in the displayed window.

| | | NovaBACKUP Gran | inular Restore | |
|--|-----------|-----------------------|--|--------------|
| ile Options Help | | | Search in Person.Address | |
| | | | Please enter search parameters. | |
| Browse | | | riedse eriter search parameters. | |
| | AddressID | AddressLine1 | Standard search Related data SQL | |
| ÷ Programmability (4) | 1 | 1970 Napa Ct. | | |
| | 2 | 9833 Mt. Dias Blv. | Fields to search: | |
| dbo.AWBuildVersion (1) | 3 | 7484 Roundtree Drive | All indexed fields O All indexed fields | - 1 |
| dbo.DatabaseLog (1,597) | 4 | 9539 Glenside Dr | All fields Custom (indexed only) | - 1 |
| dbo.ErrorLog (0) HumanResources.Department (16) | 5 | 1226 Shoe St. | | _ |
| Human Resources. Department (16) | 6 | 1399 Firestone Drive | | |
| Human Resources.Employee (290) | 7 | 5672 Hale Dr. | Multiple field match type: | |
| | 8 | 6387 Scenic Avenue | OR, records with one or more matching fields | - 1 |
| Human Resources. JobCandidate (13) | 9 | 8713 Yosemite Ct. | AND, records with matches in all searched fields | - 1 |
| Human Resources. Shift (3) | 10 | 250 Race Court | | -1 |
| Person.Address (19,614) | 11 | 1318 Lasalle Street | Fields: | _ |
| Person.AddressType (6) | 12 | 5415 San Gabriel Dr. | AddressID 3 | ^ |
| Person.BusinessEntity (20,777) | 13 | 9265 La Paz | | |
| Person.BusinessEntityAddress (19,614) | 14 | 8157 W. Book | AddressLine1 | |
| Person.BusinessEntityContact (909) | 15 | 4912 La Vuelta | | |
| Person Contact Type (20) | 16 | 40 Ellis St. | AddressLine2 | |
| Person.CountryRegion (238) | 17 | 6696 Anchor Drive | City | |
| Person.EmailAddress (19,972) | 18 | 1873 Lion Circle | | |
| | 19 | 3148 Rose Street | N StateProvinceID | |
| Person.Person (19,972) | 20 | 6872 Thomwood Dr. | N | |
| Person.PhoneNumberType (3) | 21 | 5747 Shirley Drive | PostalCode | \mathbf{v} |
| Person,StateProvince (181) | 22 | 636 Vine Hill Way | 1 | |
| Production BillOf Materials (2.679) | 23 | 6657 Sand Pointe Lane | | |
| Production.Culture (8) | 24 | 80 Sunview Terrace | Prefill Search Cle | ar |
| Production.Document (13) | 25 | 9178 Jumping St. | | |
| Production.Illustration (5) | 26 | 5725 Glaze Drive | NULL San Francisco 9 94109 0xE61000 | 00010 |
| > | < | | | > |

There are three sets of parameters to customize for this search:

Fields to search (1)

This options defines the set of fields which will be used to perform search. The user can choose to search in all indexed fields, all fields, custom selection from indexed fields or custom selection from all fields.

Multiple field match type (2)

In case more than one field is selected for search the user can choose which logical operator will be used to combine these fields.

- OR search results will include records which have at least one field that matches search parameters.
- AND search results will include records which have matching values in all fields which were selected for search.

Fields (3)

If *Custom (indexed only)* or *Custom* was selected in *Fields to search* the user will be able to choose fields which will be used for search. To select a field simply click on the field name, the field will then become selected and the user will be able to choose which comparison operator to use and to enter the value to search for.

There are also two ways to fill search fields with values from selected tow, which helps to avoid entering long string manually:

• Right-click on a row and select *Search for similar data* from context menu. This fill set the field selection to *Custom* and fill search from with values from selected row.

OR

• Select a row, then select Standard search tab and click Prefill button.

Search for related data

R

Search for related data can be used to search for rows which relate to the selected row - that are rows which have fields from the selected table as foreign keys.

Related data search can be accessed either by right-clicking on a row and selecting *Search for data related to...* from context menu or by selecting *Related data* tab in search window.



The application will analyze the selected table and automatically detect which fields are used in other tables as foreign keys (1). It will also provide a list of tables which relate to the selected table (2).

The user will then be able to enter field values which will be used when searching for related data and select from a list of tables where to perform search.

SQL Query mode

R

SQL Query search mode provides the ability to write complex search queries using SQL-like query language to narrow search results as much as possible.

SQL query mode can be accessed by clicking on Search Bar and selecting SQL tab.



The user is presented with a text field (1) which is used to enter search query. The beginning of the query is given and the user has to fill in the remaining part of WHERE clause.

The query may include field names, comparison operators, field values, logical operators and brackets. The text field makes it easier for entering search query by providing auto-complete feature, which automatically suggests possible query elements. The auto-complete window will appear automatically when first letters of query are typed, it can also be accessed by pressing **Ctrl+Space**. To select an item (field name, logical or comparison operator) from the list please press **Tab** or **Enter**.

Query examples are given at the bottom of the SQL tab (2).

4.2 Exporting items

NovaBACKUP Granular Restore allow a user to export the whole database or just particularly objects (tables, views, functions, etc.) into live SQL Server and to SQL scripts, that can be used for manual import to a live server.

4.2.1 Restore to live SQL Server

NovaBACKUP Granular Restore includes the injection capability for items (tables, views, functions, etc.) from offline database and BAK file to live SQL database.

The following options are presented:

- Authentication
 - Connection to a database using valid credentials. To provide the connection, host (domain name or IP), user logon name and password are required. It is also possible to connect through current Windows credentials.
- Connecting to several tables on different servers simultaneously.

- Browsing folder hierarchy of a connected database, browsing folder contents and viewing objects and rows.
- To provide injection, running the application as administrator or using a machine from AD domain, in which there is SQL Server with destination database, is not required.

Connection to SQL Server

G

The mode, that allows connections to live server, is enabled by default. The Destination tab, as well as the ability to connect to live server, can be hidden from the Options menu.

| | | NovaBACKUP Gra | nular Restore | | | |
|--|-------------|-----------------------|---------------|---------------|--------|-------------------------------------|
| Options Help | | | | | | |
| Show notification panel | | | | | | |
| Show progress dialog | Search in P | erson.Address | | | P | |
| Allow connections to live servers | | | | | | Destination |
| AdventureWorks2012_CS_Data.mdf | AddressID | AddressLine1 | AddressLine2 | City | Stat ^ |) [|
| 🗄 🗌 🚞 Programmability (4) | 1 | 1970 Napa Ct. | NULL | Bothell | 79 | No live servers connected. |
| | 2 | 9833 Mt. Dias Blv. | NULL | Bothell | 79 | Connect to a live server to enable |
| dbo.AWBuildVersion (1) | 3 | 7484 Roundtree Drive | NULL | Bothell | 79 | export of objects from source stora |
| dbo.DatabaseLog (1,597) | 4 | 9539 Glenside Dr | NULL | Bothell | 79 | |
| dbo.ErrorLog (0) | 5 | 1226 Shoe St. | NULL | Bothell | 79 | |
| | 6 | 1399 Firestone Drive | NULL | Bothell | 79 | |
| | 7 | 5672 Hale Dr. | NULL | Bothell | 79 | |
| | 8 | 6387 Scenic Avenue | NULL | Bothell | 79 | |
| Human Resources.JobCandidate (13) | 9 | 8713 Yosemite Ct. | NULL | Bothell | 79 | |
| Human Resources.Shift (3) | 10 | 250 Race Court | NULL | Bothell | 79 | |
| Person Address (19,614) | 11 | 1318 Lasalle Street | NULL | Bothell | 79 | |
| Person.AddressType (6) | 12 | 5415 San Gabriel Dr. | NULL | Bothell | 79 | |
| Person.BusinessEntity (20,777) | 13 | 9265 La Paz | NULL | Bothell | 79 | |
| Person.BusinessEntityAddress (19,614) | 14 | 8157 W. Book | NULL | Bothell | 79 | |
| Person.BusinessEntityContact (909) | 15 | 4912 La Vuelta | NULL | Bothell | 79 | |
| Person.ContactType (20) | 16 | 40 Ellis St. | NULL | Bothell | 79 | |
| Person.CountryRegion (238) | 17 | 6696 Anchor Drive | NULL | Bothell | 79 | |
| Person.EmailAddress (19,972) | 18 | 1873 Lion Circle | NULL | Bothell | 79 | |
| Person.Password (19,972) | 19 | 3148 Rose Street | NULL | Bothell | 79 | |
| Person Person (19,972) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | |
| Person Person Phone (19,972) Person Phone Number Type (3) | 21 | 5747 Shirley Drive | NULL | Bothell | 79 | |
| Person.Phone Number Type (3) | 22 | 636 Vine Hill Way | NULL | Portland | 58 | |
| Production.BillOfMaterials (2.679) | 23 | 6657 Sand Pointe Lane | NULL | Seattle | 79 | |
| Production.Culture (8) | 24 | 80 Sunview Terrace | NULL | Duluth | 36 | |
| Production.Document (13) | 25 | 9178 Jumping St. | NULL | Dallas | 73 | |
| Production.Illustration (5) | 26 | 5725 Glaze Drive | NULL | San Francisco | - Te | |
| > | < | | | | > | |

To establish a new connection, use the button **Connect to live server** (1), next to the Search field or go to **File->New connection->Attach to live SQL Server database** (2).

| ß | | NovaBACKUP Granular Restore | - 🗆 🗙 |
|---|---|--|---|
| File (Op Re Ch Re Se Se Sa Exy Ca Op | Person Address Type (6) Person BusinessEntity (20.777) Person Contact (909) Person Contact Type (20) Person Contact Type (20) Person Contact Type (20) Person Resource (19.972) Person Person (19.972) | Image: state of the state | Destination No live servers connected. Connect to a live server to enable export of objects from source storage. |
| < Complete | Person.Password (19.972) Person.Person (19.972) Person.Person (19.972) Person.PersonPhone (19.972) Person.PhoneNumberType (3) Person.StateProvince (181) Production.BillOfMaterials (2.679) Production.Culture (8) Production.Document (13) Production.Illustration (5) × | File info | |

To access the server, enter the domain name or the IP address, or just click on the arrow (1) to get the dropdown list of automatically detected servers and provide valid credentials.

| G Connect | to SQL Server |
|--|---|
| Server name (ex.: contoso.com\MSSQLSERVER or 192. WS2012SQL OR-ENVSERVER\ORENVSS WS2012SQL | 168.0.5\MSSQLSERVER): |
| ✓ Use current Windows credentials SQL Server login (e.g.: user1): Password: Save password | Please enter the server address and provide user credentials for connection. The application will then fetch the list of databases available on the target server. After that you will be able to choose the desired database from the list and connect. |
| Database name: | ✓ Refresh |
| | Connect Cancel |

List of available databases will be shown after clicking the Refresh button (1) or the arrow near the Database name field (2), if entered credentials are correct.

| G Connect | to SQL Server × |
|--|---|
| Server name (ex.: contoso.com\MSSQLSERVER or 192.10 WS2012SQL | 68.0.5∖MSSQLSERVER): ✓ Refresh |
| Use current Windows credentials SQL Server login (e.g.: user1): Rick Password: Save password | Please enter the server address and provide user credentials for connection. The application will then fetch the list of databases available on the target server. After that you will be able to choose the desired database from the list and connect. |
| Database name: AdventureWorks2012 | Connect Cancel |

Injection workflow

G

Once data has been selected, click the **Export** button and select an Export option.

| File Options Help Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Browse Destination Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Browse Destination Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Browse Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person Address Image: Search in Person A | Ad ^ |
|--|------|
| Browse Destination | Ad ^ |
| Browse Destination | Ad ^ |
| | Ad ^ |
| | Ad ^ |
| | NU |
| 🖞 🗋 Programmability (/) | |
| Ender Tables (71) | VL I |
| dbo.AWBuild Version (1) | |
| db0.DatabaseLog (1,397) | |
| | |
| | NU |
| Trandmiceodroce.com | NU |
| Human resources. Employee beparation | NU |
| | Ň |
| | ŇŬ |
| | Ň |
| | NU I |
| | NU I |
| | ŇŬ |
| Derror Business Fath Content (000) | NU I |
| Person.ContactType (20) 16 40 Ellis St. Person.BusinessEn 16 40 Ellis St. N | ŇŬ |
| Person CountryRegion (238) 17 6666 Appler Drive | ŇŬ |
| Person EmailAddress (19,972) 19 1973 Line Circle Person CountryRec 19 1973 Line Circle N | ŇŬ |
| Person.Password (19,9/2) | ŇŬ |
| Person. Person (19,972) | NU I |
| reison.reison (15,572) | ŇŬ |
| | Ň |
| | ŇŬ |
| | Ň |
| | NU |
| | ãv∣ |
| | > |
| Completed Selected: 1 object(s) | .:: |

NovaBACKUP Granular Restore presents several injection modes for specified data:

• Export to original object - The source object will be restored to the object listed under Destination Object.

- **Export to new Object** The user may edit the *Destination Object* for any source object, and the NovaBACKUP Granular Restore application will create a new destination object to restore to.
- Schema only Export only the schema of the source objects. The destination object can be edited and the schema(s) will be restored to the new destination object.
- Unselect successfully exported objects This will unselect the data objects that were selected for export once they have been successfully exported to the live server. This will allow the user to more easily identify which objects encountered errors and were not exported.

| 8 | Export into live SQ | L Server | - 🗆 🗙 |
|--|---|-----------------------|---------------|
| Destination database: WS2012SQL\AdventureWorks Object names are valid. Click | | | ~ |
| Source object | Destination object | Status | Action |
| [Person].[Address] | [Person].[Address] | vi Source table found | <u>Remove</u> |
| | | | |
| Export to original object (cre | ate if not exists) O Export to new object | ◯ Schema only | |
| Unselect successfully expor | ted objects | Start | Cancel .: |

4.2.2 Restore to SQL scripts

R

To save objects marked for export, click the **Export selected objects into SQL scripts** button on the toolbar or select the point in the **File** menu.

| | | NovaBACKUP Gra | nular Restore | | | | |
|---|------------|--|------------------|---------------------|----------------------|----------------|-----------------|
| e Options Help | | | | | | | |
| | | | Search in Pers | | | | |
| | | | Search in Pers | son.Address | | | ۶ |
| owse | | | | | | | |
| | AddressID | AddressLine1 | AddressLine2 | City | StateProvinceID | PostalCode | SpatialLocation |
| Programmability (4) | 1 | 1970 Napa Ct. | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| | 2 | 9833 Mt. Dias Blv. | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| dbo.AWBuildVersion (1) dbo.DatabaseLog (1,597) | 3 | 7484 Roundtree Drive | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| dbo.ErrorLog (0) | 4 | 9539 Glenside Dr | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Human Resources. Department (16) | 5 | 1226 Shoe St. | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Human Resources. Employee (290) | 6 | 1399 Firestone Drive | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| | 7 | 5672 Hale Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| | 8 | 6387 Scenic Avenue | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Human Resources. JobCandidate (13) | 9 | 8713 Yosemite Ct. | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| | 10 | 250 Race Court | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.Address (19,614) | 11 | 1318 Lasalle Street | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.AddressType (6) | 12 | 5415 San Gabriel Dr. | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.BusinessEntity (20,777) Person.BusinessEntityAddress (19,614) | 13 | 9265 La Paz | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.BusinessEntityContact (909) | 14 | 8157 W. Book | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.Contact Type (20) | 15 | 4912 La Vuelta | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.CountryRegion (238) | 16 | 40 Ellis St. | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.EmailAddress (19,972) | 17 | 6696 Anchor Drive | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person.Password (19,972) | 18 | 1873 Lion Circle | NULL | Bothell | 79 | 98011 | 0xE610000010C |
| Person (19,972) | 19 | 3148 Rose Street | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| Person.PersonPhone (19,972) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| Person.PhoneNumberType (3) | 21 | 5747 Shirley Drive | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| Person.StateProvince (181) | 22 23 | 636 Vine Hill Way 6657 Sand Pointe Lane | NULL | Portland Seattle | 58 79 | 97205 98104 | 0xE6100000010C |
| Production.BillOfMaterials (2,679) | 23 | 80 Sunview Terrace | NULL | Duluth | 36 | 55802 | 0xE6100000010C |
| Production.Culture (8) | 24 | 9178 Jumping St. | NULL | Dallas | 73 | 75201 | 0xE6100000010C |
| Production.Document (13) | ✓ 26 | 5725 Glaze Drive | NULL | San Francisco | 9 | 94109 | 0xE6100000010C |
| Froduction.illustration (5) | < 20 | 5725 Glaze Drive | NULL | San Francisco | 3 | 34103 | UXE610000010C |
| pleted | | | | Se | elected: 1 object(s) | | |
| tart exporting process, select | desting | tion folder or cre | ato a now (| | | | |
| | | | | | IICK OK. | | |
| Select o | lestina | tion folder | | × | | | |
| | | | | | | | |
| | | | | | | | |
| Calented data will be assessed into COI | | To start the sum of | and an all and | | | | |
| Selected data will be saved into SQI | | | | | | | |
| destination folder or create a new or | he and cli | ck OK. The export p | process will sta | art | | | |
| immediately. | | | | | | | |
| | | | | • | | | |
| Documents | | | | ^ | | | |
| 🗼 Downloads | | | | | | | |
| 🖻 🙀 Favorites | | | | | | | |
| 🚺 Links | | | | | | | |
| | | | | | | | |
| Music | | | | | | | |

| Favorites | |
|-----------------|-----------|
| 👔 Links | |
| 🔰 Music | |
| 🖻 📄 Pictures | |
| Baved Games | |
| Image: Searches | |
| 📑 Videos | |
| | Ť |
| Make New Folder | OK Cancel |

Required time depends on how many objects are selected for export. By default, a progress window appears after the export starts. The window shows the number of saved objects and rows (1). You can disable the progress window directly in the window or go to the **Options** menu and select **Show progress dialog**. The export can be cancelled by clicking an appropriate link in the progress dialog window (2) or by clicking the Cancel export button on the taskbar (3).

| | | NovaBACKUP Grar | nular Restore | | | | |
|---------------------------------------|------------|-----------------------|----------------|---------------|-----------------|------------|-----------------|
| ïle Options Help | | | | | | | |
| | | | Search in Pers | son.Address | | | 5 |
| Browse | | | | | | | |
| - AdventureWorks2012_CS_Data.mdf | AddreseID | Addressel ine 1 | Addreeel ine? | Ciby | StateProvinceID | PostalCode | SpatialLocation |
| 🗄 🖌 🚞 Programmability (4) | | Progre | SS | | 79 | 98011 | 0xE6100000010C |
| Tables (71) | | ~ | | | 79 | 98011 | 0xE6100000010C |
| dbo.AWBuildVersion (1) | | | | | 79 | 98011 | 0xE61000000100 |
| dbo.DatabaseLog (1,597) | Exporting | | | | 79 | 98011 | 0xE6100000010C |
| | | | | | 79 | 98011 | 0xE6100000010C |
| Human Resources. Department (16) | Tables | 71 | | | 79 | 98011 | 0xE61000000100 |
| Human Resources. Employee (250) | Indexes | 53 | | | 79 | 98011 | 0xE6100000010C |
| | Constrain | ts 71 | | | 79 | 98011 | 0xE61000000100 |
| Human Resources JobCandidate (13) | Types | 6 | | | 79 | 98011 | 0xE61000000100 |
| Human Resources. Shift (3) | Rows | 714,868 | | | 79 | 98011 | 0xE6100000010C |
| Person.Address (19,614) | Read spe | ed 431 KB/s | | | 79 | 98011 | 0xE6100000010C |
| Person.AddressType (6) | Elapsed t | ime 00:01:33 | | | 79 | 98011 | 0xE610000010C |
| Person.BusinessEntity (20,777) | | | | | 79 | 98011 | 0xE610000010C |
| Person.BusinessEntityAddress (19,614) | | | | | 79 | 98011 | 0xE610000010C |
| Person.BusinessEntityContact (909) | | | | | 79 | 98011 | 0xE610000010C |
| Person.ContactType (20) | Carl | rent operation 2 | | | 79 | 98011 | 0xE610000010C |
| Person.CountryRegion (238) | Cancel cur | rent operation | _ | | 79 | 98011 | 0xE610000010C |
| Person.EmailAddress (19,972) | Show | the dialog next time | | Close | 79 | 98011 | 0xE6100000010C |
| | | | | | 79 | 98011 | 0xE6100000010C |
| Person.PersonPhone (19,972) | 20 | 6872 Thomwood Dr. | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| Person.PhoneNumberType (3) | 21 | 5747 Shirley Drive | NULL | Bothell | 79 | 98011 | 0xE6100000010C |
| Person.StateProvince (181) | 22 | 636 Vine Hill Way | NULL | Portland | 58 | 97205 | 0xE6100000010C |
| Production.BillOfMaterials (2,679) | 23 | 6657 Sand Pointe Lane | NULL | Seattle | 79 | 98104 | 0xE6100000010C |
| Production.Culture (8) | 24 | 80 Sunview Terrace | NULL | Duluth | 36 | 55802 | 0xE6100000010C |
| Production.Document (13) | 25 | 9178 Jumping St. | NULL | Dallas | 73 | 75201 | 0xE6100000010C |
| Production.Illustration (5) | ✓ 26 | 5725 Glaze Drive | NULL | San Francisco | 9 | 94109 | 0xE6100000010C |
| > | < | | | | | | > |

Тір

G

If you closed the progress window, it can be shown again by clicking on the progress bar on the status panel.

Restoring exported scripts into SQL Server

SQL scripts exported from the offline database can be easily imported into live SQL Server manually For this purpose a special bat-file, commit.bat, is generated while extracting data. It is stored in the folder with restored scripts.

Usage for trust connection: commit.bat server_name db_name Usage for mistrust connection: commit.bat server name db name user name password

5 Granular Restore for Microsoft Exchange

5.1 Special features

Usage of NovaBACKUP Granular Restore can be more comfortable for a user due to additional **Options** menu, which allows user to customize program work.

Detailed information about every option is described in this help section.

Note

PST encoding and Show deleted items options are not available for PST/OST files.

5.1.1 PST encoding

R

Exporting mail store data into PST allows to select a PST format that suits your version of Microsoft Outlook. Outlook 2003, Outlook 2007, Outlook 2010 and Outlook 2013 process both Unicode and ANSI PST files, but as for older versions of Outlook, they will not be able to open Unicode formatted PST files. Previous versions of Outlook were using only ANSI format. The main reason for this change was to allow for international character support and to extend the maximum size of PST files beyond the 2GB limit of the ANSI formatted PST files. In NovaBACKUP Granular Restore there are two ways to select suitable encoding for output PST. Output PST encoding can be changed while selecting a destination folder for restored PST files.

| Select destination folder | × |
|---|----------|
| Selected data will be saved into .pst file(s). To start the export select the destinatio folder or create a new one and click OK. The export process will start immediately. | |
| A 🌗 Recovered | ^ |
| LIENT-PC | |
| Recovered_session1 | |
| Recovered_session2 | |
| Recovered_session3 | |
| Recovered_session4 | |
| Recovered_session5 | |
| Recovered_session6 | |
| D B TestReports | ~ |
| PST encoding: Unicode (Microsoft Outlook 2003, 2007, 2010 and 2013) | 2 |
| Make New Folde ANSI (Microsoft Outlook 2003, 2007, 2010 and 2013) ANSI (Microsoft Outlook 2002 and earlier) | |

Alternatively, encoding for the output file can be changed in the **Options** menu at any time the program runs. Selected value will be saved and used on the next program launch.

| ß | | | NovaBACKUP Granular Restore | - 🗆 🗙 |
|-------|------|--|---|-------|
| File | Opt | ions Help | | |
| | ~ | Show mailbox mismatch warning in expert | mode | |
| | ~ | Show delete folder warning in expert mode | Select mailboxes or folders to search | P |
| | | Show notification panel | | |
| Brov | | Show progress dialog | | |
| | | Allow connections to live servers | Database.edb | |
| | | Search within attachments | Jalabase.eub | |
| | | Search within attachments | and Conver Database Mailbox Database adb | |
| | 9 | PST encoding | Unicode (Microsoft Outlook 2003, 2007, 2010 and 2013) | |
| l i | | Incomplete messages | ANSI (Microsoft Outlook 2002 and earlier) | |
| | 1 | Show deleted items | xchange Server 2013 | |
| | | Display time | n logs not used. | |
| | | | un logs not used. | |
| | | 🛿 Kyle Pakeman 🖥 Luise | 22 mailboxes. Select a mailbox to display folders. | |
| | | Maria Woods | Load time: 00:00:04 | |
| | | Michael | | |
| | | Personal Archive - HealthMailboxade9ae7fe5b | | |
| | | Personal Archive - HealthMailboxbaa8042e260 Richard | | |
| | | Robert Rise | | |
| | | Romeo Montague | | |
| | | Rudy Raid | | |
| | | Susane Tyler | | |
| | | System Mailbox{ade9ae7f-e5b5-4860-a1cf-0218 Tim Goodler | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| < | | > | File info | |
| Compl | eted | | | .:: |

5.1.2 Incomplete messages

G

Incomplete messages, such as messages with missing properties, bodies, are hidden by default. This option can be changed in the Options menu.



After changing the way of displaying incomplete items, the database will be reopened

5.1.3 Showing deleted items

R

NovaBACKUP Granular Restore provides an ability to process deleted items and folders.

This special feature can be enabled via the Options menu. There are three available display modes:

- non-deleted items displays actual items in folders;
- show only deleted items displays items/folders deleted from a mailbox hierarchy, but not physically ;
- show both deleted and non-deleted items displays both actual items in folders and items/folders deleted from a mailbox hierarchy.

Note that after selecting any way of processing deleted items, the database will be reopened.

Items, deleted from Exchange Server 2010 and 2013 databases, are stored in the folder Deletions and have an appropriate type.

| | NovaBACKUP Gra | nular Kes | tore | | × |
|--------------------------|------------------------|-----------|---------------------------------------|--------------------------------------|----|
| File Options Help | | | | | |
| 🚔 🛄 🔤 | | Sear | ch in Andrew Wait | | ρ |
| | | | | | - |
| Browse | Subject | From | То | Created | |
| ⊕ | JESSICA I am sony thou | Dalia | Romeo Montague; Tim Goodler; Maria | Thursday, August 16, 2012 3:00:17 A. | |
| | ABHORSON Do you call | Michael | Andrew Wait; Susane Tyler; Juliet Cap | Thursday, August 16, 2012 3:00:12 A. | |
| Calendar (0) | | | | | |
| Solution (0) | | | | | |
| G Deletions (2) | | | | | |
| Drafts (0) Drafts (0) | | | | | |
| | | | | | |
| | | | | | |
| Notes (0) Outbox (0) | | | | | |
| Sent Items (0) | | | | | |
| | | | | | |
| | | | | | |
| ⊕ 🗿 Dalia | | | | | |
| ia | | | | | |
| 🗄 🗌 🥭 Kyle Pakeman | | | | | |
| ia | | | | | |
| 🗄 🗋 🎒 Michael | | | | | |
| È | | | | | |
| | | | | | |
| 🗄 🔤 Rudy Raid 🗸 🗸 🗸 | | | | | Y |
| mpleted | | | | | U. |

As for items deleted from Exchange Server 2007 databases, they are stored in the their original folders but can be easily recognized by an appropriate status.

Note

Items, stored in the folder Deletions, cannot be recovered to live Exchange Server database. It is recommended to restore items from the Deletion folder to PST and then import to live Exchange Server.

5.1.4 Display time

R

There are two dates display formats available for users, local time and GMT.

To switch dates display format between local computer time and GMT, use the Options menu.



| ß | Warning | × |
|---|---|---|
| ? | Switching display time requires reloading the file. This may take a long time. Do you want to continue? | |
| | Yes No | |

A message in GMT format looks the following way:

| | | NovaBACKUP Gran | ular Restore | | | × |
|---|---------------------------------|---|-----------------------|--|---|-----|
| ïle Options Help | | | | | | |
| <u> </u> | | | Search in And | y Kort | | ۶ |
| | | | | • | | - |
|]rowse | | | | | | |
| | ∧ Type | J Subject | From | То | Created | |
| 🗑 🖳 🎒 Alex Clark | | A In itsnature, it is arbitrary an | Kyle Pakerman | Andrew Wait; Richard; John; Dalia; Ro. | Wednesday, 12 Mar 2014 | 17: |
| 🗄 🖳 🎒 Andrew Wait | | It is my lady mother. It is my | | Romeo Montague; Richard; Dalia; Mic. | 4 · | |
| in Andy Kort | | Butthat it might not appear t | | Romeo Montague: Andy Kort: Robert | | |
| Calendar (439) | | Do you persuade yourself t | | Susane Tyler; Andy Kort; Juliet Capulet. | 4 · | |
| Selected Items (24) | | It wasall eloquence, and ge | | Dalia: Tim Goodler: Robert Rise: Susa | | |
| | | Alas, the heavy basketwhic | | Dalia; Kyle Pakeman; Michael; Susan | 4 C | |
| | | He went up a dark and narr | | Brian: Michael: Richard: Dalia: Luise: T | | |
| | | Noone, even there, could li | | Brian; Alex Clark; Richard; Romeo Mon | | |
| | | Stephen Brice read the ne | - | Alex Clark: John: Tim Goodler: Michael. | | |
| Notes (40) | | Give me some light! Give m | | Romeo Montague; Richard; Andrew W | 4 · · · · · · · · · · · · · · · · · · · | |
| Outbox (0) | | It were good, therefore, that | | Romeo Montague; Andrew Wait; Kyle . | | |
| Sent Items (0) | | A The riders could be heard.l | | Susane Tyler; Maria Woods; Romeo M. | | |
| 🟹 Tasks (47) | | A The sinewand heart of man | Susane Tyler | Brian; Juliet Capulet; Andy Kort; Robert. | | |
| 🗄 🔁 Brian | < | 0 | | | | > |
| 🚋 🗋 🧀 Dalia | Hewe | nt up a dark and narrow | stair into aligh | ted hall with shrouded windov | 21 | |
| 🗄 🖳 🎒 Health Mailboxade 9ae 7fe 5b 54860a 1cf 021 | 18 | | otan into angi | | | |
| Health Mailboxbaa 8042e260149aa 928ba | | | | • | 3 attachment(s): | |
| in John | From: | Rudy Raid | | | 1074 | |
| in | Sent: | Wednesday, 12 Mar 2014 17: | 29:00 GMT | | ESSAYS-6.txt, 1.00 KB | |
| ii | To: | "Brian" <brian@no-such-ema< td=""><td>il.com> "Michael"</td><td><michael@no-such-email.com< td=""><td>ESSAYS-47.txt, 1.10 KE</td><td>3</td></michael@no-such-email.com<></td></brian@no-such-ema<> | il.com> "Michael" | <michael@no-such-email.com< td=""><td>ESSAYS-47.txt, 1.10 KE</td><td>3</td></michael@no-such-email.com<> | ESSAYS-47.txt, 1.10 KE | 3 |
| ituse ituse Maria Woods | . 0. | enan senangho such ond | internet, michael | interaction of the second of the second | ESSAYS-48.txt, 2.31 KE | 3 |
| | There can | ie a rain-sodden night when a mys | terious message arriv | ed at | | |
| Personal Archive - HealthMailboxade9ae7 | fe the little ho | use in Olive Street. Both anxiety a | nd pride were in Mrs. | | | |
| Personal Archive - Health Mailboxbaa 8042 | Brice's eye | es as they followed her son out of t | | | | |
| | Street two | men were lounging on the corners y as he passed. He went up a dark | | | | |
| 🗄 🗌 🎽 Robert Rise | V 8 14 11 1 | و هو در در م | | | | |
| 1 | Preview | Properties | | | | |
| pleted | | | | | | |

5.1.5 Showing notification panel

Every program action is accompanied by an appropriate notification for user. Notification panel is disabled by default, but can be easily enabled by checking **Show notification panel** in the **Options** menu.



After that user will see additional information about opening file, export results, search results, etc.



5.2 Finding and selecting messages, folders and mailboxes

NovaBACKUP Granular Restore provides two mutually complementary modes of finding, previewing and selecting items: browsing the mailbox tree and search. Using these, it is possible to efficiently form a set of items for subsequent export, including the necessary ones and excluding ones to be skipped.



A newly opened database is shown in the Browse mode.



5.2.1 Browsing mail store tree

Browse mode shows mail store in a tree-like structure and allows browsing folders and previewing individual items.

This mode is best for navigating to specific mailboxes, folders and messages when it is precisely known what data needs to be extracted.

For example, a user may ask to restore a specific message from a known folder. Expand his or her mailbox in the tree, select the folder, find and click the item. All available properties and information about the item will be displayed in the **Preview** window to the right of the tree.



There is a check box next to the message. Check it to mark the message for export. Continue to mark other items, folders and mailboxes for export in a similar way.

| 3 | NovaBACKUP Granular Restore | |
|---|---|--|
| File Options Help | Search in Andy Kort | ۶ |
| Browse ■ Mailbox Database.edb ■ Alex Clark ■ Andrew Wait ■ Oratots (44) ■ Deteed items (24) ■ Drafts (0) ■ Journal (27) ■ Sent items (0) ■ Sent items (0) | Type () Subject From To Creat Type () Subject From To Creat In itsnature, it is arbitrary an Kyle Pakeman Andrew Wait; Richard; John; Dalia; Ro Wedr It is my lady mother. It is m Juliet Capulet Romeo Montague; Richard; Dalia; Mic Wedr Buthat it might not appeart John Romeo Montague; Andy Kort; Robert Wedr Do you persuade yourself t Andy Kort Susane Tyler; Andy Kort; Robert Rise; Susa Wedr Alas, the heavy basketwhic Alex Clark Alas, the heavy basketwhic Alex Clark Alas, the heavy basketwhic Alex Clark Buthat it might not an arr Rudy Raid Brian; Michael; Richard; Dalia; Luise; T Wedr Give me some light! Give m Michael Romeo Montague; Richard; Andrew W Wedr Give me some light! Give m Michael Romeo Montague; Richard; Andrew W Wedr The riders could be heard Andy Kot Romeo Montague; Richard; Andrew W Wedr The riders could be heard Andy Kot The riders could be heard Andy Kot The riders could be heard More Watt Susane Tyler; Maria Woods; Romeo M Wedr The riders could he near Susane Tyler | nesday, March 12, 2014 nesday, March 12, 2014 |
| | General Control C | > Robert Rise |

Use filtering feature for better browsing the list of items in a folder.

Enable filtering by pressing Ctrl+F keys. A special panel will appear in the right part of the program window.



Use search in preview feature for quick find text in item preview.

Enable search in preview by pressing **Ctrl+D** keys after opening preview of item. A special panel will appear in the right part of the program window.

| B | NovaBACKUP Granula | r Restore | - 🗆 🗙 |
|---|--|--|--|
| File Options Help | | Search in Andy Kort | P |
| Drafts (0) D | Type Subject In itsnature, it is arbitrary an Butthat it imylady mother. It is my Butthat it might not appeart Do you persuade yourself t He went up a dark and nar Image: All appeart its arbitrary appeart Image: All appeart its arbitrary appeart <td>Juliet Capulet Romeo Mortague; Richard; Dalia; John Romeo Mortague; Andy Kort; Rob Andy Kort Susane Tyler; Andy Kort; Juliet Ca Tim Goodler Dalia; Tim Goodler; Robert Rise; S Alex Clark Dalia; Kyle Pakeman; Michael; Su Rudy Raid Brian; Michael; Richard; Dalia; Lui Romeo Mortague Brian; Alex Clark; Richard; Romeo Luise Alex Clark; John; Tim Goodler; Mic Michael Romeo Mortague; Richard; Andre Andy Kort Romeo Mortague; Andrew Wait; I Andrew Wait Susane Tyler; Maria Woods; Rom Susane Tyler Brian; Juliet Capulet; Andy Kort; Ri</td> <td>Mic Wednesday, March 12, 2 ert Wednesday, March 12, 2 usa Wednesday, March 12, 2 usa Wednesday, March 12, 2 se; T Wednesday, March 12, 2 se; T Wednesday, March 12, 2 Mon Wednesday, March 12, 2 hael Wednesday, March 12, 2 www Wednesday, March 12, 2 Syle Wednesday, March 12, 2</td> | Juliet Capulet Romeo Mortague; Richard; Dalia; John Romeo Mortague; Andy Kort; Rob Andy Kort Susane Tyler; Andy Kort; Juliet Ca Tim Goodler Dalia; Tim Goodler; Robert Rise; S Alex Clark Dalia; Kyle Pakeman; Michael; Su Rudy Raid Brian; Michael; Richard; Dalia; Lui Romeo Mortague Brian; Alex Clark; Richard; Romeo Luise Alex Clark; John; Tim Goodler; Mic Michael Romeo Mortague; Richard; Andre Andy Kort Romeo Mortague; Andrew Wait; I Andrew Wait Susane Tyler; Maria Woods; Rom Susane Tyler Brian; Juliet Capulet; Andy Kort; Ri | Mic Wednesday, March 12, 2 ert Wednesday, March 12, 2 usa Wednesday, March 12, 2 usa Wednesday, March 12, 2 se; T Wednesday, March 12, 2 se; T Wednesday, March 12, 2 Mon Wednesday, March 12, 2 hael Wednesday, March 12, 2 www Wednesday, March 12, 2 Syle Wednesday, March 12, 2 |
| John Juliet Capulet Kyle Pakerman Luise Maria Woods Michael Personal Archive - HealthMailboxbae89ae7te Personal Archive - HealthMailboxbae8042e: Richard Completed | From: Michael Sent: Wednesday, March 12, 2014 10:2: To: "Romeo Montague" <romeo.mor Ham. He poisons him i'th' garden for's estate. Hi The story is extant, and written in very choice it shall see anon how the muttherer nets the love. Preview Properties</romeo.mor | tague@no-such-email.com>, "Richard s name's Gonzago. alian. You | 7 attachment(s): ESSAYS-2.txt, 526 bytes ESSAYS-4.txt, 1.01 KB ESSAYS-10.txt, 1.20 KB ESSAYS-43.txt, 760 bytes ESSAYS-47.txt, 1.10 KB |

Тір

G

Each individual item, folder and mailbox has a check box next to it. Using these check boxes, it is possible to select as many or as few items for export as necessary.

To export an entire

- mail store, mark the root check box with the mail store name.
- mailbox, mark the check box next to mailbox in the tree.
- folder, expand a mailbox and mark the check box next to the desired folder.

5.2.2 Using search

The search in the main window provides the ability to search single or multiple mailboxes and perform actions on the search results.

The best application of search mode is when the location and/or number of items to extract is not known exactly. Using keyword search, it is possible to narrow down on specific messages, folders and mailboxes. The quickest way to get search results is clicking on a particular mailbox, entering some keywords in the **Search** field and clicking the button **Start search**.

Search results will be displayed on a separate tab.

| ile Options Help | | | | | | | |
|-------------------------------|------|----------------------|---|------------------------|----------------|------------------------------------|-------------|
| 🞽 📕 🧠 | | | | Search in all m | ailboxes: wait | | |
| Browse Search: «wait» (975) × | | | | | | | |
| | Туре | e Location | Ø | Subject | From | То | Cr |
| 🚊 🗋 🎒 Alex Clark (975) | | Alex Clark\Calendar | | This came at | Brian | Romeo Montague; Richard; Julie | Cap We |
| Calendar (273) | | Alex Clark\Calendar | | That's all th' | Alex Clark | Dalia; Maria Woods; Kyle Pakem | ian; R We |
| Contacts (1) | | Alex Clark \Calendar | | Herfather | Maria Woods | Andy Kort; Luise; Juliet Capulet | We |
| Deleted Items (16) | | Alex Clark\Calendar | | Brinsmade, lifting the | Juliet Capulet | Susane Tyler; Alex Clark; Kyle Pa | kerm We |
| Tasks (1) | | Alex Clark\Calendar | | | Andrew Wait | Andy Kort: John: Tim Goodler: Su | sane We |
| V (dsks (1) | | Alex Clark\Calendar | | Mon. Mon. Mon. | Susane Tyler | Andrew Wait; Alex Clark; Robert | Rise; We |
| | | Alex Clark\Calendar | | The whole | Richard | Maria Woods: Rudy Raid: Tim Go | odler We |
| | | Alex Clark\Calendar | | if itwas in | Maria Woods | Romeo Montague; Andrew Wait; | Rudy We |
| | | Alex Clark\Calendar | | Originally. | Andrew Wait | Susane Tyler; Brian; Alex Clark; F | Rome We |
| | | Alex Clark\Calendar | | Let's | Romeo Montague | Andy Kort; Brian; Alex Clark; Mari | |
| | | Alex Clark\Calendar | | I called him | Alex Clark | Rudy Raid; Richard; John; Kyle F | aker We |
| | | Alex Clark\Calendar | | She gathered | Susane Tyler | Maria Woods; Andy Kort; Andrew | |
| | | Alex Clark\Calendar | | | Brian | Alex Clark: Tim Goodler: John: R | |
| | | Alex Clark\Calendar | | The maintenance of | Andrew Wait | Kyle Pakeman | We |
| | | Alex Clark\Calendar | | Chaudiere had | Susane Tyler | Andrew Wait: Andv Kort: Alex Cla | rk: M We |
| | | Alex Clark\Calendar | | Beside | Robert Rise | Richard: Andy Kort: Maria Woods | Sus We |
| | | Alex Clark\Calendar | | Break off thy | Dalia | Alex Clark; Rudy Raid; Luise; Tim | Goo We |
| | | Alex Clark\Calendar | | How frequently | Richard | Maria Woods; Michael; Robert R | se; R We |
| | | Alex Clark\Calendar | | She was going | Rudy Raid | John; Susane Tyler; Luise; Rome | o Mo We |
| | | Alex Clark\Calendar | | Now. | Michael | Luise; Brian; Rudy Raid; Andy Ko | |
| | | Alex Clark\Calendar | | | Kyle Pakerman | Alex Clark; Rudy Raid; Maria Wo | |
| | | Alex Clark\Calendar | | Suit the action | Tim Goodler | Kyle Pakeman; Susane Tyler; Ri | |
| | | Alex Clark\Calendar | | | Luise | Juliet Capulet; Brian | We |
| | | Alex Clark\Calendar | | So | Andrew Wait | Brian; Luise; Tim Goodler; Alex C | ark; K We |
| | | | | | | | |
| | | ↓ Page 1 of 10 ↓ | | Ű | | 100 mes | sages per p |

If a user knows exactly in what mailbox or folder the data is located, using **Search in mailbox option** will speed up the search.

Right-click on a folder/a mailbox will open a context menu.

| NovaBACKUP Granular Restore | | | | | | |
|---|---|---|--|--|--|--|
| File Options Help | | | | | | |
| Browse | Select mailboxes or folders to search | ٩ | | | | |
| Mailbox Database.edb Alex Clark Andrew Wat Andrew Wat Andrew Wat Andrew Wat Andrew Wat Dalia Brian Dalia Health Mailboxade 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 Health Mailbox and 9ae 7re 5b 54860a 1cf 0218267 | Mailbox Database.edb C:\Exchange Server Database\Mailbox Database.edb Size: 904 Mb Date: 3/13/2014 Version: Exchange Server 2013 Transaction logs not used. 22 mailboxes. Select a mailbox to display folders. Load time: 00:00:03 | | | | | |
| Completed | File info | | | | | |

By clicking on this menu advanced mode of search dialog will be opened and **Search in** field will be filled with the selected mailbox/folder.

Fill in necessary search parameters and start the search.
For more precise searches click on the Search field, drop-down list of all search fields will appear:

• Search in - specifies mailbox(es)\folder(s) to search in. Default: entire database. If you select one or more Search in check boxes, but specify no additional search criteria, the utility will return all items from the selected folder(s).

| Search in | × |
|--|----|
| 🖃 📲 🌍 Mailbox Database.edb | ~ |
| 🗄 🧰 Alex Clark | |
| 🗄 🦳 🎒 Andrew Wait | |
| 🗄 🗹 🚔 Andy Kort | |
| 🖕 🔲 🧐 Brian | |
| Calendar (444) | |
| Contacts (44) | |
| Deleted Items (28) | |
| Drafts (0) | |
| V 🛅 Inbox (1,018) | |
| 🔚 Journal (27) | |
| Junk Email (0) | |
| | |
| Outbox (0) | |
| | |
| | |
| ia | |
| ia | |
| | |
| | |
| | |
| 🗈 🔁 Kyle Pakeman | |
| tuse true Annia Woods | |
| | |
| 🖶 🔄 🎒 Personal Archive - Health Mailboxade9ae7fe5b54860a1cf021826768790 | ~ |
| Include mailboxes that are expanded, have items selected or were searched before | |
| Include mainboxes that are expanded, have items selected or were searched before | |
| OK Cano | el |
| | |
| | |

- Has words search for mail store items that have words or phrases entered in the field.
- Doesn't have search for items that do not have words or phrases entered in the field.
- Has attachments search for items with attachments.
- From search for keywords in the From: field.
- To search for keywords in the To: field.
- Subject search for keywords in subject.
- **Date range** set specific date range if known. It is obligatory to set both the beginning and the end of the desired time period.

The outcomes of a search can be:

1. The program was able to find items (1) that corresponds to specified search parameters (2). The user can select separate items or mark search results for recovery.

Clicking an item in the search results tab will open the item preview. Selecting item(s) in search results will make their recovery possible.

| G | | NovaBACKU | P Gr | anular | Restore | - 🗆 🗾 🗙 |
|--|------|--|------|------------|--------------------|--|
| File Options Help | | | | 0 | | |
| | | | | - | Search in all mail | ilboxes: from:(Andrew) has:attachment wait |
| Browse Search: «from:(Andrew) has:at» (96) × |) | | | | Search in | Entire database |
| Search: «from:(Andrew) has:at» (96) | Туре | Location | Ø | Subjec | | |
| | | \Andy Kort\Inbox | A | The rid | | |
| | | \Alex Clark\Inbox | ğ | The rid | | Include mailboxes that are expanded, have items selected or were |
| Calendar (25) | | \Andrew Wait\Inbox | Ō | Exeunt | | searched before |
| | | \Brian \Inbox | Q | Cluyme | | Find whole words only |
| Andy Kort (19) | | \Andy Kort\Inbox | Q | Cluyme | | |
| Inbox (19) | | \Andy Kort\Inbox | Q | | Has words: | from:(Andrew) has:attachment wait |
| ≟ 🎒 Brian (14) | | \Andrew Wait\Inbox | Q | | Doesn't have: | |
| inbox (14) | | \Alex Clark\Inbox | Q | A partic | | |
| | | \Andrew Wait\Inbox | Q | A partic | | Has attachments |
| | | \Alex Clark\Inbox | Q | Therefl | From: | |
| | | \Brian\Inbox | Ŋ | She wa | | |
| | | \Alex Clark\Inbox | ų | She wa | To: | |
| | | \Alex Clark\Inbox | Ŋ | Heaver | Subject: | |
| | | \Andy Kort\Inbox | Ŋ | Heaver | Data | |
| | | \Andy Kort\Inbox | Ŋ | I'll drop | Date range: | . to: |
| | | \Andrew Wait\Inbox | U U | I'll drop | | Search Clear |
| | HH | \Alex Clark\Inbox \Andrew Wait\Inbox | N N | I'll drop | | |
| | | Vandrew Wait (Inbox Vandy Kort (Inbox | N N | | | Andrew Wait Andy Kort; Romeo Montague; Michael; Andrew Wait Andy Kort; Romeo Montague; Michael; |
| | HH | Vandy Kort \Inbox | 8 | Ale | | |
| | | \Andy Kort \Inbox | N N | | | se-her brother Andrew Wait Kyle Pakerman; John; Susane Tyler; Ri se-her brother Andrew Wait Kyle Pakerman; John; Susane Tyler; Ri |
| | H | Vandrew Wait \Inbox | 0 | | | owns it. Dan Andrew Wait Robert Rise; John; Susane Tyler; Hi |
| | Hā | \Alex Clark\Inbox | ň | | | owns it. Dan Andrew Wait Robert Rise; John; Kyle Pakerman; Mi. |
| | H | | ă | | | owns it. Dan Andrew Wait Robert Rise; John; Kyle Pakeman; Mi. |
| | 12 | Senari VIIIDUA | ğ | D'un still | ownanc. Dari Still | Towns at carrier where model model model model and the accurate with the |
| | N - | (Page 1 of 1) →) | | Ŭ | | 100 messages per page |
| Search complete, 96 matches | | | | | | |

Counters of found elements are automatically updated or can be updated manually by clicking on the **Refresh** button. If any folder is selected and the program has found new elements in it, then the following value will be shown: previous(value, when we selected the folder) value of a counter + count(in green) of newly found elements, which will be updated in real-time.

| | | NovaBACKUP | Gra | nular Restore | | | |
|----------------------------------|------|---------------------------|-----|------------------------|-----------------|--|------------|
| ile Options Help | | | | | | | |
| 产 📙 🤘 | | | | Search in user-defined | locations: wait | | |
| Browse Search: «wait» (4,305) × | | | | | | | |
| | Туре | Location | Ø | Subject | From | То | Ī |
| | | \Alex Clark\Inbox | | I have | Andrew Wait | Andy Kort; Maria Woods; Juliet Capulet. | |
| Calendar (273) | | \Alex Clark\Inbox | | Linnaeus said long | Tim Goodler | Dalia; Robert Rise; Luise; Rudy Raid; | |
| Solution (10) | | \Alex Clark\Inbox | | - | Maria Woods | John: Alex Clark: Susane Tyler: Maria | |
| Deleted Items (16) | | \Alex Clark\Inbox | | | Andy Kort | Alex Clark; Andy Kort; Rudy Raid; Mari | |
| Tasks (1) | | \Alex Clark\Inbox | | He had taken | Andrew Wait | John: Andrew Wait: Michael: Juliet Ca | |
| | | \Alex Clark\Deleted Items | | THERSITES. | Alex Clark | Andy Kort; Juliet Capulet; Michael; Rob. | |
| Calendar (421) | | \Alex Clark\Inbox | | LADY FAULCONBRIDGE. | John | Alex Clark: Maria Woods: Susane Tyler. | |
| Deleted Items (26) | | \Alex Clark\Inbox | | | Dalia | Brian; Robert Rise; Michael; Rudy Rai | |
| | | \Alex Clark\Inbox | | What say these | Andy Kort | Andrew Wait: Richard: Luise: Tim Goo | |
| 🗐 Journal (2) | | \Alex Clark\Inbox | | After | Andrew Wait | Juliet Capulet; Luise; John | |
| Notes (2) | | \Alex Clark\Inbox | | What did | Richard | John: Kyle Pakerman: Alex Clark: Luise. | |
| 🟹 Tasks (2) | | \Alex Clark\Inbox | | Herfather | Maria Woods | Andy Kort; Luise; Juliet Capulet; Maria | |
| 🖕 🗌 🎒 Andy Kort (941) | | \Alex Clark\Inbox | | Brinsmade, lifting the | Juliet Capulet | Susane Tyler; Alex Clark; Kyle Pakerm | |
| Calendar (275) | | \Alex Clark\Inbox | | | Andrew Wait | Andy Kort; John; Tim Goodler; Susane | |
| ····· Deleted Items (16) | | \Alex Clark\Inbox | | Mon. Mon. Mon. | Susane Tyler | Andrew Wait: Alex Clark: Robert Rise: | |
| inbox (645) | | | | Originally, | Andrew Wait | Susane Tyler; Brian; Alex Clark; Rome | |
| 🔚 Journal (2) | | \Alex Clark\Inbox | | Let's | Romeo Montaque | Andy Kort; Brian; Alex Clark; Maria Wo | |
| | | | | She gathered | Susane Tyler | Maria Woods: Andy Kort: Andrew Wait | |
| ia Brian (928) | | \Alex Clark\Inbox | | | Brian | Alex Clark: Tim Goodler: John: Romeo | |
| Calendar (271) & Contacts (3) | | \Alex Clark\Inbox | | The maintenance of | Andrew Wait | Kyle Pakeman | |
| Deleted Items (14) | | \Alex Clark\Inbox | | Chaudiere had | Susane Tyler | Andrew Wait; Andy Kort; Alex Clark; M | |
| | | | | Beside | Robert Rise | Richard: Andy Kort: Maria Woods: Sus | |
| Tasks (1) | | \Alex Clark\Inbox | | Break off thy | Dalia | Alex Clark; Rudy Raid; Luise; Tim Goo | |
| | | | | She was going | Rudy Raid | John; Susane Tyler; Luise; Romeo Mo | |
| | < | | | | | | > |
| | | Page 1 of 6* > > | | 5 | | 100 messages per p | |
| | 14 | age or o | | | | inessages per p | <i>/</i> d |

Words and phrases which match the search query are highlighted in the preview, which helps to easily identify where the match was found.

| R | | NovaBACKUP G | ranu | lar Restore | | | - 🗆 🗙 |
|---|---------|---|-------|--|--|------------------------|----------------|
| File Options Help | | | | | | | |
| | | | | Search in all mailboxes: from:(Andrew | / Wait) wait | | P |
| Browse Search: «from:(Andrew Wait) wait» (109) × | - | | | | _ | | |
| ⊑ Search: «from:(Andrew Wait) wait.» (109) ⊨ Andrew Wait (109) | Туре | Location | U | Subject | From | То | ^ |
| Calendar (47) | | \Andrew Wait\Inbox | | Will it not be received, When we hav | Andrew Wait | Juliet Capulet; Andre | |
| Deleted Items (26) | | \Andrew Wait\Inbox | Q | Exeunt FAIRIES Exeunt FAIRIES | Andrew Wait | Maria Woods; Juliet | |
| Inbox (36) | | \Andrew Wait\Inbox | Q | A particular country, in the same | Andrew Wait | Robert Rise; Andrew | |
| | | \Andrew Wait\Inbox | Q | Dan still owns it. Dan still owns it. Dan | Andrew Wait | Robert Rise; John; H | yle Pakerman |
| | | \Andrew Wait\Inbox | Û | In this action it isgenius; not the privileg | Andrew Wait | John; Kyle Pakerma | |
| | | \Andrew Wait\Inbox | | SHALLOW. SHALLOW. SHALLO | Andrew Wait | Alex Clark; Juliet Cap | |
| | | \Andrew Wait\Inbox | | Thesubscribers to a new loan, who me | Andrew Wait | Robert Rise; Maria V | |
| | | \Andrew Wait\Inbox | Q | | Andrew Wait | John; Michael; Luise | |
| | | \Andrew Wait\Inbox | | Let it be virtuous to be obstinate. Let it | Andrew Wait | Alex Clark; Andrew \ | Vait; Luise; R |
| | | \Andrew Wait\Inbox | | 3 | Andrew Wait | Kyle Pakeman; Mar | |
| | | \Andrew Wait\Inbox | | And in the ages to come, women such | | Andrew Wait; Luise; | |
| | | \Andrew Wait\Inbox | U | [Aside to MENAS] I think th'art mad. [A | Andrew Wait | John; Kyle Pakema | n; Andrew Wa 🗸 |
| | < | | | | | | > |
| | Hisga | arments hung in tatters; | , his | boots were ripped and solele | ess. | | × |
| | | | | ~ | | | |
| | From: | Andrew Wait | | | | | ^ |
| | Sent: | Wednesday, March 12, 20 | 14 10 |):25:00 AM UTC-07:00 | | | |
| | To: | "Kyle Pakerman" <kyle.pal< td=""><td>kerm</td><td>an@no-such-email.com>, "Maria Wo</td><td>ods" <maria.v< td=""><td>Voods@no-such-er</td><td>nail.com</td></maria.v<></td></kyle.pal<> | kerm | an@no-such-email.com>, "Maria Wo | ods" <maria.v< td=""><td>Voods@no-such-er</td><td>nail.com</td></maria.v<> | Voods@no-such-er | nail.com |
| | Cc: | "Kyle Pakerman" <kyle.pal< td=""><td>kerm</td><td>an@no-such-email.com>, "Maria Wo</td><td>ods" <maria.v< td=""><td>Voods@no-such-er</td><td>nail.com</td></maria.v<></td></kyle.pal<> | kerm | an@no-such-email.com>, "Maria Wo | ods" <maria.v< td=""><td>Voods@no-such-er</td><td>nail.com</td></maria.v<> | Voods@no-such-er | nail.com |
| | garment | and privation had wom him dowr s hung in tatters; his boots were r s flour had been used up, and all ew Properties | ipped | and soleless. Long | | | ~ |
| | Tievie | ew riopeiges | | | | | |
| | | 🛛 Page 1 of 2 🕨 🔰 | Ü | | | 100 mes | ages per page |
| Search complete, 109 matches | | | | | | | |

2. The search didn't match any items. Review search parameters and run another search.

To delete temporary data, generated by NovaBACKUP Granular Restore, go to the **File** menu and click **Delete saved search indexes and logs**.

| | | | | NovaBACKUP | Gra | nular Restore | | | |
|---|--|--------|-----|---------------------------|-----|-------------------------|----------------|---|----|
| 2 | Options Help | | _ | | | | | | |
| | Open file | Ctrl+0 | 1 | | | | | | |
| | Recent | • | L . | | | Search in all mailboxes | : wait | | |
| | Close file | | L . | | | | | | |
| | Reload database using transaction logs | | F | 1 | | | | | |
| | Search for files to open | | е | Location | 0 | Subject | From | То | |
| | search for mes to open in | | | \Alex Clark\Inbox | | I have | Andrew Wait | Andy Kort; Maria Woods; Juliet Capule | đ |
| | Export selected items into PST | Ctrl+S | | \Alex Clark\Inbox | | Linnaeus said long | Tim Goodler | Dalia; Robert Rise; Luise; Rudy Raid; | |
| | Export into original Exchange mailbox | Ctrl+G | | \Alex Clark\Inbox | | | Maria Woods | John; Alex Clark; Susane Tyler; Maria | |
| | Cancel current operation | Ctrl+N | | \Alex Clark\Inbox | | | Andy Kort | Alex Clark; Andy Kort; Rudy Raid; Mari | đ |
| | Cancel current operation | Ctri+N | | \Alex Clark\Inbox | | He had taken | Andrew Wait | John; Andrew Wait; Michael; Juliet Ca | |
| | Open log folder | | - | \Alex Clark\Deleted Items | | THERSITES. | Alex Clark | Andy Kort; Juliet Capulet; Michael; Rot | b |
| - | Delete saved temp files and logs | | | \Alex Clark\Inbox | | LADY FAULCONBRIDGE. | John | Alex Clark; Maria Woods; Susane Tyle | |
| - | Delete saved temp files and logs | | | \Alex Clark\Inbox | | | Dalia | Brian; Robert Rise; Michael; Rudy Rai | |
| | Exit | Alt+X | - | \Alex Clark\Inbox | | What say these | Andy Kort | Andrew Wait; Richard; Luise; Tim Goo | 0 |
| T | | | | \Alex Clark\Inbox | | After | Andrew Wait | Juliet Capulet; Luise; John | |
| | Notes (2) | | - | \Alex Clark\Inbox | | What did | Richard | John; Kyle Pakerman; Alex Clark; Luise | |
| | 🔁 Tasks (2) | | 4 | \Alex Clark\Inbox | | Herfather | Maria Woods | Andy Kort; Luise; Juliet Capulet; Maria | i. |
| Ē | | | 4 | \Alex Clark\Inbox | | Brinsmade, lifting the | Juliet Capulet | Susane Tyler; Alex Clark; Kyle Pakerm | |
| | Calendar (275) | | 4 | \Alex Clark\Inbox | | | Andrew Wait | Andy Kort; John; Tim Goodler; Susane | |
| | | | - | \Alex Clark\Inbox | | Mon. Mon. Mon. | Susane Tyler | Andrew Wait; Alex Clark; Robert Rise; | |
| | | | 4 | \Alex Clark\Inbox | | Originally, | Andrew Wait | Susane Tyler; Brian; Alex Clark; Rome | ż. |
| | Notes (3) | | 4 | \Alex Clark\Inbox | | Let's | Romeo Montague | Andy Kort; Brian; Alex Clark; Maria Wo | þ |
| ÷ | | | 4 | \Alex Clark\Inbox | | She gathered | Susane Tyler | Maria Woods; Andy Kort; Andrew Wait | it |
| | Calendar (271) | | 4 | \Alex Clark\Inbox | | | Brian | Alex Clark; Tim Goodler; John; Romeo | , |
| | | | - 4 | \Alex Clark\Inbox | | The maintenance of | Andrew Wait | Kyle Pakeman | |
| | Deleted Items (14) | | - | \Alex Clark\Inbox | | Chaudiere had | Susane Tyler | Andrew Wait; Andy Kort; Alex Clark; M | 4 |
| | inbox (639) | | 4 | \Alex Clark\Inbox | | Beside | Robert Rise | Richard; Andy Kort; Maria Woods; Sus | |
| | 📝 Tasks (1) | | - | \Alex Clark\Inbox | | Break off thy | Dalia | Alex Clark; Rudy Raid; Luise; Tim Goo | |
| | | | | \Alex Clark\Inbox | | She was going | Rudy Raid | John; Susane Tyler; Luise; Romeo Mo | Ĵ. |
| | | < | | | | | | | |
| | | 14 | 4 | Page 1 of 5* 🕨 🕽 | d C | 5 | | 100 messages per | r |
| | complete, 4,305 matches | | | | | | | | |

Note

G

Next search in the same folder/mailbox will be almost instant (only if saved search indexes and logs haven't

just been deleted).

Note

R

Search with empty query is not available.

Note

Asterisk ('*') is added to all words in search fields by default. This allows to find not only specified words but also their word forms. Use quotes (" ") to search for an exact phrase.

Advanced search

Advanced search uses symbols and operators in queries. These operators allow you to find what you're looking for quickly and accurately.

To use advanced search enter operators and their values into the **Search** field (1).

| R | NovaBACKUP Granular Restore |
|-------------------|---|
| File Options Help | |
| Browse | Select mailboxes or folders to search: from:"alex." subject:"follow" |
| | Mailbox Database.edb Size: 904 Mb Date: 3/13/2014 Version: Exchange Server 2013 Transaction logs not used. 22 mailboxes. Select a mailbox to display folders. Load time: 00:00:03 |
| < > | File info |
| Completed | |

Operators are listed below:

| Operator | Definition | Example |
|----------|---------------------------------------|---|
| from: | Used to specify the sender. | Example: from:alex Meaning: messages from Alex. |
| to: | Used to specify a recipient. | Example: to:John Meaning: all messages that were sent to John (by any user). |
| subject: | Search for words in the subject line. | Example: subject:dinner Meaning: messages that have the word "dinner" in the subject. |

| Operator | Definition | Example |
|------------------------------------|---|---|
| OR | Search for messages matching term A or term B. OR must be in all caps | Example: from:alex OR from:john Meaning: messages from Alex or from John. |
| AND or Space | Search for messages matching term A and term B. AND must be in all caps. | Example: from:alex AND from:john Meaning: messages from Alex and from John. |
| - (hyphen) | Used to exclude messages from your search. | Example: dinner -movie Meaning: messages that contain the word "dinner" but do not contain the word "movie". |
| has:attachment | Search for messages with an attachment. | Example: from:john has:attachment Meaning: messages from John that have an attachment. |
| att_name: | Search for messages with specified attachment name. | Example: to:jane att_name:photo.png Meaning: messages to Jane that have an attachment with specified attachment name. |
| cc: bcc: | Used to specify recipients in the cc: or bcc: fields Search on bcc: cannot retrieve messages on which you were blind carbon copied. | Example: cc:John Meaning: messages that were cc-ed to John. |
| " " (quotes) | Used to search for an exact phrase* *capitalization isn't taken into consideration. | Example: "i'm feeling lucky" Meaning: messages containing the phrase "i'm feeling lucky" or "I'm feeling lucky". Example: subject:"dinner and a movie" Meaning: messages containing the phrase "dinner and a movie" in the subject. |
| () | Used to group words Used to specify terms that shouldn't be excluded. | Example: from:alex (dinner OR movie) Meaning: messages from Alex that contain either the word "dinner" or the word "movie". Example: subject:(dinner movie) Meaning: messages in which the subject contains both the word "dinner" and the word "movie". |
| create_time:[yyyymmdd yyyymmdd] | Search for messages created during a certain period of time. | Example: create_time:[20110416 20110516] Meaning: messages created between April 16, 2011 and May 16, 2011. |
| after: before: | Search for messages sent or received during a certain period of | Example: after:20110416 before:20110516 |



Using wildcard characters

A wildcard character is a keyboard character such as an asterisk (*) or a question mark (?) that is used to represent one or more characters when you are searching for files, folders, printers, computers, or people. Wildcard characters are often used in place of one or more characters when you do not know what the real character is or you do not want to type the entire name.

| Wildcard character | Definition | Example |
|----------------------|--|---|
| * (asterisk) | Used to substitute for zero or more characters. | Example: subject:d*g Meaning: finds messages containing words "doing", "dog", "debug", etc. |
| ? (question mark) | Used to substitute for a single character in a name. | Example: subject:d?g Meaning: finds messages containing words "dog", "dig", "dug", etc. |

Note

R

Use checked 'Find whole word only' in case using question mark ("?") in the start of the word.

Note

Other special characters are not used for search. Search query, containing special characters, may return incorrect results.

Search within attachments

Search within attachments is not enabled by default. This option can be changed in the Options menu. This option allows to perform search in attachments' content.



Note

R

After enabling this option the database will have to be reopened. Search process may take longer when search within attachments is enabled.

5.3 Exporting items

NovaBACKUP Granular Restore includes the injection capability for items (emails, calendars, contacts, etc.) from offline database and PST/OST files to original live Exchange databases as well as granular data extraction to Personal Storage File (.pst) files.

5.3.1 Restore to original live Exchange Server. Standard mode

Important Note

Standard export mode requires access to Active Directory to establish connection to Exchange Server. The program requests users list from Active Directory and checks if IDs of offline and live user mailboxes match. That's why the user, logged in, must be a domain user.

After startup, opening an EDB file and checking items the main window of the application looks as follows:

| ile Options Help | | | | | ului | Restore | | | | |
|---|-----|--------|---|----------------------------------|-------|------------------|--|------------|-----------|------|
| | | | | | | | | | | |
| | | | | | | - | | | | |
| | | | | | | Search in Alex (| Clark | | | 1 |
| | | | | | | | | | | |
| prowse | | | | | | | | | | |
| Mailbox Database.edb | Λ Τ | уре | 0 | Subject | From | n | То | Created | · · · · | |
| Alex Clark | | | | She was glad that Jo should | Luis | e | Maria Woods; Kyle Pakerman; Luise; | Wednesday, | March 12, | 2014 |
| Calendar (438) | | / 🖂 | A | In itsnature, it is arbitrary an | Kyle | Pakeman | Andrew Wait; Richard; John; Dalia; Ro | Wednesday, | March 12, | 2014 |
| | | | | It is my lady mother. It is my | Julie | t Capulet | Romeo Montague; Richard; Dalia; Mic | Wednesday, | March 12, | 2014 |
| | Ē | | | Butthat it might not appear t | Johr | 1 | Romeo Montague; Andy Kort; Robert | Wednesday, | March 12, | 2014 |
| | | | 0 | Do you persuade yourself th | And | y Kort | Susane Tyler; Andy Kort; Juliet Capulet | Wednesday, | March 12, | 2014 |
| | | / 🖂 | - | I regret that I am unable to r | Briar | 1 | John; Brian; Tim Goodler; Kyle Pakerm | Wednesday, | March 12, | 2014 |
| | | | 0 | Alas, the heavy basketwhic | Alex | Clark | Dalia; Kyle Pakeman; Michael; Susan | Wednesday, | March 12, | 2014 |
| Notes (40) | | / 🖂 | Ø | He went up a dark and narr | Rud | y Raid | Brian; Michael; Richard; Dalia; Luise; T | Wednesday, | March 12, | 2014 |
| Outbox (0) | | | | Noone, even there, could li | Rom | ieo Montague | Brian; Alex Clark; Richard; Romeo Mon | Wednesday, | March 12, | 2014 |
| Sent Items (0) | | | Ø | One of the things particular | Rob | ert Rise | John; Maria Woods; Richard; Alex Clar | Wednesday, | March 12, | 2014 |
| 🗍 🏹 Tasks (48) | | / 🖂 | 0 | Stephen Brice read the new | Luis | e | Alex Clark; John; Tim Goodler; Michael | Wednesday, | March 12, | 2014 |
| 🗄 🗋 🎒 Andrew Wait | | | Ū | Give me some light! Give m | Mich | nael | Romeo Montague; Richard; Andrew W | Wednesday, | March 12, | 2014 |
| 🗄 🖳 🎒 Andy Kort | | | 0 | His condition leaves him no | Julie | t Capulet | Romeo Montague; Richard; Juliet Cap | Wednesday, | March 12, | 2014 |
| 🗄 🗋 🎒 Brian | | | | What a pied ninny's this! | Mari | a Woods | Maria Woods; Brian; Juliet Capulet; Ro | Wednesday, | March 12, | 2014 |
| | . [| | Ø | Your vows, your memories, | Johr | n | Robert Rise; Maria Woods; Andrew W | Wednesday, | March 12, | 2014 |
| | - 1 | / 🖂 | 0 | The riders could be heard, lo | And | rew Wait | Susane Tyler; Maria Woods; Romeo M | Wednesday, | March 12, | 2014 |
| | | / 🖂 | 0 | The sinewand heart of man | Susa | ane Tyler | Brian; Juliet Capulet; Andy Kort; Robert | Wednesday, | March 12, | 2014 |
| John Juliet Capulet | | | | Now, herald, are the dead n | Alex | Clark | Michael; Alex Clark; Susane Tyler; Ro | Wednesday, | March 12, | 2014 |
| | | \geq | | Dieu vous garde, monsieur | Mich | nael | Maria Woods; Robert Rise | Wednesday, | March 12, | 2014 |
| | | | | If you had seen the look in | Rom | ieo Montague | Dalia; Juliet Capulet; Alex Clark; Rome | Wednesday, | March 12, | 2014 |
| | | | | She wore a gray blouse with | Rob | ert Rise | Alex Clark; Susane Tyler; Maria Woods | Wednesday, | March 12, | 2014 |
| 🗄 🖳 🎽 Michael | | \sim | | But though the public schoo | Luis | e | John; Brian; Michael; Andy Kort; Maria | Wednesday, | March 12, | 2014 |
| 🗄 🗌 🍎 Personal Archive - Health Mailboxade9ae 7 | - | \geq | | if itwas in gold; but at the sa | | | Rudy Raid; Juliet Capulet; Brian; Andy | | | |
| 🗄 🗌 🧿 Personal Archive - Health Mailboxbaa 8042 | _ | \geq | | My stars shine darkly over m | | | Juliet Capulet; Tim Goodler; Alex Clark; | | | |
| 🗄 🗆 🗋 👰 Richard | | | Ø | Charley was of these people | | - | Susane Tyler; Alex Clark; Michael; Rud | | | |
| 🗄 🗌 🚔 Robert Rise | | \geq | | | Rich | ard | Richard; John; Andy Kort; Robert Rise; | Wednesday, | March 12, | |
| > ppleted | < | | | | | | Selected: 6 item(s) in 1 mail | | | > |

Clicking the injection button will bring up the following dialog:

| Host (ex.: contoso.com or 192.168.0.5): About | bout export into original mailbox elected items will be copied from |
|--|---|
| Details: Export from source mailbox 'Alex Clark' to destination mailbox <u>Alex.Clark@no-such-email.com</u> : 19 items.] The of detect of the Exch Exch destination mailbox <u>Alex.Clark@no-such-email.com</u> : 19 items.] | fline mailboxes into their original cations on live Exchange Server. the destination Exchange Server is etected automatically using the urrent Active Directory domain. urrent user should be a member the same domain as target kchange Server and should have kchange impersonation access to estination mailboxes. ach selected item will go to its iginal location in respective ailbox, e.g. Patrick's offline mail ill go to Patrick's mailbox, Lisa's alendar items to Lisa's mailbox c. When selected items cannot be atched to destination mailbox, ey will not be exported. |

Domain name of the machine with Exchange Server will be automatically detected if current machine is in the same domain with Exchange Server. Otherwise, the host will not be detected and has to be entered manually. By default, NovaBACKUP Granular Restore uses current user to establish the connection. If current user doesn't have rights to impersonate selected for export user, an appropriate error will appear in details.

In case of error it is recommended to use the Advanced button and configure the connection settings.

| R | Connect to Exchange Server mailbox |
|---|--|
| | Host (ex.: contoso.com or 192.168.0.5): Image: Save password |
| | Connect Cancel |

There are two ways to connect to selected mailbox:

1. Use credentials of selected mailbox.

2. Specify the user that has impersonation rights.

To use credential of selected mailbox, enter host name of machine with Client Access Role, unmark **Use current Windows credentials** enter user name and password and press **Connect**.

| R | Connect to Exchange Server mailbox | × |
|---|--|---|
| | Host (ex.: contoso.com or 192.168.0.5): ES2013.no-such-email.com Use current Windows credentials User logon name (e.g.: user1): Alex.Clark Password: ••••••••• Save password |] |
| | Connect Cancel | |

To use **Exchange impersonation** to establish the connection, enter host name of machine with Client Access role, unmark **Use current Windows credentials**, enter credentials of the user with impersonation rights and press **Connect**. In the example below Brian has impersonation rights to access Dalia's mailbox.

| R | Conne | ct to | Exch | ange Server | mailbox | > | < | |
|-------|--|----------|---|--|--|---|--|--|
| | Host (ex.: contoso.com or 192.10 ES2013.no-such-email.com | 68.0.5) | : | | | | | |
| | Use current Windows creden User logon name (e.g.: user1): Brian Password: Save password | tials | | a mailbox credentia | cother than th ils. To use the ons need to be | on lets you connect to ne default one for your e feature, access e configured at | | |
| Expor | ting to live Exchange is also |) availa | able | ia the File m | Connect | Cancel | | |
| Q | | | | NovaBACKUP Gran | | | | - 🗆 🗙 |
| | Options Help Open file Ctrl+O Recent Close file | • | | | Search in Alex (| Clark | | Q |
| | Reload database using transaction logs Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Cancel current operation Ctrl+N | | She In it It is Butt | oject was glad that Jo should snature, it is arbitrary an my lady mother. It is my hat it might not appear t you persuade yourself th | Kyle Pakerman Juliet Capulet | To Maria Woods; Kyle Pakerman; Luise; Andrew Wait; Richard; John; Dalia; Ro Romeo Montague; Richard; Dalia; Mic | . Wednesday, | March 12, 2014 |
| | Open log folder Delete saved temp files and logs Exit Alt+X | | I reg Q Alas Q He Noc Q One Q Ste Q Ste Q Ste Q His Wh Q You Q The Q The Nov Die If yo She But if itv | set that I am unable to r s, the heavy basketwhic went up a dark and narr one, even there, could li of the things particularl ohen Brice read the new s me some light! Give m condition leaves him no at a pied ninny's this! r rows, your memories, s newand heart of man v, herald, are the dead n u vous garde, monsieur u uhad seen the look in wore a gray blouse with though the public schoo vas in gold; but at the sa stars shine darkly over m. | Andy Kort Brian Alex Clark Rudy Raid Romeo Montague Robert Rise Luise Michael Juliet Capulet Maria Woods John Andrew Wait Susane Tyler Alex Clark Michael Romeo Montague Robert Rise Luise Andrew Wait | Romeo Montague: Andy Kort; Robert Susane Tyler; Andy Kort; Subiet Capulet John; Bian; Tim Goodler; Kyle Pakerm Dalia; Kyle Pakerman; Michael; Susan Brian; Michael; Richard; Dalia; Luise; T Bran; Alex Clark; Richard; Dalia; Luise; T Bran; Alex Clark; Richard; Dalia; Luise; T John; Maria Woods; Richard; Alex Clar Alex Clark; John; Tim Goodler; Michael Romeo Montague; Richard; Aldrew W Romeo Montague; Richard; Juliet Cap Maria Woods; Brian; Juliet Capulet; Ro Robert Rise; Maria Woods; Andrew W Susane Tyler; Maria Woods; Andrew W Susane Tyler; Maria Woods; Andrew W Brian; Juliet Capulet; Andy Kort; Robert Michael; Alex Clark; Susane Tyler; Ro Maria Woods; Robert Rise Dalia; Juliet Capulet; Alex Clark; Rome Alex Clark; Susane Tyler; Maria Woods. John; Brian; Michael; Andy Kort; Maria Rudy Raid; Juliet Capulet; Brian; Andy Juliet Capulet; Tim Goodler; Alex Clark; Cark; | Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, Wednesday, | March 12, 2014 March 12, 2014 |

After establishing the connection, the export will start. Required time depends on how many items are selected for export. You will be shown a progress window during the export. The window shows the number of saved folders, messages, errors and total expected items to be restored. You can disable the progress window directly in the window or go to the **Options** menu and select **Show progress dialog**. The export can be cancelled by clicking the Cancel exporting button on the taskbar.

| | NovaBA | ACKUP Granular Restore | | |
|---|---|-------------------------------|--|--|
| ile Options Help | | | | |
| | | Search in Ale | ex Clark | ۶ |
| Browse Mailbox Database.edb | A Tes D Calvest | From | Το | Created |
| ininio v Database.edb | Type Subject | | | |
| Calendar (438) | | that Jo should Luise | Maria Woods; Kyle Pakerman; Luise; | 4 C C C C C C C C C C C C C C C C C C C |
| Contacts (45) | | is arbitrary an Kyle Pakerman | Andrew Wait; Richard; John; Dalia; Ro | . Wednesday, March 12, 2014 |
| ······ ✓ in Deleted Items (25) | | | | Wednesday, March 12, 2014 |
| □ □ □ Drafts (0) | | Progress | ie; Andy Kort; Robert | Wednesday, March 12, 2014 |
| | | | ndy Kort; Juliet Capulet | . Wednesday, March 12, 2014 |
| Journal (27) | Exporting into original E | xchange Server mailbox | Goodler; Kyle Pakerm | Wednesday, March 12, 2014 |
| Junk Email (0) | Exporting into original E | Achange Server Malibox | man; Michael; Susan | Wednesday, March 12, 2014 |
| Notes (40) | | | Richard; Dalia; Luise; T | Wednesday, March 12, 2014 |
| | Folders | 0 | ; Richard; Romeo Mon | Wednesday, March 12, 2014 |
| Sent Items (0) | Messages | 0 | ods; Richard; Alex Clar | Wednesday, March 12, 2014 |
| | Errors | 0 | | Wednesday, March 12, 2014 |
| 🗄 🗆 🧑 Andrew Wait | Total messages count | 0 | | Wednesday, March 12, 2014 |
| 🗄 🗋 🎽 Andy Kort | Elapsed time | 00:00:05 | | Wednesday, March 12, 2014 |
| 🗄 🗋 🗿 Brian | | | | Wednesday, March 12, 2014 |
| 🚋 🗋 🧿 Dalia | Cancel current operation | | | Wednesday, March 12, 2014 |
| 🚋 🗆 🦳 进 Health Mailboxade9ae 7fe5b54860a1cf0218 | Show the dialog nex | d time | | Wednesday, March 12, 2014 |
| | onew are along they | | | . Wednesday, March 12, 2014 |
| 🚋 💭 🎒 John | Now, herald, a | are the dead n Alex Clark | Michael: Alex Clark: Susane Tyler: Ro | |
| 🗄 🖳 🎒 Juliet Capulet | | de, monsieur Michael | Maria Woods: Robert Rise | Wednesday, March 12, 2014 Wednesday, March 12, 2014 |
| 🗄 🖳 🥭 Kyle Pakerman | | n the look in Romeo Montague | | |
| 🗄 🖳 🎒 Luise | | ay blouse with Robert Rise | Alex Clark; Susane Tyler; Maria Woods | |
| 🗄 🖳 🥭 Maria Woods | - | e public schoo Luise | John; Brian; Michael; Andy Kort; Maria | |
| | | ; but at the sa Andrew Wait | Rudy Raid; Juliet Capulet; Brian; Andy | • |
| | - | darkly over m Rudy Raid | Juliet Capulet; Tim Goodler; Alex Clark; | |
| ÷ | | f these people Romeo Montague | | • |
| ia | | | • • • • • • • • • • | |
| H Modert Rise | ✓ ✓ | Richard | Richard; John; Andy Kort; Robert Rise; | . Wednesday, March 12, 2014 |
| / | × | | | · · · · · · · · · · · · · · · · · · · |

5.3.2 Restore to live Exchange Server. Expert mode

NovaBACKUP Granular Restore includes the injection capability for items (emails, calendars, contacts, etc.) from offline database and PST and OST files to live Exchange database.

The following options are presented:

• Authentication

R

- Connection to a mailbox using its owner credentials. To provide the connection, host (domain name or IP), user logon name and password are required. It is also possible to connect through current Windows credentials.
- Connection to another account mailbox by using Exchange impersonation. (http://msdn.microsoft.com/enus/library/bb204095%28EXCHG.140%29.aspx).
- Connecting to several mailboxes on different servers simultaneously.
- Browsing folder hierarchy of a connected mailbox, browsing folder contents and viewing message bodies and other items (calendars, contacts).
- Creating folders in the connected mailbox.
- Drag-and-drop copying of folders and individual items from offline (source, EDB) database, PST or OST file to the attached mailbox (destination live Exchange server).
- To provide injection, running the application as administrator or using a machine from AD domain, in which there is Exchange Server with destination mailbox, is not required.
- Injection is possible to a local machine, as well as machines with Exchange Server, which are in the local network or the Internet.



R

After opening a mail store the main window of the application looks as follows:

| | | | NovaBACKUP Gran | ular Restore | | |
|--|--------|---------|----------------------------------|----------------|--------------------------|---------------------------------------|
| le Options Help | | | | | | |
| 🔒 🔲 📓 | Searc | h in Al | ex Clark | | P | - |
| | | | | | | |
| rowse | | | | | | Destination |
| | ∧ Type | 0 | Subject | From | To ^ | No live servers connected. |
| 🚊 🖳 🎒 Alex Clark | | | She was glad that Jo should | Luise | Maria Woods; Kyle Pa | |
| Calendar (438) | | A | In itsnature, it is arbitrary an | | Andrew Wait; Richard | Connect to a live server to enable |
| | | | It is my lady mother. It is my | Juliet Capulet | Romeo Montague; Ric | export of objects from source storage |
| Deleted items (25) | | | Butthat it might not appear t | | Romeo Montague; An | |
| | | | Do you persuade yourself th | Andy Kort | Susane Tyler; Andy K | |
| | | | I regret that I am unable to r | Brian | John; Brian; Tim Good | |
| | | | Alas, the heavy basketwhic | Alex Clark | Dalia; Kyle Pakeman; | |
| Notes (40) | | Ă | He went up a dark and narr | Rudy Raid | Brian; Michael; Richar | |
| | | | Noone, even there, could li | Romeo Montague | Brian; Alex Clark; Rich | |
| Sent Items (0) | | l I | One of the things particular | Robert Rise | John; Maria Woods; F | |
| 🟹 Tasks (48) | | Ā | Stephen Brice read the new | Luise | Alex Clark; John; Tim | |
| 🗄 🗋 🚔 Andrew Wait | | Ā | Give me some light! Give m | Michael | Romeo Montague; Ric | |
| 🗄 🗆 🧾 🥭 Andy Kort | | Ū | His condition leaves him no | Juliet Capulet | Romeo Montague; Ric | |
| 🚋 💭 🥭 Brian | | | What a pied ninny's this! | Maria Woods | Maria Woods; Brian; J | |
| 🗄 🗋 🎒 Dalia | | 0 | Your vows, your memories, | John | Robert Rise; Maria We | |
| Health Mailboxade 9ae 7fe 5b 54860a 1cf 0218 | | Ū | The riders could be heard, lo | Andrew Wait | Susane Tyler; Maria V | |
| HealthMailboxbaa8042e260149aa928ba55 | | Í Í | The sinewand heart of man | Susane Tyler | Brian; Juliet Capulet; / | |
| ia | | | Now, herald, are the dead n | Alex Clark | Michael; Alex Clark; S | |
| ia | | | Dieu vous garde, monsieur | Michael | Maria Woods; Robert | |
| | | | If you had seen the look in | Romeo Montague | Dalia; Juliet Capulet; / | Romeo Montague: Kyle Pakerman; Rudy R |
| ia | | | She wore a gray blouse with | Robert Rise | Alex Clark; Susane Ty | |
| | | | But though the public schoo | Luise | John; Brian; Michael; | |
| | | | if itwas in gold; but at the sa | Andrew Wait | Rudy Raid; Juliet Capi | |
| Personal Archive - Health Mailboxbaa 8042e. | | | My stars shine darkly over m | Rudy Raid | Juliet Capulet; Tim Go | |
| 🗄 🔁 🗃 Richard | | 0 | Charley was of these people | Romeo Montague | Susane Tyler; Alex Cla | |
| 🗄 🦳 🎒 Robert Rise | < 🗌 🖂 | | | Richard | Richard; John; Andy F Y | |
| > | < | | | | > | |

There is a panel with a wide splitter added on the right. Toolbar buttons are added to connect to Exchange Server and inject checked items to the attached mailbox.

The injection button (next to the **Export selected data into PST** button) becomes active when there is a connection with at least one live mailbox and items in the offline database are checked.

The button for the connection to the mailbox has a drop-down list with mailboxes, which were attached previously. When clicking **Select** menu item for the attached mailbox in the drop-down list, it appears in the tree on the right and becomes selected. It is also possible to disconnect from the mailbox by clicking the **Disconnect** menu item.

| Attach to live Exchange mailbox Ctrl+ | ·T | |
|---------------------------------------|----|------------|
| Recent | • | |
| Brian@no-such-email.com | • | |
| John@no-such-email.com | • | Select |
| Dalia@no-such-email.com | • | Disconnect |
| Alex.Clark@no-such-email.com | • | Refresh |
| Disconnect all | | |

Clicking the connection toolbar button will bring up the following dialog for entering the credentials:

| G | Connect to Exchange Serve | er mailbox | x |
|---|--|--|---|
| | User logon name (e.g.: user1): Alex Clark | ge impersonation lets you connect to ox other than the default one for your ials. To use the feature, access ions need to be configured at ge Server. nect to a different mailbox | |
| | [| Connect Cancel | |

Fill the following required fields:

G

· Host: domain name of the machine with Exchange Server, or IP address

• User logon name – user name to log on

• Password - user's password

There is an option of connecting using current Windows credentials. When the checkbox is selected, the **User** and **Password** fields are disabled:

| R | Connect to Exchange Server mailbox | × |
|---|---|---|
| | Host (ex.: contoso.com or 192.168.0.5): ES2013.no-such-email.com Image: second control with the second control withe second contrel with the second control withe second co |] |
| | Connect Cancel | |

It is possible to connect to someone else's mailbox using **Exchange impersonation**. To do this, check the **Connect to a different mailbox** box and enter the mailbox owner SMTP address:

| Connec | t to Excha | nge Server mailbox | | | × |
|--|--|--|---------------|---------------------------------|---|
| connoc | | 5 | | | |
| | | | | | |
| Host (ex.: contoso.com or 192.16 | 8.0.5): | | | | |
| ES2013.no-such-email.com | | | | | |
| | | | | | |
| | | Exchange impersonation le | ts vou conne | ect to | |
| Use current Windows credenti | lais | a mailbox other than the de | fault one for | | |
| User logon name (e.g.: user1): | | credentials. To use the feat permissions need to be cor | | | |
| Alex Clark | | Exchange Server. | ingurou ut | | |
| | | Connect to a different ma | ilbox | | |
| Password: | | Mailbox owner SMTP addres | | | |
| ******* | | (ex.: user1@contoso.com): | | | |
| | | dalia@no-such-email.com | | | |
| Save password | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | _ |
| | | Connect | Cano | al | |
| | | Connect | Cano | | |
| | | | | | |
| posting and experting to live Ex | (abanga ara | alaa ayailahla thrayah tha | | | |
| nnecting and exporting to live Ex | | | File menu | | _ |
| | | e also available through the lovaBACKUP Granular Restore | File menu | | |
| ile Options Help | | | File menu | | _ 0 |
| | | ovaBACKUP Granular Restore | | | 0 |
| ile Options Help Open file Ctrl+O | No | ovaBACKUP Granular Restore | File menu | | - |
| ile Options Help Open file Ctrl+O Recent | No | ovaBACKUP Granular Restore | | Desti | • Ination |
| ile Options Help Open file Ctrl+O Recent Close file Reload database using transaction logs New connection | No | ovaBACKUP Granular Restore | | Desti No lin | ination ve servers connected. |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open | No | ovaBACKUP Granular Restore | | Desti No lin Conn | • Ination |
| ile Options Help Open file Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S | Attach to Recent te: 904 Mb | olders to search | | Desti No lin Conn | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G | Attach to Recent 904 Mb atta: 3/13/201 | olders to search | | Desti No lin Conn | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S | Attach to Recent 2904 Mb ate: 3/13/201 rsion: Exchar | olders to search | | Desti No lin Conn | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N | Attach to Recent 904 Mb ate: 3/13/201 rsion: Exchar ansaction log | olders to search | | Desti No lin Conn | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E | | olders to search | | Desti No lin Conn | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder | Attach to Recent 904 Mb ate: 3/13/201 rsion: Exchar ansaction log | olders to search | | Desti No lin Conn | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X ⊕ □ Personal Archive - HealthMalboxade5ae /rebb; | | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+G Export into live server Ctrl+R Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X ♥ - ● Personal Archive - HealthMailboxaa8042e260 ♥ - ● ● Resonal Archive - HealthMailboxaa8042e260 | | olders to search | | Desti No lin Conn | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X B→→→ Personal Archive - HealthMalboxadeSae/Retbo B+Chard B+Chard B+Chard Ctrl+Se | | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X Open Search Archive - HealthMailboxade9ae /rebot Personal Archive - HealthMailbox | | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X B | Attach to Recent 904 Mb te: 3/13/201 rrsion: Exchar ansaction log malboxes. S ad time: 00:00 | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+G Export into live server Ctrl+R Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X Ctrl→Personal Archive - HealthMailboxaa@siae retor Personal Archive - HealthMailboxaa@siae retor | Attach to Recent 904 Mb te: 3/13/201 rrsion: Exchar ansaction log malboxes. S ad time: 00:00 | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X B | Attach to Recent 904 Mb te: 3/13/201 rrsion: Exchar ansaction log malboxes. S ad time: 00:00 | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X B | Attach to Recent 904 Mb te: 3/13/201 rrsion: Exchar ansaction log malboxes. S ad time: 00:00 | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |
| ile Options Help Open file, Ctrl+O Recent Close file Reload database using transaction logs New connection Search for files to open Export selected items into PST Ctrl+S Export into original Exchange mailbox Ctrl+G Export into live server Ctrl+E Cancel current operation Ctrl+N Open log folder Delete saved temp files and logs Exit Alt+X B | Attach to Recent 904 Mb te: 3/13/201 rrsion: Exchar ansaction log malboxes. S ad time: 00:00 | olders to search | | Desti No lin conr expo | ination ve servers connected. nect to a live server to enable |

Injection workflow

R

After the connection is established, the mail store tree appears on the **Destination** tab (1). It will be listed in the drop-down list of the toolbar (2) connection button and in the **File** menu (3).



It is possible to select whether to show folder items and preview or not – a button near the **Destination** tab is used for this purpose. If it is disabled there will be only a tree displayed in the right panel.



After enabling the button a list with the items is displayed as well as a preview when clicking on the item.



Connection to several mailboxes simultaneously on different hosts is possible.



After mailbox appears in the tree, it is possible to drag-and-drop folders and separate items. When dragging a folder or a mailbox to live Exchange mailbox, the hierarchy of the data being dragged will be recreated inside the destination folder.

When right-clicking folders/mailboxes in the destination panel, it is possible to create a folder inside the mailbox.

R



It is also possible to delete and rename created folder within one program session. When checking the items in the offline database, data exporting is available by clicking the **Export into live Exchange Server mailbox** button. This method is the equivalent of saving to PST, except that the target is a live server, not a file. It is complementary to drag-and-drop and useful for management of disparate data. With this method, items of different types (e.g. notes and tasks) and/or located in different offline database folders/mailboxes or in different PST/OST files can be exported.



R

When clicking the **Export into live Exchange Server mailbox** button, a dialog, which allows to select a folder to save selected data, appears. Data hierarchy will be restored automatically. The root of hierarchy is the closest common parent item.

| Select destination folder | × |
|--|---|
| ES2013.no-such-email.com Alex.Clark@no-such-email.com | |
| Drafts (0) Inbox (1,000) Journal (27) Junk Email (0) Junk Email (0) Outbox (0) Outbox (0) Sent Items (0) Tasks (47) Unselect successfully exported items | ✓ |

5.3.3 Working with clustered Exchange Server configuration

Exporting data into live instance of clustered Exchange Server does not differ from working with any other server configuration. Even if there are several servers with Mailbox Server roles in your configuration, and they have been added to your CCR/DAG, data can be easily restored.



As you can see on the scheme, to export data into live server, NovaBACKUP Granular Restore calls Client Access Server to get access to specified mailbox. And it doesn't really matter which of existing Mailbox Servers stores target mailbox - data will be exported to the right place.

The IP-address or FQDN of Client Access Server should be specified in the **Host** field while using the **Expert** mode. In the **Export into original** mode FQDN of this server is detected automatically by calling Active Directory domain controller.

R

5.3.4 Restore to PST files

R

To save items marked for export, click the **Export selected items** button on the toolbar or select the point in the **File** menu.

| | | | | NovaBACKUP Gran | ular Restore | | | 2 |
|---|-----|-----|---|----------------------------------|----------------|--|--|----|
| le Options Help | | | | | | | | |
| | | | | | | | | _ |
| | | | | | Search in Alex | Clark | | 1 |
| | | | | | | | | |
| rowse | | | | | | | | |
| Mailbox Database.edb | ^ T | уре | A | Subject | From | То | Created | |
| 🖕 🔲 🚔 Alex Clark | | / 🖂 | 0 | She was glad that Jo should | Luise | Maria Woods; Kyle Pakerman; Luise; | Wednesday, March 12, 20 | 14 |
| Calendar (438) | | / 🖂 | A | In itsnature, it is arbitrary an | | Andrew Wait; Richard; John; Dalia; Ro | • • • • • • • | |
| <u>8</u> Contacts (45) | | / 🖂 | 0 | It is my lady mother. It is my | | Romeo Montague: Richard: Dalia; Mic | | |
| Deleted Items (25) | | / 🖂 | | Butthat it might not appear t | | Romeo Montague; Andy Kort; Robert | 4 C C C C C C C C C C C C C C C C C C C | |
| Drafts (0) | | / 🖂 | A | Do you persuade yourself th | | Susane Tyler; Andy Kort; Juliet Capulet | | |
| V inbox (1,046) | | / 🖂 | 0 | I regret that I am unable to r | | John: Brian: Tim Goodler: Kyle Pakerm | | |
| | | / 🖂 | A | Alas, the heavy basketwhic | | Dalia: Kyle Pakeman: Michael: Susan | | |
| Notes (40) | | / 🖂 | ă | He went up a dark and narr | | Brian; Michael; Richard; Dalia; Luise; T | 2 C C C C C C C C C C C C C C C C C C C | |
| | | / 🖂 | 0 | Noone, even there, could li | | Brian: Alex Clark: Richard: Romeo Mon | 4 C C C C C C C C C C C C C C C C C C C | |
| | _ | / 🖂 | A | One of the things particular | | John; Maria Woods; Richard; Alex Clar | 2 · · · · · · · · · · · · · · · · · · · | |
| Tasks (48) | | / 🖂 | Å | Stephen Brice read the new | | Alex Clark; John; Tim Goodler; Michael | 4 C C C C C C C C C C C C C C C C C C C | |
| ndrew Wait | | / 🖂 | ă | Give me some light! Give m | | Romeo Montague: Richard: Andrew W | | |
| Andy Kort | | / 🖂 | ñ | His condition leaves him no | | Romeo Montague; Richard; Juliet Cap | | |
| 🗄 🖳 🎽 Brian | | / 🖂 | 0 | What a pied ninny's this! | Maria Woods | Maria Woods; Brian; Juliet Capulet; Ro | | |
| 🗄 🗌 🏂 Dalia | | / 🖂 | A | Your vows, your memories, | | Robert Rise; Maria Woods; Andrew W | | |
| ianter de la companya de la company | 8 | / 🖂 | Å | The riders could be heard lo | | Susane Tyler: Maria Woods; Romeo M | | |
| 🛓 🗆 🖂 🎒 Health Mailboxbaa 8042e 260 149aa 928ba 5 | | / 🖂 | Ä | The sinewand heart of man | | Brian; Juliet Capulet; Andy Kort; Robert | 4 C C C C C C C C C C C C C C C C C C C | |
| 🚋 💭 🎒 John | | / 🖂 | 0 | Now, herald, are the dead n | | Michael: Alex Clark: Susane Tyler: Ro | | |
| 🗄 🖳 🎒 Juliet Capulet | | / 🖂 | | Dieu vous garde, monsieur | | Maria Woods: Robert Rise | Wednesday, March 12, 20 Wednesday, March 12, 20 | |
| 🗄 🖳 🥭 Kyle Pakeman | | / 🖂 | | If you had seen the look in | | Dalia: Juliet Capulet: Alex Clark: Rome | | |
| | | / 🖂 | | She wore a gray blouse with | | Alex Clark; Susane Tyler; Maria Woods | | |
| ia | | / 🖂 | | But though the public schoo | | John: Brian: Michael: Andy Kort: Maria | | |
| ⊞… | | / 🖂 | | if itwas in gold; but at the sa | | Rudy Raid; Juliet Capulet; Brian; Andy | | |
| Personal Archive - Health Mailboxade Sae // | - | / 🖂 | | My stars shine darkly over m | | Juliet Capulet: Tim Goodler: Alex Clark: | | |
| | | / 🖂 | A | Charley was of these people | | Susane Tyler; Alex Clark; Michael; Rud | | |
| | | / 🖂 | 0 | chancy was or moso people | Richard | Richard; John; Andy Kort; Robert Rise; | | |
| | | | | | - Ionara | Honord, contra, reay hort, hoboit hide, | reconcodey, March 12, 20 | > |
| npleted | | | | | | Selected: 1 folder(s) in 1 m | ailbox(ac) | |

You will be asked to select or create the destination folder for recovered data:

| Select destination folder | × |
|---|---|
| Selected data will be saved into .pst file(s). To start the export select the destinati folder or create a new one and click OK. The export process will start immediately | |
| A 🌗 Recovered | ^ |
| LIENT-PC | |
| Recovered_session1 | |
| Recovered_session2 | |
| Recovered_session3 | |
| Recovered_session4 | |
| Recovered_session5 | |
| Recovered_session6 | |
| TestReports | ~ |
| PST encoding: Unicode (Microsoft Outlook 2003, 2007, 2010 and 2013) | * |
| Make New Folder OK Cancel | |

After selecting folder, the export will start. Required time depends on how many items are selected for export. You will be shown a progress window during the export. The window shows the number of saved mailboxes, folders, messages and total expected items to be restored (1). You can disable the progress window directly in the window or go to the **Options** menu and select **Show progress dialog**.

The export can be cancelled by clicking an appropriate link in the progress dialog window (2) or by clicking the



Cancel export button on the taskbar (3).

| G | NovaBACKUP Granular Restore | - 🗆 🗙 |
|---|---|-------|
| File Options Help | Search in all mailboxes | ٩ |
| Andrew Wait Ack Clark Ack Clark Andrew Wait Andrew Mait Andrew Maite Andrew Maite | Mailbox Database.edb Progress Exporting into PST 17% Mailboxes 7 Folders 79 Messages 5.029 Total messages count 28,163 Read speed 115 KB/s Elapsed time 00:01:05 Image: Cancel current operation Image: Close File info File info | |
| Exporting into PST 17% | 00:01:05 Selected: 22 mailbox(es) | .:: |
| Tin | | |

Tip

If you closed the progress window, it can be shown again by clicking on the progress bar on the status panel.

PST file naming, size and format

NovaBACKUP Granular Restore exports each mail store into a separate .pst file named "Recovery NNN - <Mailbox Name>[- VVV] . pst", where NNN is current recovery session identifier, VVV – volume number in case the PST has to be written in more than one volume.

Example:

Recovery 001 - John Doe.pst

Recovery 001 - John Doe - 001.pst

Recovery 001 - John Doe - 002.pst

Recovery 001 - Mary Smith.pst

With large exports, there can be more than one file on the output. Additional files are created automatically when the file size limit is hit. The size volume limit depends on the output file encoding. For ANSI PST files the limit is 1GB, for Unicode files it is 19GB.

Opening exported items in Outlook

To view and manipulate exported items, use Microsoft Outlook to open the Personal Storage File (.pst) files exported by NovaBACKUP Granular Restore:

- 1. Start Outlook.
- 2. Click File and choose Open Outlook Data File.
- 3. Select exported pst file and click OK.



Note

G

It is not recommended to move .pst files that are open in Outlook. Before moving, right- click the name of the Outlook Data File (.pst) and click Close .

Restoring exported items into Exchange Server

Items extracted from a mail store can be easily restored into a live server:

- 1. Make sure you have Microsoft Outlook with access to the mailbox you want to restore items into.
- 2. Open .pst file with exported messages.
- 3. Open the mailbox you need to import data into.
- 4. Select the items and drag-and-drop them back into the original folders. They will be automatically synchronized with the live Exchange Server database.



6 Command-line interface

The command line feature allows you to easily process several databases.

Usage: esr.exe <source> <destination>

R

Example: esr.exe "c:\Mailbox Database.edb" "c:\results\"

Below is a list of commands with their description that can be used in command line:

• There are s everal ways to set the source file(s):

| Operation | Description | Example |
|-------------------------------|---|--|
| <file mask="" path=""></file> | mask to path with files | esr.exe c:*.edb c :\results\ |
| /list= <path></path> | sets a path to file which contains a list with files to recover | esr.exe /list=d:\files_to_recover.txt c:\results\ |
| /list={file1, file2,, fileN} | sets enumeration of files to recover. Full path to file must be used | esr.exe /list={d:\1.edb, d:\2.edb} c: \results\ |

• Specify the destination directory for the recovered file(s):

| Operation | Description | Example |
|---|--------------------------|-------------------------------|
| <out dir=""></out> | path to output directory | esr.exe c:*.edb c :\results\ |
| Detailing parameters: | | |

| Operation | Description | Example |
|-------------------------|---|--|
| /initdir= <path></path> | sets the initial directory for the Open database dialog | esr.exe /initdir="c:\EDB Mailboxes \" |

| Operation | Description | Example |
|--------------------------|--|---|
| -notfilterfaultymessages | shows messages that have been filtered due to their damage | esr.exe -notfilterfaultymessages |
| /redirect= <path></path> | redirects console output to text file | esr.exe c:*.edb c :\results\ / redirect="c:\result.txt" |
| /cleartemp | if set - the product will remove all temp data on startup | esr.exe /cleartemp |

7 Glossary

R

This glossary lists terms and their synonyms, most commonly used in NovaBACKUP Granular Restore help. **AD** - Active Directory (AD) is a directory service implemented by Microsoft for Windows domain networks. An AD domain controller authenticates and authorizes all users and computers in a Windows domain type network. For additional information, please visit http://en.wikipedia.org/wiki/Active Directory.

ANSI PST format - An old PST-file format, used in Outlook 97-2002. ANSI format has a 2 GB limit in file size. **Deleted items** - Items/folders deleted from a mailbox hierarchy.

Destination folder/mailbox - A folder/mailbox, selected for export.

EDB - An Exchange database format, used to store information from users' mailboxes. Synonyms: Exchange Server database, dataset.

EWS - Exchange Web Services. EWS provides the functionality to enable client applications to communicate with the Exchange server. EWS provides access to much of the same data that is made available through Microsoft Office Outlook.

Exchange impersonation - Exchange impersonation enables a caller to impersonate a given account so that the operations can be performed with the rights of the impersonated account, instead of the rights that are associated with the caller's account. Configuration information is available at http://msdn.microsoft.com/en-us/library/office/bb204095(v=exchg.140).aspx

Exchange Server - A mail server, calendaring software and contact manager developed by Microsoft. **Export** - Copying information from an offline mailbox so it can be stored in a pst file or on the live Exchange Server.

GMT - Greenwich Mean Time (GMT) is considered as a reference point for time.

Host - Domain name of the machine with Client Access role of Exchange Server, or IP address.

Injection - The process of copying data from offline mailbox to live or original connected mailbox on the server. **Local time** - Local time is calculated by adding or subtracting a number of hours, depending on a time zone, to UTC.

Live Exchange Server mailbox - Destination Exchange server mailbox, that exists on the server and is available for connection. Synonym: attached mailbox.

Mail Store - A type of self-storage whereby customers send items by mail or delivery service (usually by the box) to be stored at a central location. Synonyms: mailbox, offline database, Outlook storage, database storage(depending on the conext).

Original mailbox - A mailbox in live Exchange Server that corresponds to the mailbox in the opened database.

OST - An Offline Storage Table (.ost) format. OST is used by Microsoft Exchange Server that enables users to work with their messages and mail data even when access to the mail server isn't available.

PST - A Personal Storage File (.pst) format, used to store copies of messages, calendar events, and other items. PST files are readable with Outlook or other compatible email client.

Unicode PST format - A PST-file format used in Outlook 2003, Outlook 2007, Outlook 2010 and Outlook 2013, so older versions of Outlook will not be able to open Unicode formatted PST files. Previous versions of Outlook were using ANSI format. The main reason for this change was to allow for international character



support and to extend the maximum size of PST files beyond the 2GB limit of the ANSI formatted PST files. **UTC** - Coordinated Universal Time (UTC) is the primary time standard by which the world regulates clocks and time. Usually used with references to time zones.