

ABS Enterprise®

Granular Recovery for Exchange Guide - StorageCraft

May 2013

Kroll Ontrack Edition



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Preamble

GRE Client Requirements

Operating System

- Windows Server 2003 or above
- Windows XP SP3 or above

Software

- Microsoft Outlook 2003 or above
- Microsoft Outlook 2010 64bit not supported
- ShadowProtect Mount Services (if client machine is not under currently protection, refer to **Configuration: ShadowProtect Mount Service** section of this guide)

Network

- Domain Controller or Member of the domain (same domain as the Exchange Server)

Other

- The GRE Client machine cannot be an Exchange Server of any version

Exchange Server Requirements

- Microsoft Exchange Server 2003 or above

Notes

This guide is segregated into two sections, **Configuration:** and **Restore:**

- The **Configuration:** section focuses on configuring the service account and GRE client installation. Please note that this only needs to be performed once.
- The **Restore:** section focuses on performing a restore job using the GRE client

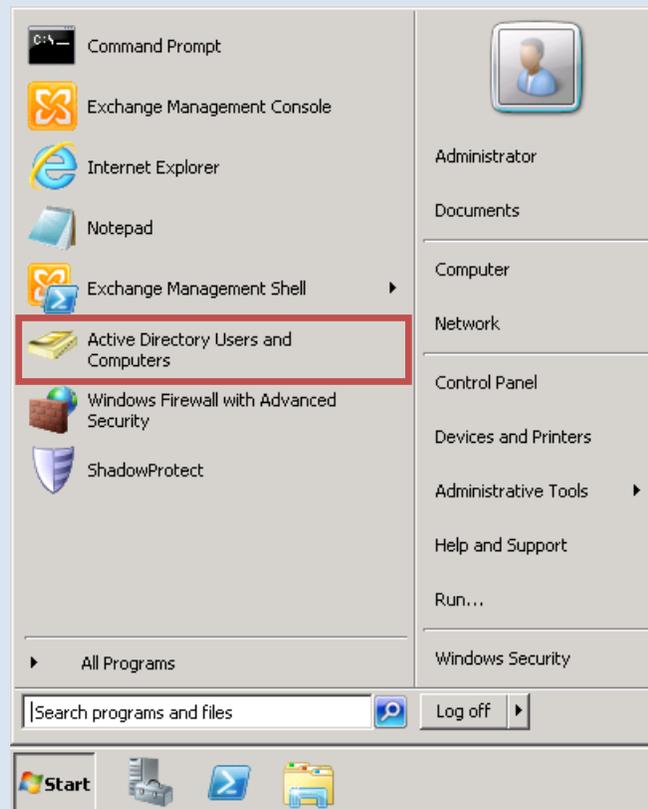
Definitions/Abbreviations:

- **AD** - Active Directory Users and Computers
- **OU** - Organizational Unit
- **GRE** - Granular Recovery for Exchange
- **Appliance** - ABS onsite device
- **GRE Client** - Machine configured to perform Granular Recovery for Exchange

Configuration: GRE Service Account

1. Service Account Active Directory Permissions

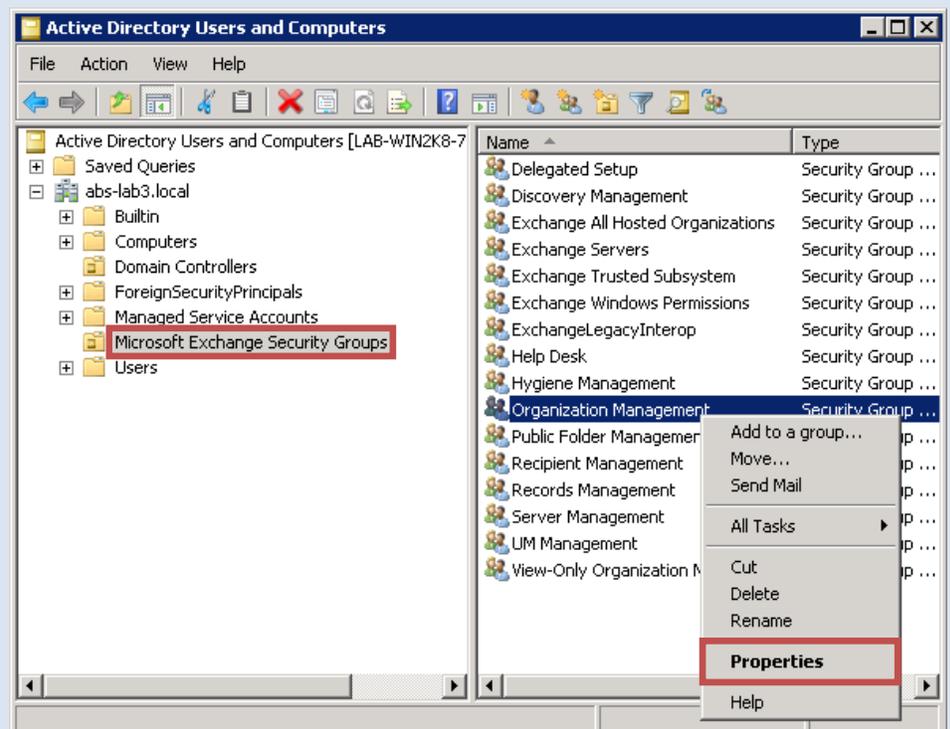
a. Open **Active Directory**



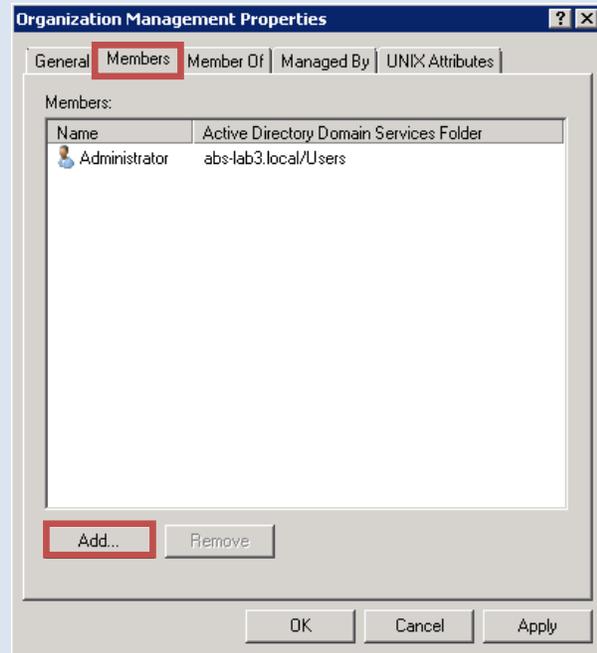
b. Select **Microsoft Exchange Security Groups**

c. Right click **Organization Management**

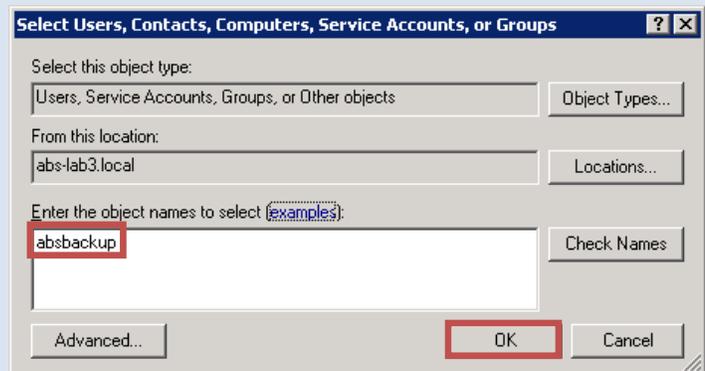
d. Click **Properties**



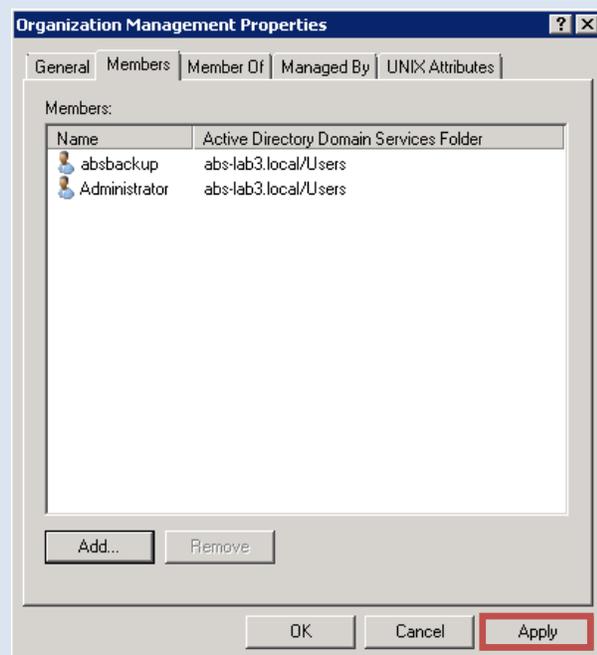
- e. Select the **Members** tab
- f. Click **Add...**



- g. Type in the **absbackup** service account name
- h. Click **OK**



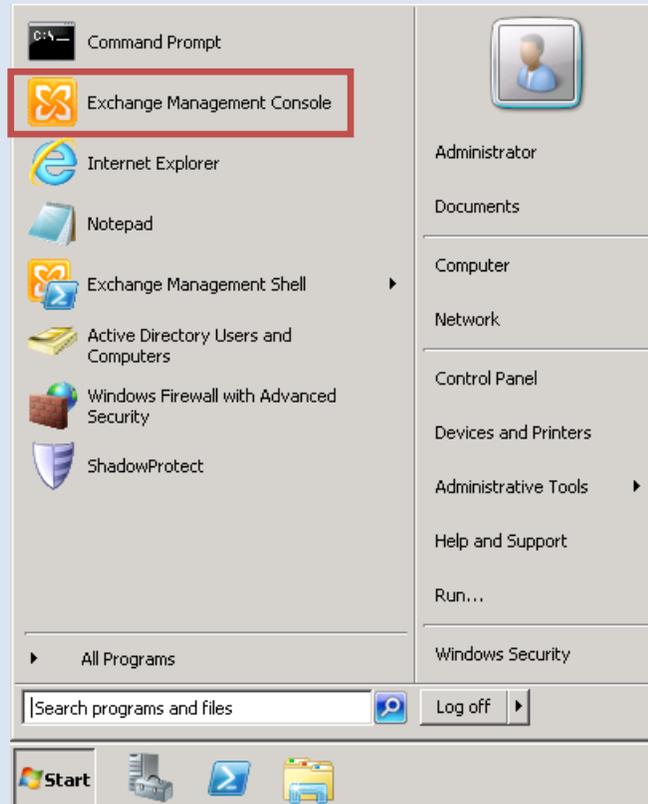
- i. Click **Apply**



2. Service Account Mailbox

i Perform following steps on the **Microsoft Exchange Server**

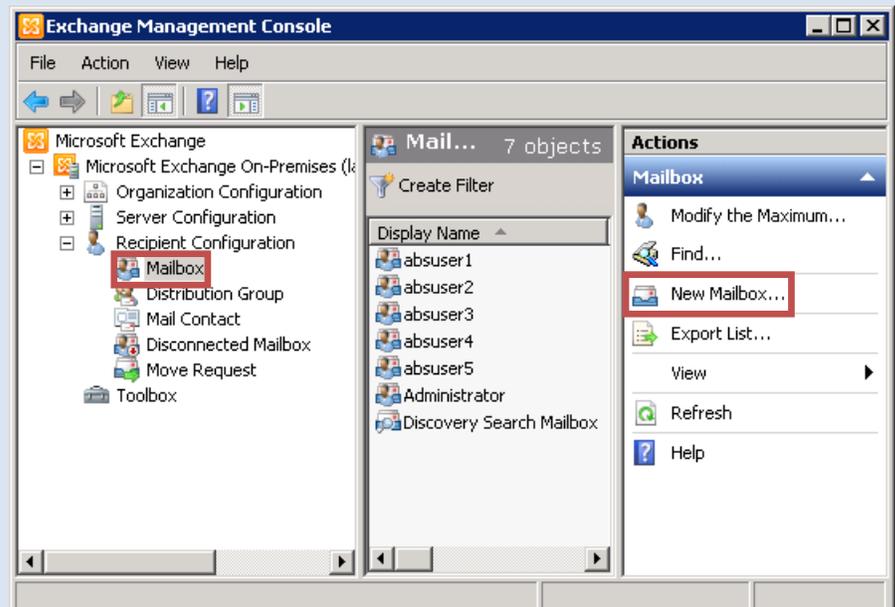
a. Open **Exchange Management Console**



b. Expand **Recipient Configuration**

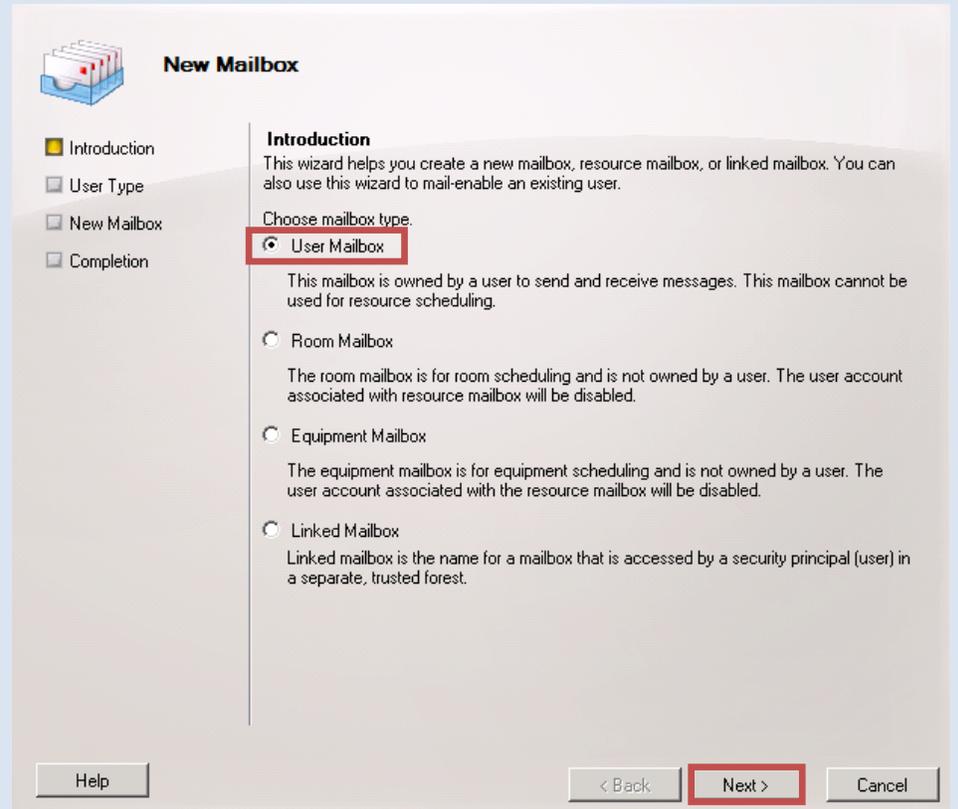
c. Select **Mailbox**

d. Click **New Mailbox...**



e. Select **User Mailbox**

f. Click **Next**



New Mailbox

Introduction
User Type
New Mailbox
Completion

Introduction
This wizard helps you create a new mailbox, resource mailbox, or linked mailbox. You can also use this wizard to mail-enable an existing user.

Choose mailbox type.

User Mailbox
This mailbox is owned by a user to send and receive messages. This mailbox cannot be used for resource scheduling.

Room Mailbox
The room mailbox is for room scheduling and is not owned by a user. The user account associated with resource mailbox will be disabled.

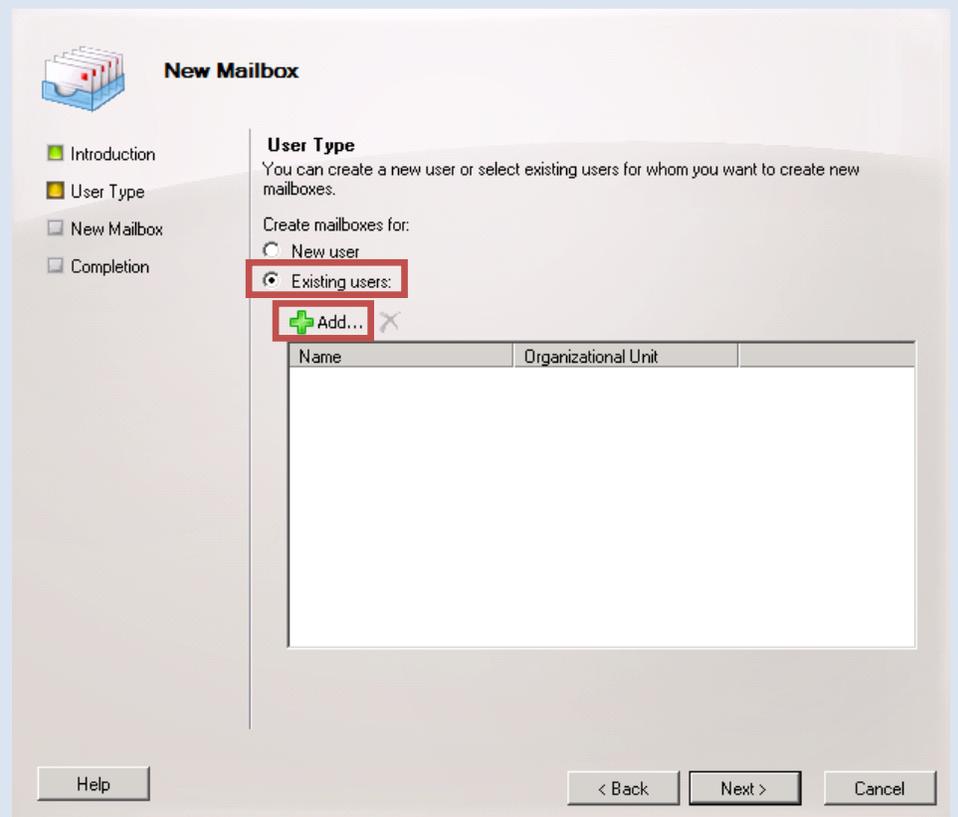
Equipment Mailbox
The equipment mailbox is for equipment scheduling and is not owned by a user. The user account associated with the resource mailbox will be disabled.

Linked Mailbox
Linked mailbox is the name for a mailbox that is accessed by a security principal (user) in a separate, trusted forest.

Help < Back **Next >** Cancel

g. Select **Existing users:**

h. Click **Add...**



New Mailbox

Introduction
User Type
New Mailbox
Completion

User Type
You can create a new user or select existing users for whom you want to create new mailboxes.

Create mailboxes for:

New user

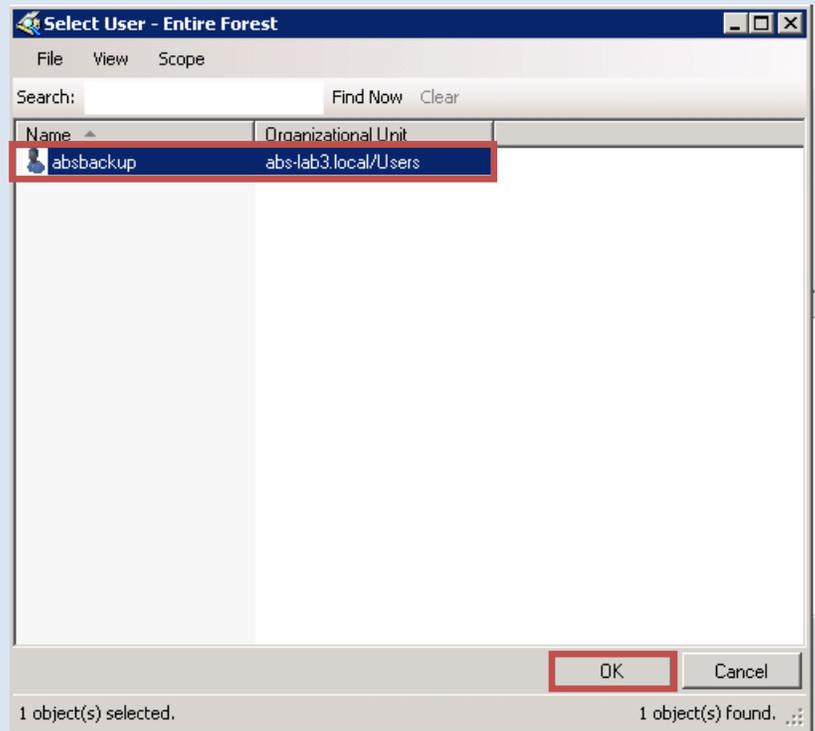
Existing users:

+ Add... X

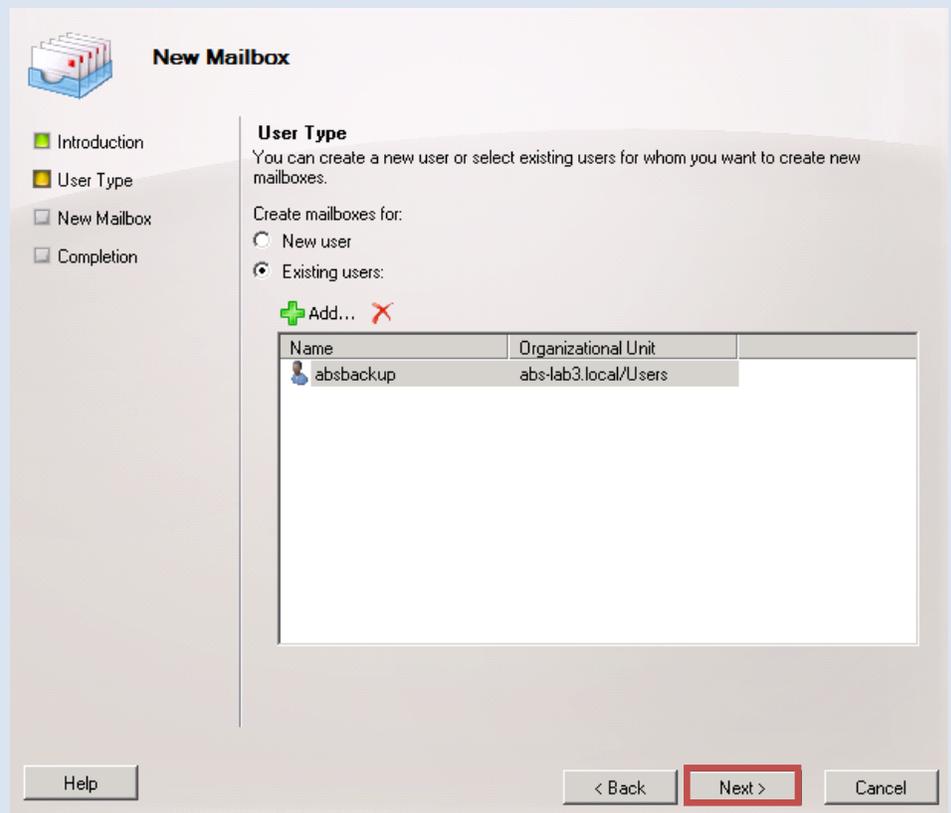
Name	Organizational Unit
------	---------------------

Help < Back **Next >** Cancel

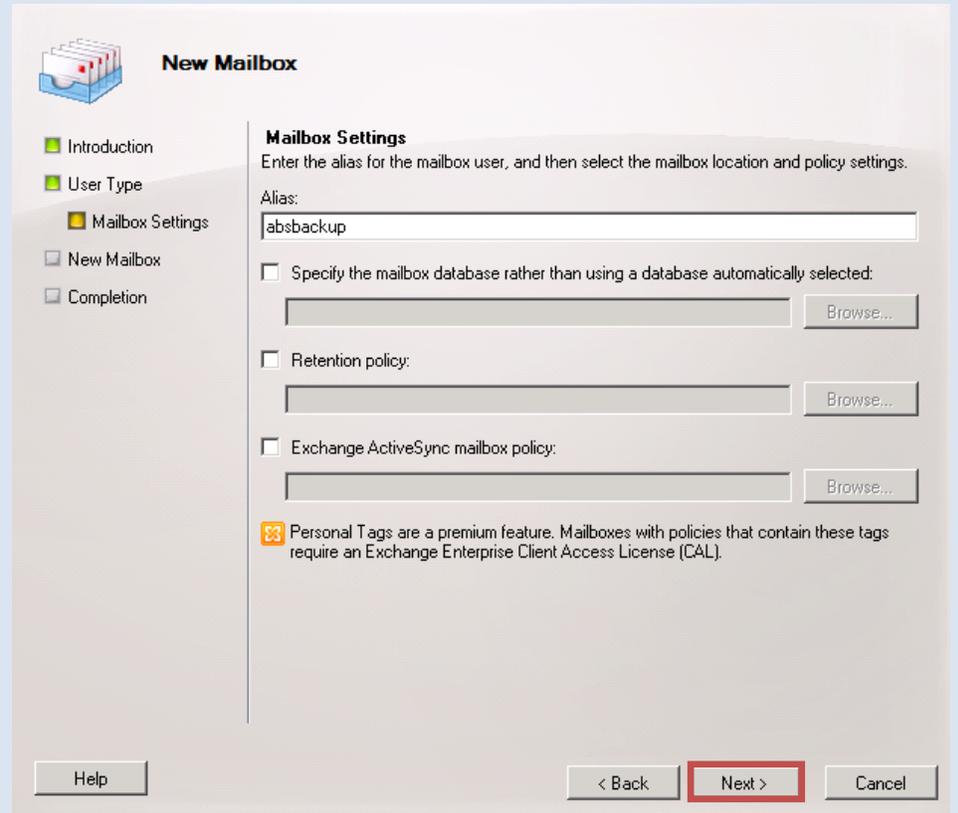
- i. Select the **absbackup** service account
- j. Click **OK**



- k. Click **Next**



l. Click **Next**



New Mailbox

- Introduction
- User Type
- Mailbox Settings**
- New Mailbox
- Completion

Mailbox Settings
Enter the alias for the mailbox user, and then select the mailbox location and policy settings.

Alias:
absbackup

Specify the mailbox database rather than using a database automatically selected:
Browse...

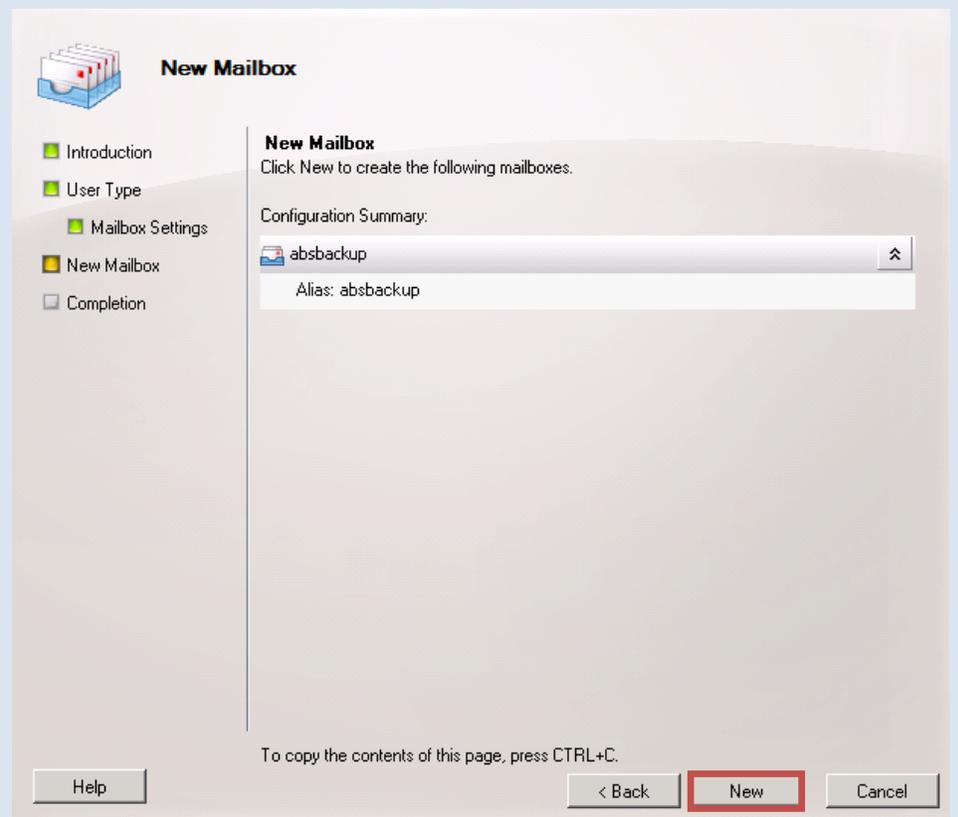
Retention policy:
Browse...

Exchange ActiveSync mailbox policy:
Browse...

 Personal Tags are a premium feature. Mailboxes with policies that contain these tags require an Exchange Enterprise Client Access License (CAL).

Help < Back **Next >** Cancel

m. Click **New**



New Mailbox

- Introduction
- User Type
- Mailbox Settings
- New Mailbox**
- Completion

New Mailbox
Click: New to create the following mailboxes.

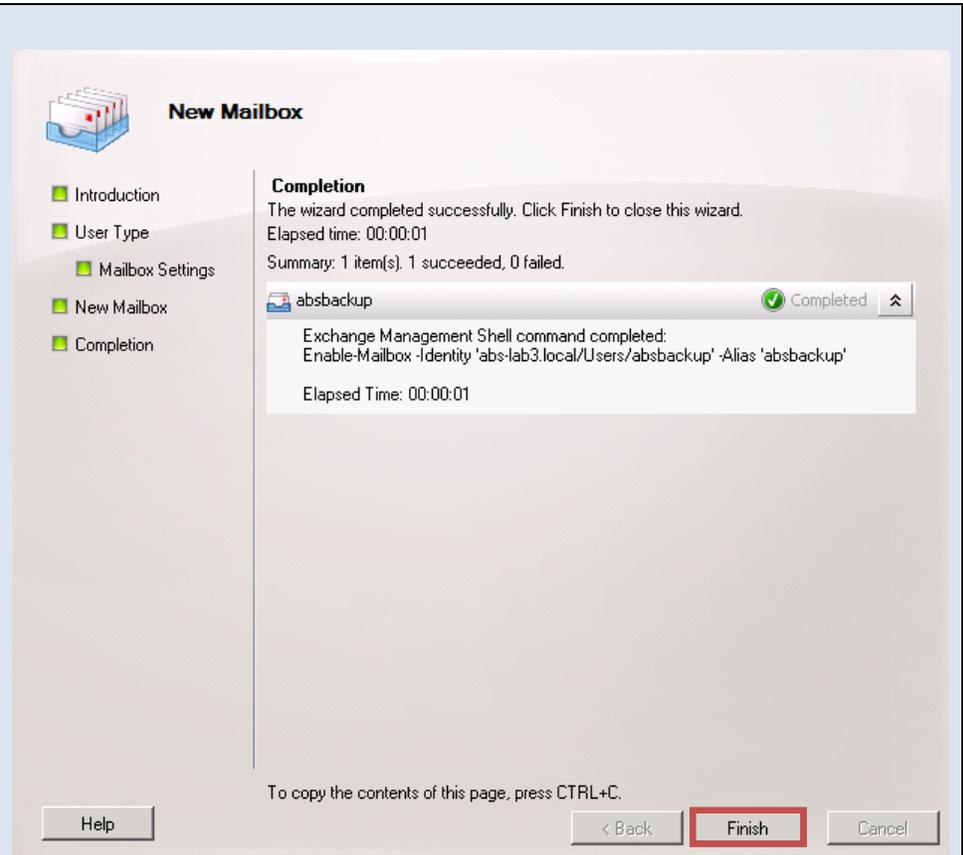
Configuration Summary:
absbackup
Alias: absbackup

To copy the contents of this page, press CTRL+C.

Help < Back **New** Cancel

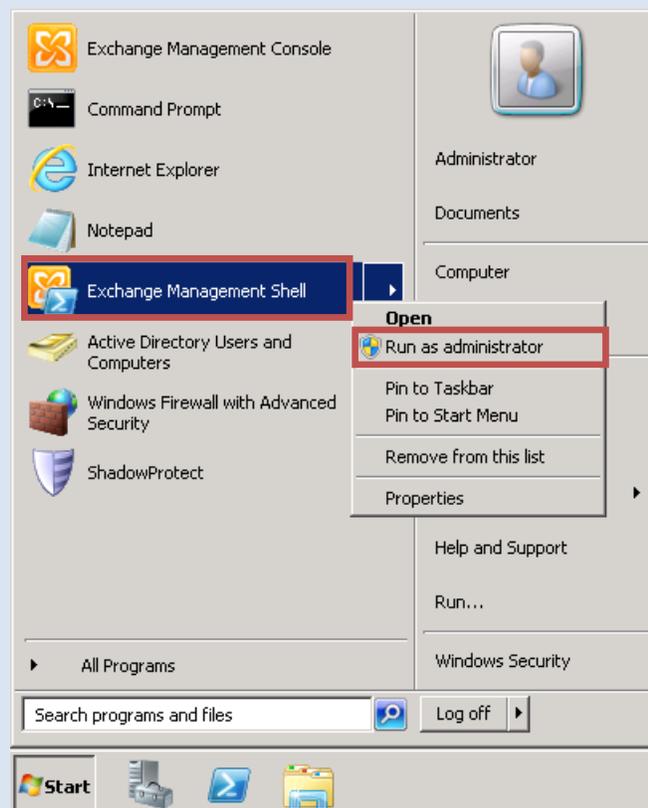
n. Click **Finish**

New mailbox creation for the **absbackup** service account is now **Complete**



3. Service Account Exchange Permissions

a. Open **Exchange Management Shell** as Administrator



b. **Copy/Paste** or manually enter the following command into the **Shell**

i Replace the words **mailbox database name** with the actual name of the exchange database on the server

c. Press **Enter**

i You may need to place the exchange database name in between apostrophes

Example: 'DB1'

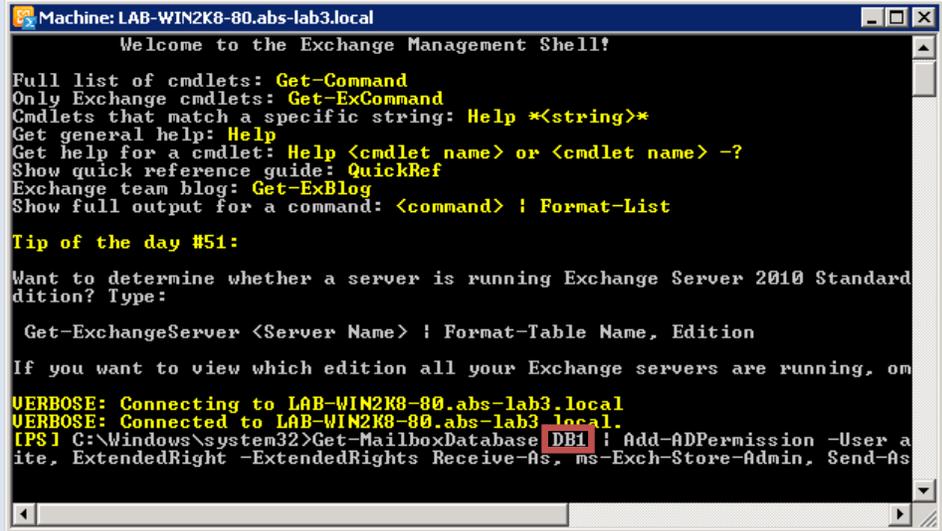
d. The following is a sign of a successful permissions change

i If there are multiple Exchange Databases on the Exchange server, repeat steps **b-e** substituting different database names

GRE service account configuration is now **Complete**

Command:

Get-MailboxDatabase **mailbox database name** | Add-ADPermission -User absbackup -AccessRights GenericRead, GenericWrite, ExtendedRight -ExtendedRights Receive-As, ms-Exch-Store-Admin, Send-As



Identity	User	Deny	Inherited
DB1	ABS-LAB3\absbackup	False	False
DB1	ABS-LAB3\absbackup	False	False
DB1	ABS-LAB3\absbackup	False	False
DB1	ABS-LAB3\absbackup	False	False
DB1	ABS-LAB3\absbackup	False	False
DB1	ABS-LAB3\absbackup	False	False
DB1	ABS-LAB3\absbackup	False	False

Configuration: GRE Client

1. Access the GRE Client

i Perform these steps on a machine that satisfies all the system requirements in the **Preamble**

- a. From the client machine, click the **Start** button
- b. Enter in the share path in the search field

i Share path example:
\\10.13.230.130\client-apps
Substitute example IP address with the IP address that was set on the appliance

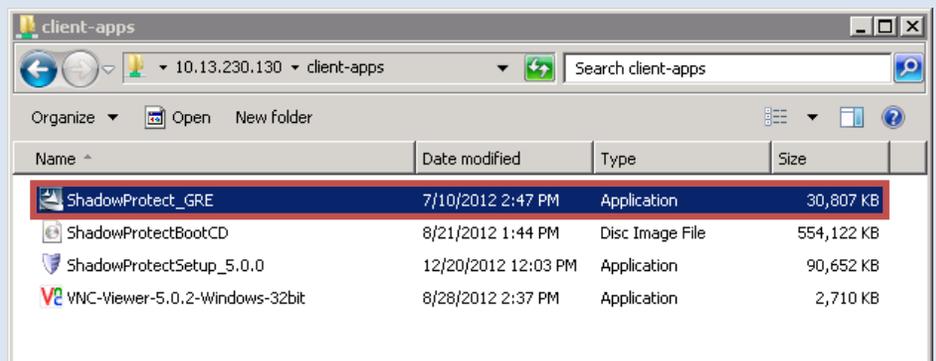
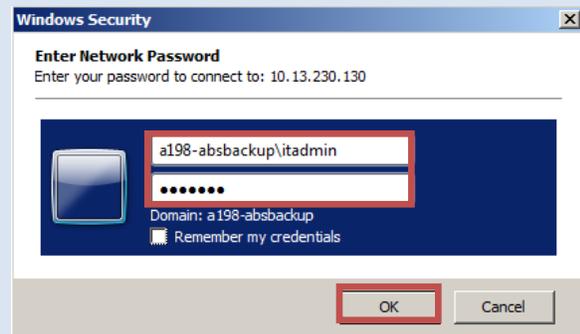
- c. Enter in the **itadmin** account credentials (refer to your **Activation Letter** for the password)

i When authenticating against the appliance, make sure to add the appliance name before the username. Example:
a198-absbackup\itadmin

- d. It is recommended to copy **ShadowProtect_GRE.exe** to a local directory on the client machine, but is not required

2. Install the Client

- a. Double Click the GRE client installer:
ShadowProtect_GRE.exe



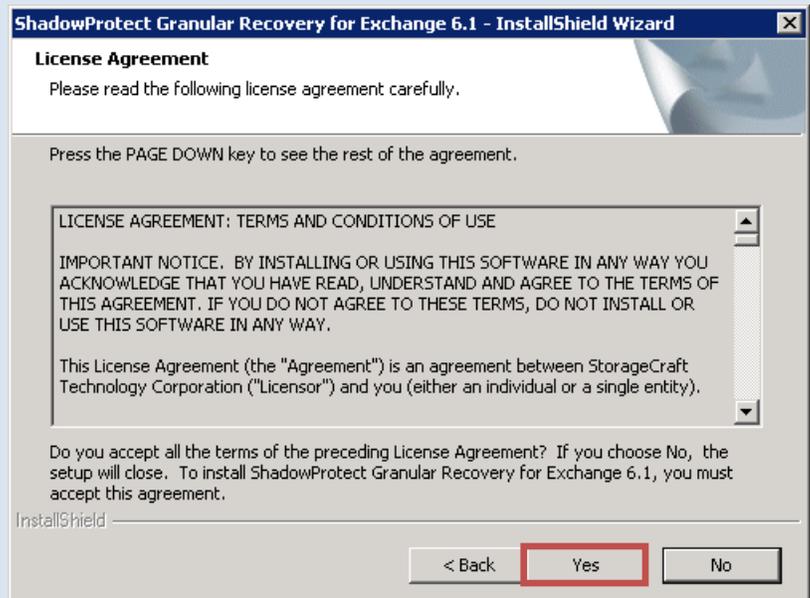
b. Click **Run**



c. Click **Next**

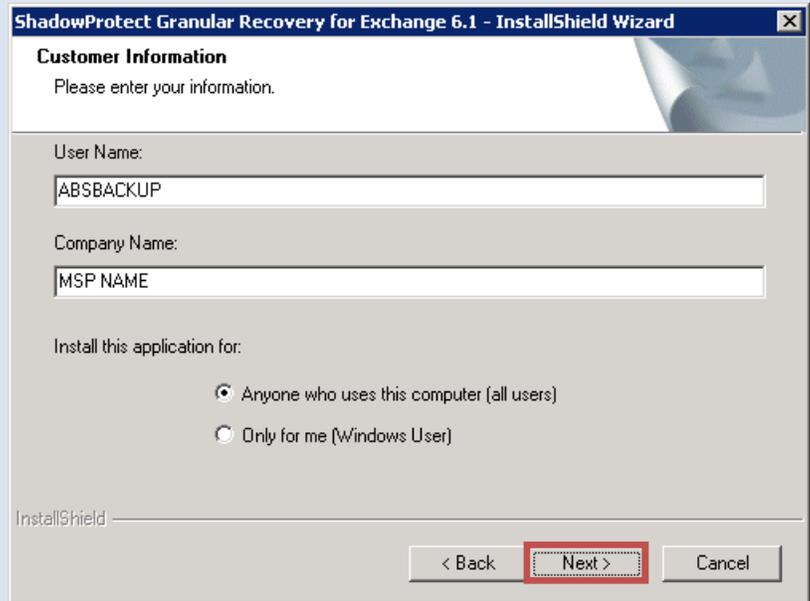


d. Click **Yes**

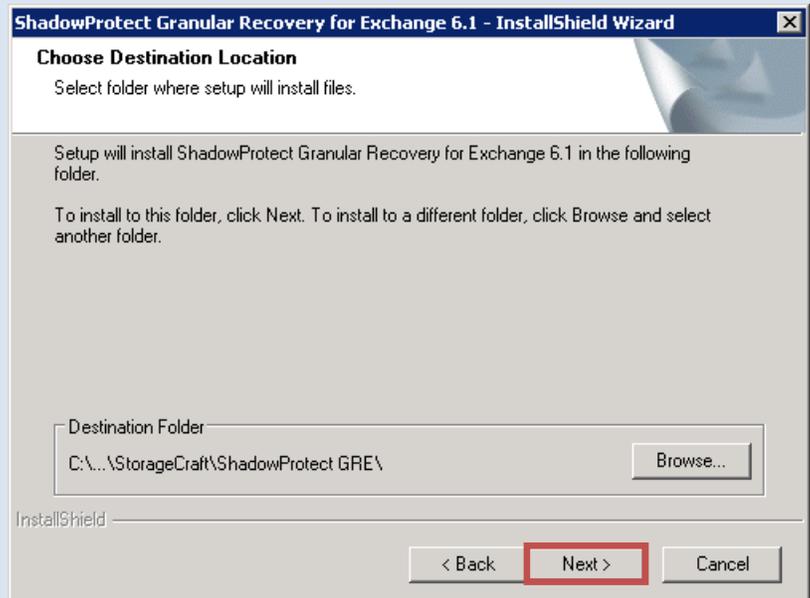


e. Populate the **User Name** and **MSP Name**

f. Click **Next**



g. Click **Next**



h. Click **Finish**

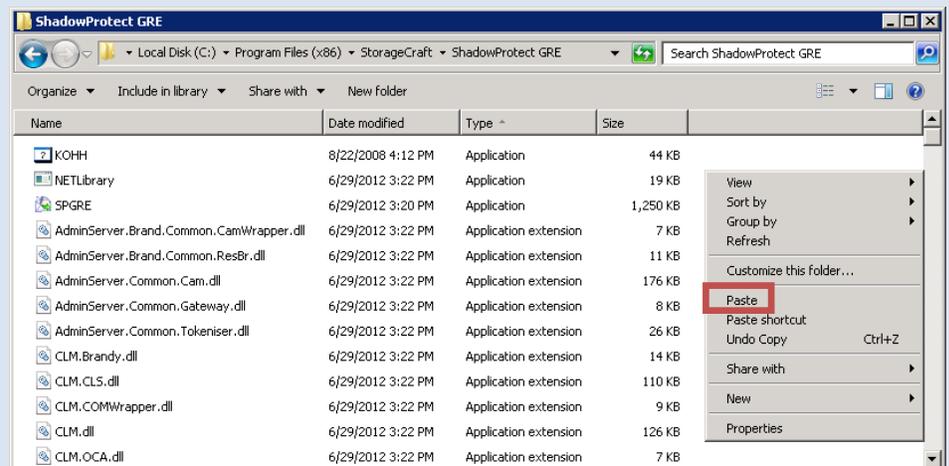


3. License Activation

a. Navigate to the following directory:

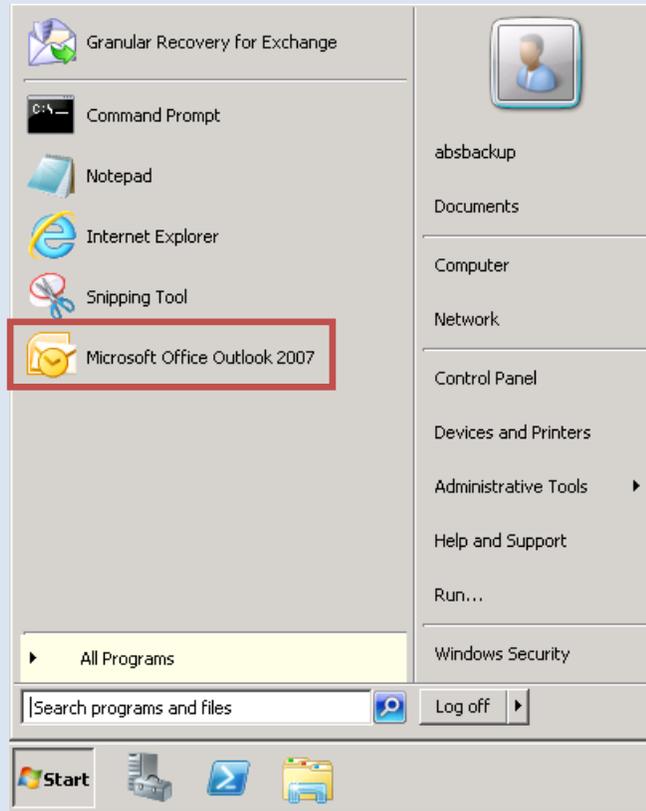
C:\Program Files(x86)\StorageCraft\ShadowProtect GRE

b. Paste the ABS provided **license.ini** file into this directory



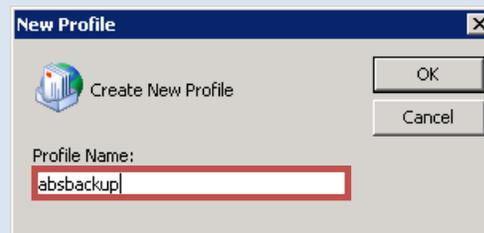
4. Outlook Setup

a. Open **Microsoft Outlook**



b. Under **Profile Name:** type in **absbackup**

c. Click **OK**



d. Type in the appropriate
absbackup email address

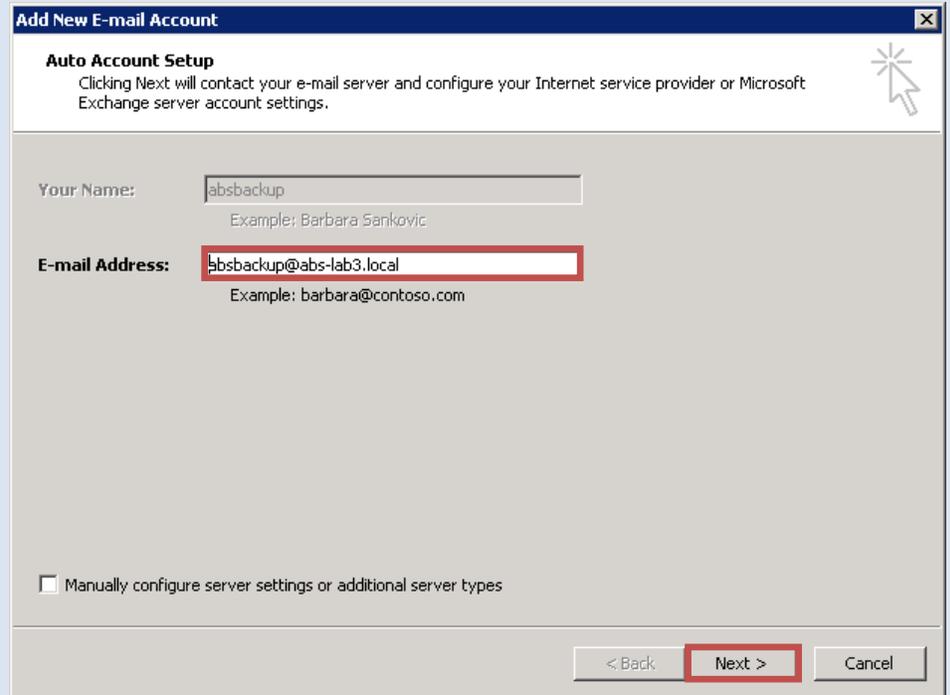
e. Click **Next**

i You may need to **Manually
configure server settings**
depending on your Exchange
configuration

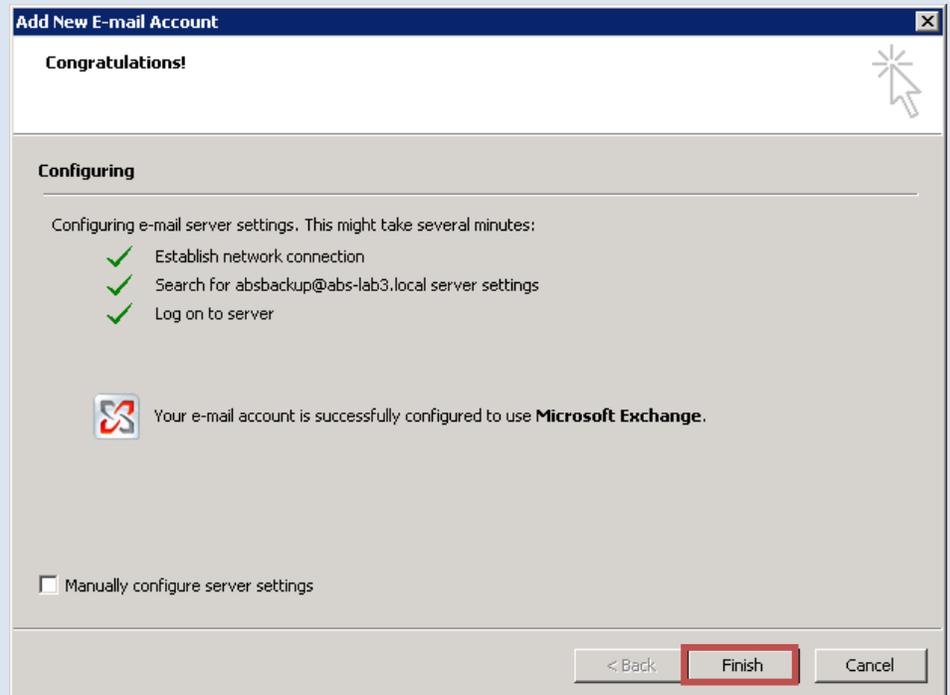
f. Click **Finish**

i If the configuration is
unsuccessful, verify Exchange
settings and **absbackup** mailbox
settings

GRE Agent Configuration is now
Complete



The screenshot shows the 'Add New E-mail Account' dialog box in the 'Auto Account Setup' stage. The title bar reads 'Add New E-mail Account'. Below the title, it says 'Auto Account Setup' and 'Clicking Next will contact your e-mail server and configure your Internet service provider or Microsoft Exchange server account settings.' There are two input fields: 'Your Name:' with the value 'absbackup' and 'E-mail Address:' with the value 'absbackup@abs-lab3.local'. Both fields have a red border. Below the fields, there is a checkbox labeled 'Manually configure server settings or additional server types' which is unchecked. At the bottom right, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a red border.



The screenshot shows the 'Add New E-mail Account' dialog box in the 'Configuring' stage. The title bar reads 'Add New E-mail Account'. Below the title, it says 'Congratulations!' and 'Configuring'. Under 'Configuring', it says 'Configuring e-mail server settings. This might take several minutes:' followed by a list of three items with green checkmarks: 'Establish network connection', 'Search for absbackup@abs-lab3.local server settings', and 'Log on to server'. Below the list, there is a Microsoft Exchange logo and the text 'Your e-mail account is successfully configured to use Microsoft Exchange.' At the bottom right, there are three buttons: '< Back', 'Finish', and 'Cancel'. The 'Finish' button is highlighted with a red border.

Configuration: ShadowProtect Mount Service

! Only perform the following configuration if this machine is not protected under the ABS Appliance. If the machine is protected under the ABS Appliance, please skip this section of the guide.

1. Access the Agent

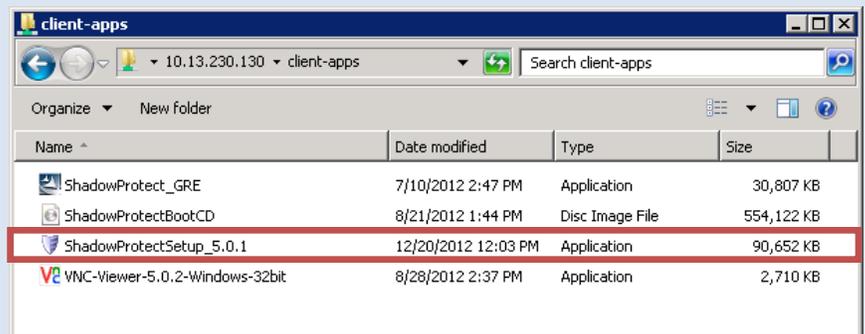
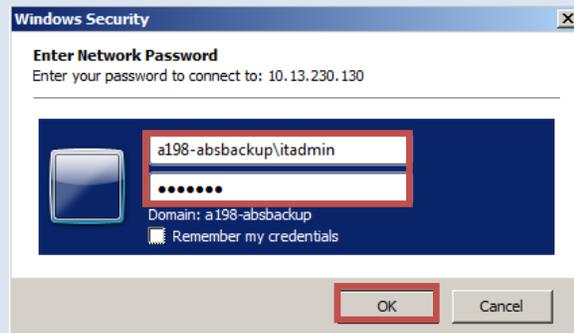
- a. From the client, click the **Start** button
- b. Enter in the share path in the search field

i Share path example:
\\10.13.230.130\client-apps
Substitute example IP address with the IP address that was set on the appliance

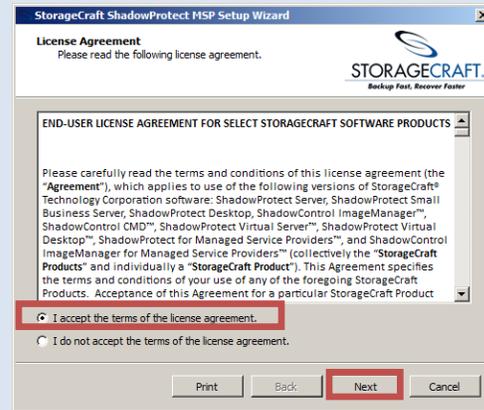
- c. Enter in the **itadmin** account credentials (refer to your **Activation Letter** for the password)

i When authenticating against the appliance, make sure to add the appliance name before the username. Example:
a198-absbackup\itadmin

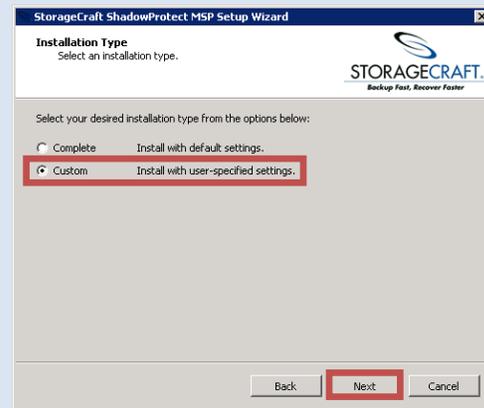
- d. It is recommended to copy **ShadowProtectSetup_.exe** to a local directory on the client, but is not required



m. Accept the license agreement, click **Next**



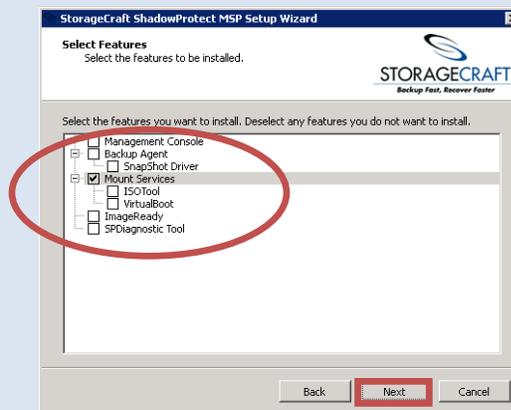
n. Select **Custom**, click **Next**



o. Click **Next** to accept the default install directory



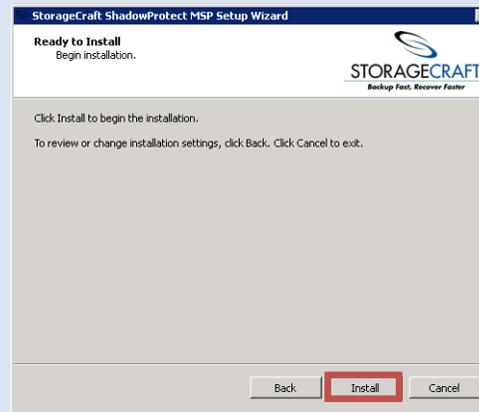
p. Select only the **Mount Services** option, click **Next**



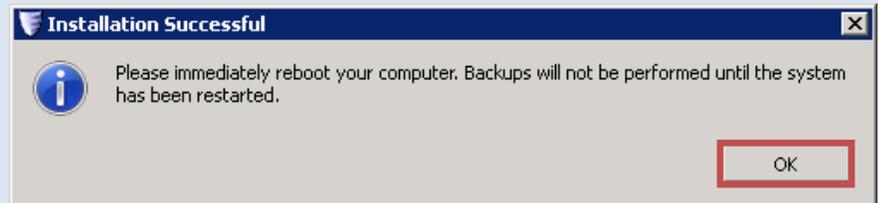
q. Click **Next**



r. Click **Install**



s. Click **OK**



t. Select "Yes, I want to restart my computer now," click **Finish**

After the reboot has completed, the ShadowProtect mount services installation is **Complete**



Restore: Mounting the Recovery Image as Local Drive

1. Selecting Recovery Image

 Before beginning the granular recovery process, ABS highly recommends to first verify that the mail items were not accidentally misplaced or are still in the **Deleted Items** folder. Check the **Recover Deleted Items tool** within Outlook to see if the items can be recovered that way.

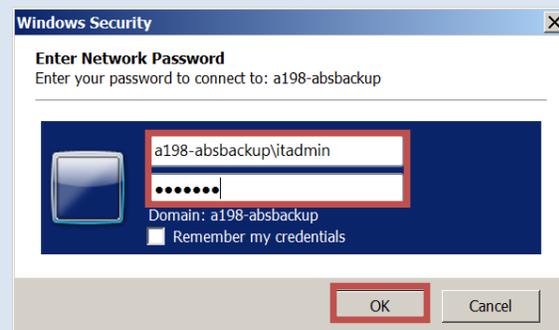
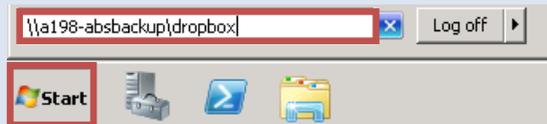
 The following steps must be performed on the machine that has been configured to execute **Granular Recovery for Exchange** restore tasks.

- a. Click the **Start Button**
- b. Type in the **dropbox** share path in the search box

 Share path example:
\\a198-absbackup\dropbox
Substitute "a198" with your unique appliance ID

- c. Enter in the **itadmin** account credentials (refer to your **Activation Letter** for the password)

 When authenticating against the appliance, make sure to add the appliance name before the username. Example:
a198-absbackup\itadmin



- d. Double click the appropriate storage folder that the protected Exchange Server is stored under.

i You will find an **offsite** and an **onsite** folder under **dropbox**

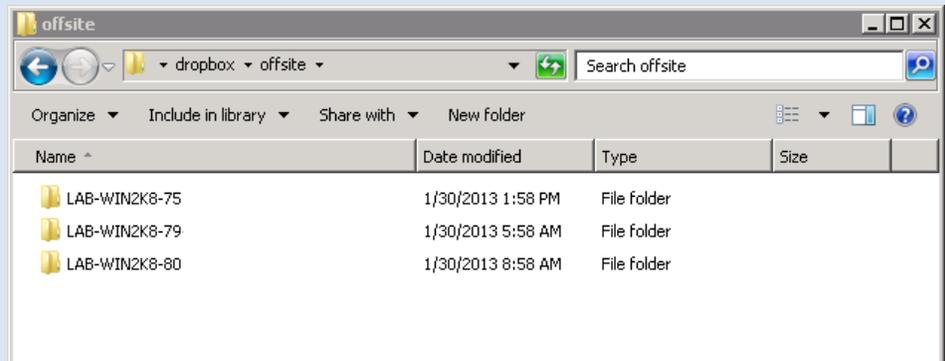
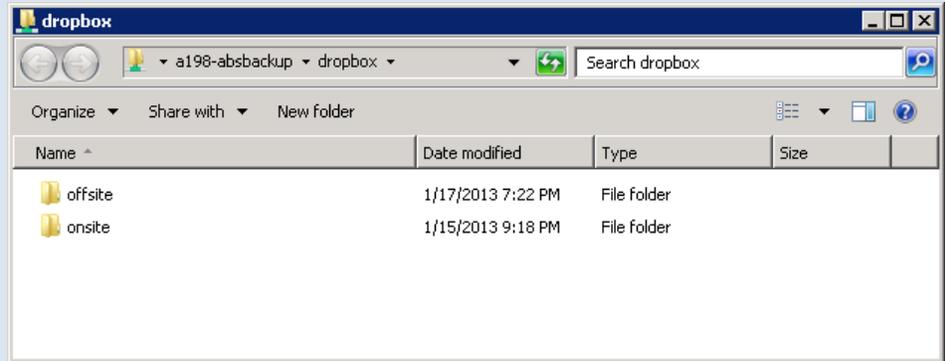
Use **offsite** folder for storing snapshots that are being replicated to the **ABS Cloud**

Use **onsite** folder for storing snapshots locally on the appliance (not replicated to the **ABS Cloud**)

- e. Double click the **name of the exchange server** you want to restore data from

- f. Select the **Image File(s)** that contain the **Exchange Database** and **Exchange Logs**

! If the **Exchange Database** and **Exchange Logs** are located in different **Recovery Images**, you will need to mount them both by repeating these steps.



Name	Date modified	Type	Size
C_VOL-b001-i001	1/17/2013 8:58 PM	ShadowProtect Incr...	167 KB
System Reserved_VOL-b001-i001.md5	1/17/2013 8:58 PM	MD5 File	1 KB
System Reserved_VOL-b001-i001	1/17/2013 8:58 PM	ShadowProtect Incr...	47 KB
C_VOL-b001-i002.md5	1/17/2013 9:58 PM	MD5 File	1 KB
C_VOL-b001-i002	1/17/2013 9:58 PM	ShadowProtect Incr...	160 KB
System Reserved_VOL-b001-i002.md5	1/17/2013 9:58 PM	MD5 File	1 KB
System Reserved_VOL-b001-i002	1/17/2013 9:58 PM	ShadowProtect Incr...	47 KB
C_VOL-b001-i003.md5	1/17/2013 10:58 PM	MD5 File	1 KB
C_VOL-b001-i003	1/17/2013 10:58 PM	ShadowProtect Incr...	152 KB
C_VOL-b001-i003-cd	1/17/2013 10:58 PM	ShadowProtect Incr...	224 KB
System Reserved_VOL-b001-i003.md5	1/17/2013 10:58 PM	MD5 File	1 KB
System Reserved_VOL-b001-i003	1/17/2013 10:58 PM	ShadowProtect Incr...	46 KB
System Reserved_VOL-b001-i003-cd	1/17/2013 10:58 PM	ShadowProtect Incr...	50 KB

i Feel free to organize the recovery images by the "date modified" for easier navigation.

The naming scheme for the images follows this format:
Volume name-Base number-Incremental number

CD = Consolidated Daily
CW = Consolidated Weekly
CM = Consolidated Monthly

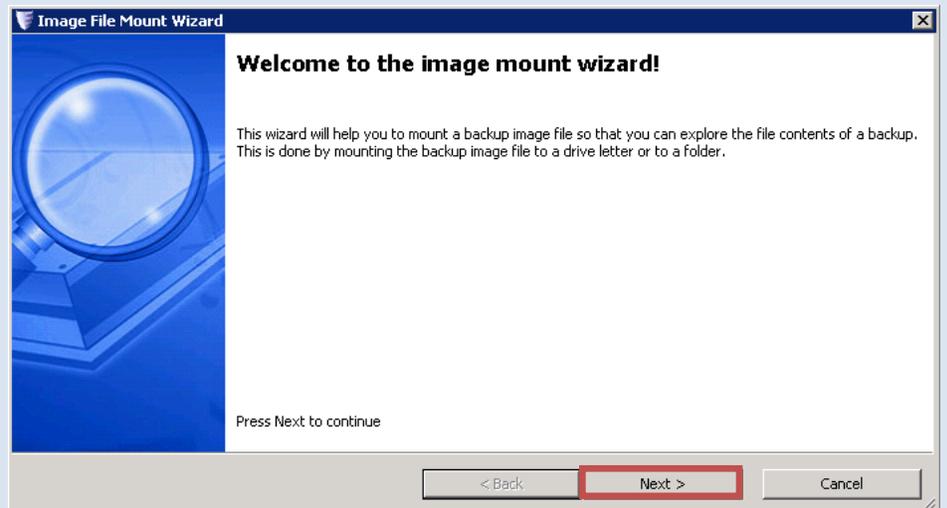
2. Mounting Recovery Image

a. Right click the **Image File**, select **Mount**

Name	Date modified	Type	Size
C_VOL-b001-i002-cd.md5	9/21/2012 12:00 AM	MD5 File	1 KB
C_VOL-b001-i002-cd	9/21/2012 12:00 AM	ShadowProtect Incremental Image	1,558 KB
System Reserved_VOL-b001-i002-cd.md5	9/21/2012 12:00 AM	MD5 File	1 KB
System Reserved_VOL-b001-i002-cd	9/21/2012 12:00 AM	ShadowProtect Incremental Image	50 KB
C_VOL-b001-i002.md5	9/20/2012 8:59 PM	MD5 File	1 KB
C_VOL-b001-i002	9/20/2012 8:59 PM	ShadowProtect Incremental Image	284 KB
System Reserved...	9/20/2012 8:59 PM	MD5 File	1 KB
System Reserved...	9/20/2012 8:59 PM	ShadowProtect Incremental Image	48 KB
System Reserved...	9/20/2012 7:59 PM	MD5 File	1 KB
System Reserved...	9/20/2012 7:59 PM	ShadowProtect Incremental Image	48 KB
C_VOL-b001-i001	9/20/2012 7:59 PM	MD5 File	1 KB
C_VOL-b001-i001	9/20/2012 7:59 PM	ShadowProtect Incremental Image	1,431 KB
System Reserved...	9/20/2012 7:27 PM	MD5 File	1 KB
System Reserved...	9/20/2012 7:27 PM	ShadowProtect Full Image	10,641 KB
System Reserved...	9/20/2012 7:27 PM	SPK File	1 KB
C_VOL-b001.spk	9/20/2012 7:27 PM	SPK File	1 KB

b. The **Image File Mount Wizard** will open

c. Click **Next**



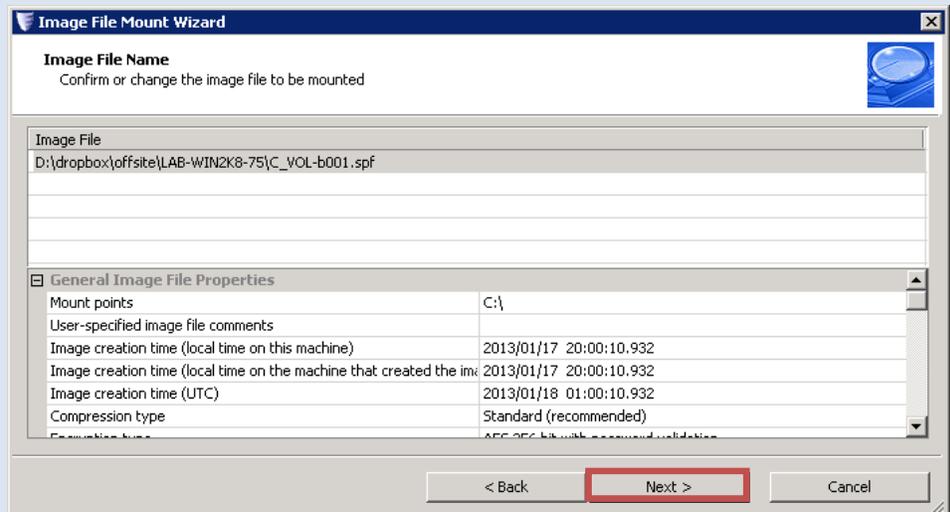
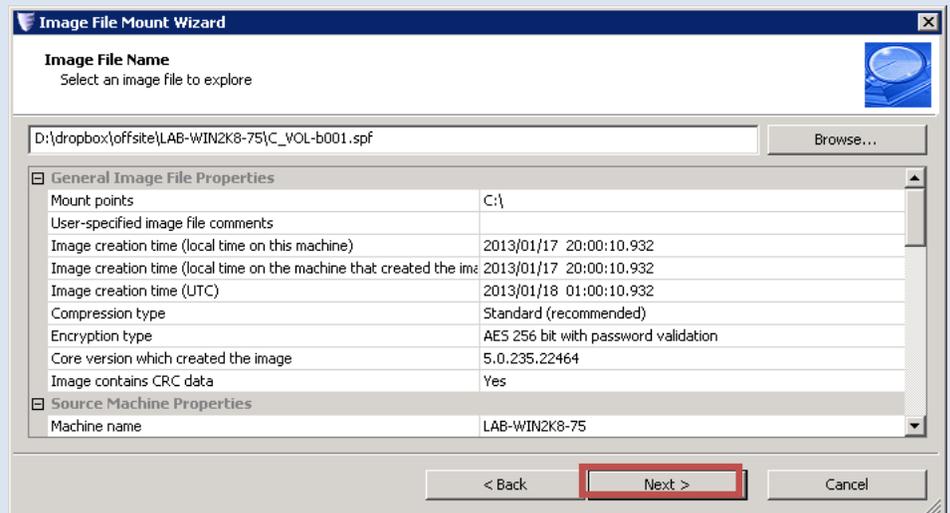
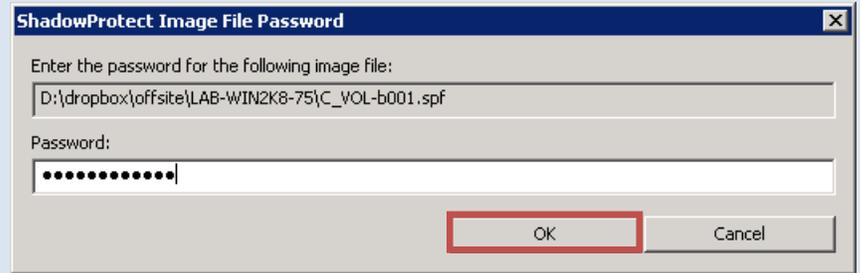
d. When prompted, type in the **ABS Encryption Password**

i Please use the same encryption password used in the initial setup of the machine. If you used the ABS provided password, you can find it in the **Activation Letter**.

e. Click **OK**

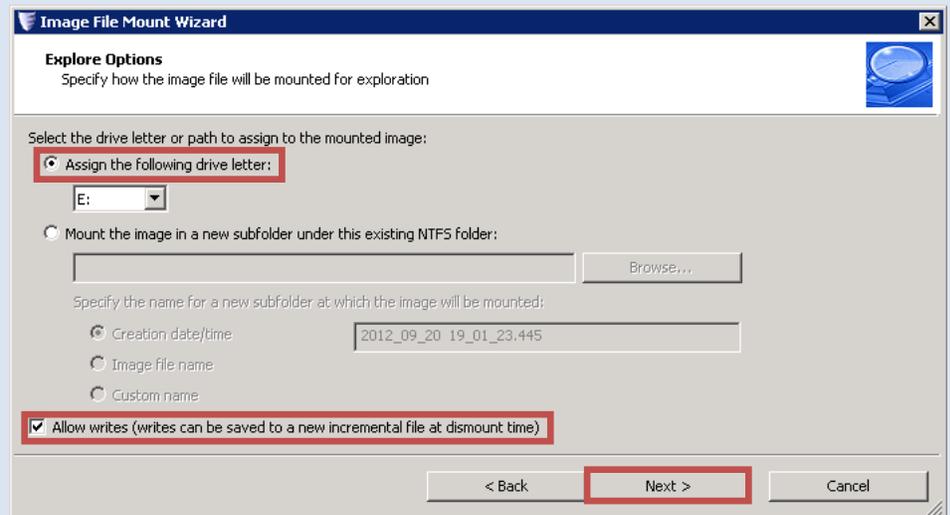
f. Click **Next**

g. Click **Next**



- h. Select **Assign the following drive letter:**
- i. Select an available drive letter from the drop down menu
- j. Select the **Allow writes** checkbox
- k. Click **Next**
- l. Click **Finish**

The recovery image will now be mounted as a local drive on the machine



Restore: Exchange Server

i This restore type is used to restore back to the original Exchange server. If you need to restore the items to a **PST** file, refer to **Restore to Personal Folder File (PST)** section of this guide.

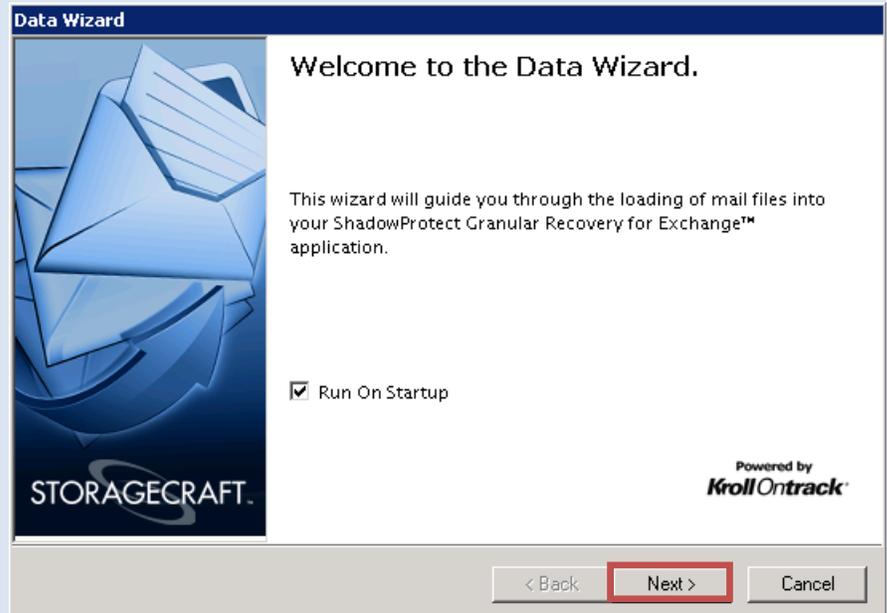
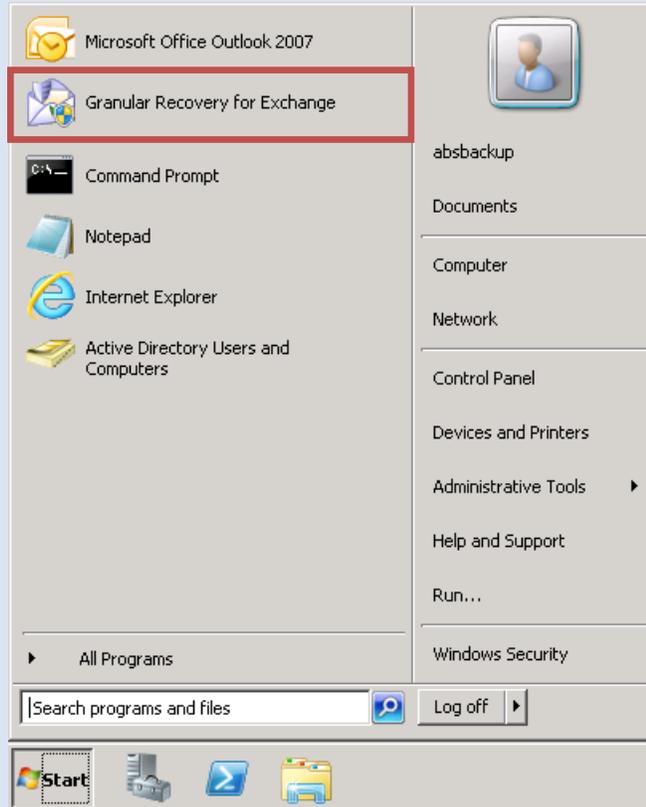
! It is recommended to be logged in as the **absbackup** network admin account when performing these steps

- a. Open **Granular Recovery for Exchange**

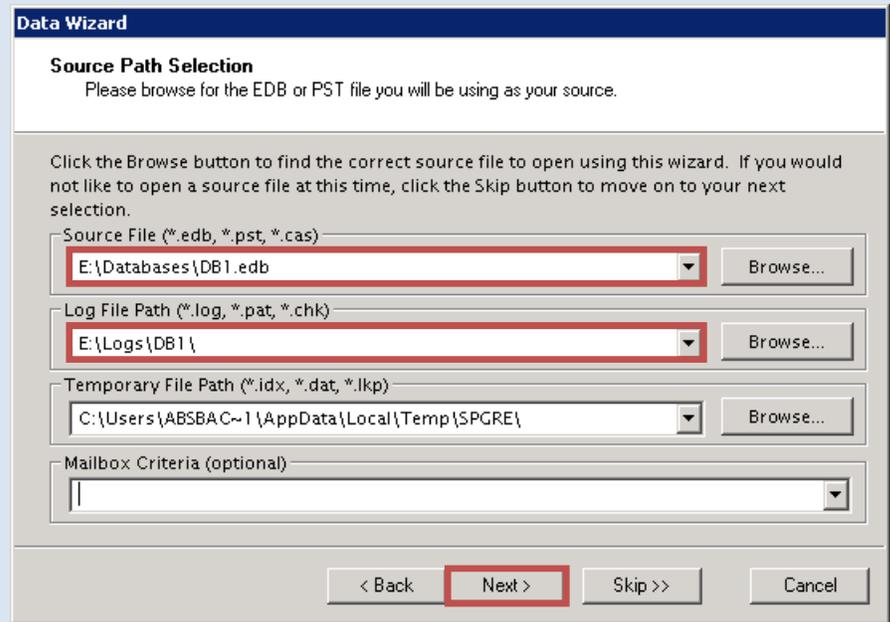
i Launch icon for **Granular Restore for Exchange** might not be located on the **Start Menu**, the default location is:

**C:\Program Files(x86)
\StorageCraft\ShadowProtect
GRE\SPGRE.exe**

- b. Click **Next**



- c. Click **Browse...** under **Source File** and navigate to the **Exchange Database** on the mounted recovery image
- d. Click **Browse...** under **Log File Path** and navigate to the **Exchange Logs** on the mounted recovery image
- e. Leave **Temporary File Path** default
- f. Click **Next**



Data Wizard

Source Path Selection
Please browse for the EDB or PST file you will be using as your source.

Click the Browse button to find the correct source file to open using this wizard. If you would not like to open a source file at this time, click the Skip button to move on to your next selection.

Source File (*.edb, *.pst, *.cas)
E:\Databases\DB1.edb

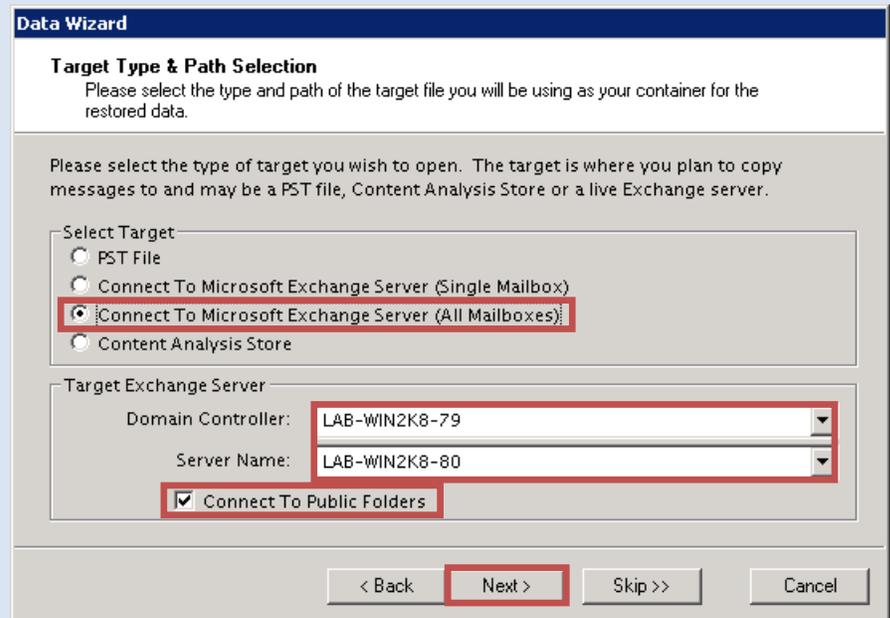
Log File Path (*.log, *.pat, *.chk)
E:\Logs\DB1\

Temporary File Path (*.idx, *.dat, *.lcp)
C:\Users\ABSBACK~1\AppData\Local\Temp\SPGRE\

Mailbox Criteria (optional)

< Back **Next >** Skip >> Cancel

- g. Select **Connect to Microsoft Exchange Server (All Mailboxes)**
- h. Type in the **Domain Controller** name
- i. Type in the **Exchange Server** name
- j. Select **Connect To Public Folders**
- k. Click **Next**



Data Wizard

Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.

Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.

Select Target

PST File

Connect To Microsoft Exchange Server (Single Mailbox)

Connect To Microsoft Exchange Server (All Mailboxes)

Content Analysis Store

Target Exchange Server

Domain Controller: LAB-WIN2K8-79

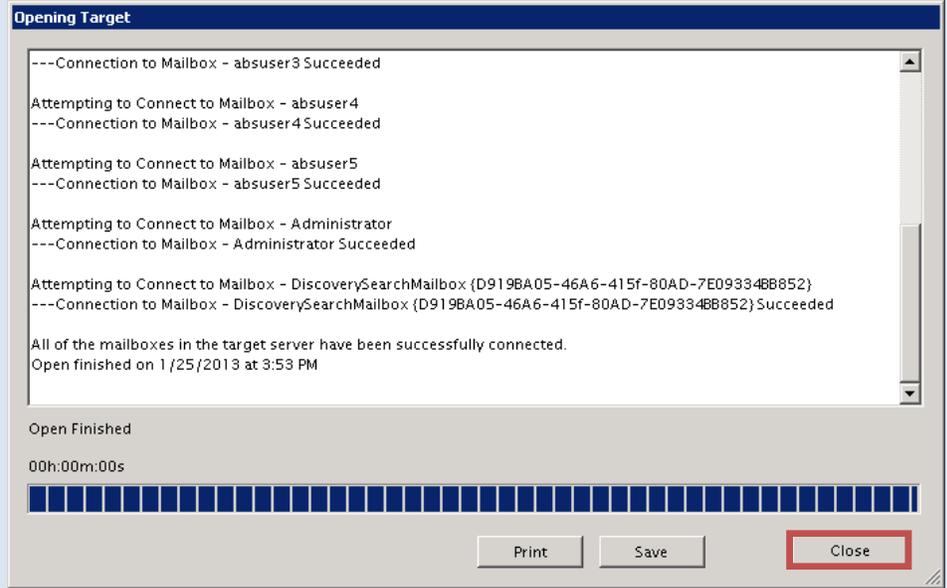
Server Name: LAB-WIN2K8-80

Connect To Public Folders

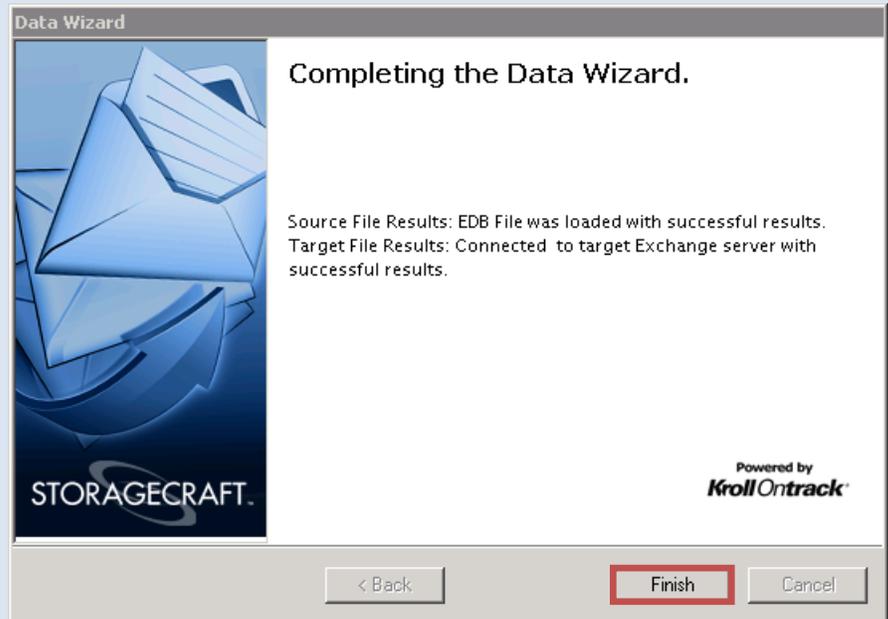
< Back **Next >** Skip >> Cancel

i **Granular Restore for Exchange** will now connect to the Exchange server. This may take a long time (depending on the total number of mailboxes on the Exchange server)

l. Click **Close**



m. Click **Finish**

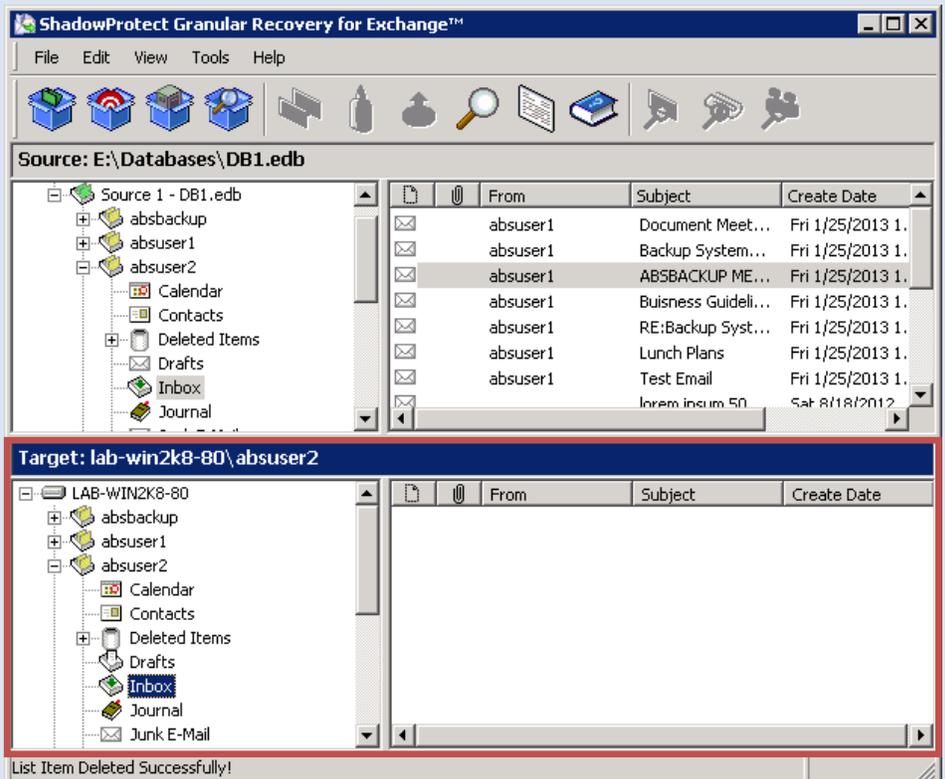
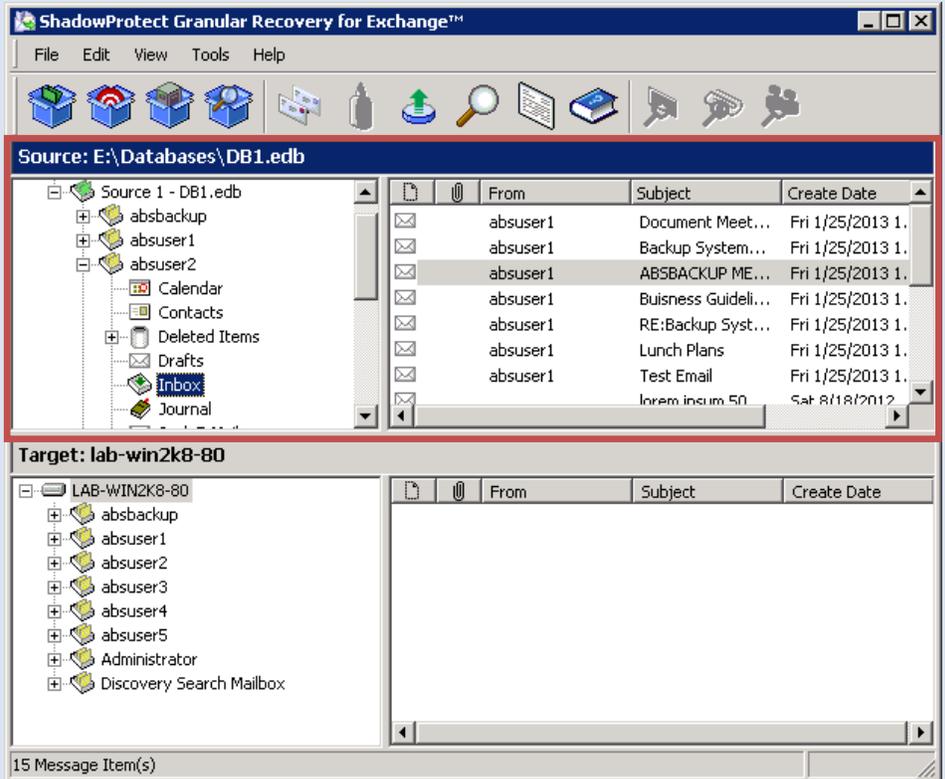


n. Under **Source (Recovery Image)**, navigate to the items that you wish to restore

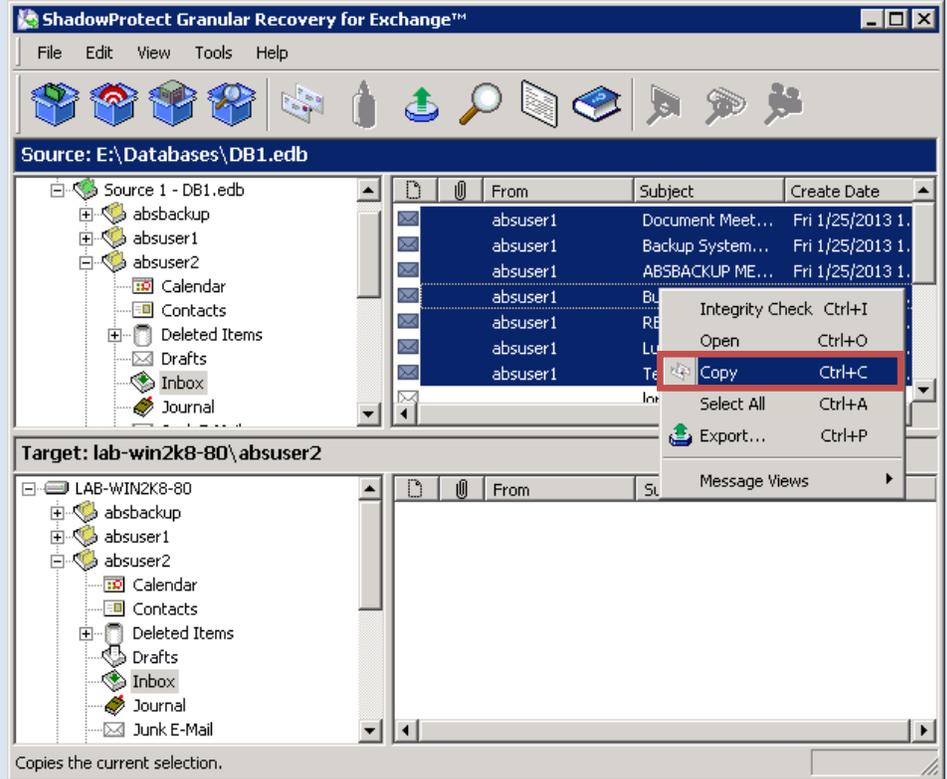
i Messages, folders, calendars, mailboxes, and Exchange database files are all supported using this restore method

o. Under **Target (Exchange Server)**, navigate to the location where you wish to restore the email message to

i You are able to create, rename, and delete items in the target field. These changes will reflect on the Exchange server in real-time.

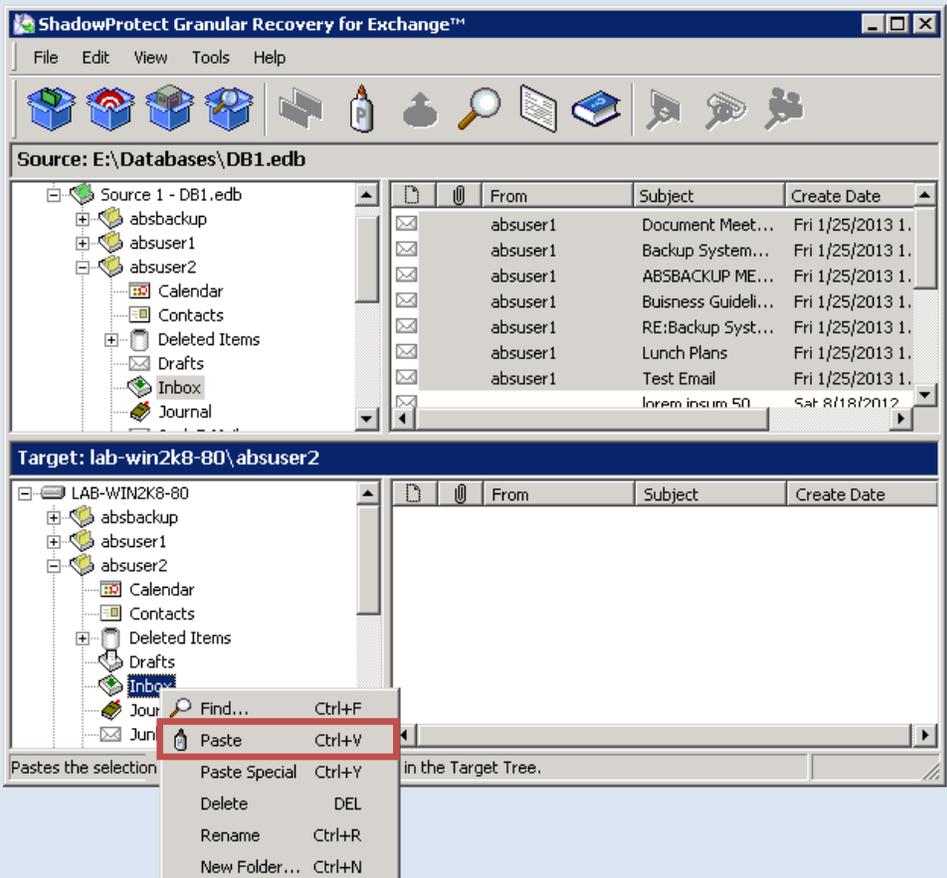


- p. Select the items that you wish to restore
- q. Right click the items, click **Copy**



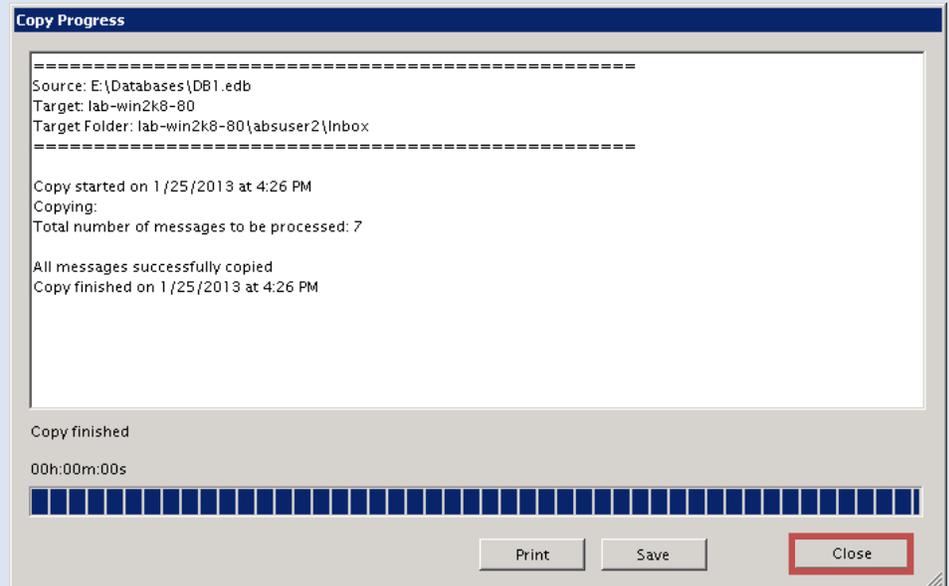
- r. Right click the location where you wish to restore the items
- s. Click **Paste**

i Any items copied that already exist under the **Target** will be marked as a **duplicate** and not be copied over



t. Click **Close**

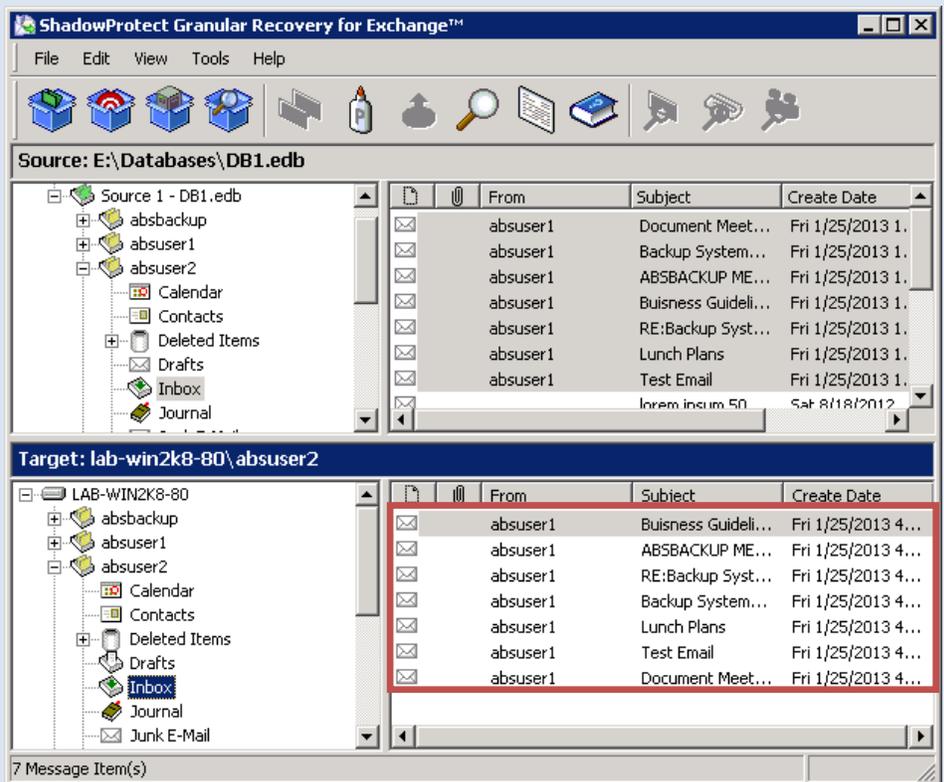
i Any duplicate items will be displayed in this window



u. The restored items will now appear in the selected restore location

The restore of mail items is now **Complete**.

Proceed to **Dismounting Recovery Image** section of the guide to finish the process.



Restore: Personal Folder File (PST)

i This restore type is used to restore to an existing or newly created **PST file**. If you need to restore items directly to an Exchange server, refer to **Restore to Exchange Server** section of this guide

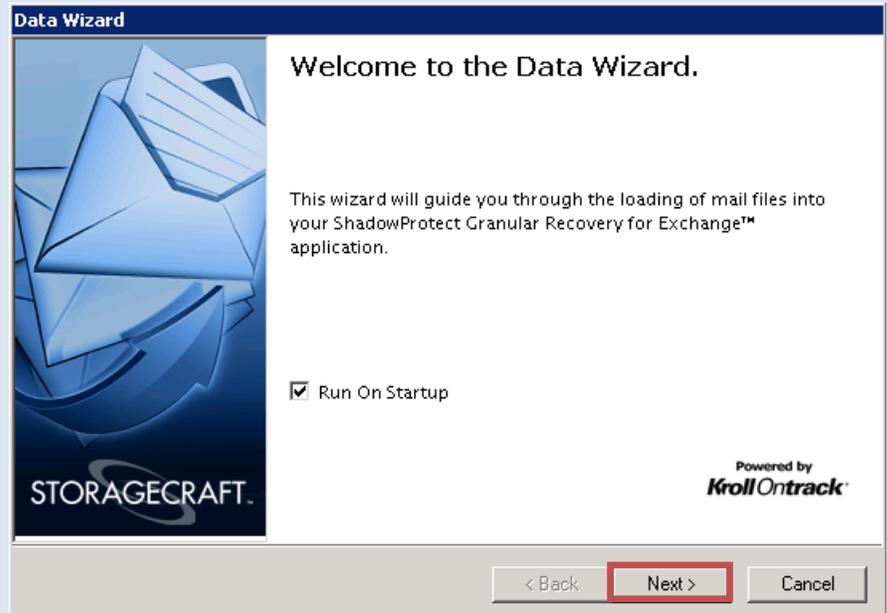
! It is recommended to be logged in as the **absbackup** network admin account when performing these steps

- a. Open **Granular Recovery for Exchange**

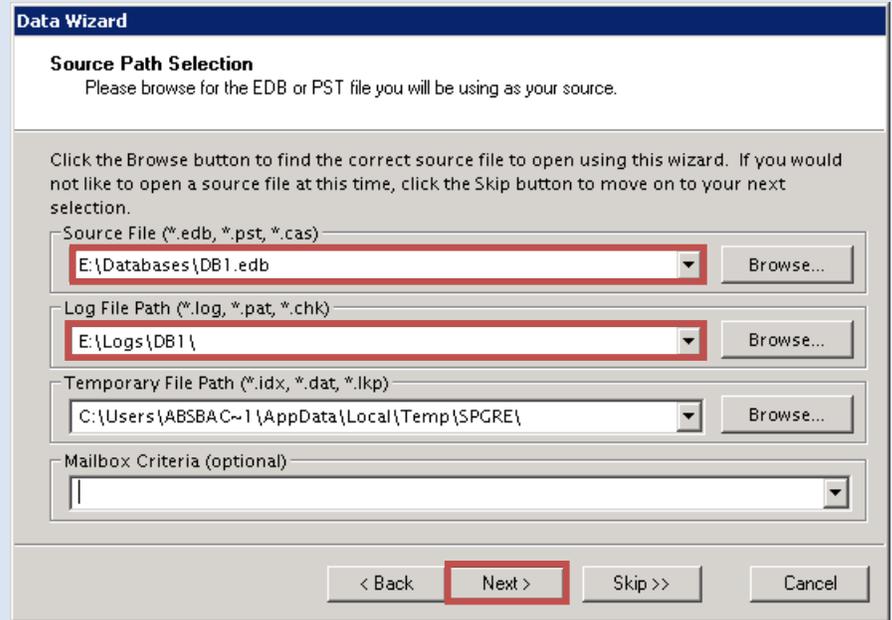
i Launch icon for **Granular Restore for Exchange** might not be located on the **Start Menu**, the default location is:

**C:\Program Files(x86)
\StorageCraft\ShadowProtect
GRE\SPGRE.exe**

- b. Click **Next**



- c. Click **Browse...** under **Source File** and navigate to the **Exchange Database** on the mounted recovery image
- d. Click **Browse...** under **Log File Path**, navigate to the **Exchange Logs** on the mounted recovery image
- e. Leave **Temporary File Path** default
- f. Click **Next**



Data Wizard

Source Path Selection
Please browse for the EDB or PST file you will be using as your source.

Click the Browse button to find the correct source file to open using this wizard. If you would not like to open a source file at this time, click the Skip button to move on to your next selection.

Source File (*.edb, *.pst, *.cas)
E:\Databases\DB1.edb [Browse...]

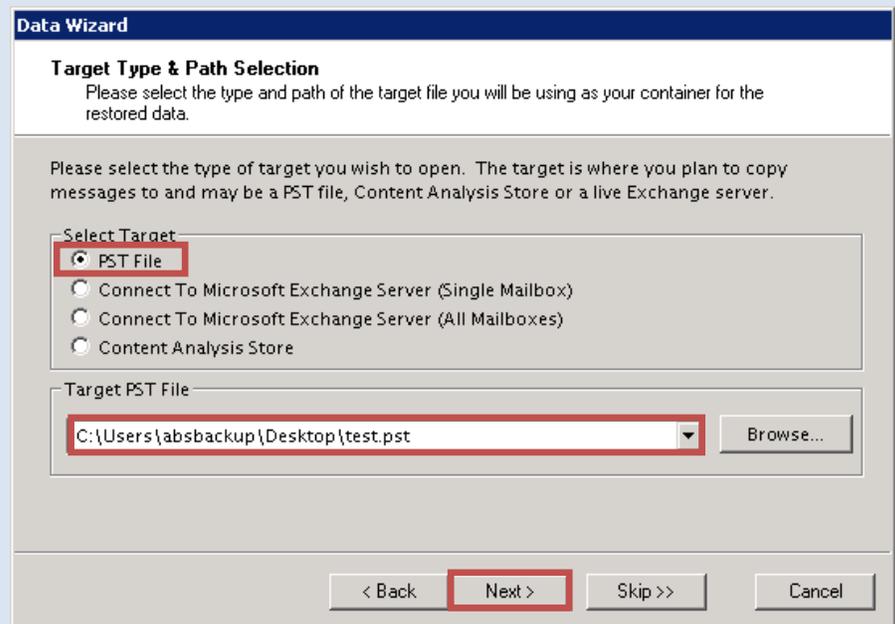
Log File Path (*.log, *.pat, *.chk)
E:\Logs\DB1\ [Browse...]

Temporary File Path (*.idx, *.dat, *.lcp)
C:\Users\ABSBACK~1\AppData\Local\Temp\SPGRE\ [Browse...]

Mailbox Criteria (optional)
[]

< Back [Next >] Skip >> Cancel

- g. Select **PST File**
- h. Click **Browse...** navigate to an existing PST folder or create a new one
- i. Click **Next**



Data Wizard

Target Type & Path Selection
Please select the type and path of the target file you will be using as your container for the restored data.

Please select the type of target you wish to open. The target is where you plan to copy messages to and may be a PST file, Content Analysis Store or a live Exchange server.

Select Target:
 PST File
 Connect To Microsoft Exchange Server (Single Mailbox)
 Connect To Microsoft Exchange Server (All Mailboxes)
 Content Analysis Store

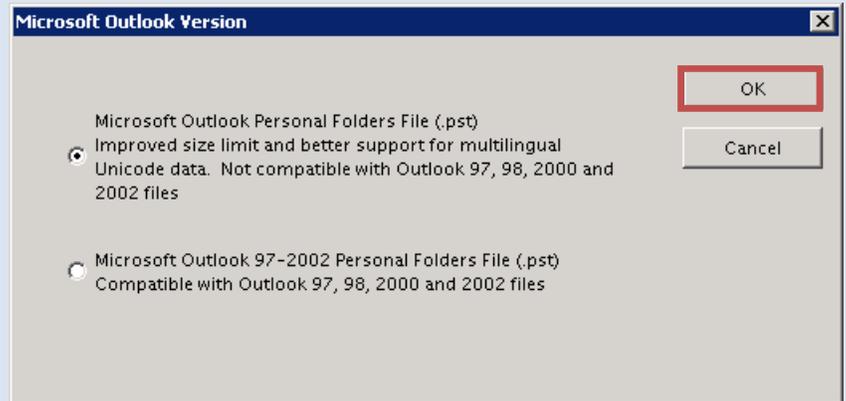
Target PST File
C:\Users\absbackup\Desktop\test.pst [Browse...]

< Back [Next >] Skip >> Cancel

j. Select version of Outlook that the PST will be attached to

k. Click **OK**

i Selecting the **Microsoft Outlook 97-2002...** option creates a 1.8GB limit on the PST file

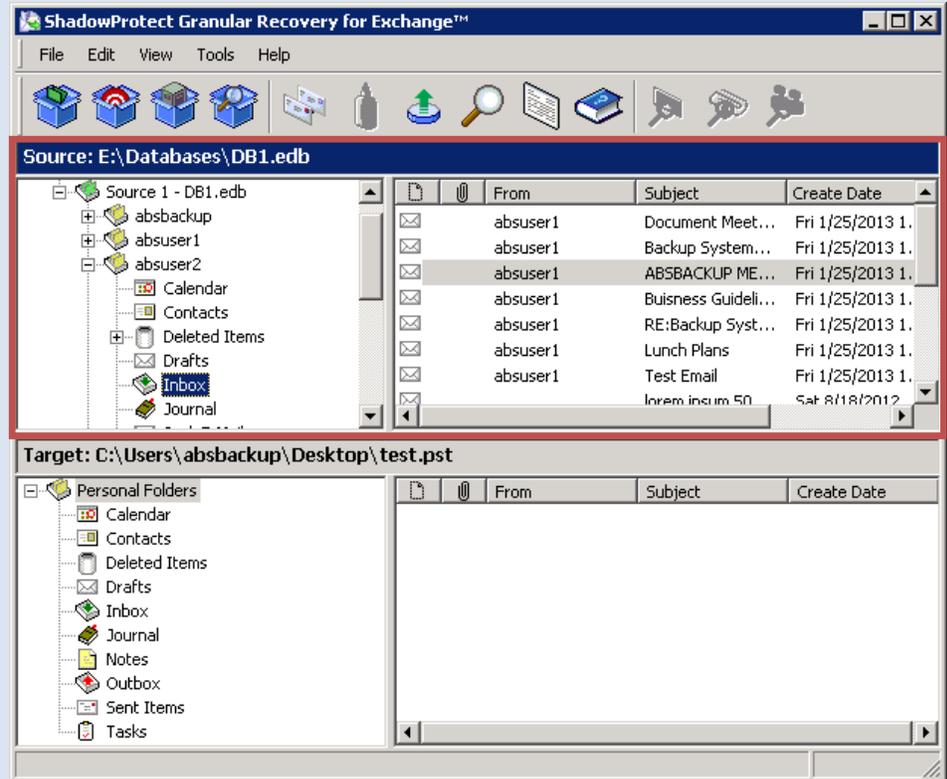


l. Click **Finish**

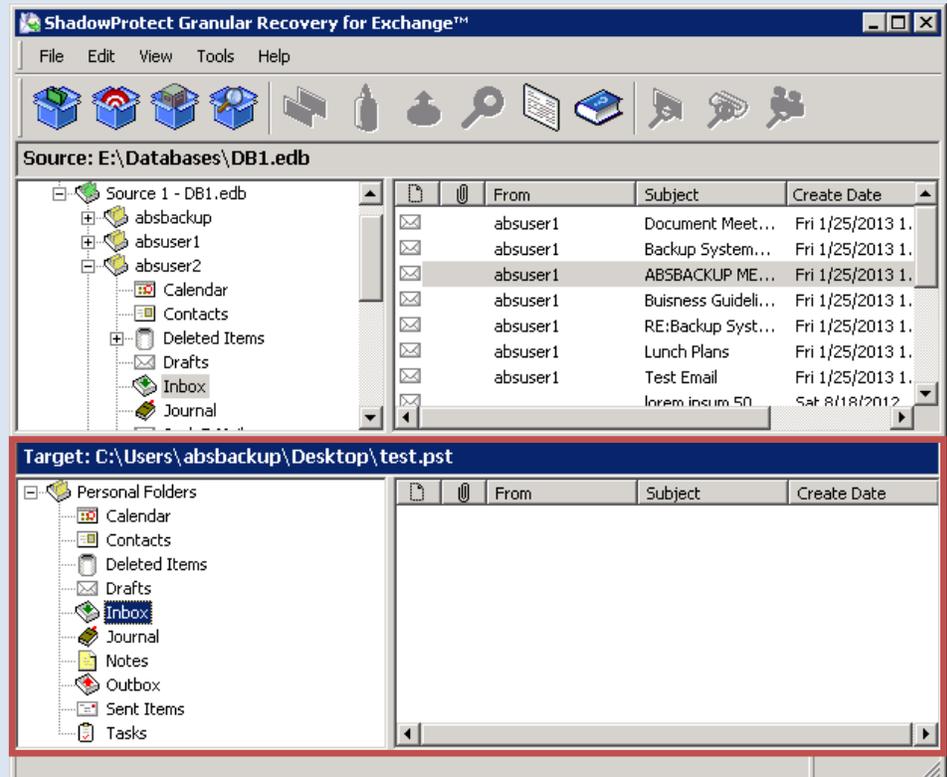


m. Under **Source (Recovery Image)**, navigate to the items that you wish to restore

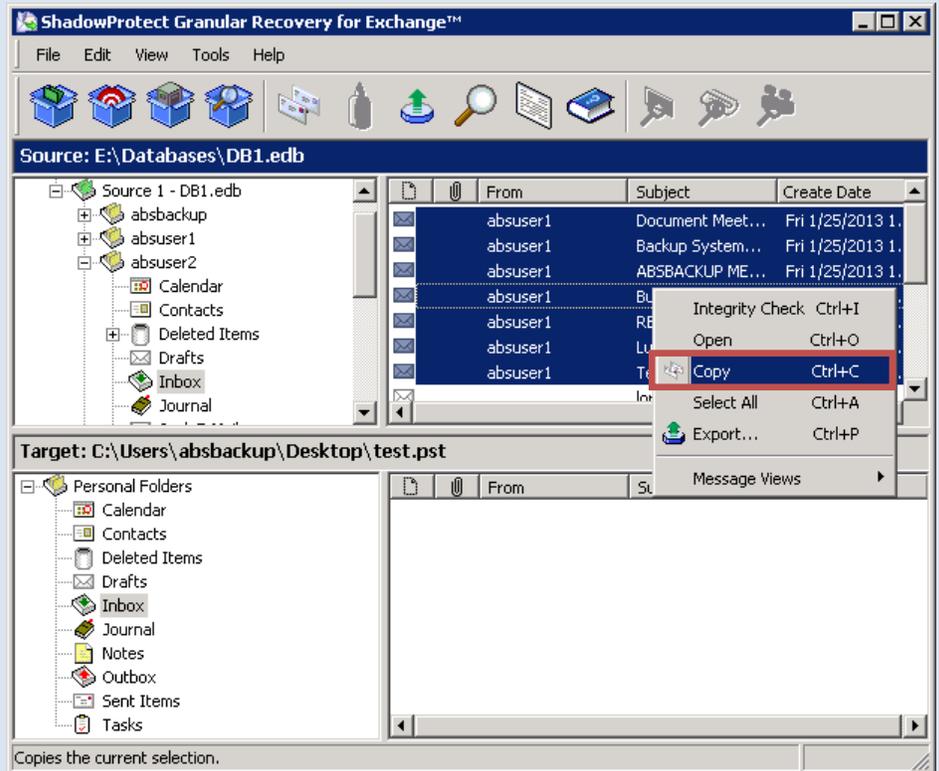
i Messages, folders, calendars, mailboxes, and Exchange database files are all supported using this restore method



n. Under **Target (PST File)**, navigate to the location where you wish to restore the email message to

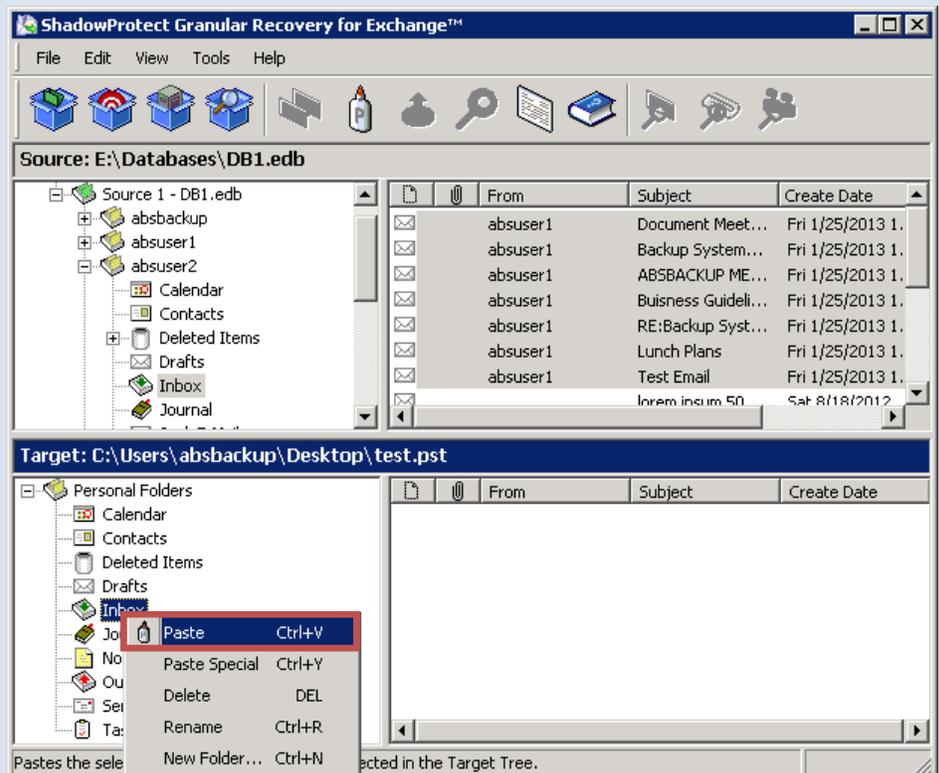


- o. Select the items that you wish to restore
- p. Right click the items, click **Copy**



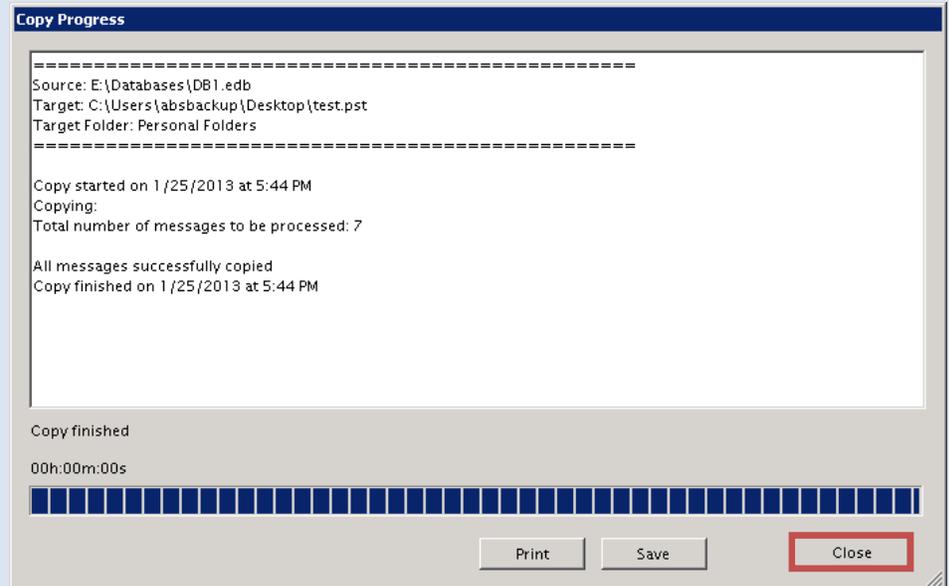
- q. Right click the location where you wish to restore the items
- r. Click **Paste**

i Any items copied that already exist under the **Target** will be marked as a **duplicate** and not be copied over



s. Click **Close**

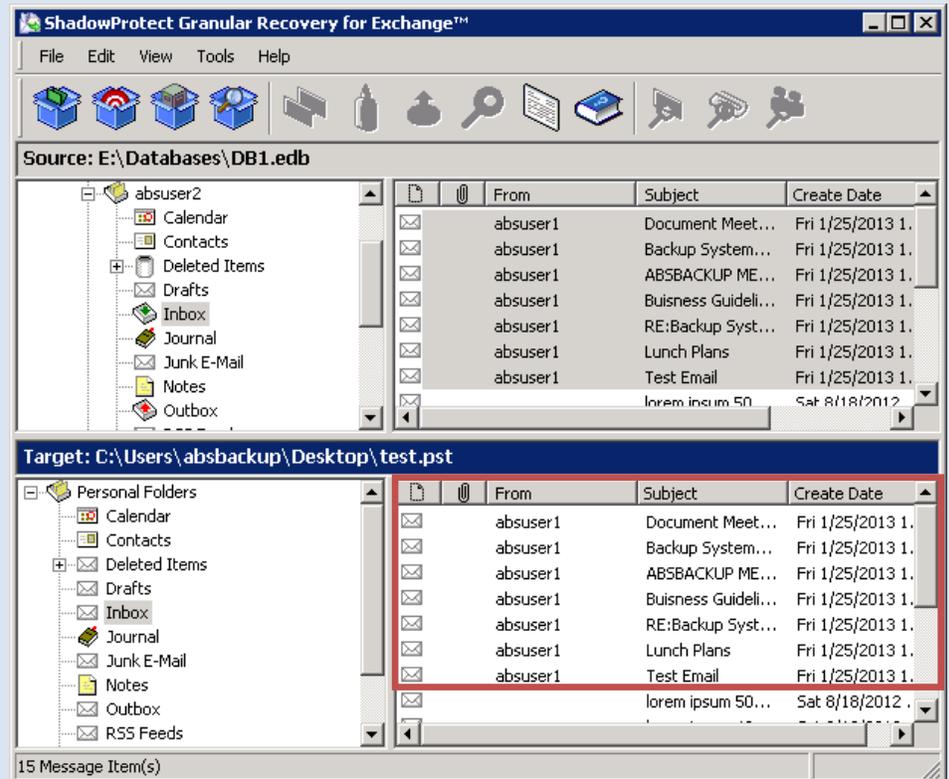
i Any duplicate items will be displayed in this window



t. The restored items will now appear in the selected restore location

The restore of mail items is now **Complete**.

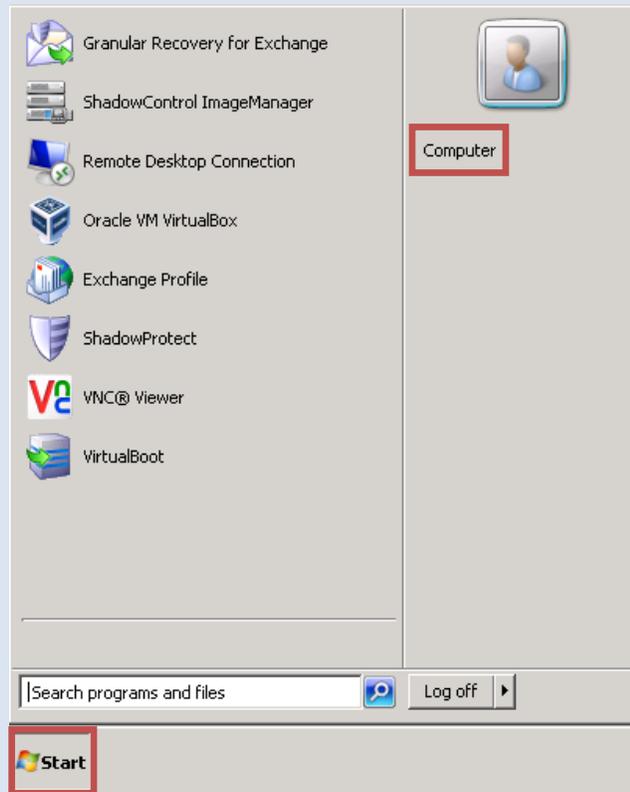
Proceed to **Dismounting Recovery Image** section of the guide to finish the process



Restore: Dismounting the Recovery Image as Local Drive

i Perform these steps on the client machine that has the recovery image mounted

- a. Click the **Start Menu**
- b. Click **Computer**



- c. Right click the mounted drive
- d. Select **Quick Dismount**

The dismount of the **Image File** is now **Complete**

