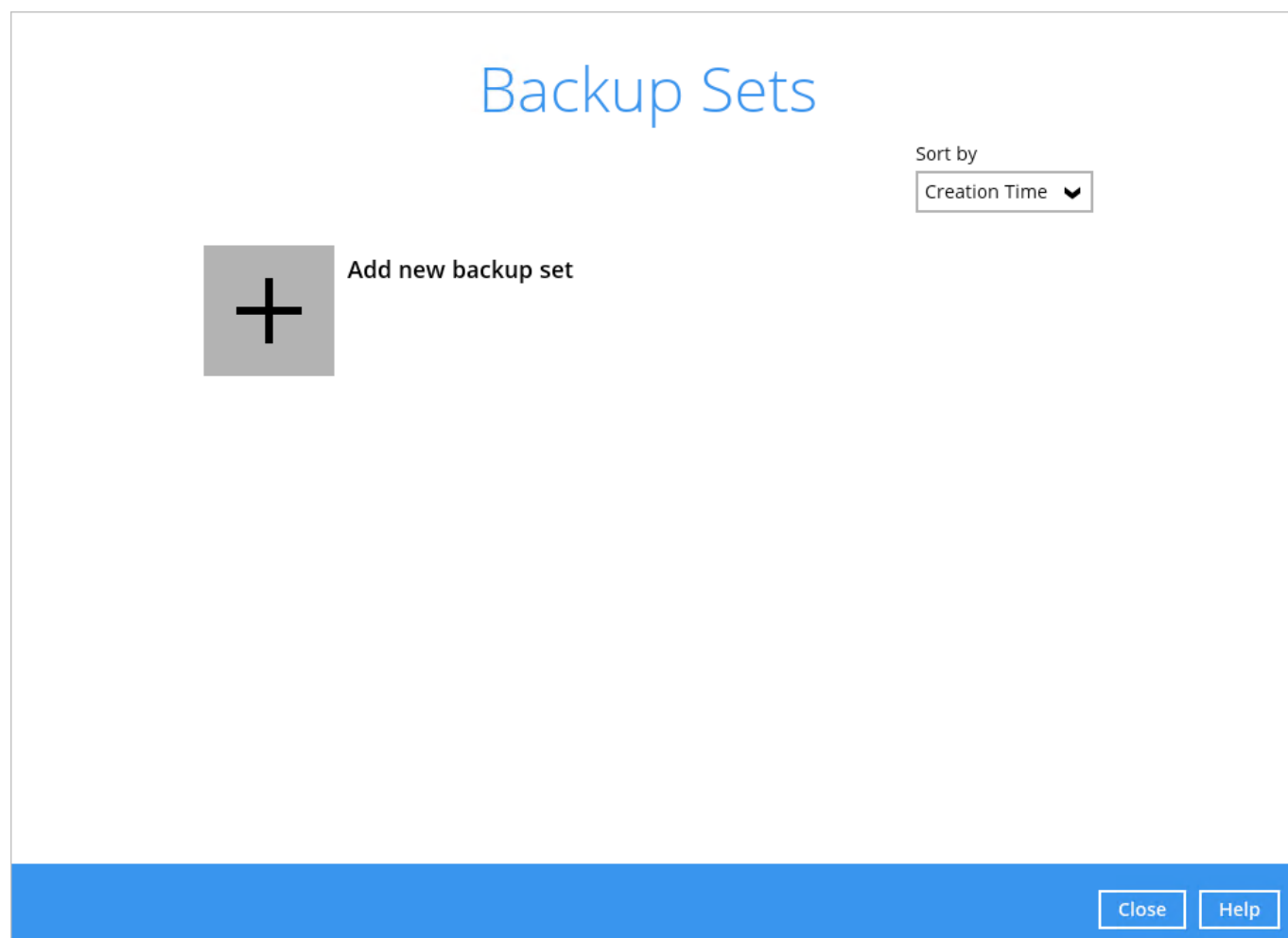# 4.2 Mail-Level Backup and Restore On Exchange Server Database Availability Group (DAG)

4.2.1 Create Mail Level Backup Set

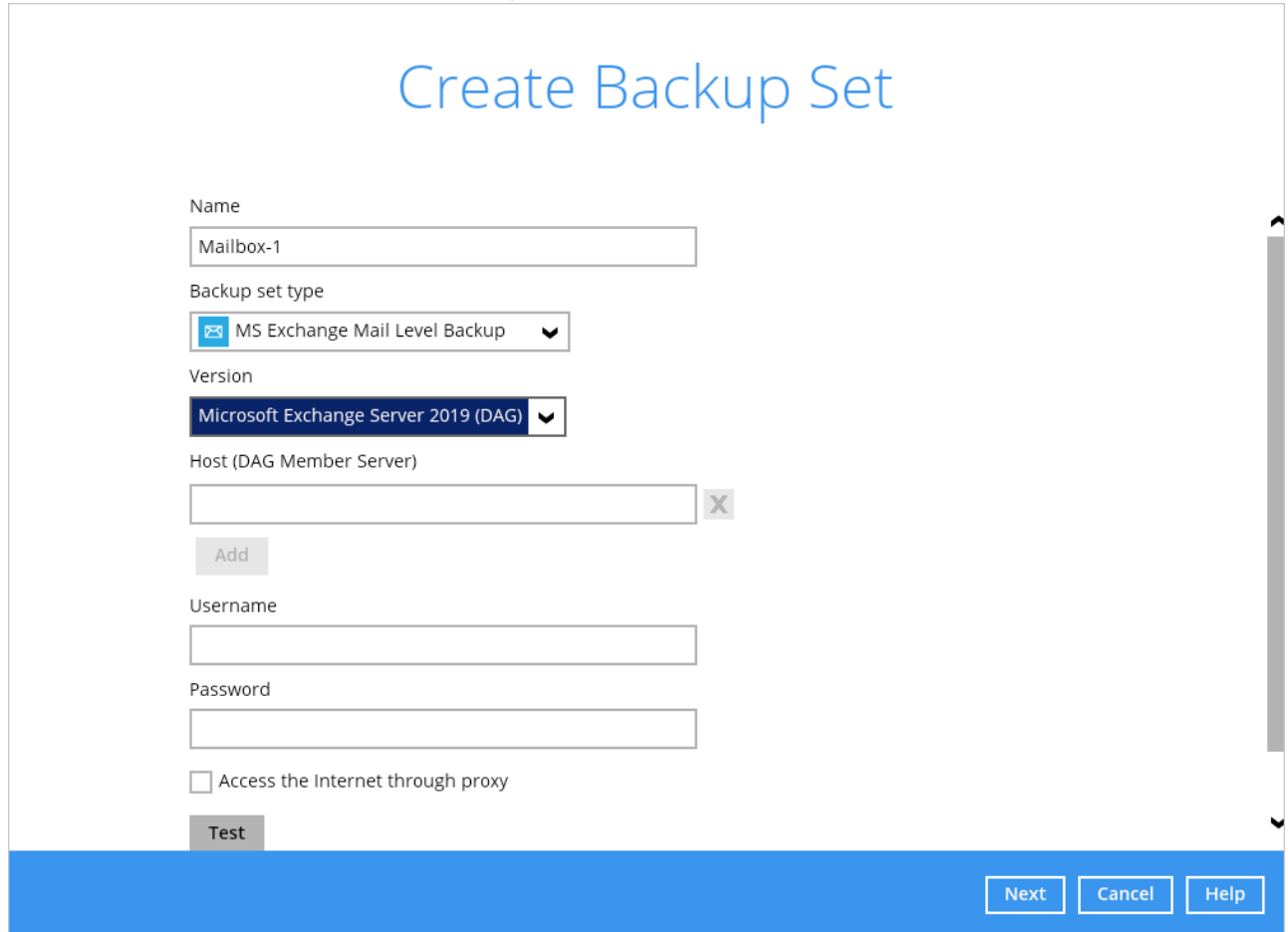4.2.1.1. Click the **Backup Sets** icon on the main interface of AhsayOBM.

4.2.1.2. Create a new backup set by clicking the "+" icon next to Add new backup set.

4.2.1.3. Select the Backup set type as **MS Exchange Mail Level Backup**. The system will automatically detect and select the Exchange Server DAG version, make sure the version selected is correct.

- Enter the hostname of all the DAG Member Server, and the username and password of the Windows user account used for backup.

- Check the "Access the Internet through proxy" if required.

4.2.1.4. In the Backup Source menu, select the mailboxes or public folders for backup. You can click to expand the mailbox or public folder to select which mail folder to back up. You can also click Show mails to select individual mail to back up. Click Next to proceed when you are done.

4.2.1.5. In the Schedule menu, you can configure a backup schedule for backup job to run automatically at your specified time interval. By default, the Run scheduled backup for this backup set option is disabled. Enable it then click the "+" icon next to Add new schedule. Click Next to proceed when you are done setting.

Schedule

Run scheduled backup for this backup set

Off

Previous   Next   Cancel   Help

4.2.1.6. In the Destination menu, select a backup destination where the backup mail will be stored. Click the "+" icon next to **Add new storage destination / destination pool**.

Destination

Backup mode

[Sequential ▼]

Existing storage destinations

[+] Add new storage destination / destination pool

∧ ∨

[Previous] [Next] [Cancel] [Help]

4.2.1.7. Select the destination storage, then click OK to proceed.

New Storage Destination / Destination Pool

Name

[AhsayCBS]

Destination storage

[Ⓒ AhsayCBS ▼]

[OK] [Cancel] [Help]

4.2.1.8. Click Next on the Destination menu page to proceed.

4.2.1.9. In the Encryption window, the default Encrypt Backup Data option is enabled with an encryption key preset by the system which provides the most secure protection.

4.2.1.10. You can choose from one of the following three Encryption Type options:

- **Default** – an encryption key with 44 alpha numeric characters will be randomly generated by the system

- **User password** – the encryption key will be the same as the login password of your AhsayOBM at the time when this backup set is created. Please be reminded that if you change the AhsayOBM login password later, the encryption keys of the backup sets previously created with this encryption type will remain unchanged.

- **Custom** – you can customize your encryption key, where you can set your own algorithm, encryption key, method and key length.

> For best practice on managing your encryption key, refer to the following article: Best Practices for Managing Encryption Key on AhsayOBM or AhsayACB

4.2.1.11. If you have enabled the Encryption Key feature in the previous step, the following pop-up window shows, no matter which encryption type you have selected.

The pop-up window has the following three options to choose from:

- **Unmask encryption key** – The encryption key is masked by default. Click this option to show the encryption key.

- **Copy to clipboard** – Click to copy the encryption key, then you can paste it in another location of your choice.

- **Confirm** – Click to exit this pop-up window and proceed to the next step

4.2.1.12. Enter the Windows login credentials for user authentication. Click Next to proceed. The User name should be entered in the following format "user@hostname", i.e. administrator@ahsay.com

> The Windows User Authentication interface will show only if scheduled backup is enabled and set successfully.

4.2.1.13. The following screen shows when the new backup set is created successfully.

Congratulations!

"MS Backup 2016 Mail Level BAckup (DAG)" is successfully creat...

Backup now   Close

4.2.1.14. Click Backup now to start a backup immediately, or run a backup job later by following the instructions in Run Mail Level Backup Job.

4.2.2 Run Mail Level Backup Job

As mentioned in the Requirement section of this guide, if you choose to back up an Exchange DAG setup by installing AhsayOBM on each DAG members, only a scheduled backup that is performed on all DAG members at the scheduled time, will be considered a complete backup. AhsayOBM on all DAG members will start a backup, based on the scheduled time of the backup set at the same time.
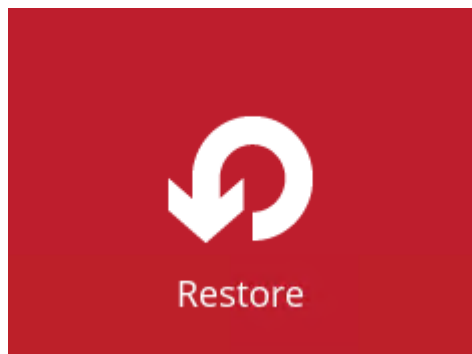
A manual backup performed only on individual DAG member will not be considered complete.

Please refer to the Scheduled Backup for Exchange Server in Data Availability Group (DAG) Option for details.

4.2.3 Restore Mail Level Backup

Below are the steps of the restore process for mail-level backup in DAG.

4.2.3.1. In the AhsayOBM main interface, click the Restore icon.

4.2.3.2. Select the backup set that you would like to restore mail from.

4.2.3.3. Select the backup destination that contains the mail(s) that you would like to restore.

4.2.3.4. Click to expand the menu tree to select which mailbox to restore. You can also select mail item(s) from a specific backup job or all mail items that you have backed up to restore. Click Next to proceed.

Select Your Mail Objects To Be Restored

Select what to restore

| Choose from files as of job ⌄ | 03/05/2019 ⌄ | Latest ⌄ |

Show filter

Folders	Subject	Date modified	Size
⊟ 🔴 AhsayCBS			
⊟ ☐ 10.16.6.81			
⊟ ☐ Mailboxes			
⊞ ☑ 👤 backup@xch16			

< ▮▮▮▮ >

Search

Items per page | 50 ⌄ | Page | - ⌄

[Previous] [Next] [Cancel] [Help]

4.2.3.5. Select to restore the mail to their Original location, Alternate location or to an Alternate host.

- **Restore to Original Location** - Select the **Original location** option. If you would like to modify the Verify checksum of in-file delta files setting, click **Show advanced option**. Then press **Next** to proceed.

Choose Where The Mail Objects To Be Restor...

Restore mail objects to

(●) Original location
(○) Alternate location
(○) Alternate host

Show advanced option

Previous   Next   Cancel   Help

Choose Where The Mail Objects To Be Restor...

Restore mail objects to

(●) Original location
(○) Alternate location
(○) Alternate host

[ ] Verify checksum of in-file delta files during restore

Hide advanced option

Previous   Next   Cancel   Help

- **Restore to Alternate Mailbox** - You can choose to restore mailbox item(s) to another mailbox in the same Exchange server. Select the **Alternate location** option. If you would like to modify the Verify checksum of in-file delta files setting, click **Show advanced option** then press **Next**. Select the desired mailbox destination, then press Next to proceed.

Choose Where The Mail Objects To Be Restor…

Restore mail objects to

◯ Original location
⦿ Alternate location
◯ Alternate host

Show advanced option

[Previous] [Next] [Cancel] [Help]

Alternate Location

Host

| 10.16.6.81 |

| 10.16.6.82 |

User

| Administrator@xch16dag.ahsay.com ⌄ |

Administrator@xch16dag.ahsay.com
backup@xch16dag.ahsay.com
user01@xch16dag.ahsay.com
user02@xch16dag.ahsay.com
user03@xch16dag.ahsay.com

[Previous] [Next] [Cancel] [Help]

- **Restore to Alternate Host** - You can also choose to restore mailbox item(s) to another mailbox in another Exchange server of the same version. Select the **Alternate host** option. Enter the host, username and password of the alternate Exchange server. If you will access the internet through proxy, check the box beside it and set the configuration for the proxy server

and click Save. If you would like to modify the Verify checksum of in-file delta files setting, click **Show advanced option**.

Choose Where The Mail Objects To Be Restor…

Restore mail objects to
○ Original location
○ Alternate location
● Alternate host

Host

10.16.6.81

Username

backup

Password

••••••

☐ Access the Internet through proxy

Test

Show advanced option

Previous   Next   Cancel   Help

Proxy (HTTP)

IP address   Port

Login ID

Password

Test connection

Save   Cancel

Select the desired mailbox destination then press Next proceed.

Alternate Location

Host

10.16.6.81

User

Administrator@xch16dag.ahsay.com ▼

Administrator@xch16dag.ahsay.com
backup@xch16dag.ahsay.com
user01@xch16dag.ahsay.com
user02@xch16dag.ahsay.com
user03@xch16dag.ahsay.com

Previous | Next | Cancel | Help

Please refer to the Limitation part to check for the limitation of the restore process.

4.2.3.6. Select the temporary directory for storing temporary files, such as delta files when they are being merged, click Restore to start the restoration.

4.2.3.7. The following screen with the text Restore Completed Successfully shows when the restoration is completed.