Ahsay Backup

Ahsay Online Backup Manager v7

Quick Start Guide for Windows

Ahsay Systems Corporation Limited

31 July 2019

A wholly owned subsidiary of
Ahsay Backup Software Development Company Limited
HKEx Stock Code: 8290

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Revision History

Date	Descriptions	Type of modification
14 September 2018	Added requirement of Antivirus Exclusion for Ch.2.3; Updated Overview of backup process for Ch.9	New/ Modification
31 July 2019	Added Ch 7 AhsayOBM Overview	New

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1 Overview

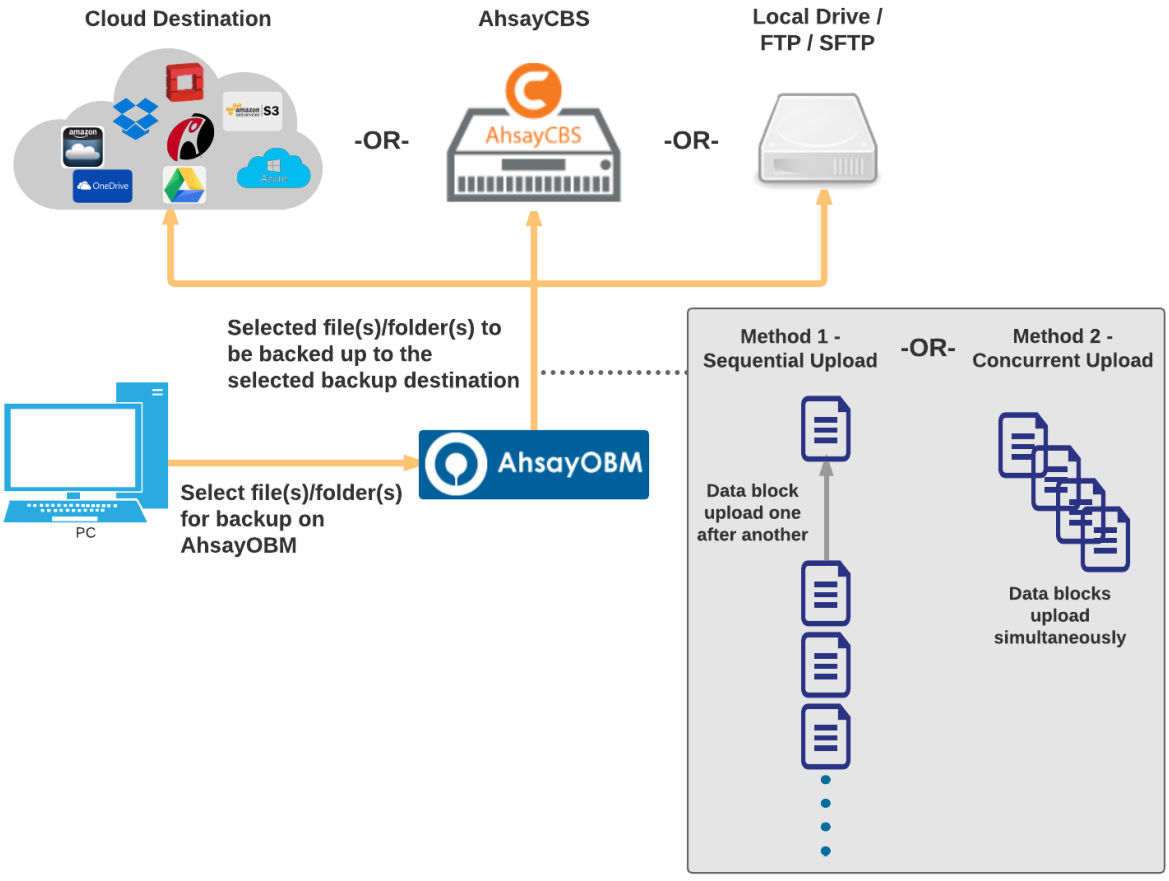
What is this software?

Ahsay brings you specialized client backup software, namely AhsayOBM, to provide a comprehensive backup solution for protecting file(s) / folder(s) on your machine, with a wide variety of backup destinations (major cloud storage service providers, FTP/SFTP, local drive, etc.) of your choice.

System Architecture

Below is the system architecture diagram illustrating the major elements involved in the backup process among the backup machine, AhsayOBM and AhsayCBS.

In this user guide, we will focus on the software installation, as well as the end-to-end backup and restore process using the AhsayOBM as a client backup software.



2 Requirements for AhsayOBM on Windows

Hardware Requirements

Refer to the link below for details of the minimum and recommended requirements for installing AhsayOBM:
FAQ: Ahsay Hardware Requirement List (HRL) for version 7.3 or above

Software Requirements

Refer to the following article for the list of compatible operating systems and Hyper-V platforms:
FAQ: Ahsay Software Compatibility List (SCL) for version 7.3 or above

Refer to the following article for the list of compatible operating system for OpenDirect and Granular Restore:
FAQ: Ahsay Software Compatibility List (SCL) for Granular and OpenDirect Restore

Antivirus Exclusion Requirement

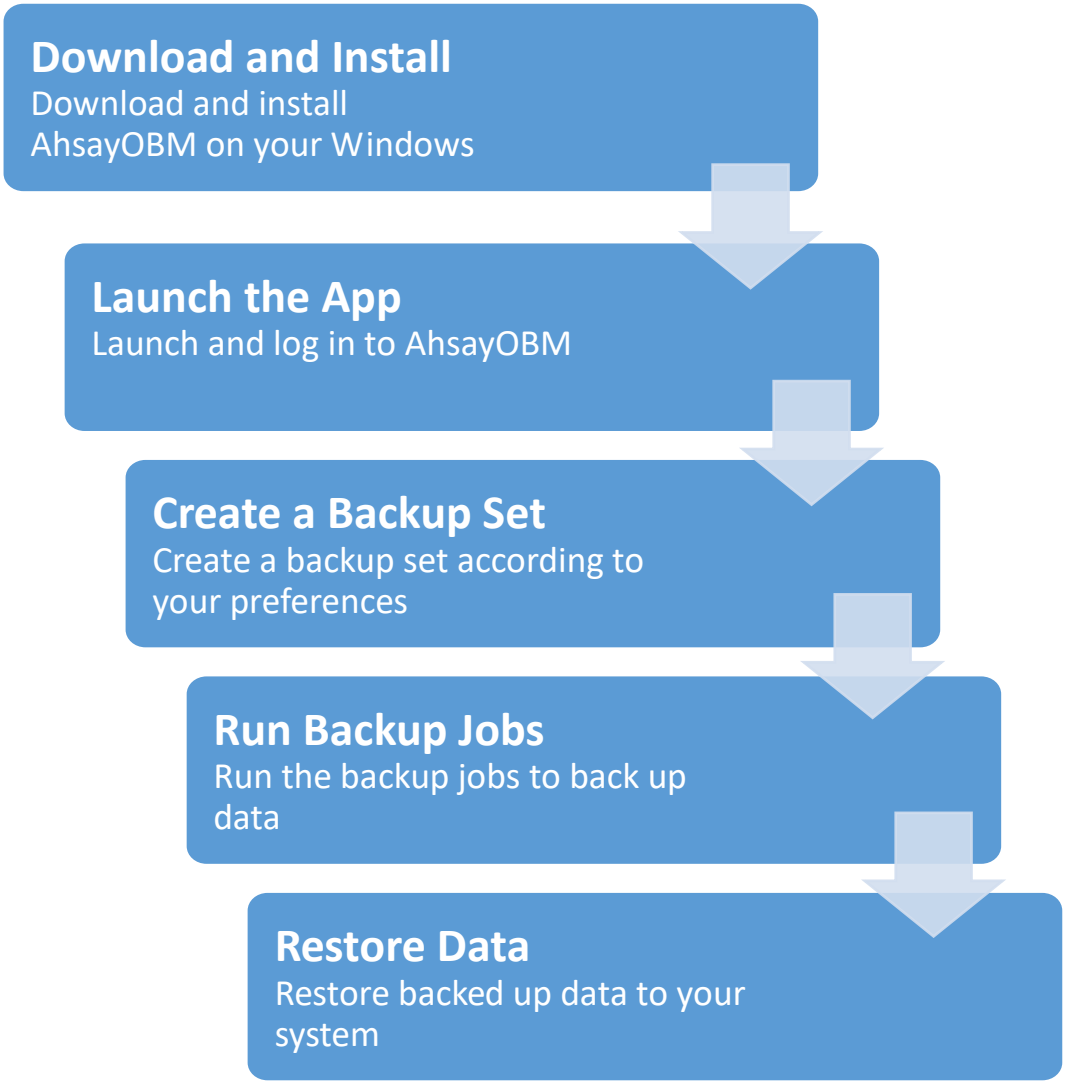
To optimize performance of AhsayOBM on Windows, and to avoid conflict with your antivirus software, refer to the following KB article the list of processes and directory paths that should be added to all antivirus software white list / exclusion list:
FAQ: Suggestion on antivirus exclusions to improve performance of Ahsay software on Windows

NOTE

For AhsayOBM version 7.17 or above, the bJW.exe process is automatically added to Windows Defender exclusion list for Windows 10 and 2016, during installation / upgrade via installer or upgrade via AUA.

3 Get Started with AhsayOBM

This quick start guide will walk you through the following 5 major parts to get you started with using AhsayOBM.



4 OpenDirect Restore

What is OpenDirect Restore?

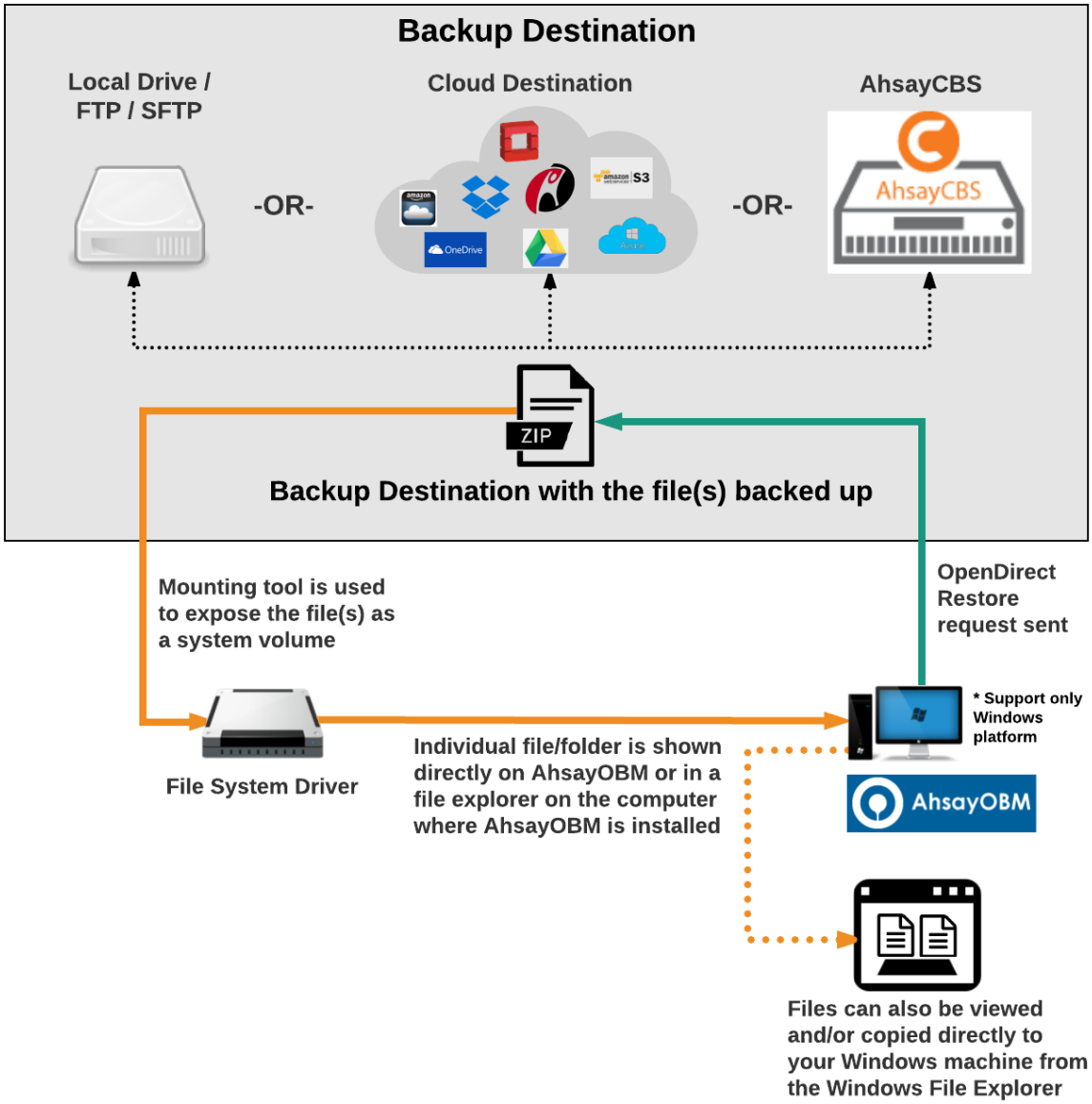
OpenDirect restore is an additional restore options for restoring files from a Windows File backup set available from AhsayOBM v7.13.0.0 or above. The OpenDirect restore method makes use of the granular restore technology to make selective restore of individual files from a large compressed or image file, for example zip, RAR, ISO files, without the need to restore the compressed or image file first, to give you a fast and convenient file restore solution.

During the OpenDirect restore process, the file(s)/folders can be viewed and/or copied from the Windows File Explorer on the Windows machine you are performing the restore. OpenDirect restore is only supported on File backup sets created and backed up using AhsayOBM v7.13.0.0 or above on Windows platform with OpenDirect restore feature enabled.

Important

OpenDirect restore requires an additional OpenDirect / Granular restore add-on module license to work. Contact your backup service provider for further details.

How does OpenDirect Restore work?



Benefits of using OpenDirect Restore

Comparison between OpenDirect File Restore and Traditional File Restore

OpenDirect Restore	
Introduction	
OpenDirect restore allows you to quickly access individual files from a large compressed or image file by viewing and/or copying files from the file explorer on the Windows you are performing the restore, without having to fully restore the whole compressed or image file first.	
Pros	
Restore of Entire Compressed File Not Required	As opposed to the traditional restore where you have to restore the entire compressed or image file first before you can access any individual file in it, OpenDirect restore allows you to view and download individual files from a compressed or image file, without having to restore compressed file or image file first.
Ability to Restore Selected Files	When restoring a large compressed or image file, sometimes, you may only need to restore individual file(s) out of the entire file, therefore, OpenDirect restore gives you the flexibility to restore selective file(s) quickly, so it saves you time and effort to achieve your restore goal.
Cons	
No Encryption and Compression	To ensure optimal restore performance, the backup of the files in an OpenDirect file backup set will **NOT** be encrypted and compressed, therefore, you may have to take these factors in consideration when selecting this restore option.

Traditional Restore	
Introduction	
The traditional restore method restores the entire compressed file or image file. Backed up data can only be accessed when complete restore is performed.	
Pros	
Backup with Compression and Encryption	Backup file(s) are compressed, therefore in smaller file size, and encrypted before being uploaded to the backup destination.
Cons	
Slower Recovery	As the entire compressed or image file has to be restored before you can access any individual files, restore time could be long if the file size is large

Requirements

Supported Backup Modules

OpenDirect restore is only supported on File backup sets created and backed up using AhsayOBM v7.13.0.0 or above on Windows platform with OpenDirect restore feature enabled.

License Requirements

An OpenDirect / Granular restore add-on module license is required per backup set for this feature to work. Contact your backup service provider for more details.

Backup Quota Storage

As compression is not enabled for OpenDirect file backup sets, to optimize restore performance the storage quota required will be higher than non-OpenDirect file backup sets. Contact your backup service provider for details.

Windows Operating System

AhsayOBM must be installed on a 32 bit or 64-bit Windows Operating System as libraries for OpenDirect only supports Windows platform.

Windows 2008 R2 SP1 or above	Windows 2012	Windows 2012 R2
Windows 2016	Windows 7 SP1 or above	Windows 8
Windows 8.1	Windows 10	

Temporary Directory Requirement

The temporary directory folder should have at least the same available size as the compressed or image file to be restored and should be located on a local drive to ensure optimal performance.

Available Spare Drive Letter

One spare drive letter must be available on the Windows machine for the granular restore process, as the compressed file or image is mounted on Windows as a logical drive. AhsayOBM will automatically take the next available drive letter in alphabetical order for the compressed or image file.

Note

1. The Windows drive letters A, B, and C are not used by OpenDirect restore.
2. The OpenDirect restore assigned drive letter(s) will be released once you exit from AhsayOBM UI.

Network Requirements

Recommended minimum network speed is **at least 100Mbps download speed**.

The network bandwidth requirements will increase in proportion to the size of the compressed file/image and or the incremental delta chain length to ensure optimal performance. Working with limited network bandwidth may severely affect the granular restore performance.

You can use an online network speed test website (e.g. www.speedtest.net) to get an idea of the actual bandwidth of the machine.

Other Dependencies

The following dependencies are restore related and therefore they will be checked by AhsayOBM only when an OpenDirect restore is performed. Absence of these elements will not affect the backup job but would cause the restore to fail.

- Microsoft Visual C++ 2015 Redistributable (x86) / (x64)
  https://www.microsoft.com/en-us/download/details.aspx?id=48145
- Update for Universal C Runtime in Windows
  https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows
- **For Windows 7 and Windows Server 2008 R2 only**

  Microsoft Security Advisory 3033929
  https://technet.microsoft.com/en-us/library/security/3033929.aspx

Permissions

The Windows login account used for installation and operation of the AhsayOBM client machine requires Administrator privileges.

5 Download and Install AhsayOBM

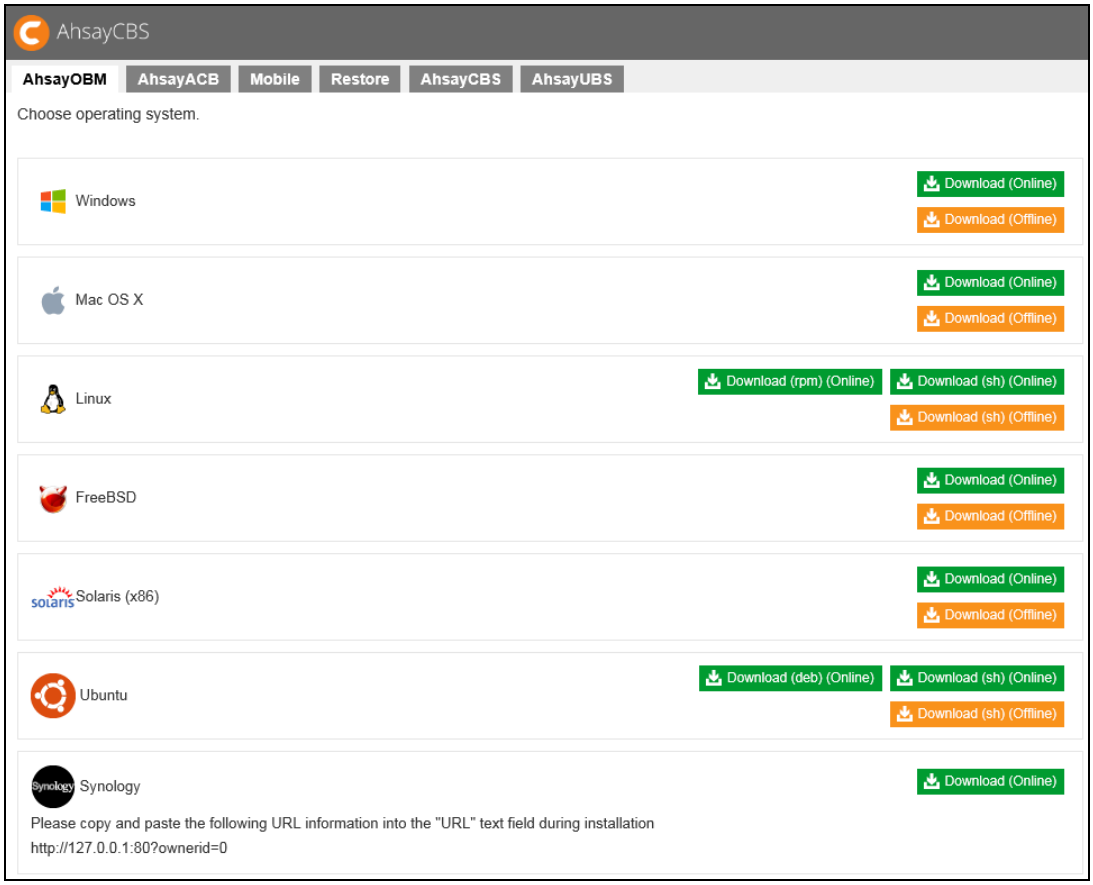
From version 7.15.0.0 onwards, there are two installation modes of AhsayOBM, online installation and offline installation. Below is the table of comparison between online installation and offline installation.

	Online Installation	Offline Installation
Version Supported	➢ From v7.3.2.0 onwards.	➢ From v7.15.0.0 onwards.
Installation Time	➢ Takes more time as it needs to download the binary and component files (80MB to 132MB depending on operating system) each time the installation is run. ➢ Online installer size is 6KB to 3.5MB depending on operating system as it contains only the initial installation package files.	➢ Takes less time as all the necessary binary and component files are already available in the offline installer and offline installer can be downloaded once but reused many times. ➢ Offline installer size is 80MB to 132MB depending on operating system as it contains all the necessary binary and component files.
Deployments	➢ Suitable for single or small amount of device installations. ➢ Suitable for sites with fast and stable internet connection as internet connection is needed each time when an installation is run. ➢ A slow internet connection will result in longer installation time and interrupted or unstable internet connection may lead to unsuccessful installation. ➢ Ensures the latest version of the product is installed.	➢ Suitable for multiple or mass device installations. ➢ Suitable for client sites with metered internet connections as once the offline installer is downloaded, internet connection is not needed each time when an installation is run. ➢ May need to update the product version after installation if an older offline installer is used.

Download AhsayOBM

1. In a web browser, click the blue icon on the top right corner to open the download page for the AhsayOBM installation package file from your backup service provider's website.

2. In the **AhsayOBM** tab of the download page, you can choose the AhsayOBM installer by operating system.



3. In the **Windows** section, click on the **Download (Online)** or **Download (Offline)** button to download the AhsayOBM installation package.

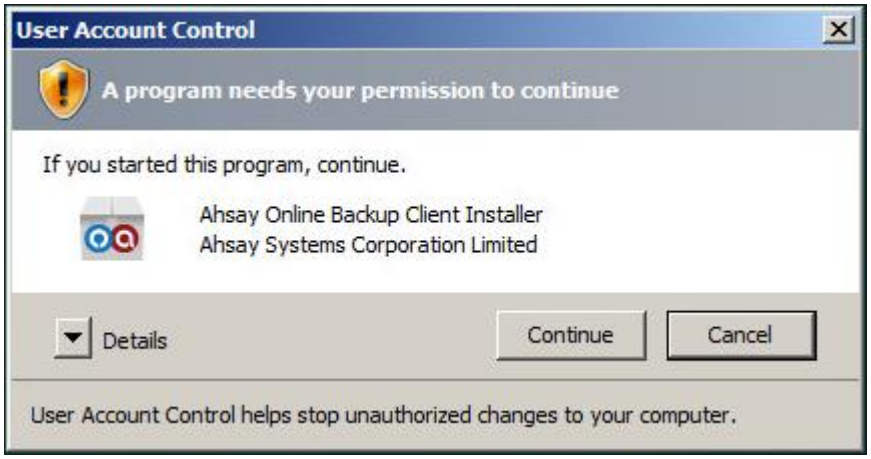
Install AhsayOBM

Option 1: Online Installation Option

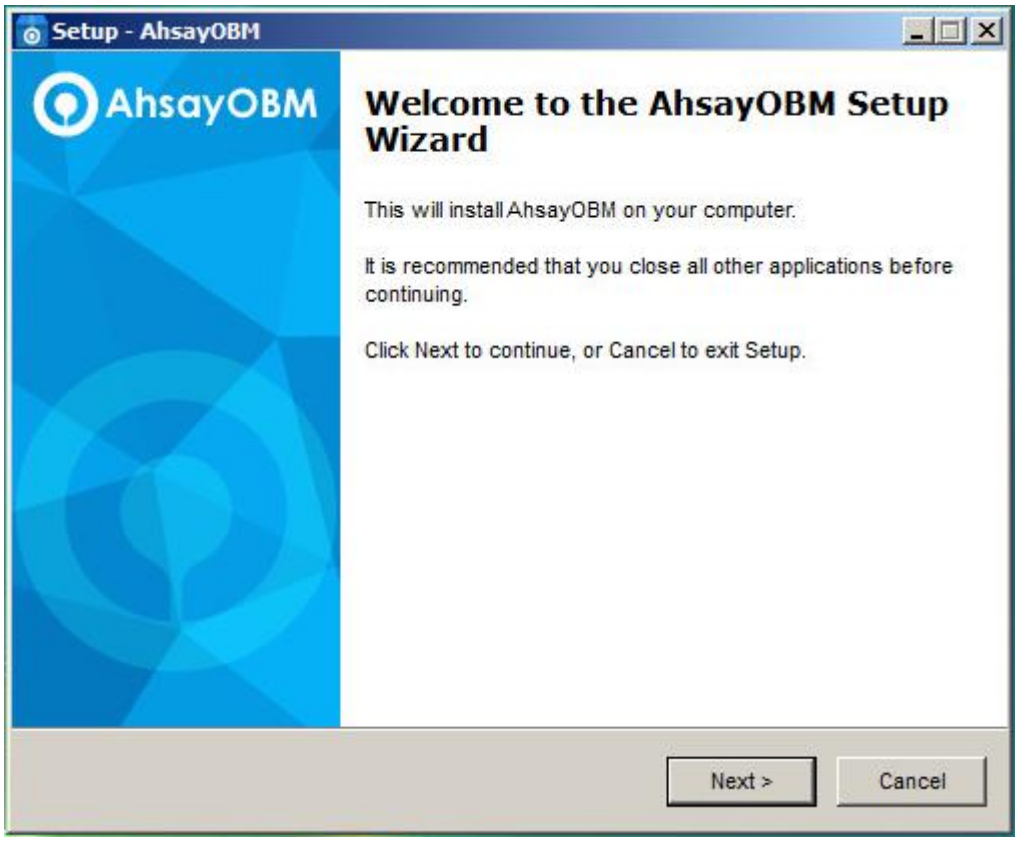
1. Launch the online installation package file you have downloaded from the download section above.

2. Click **Run** when you see this message.

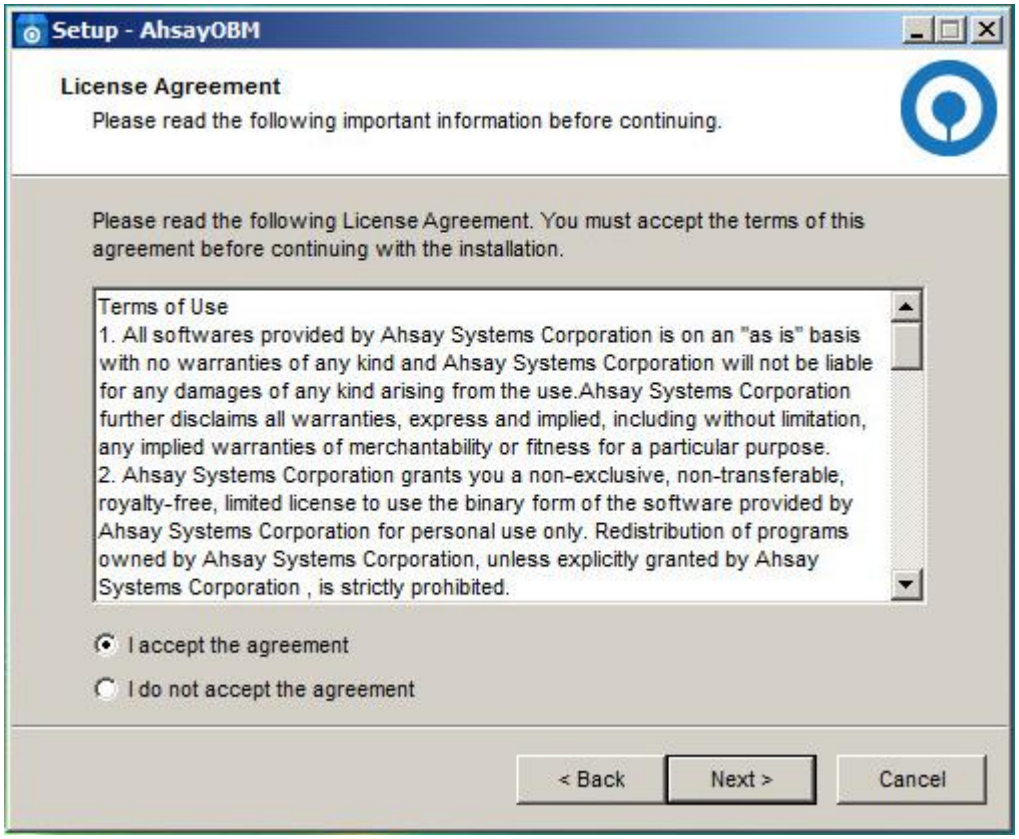
3. The following dialog box will appear only if User Account Control is enabled. Click **Continue** to start the installation.



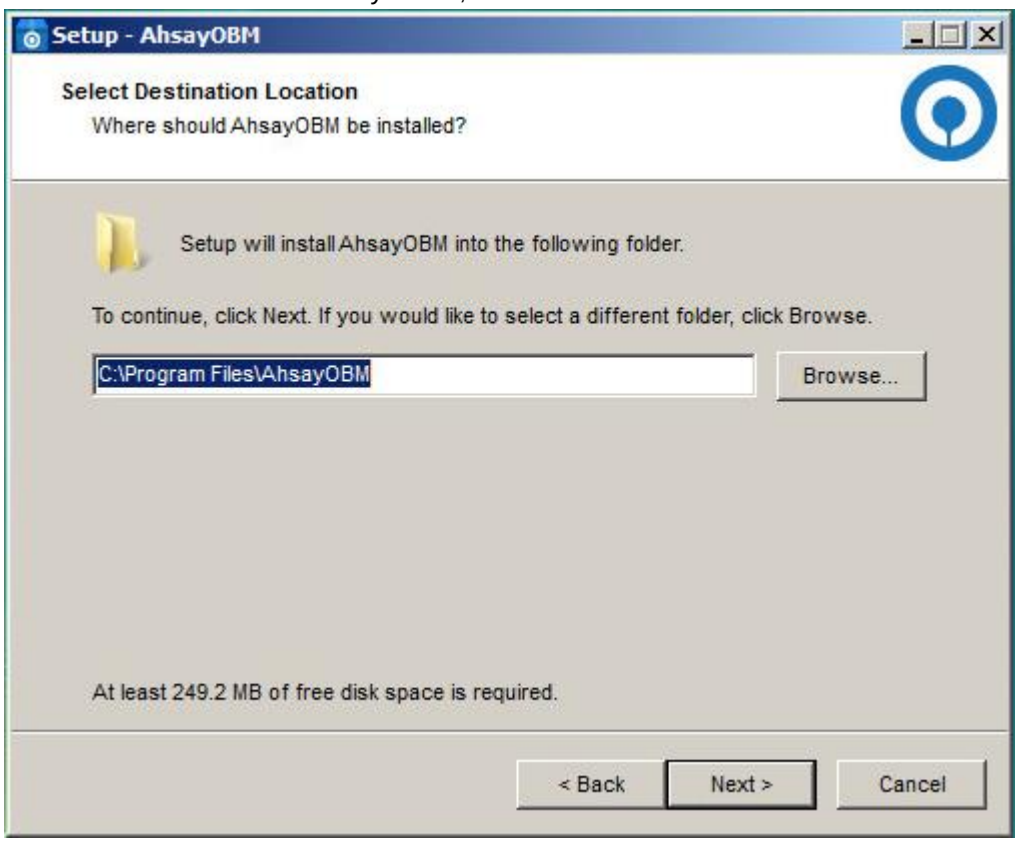
4. Click **Next** to continue.



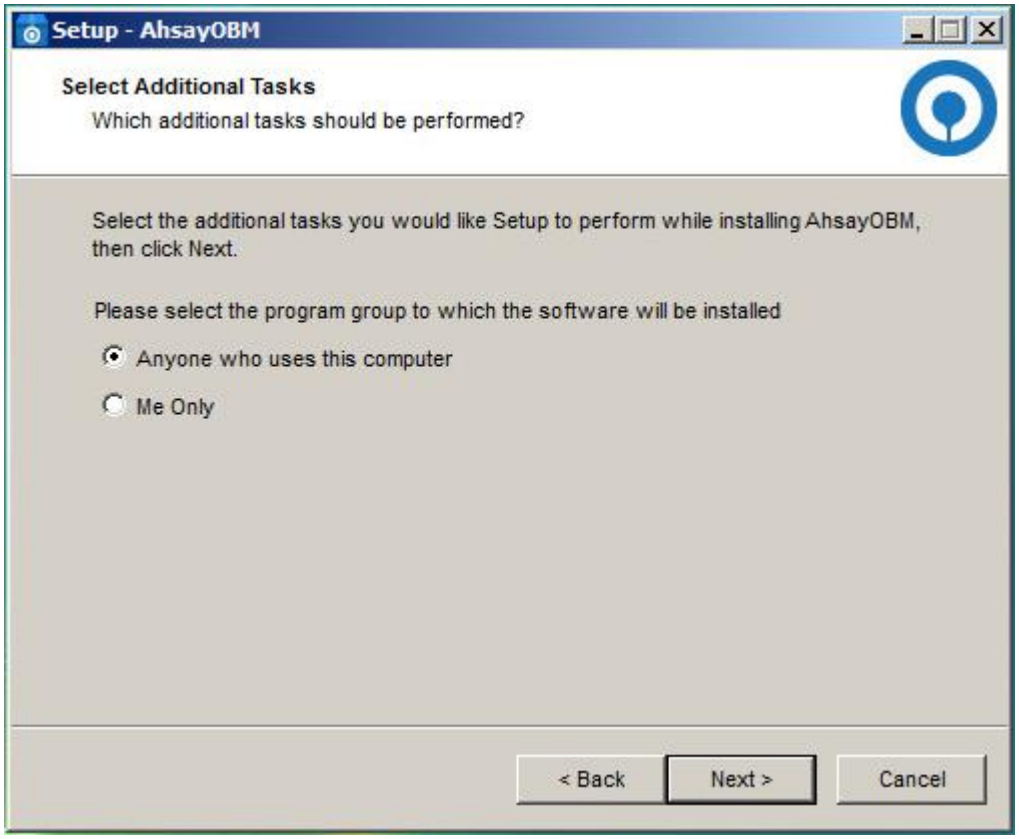
5. Select **I accept the agreement** after reading the license agreement. Then, click **Next** to proceed.



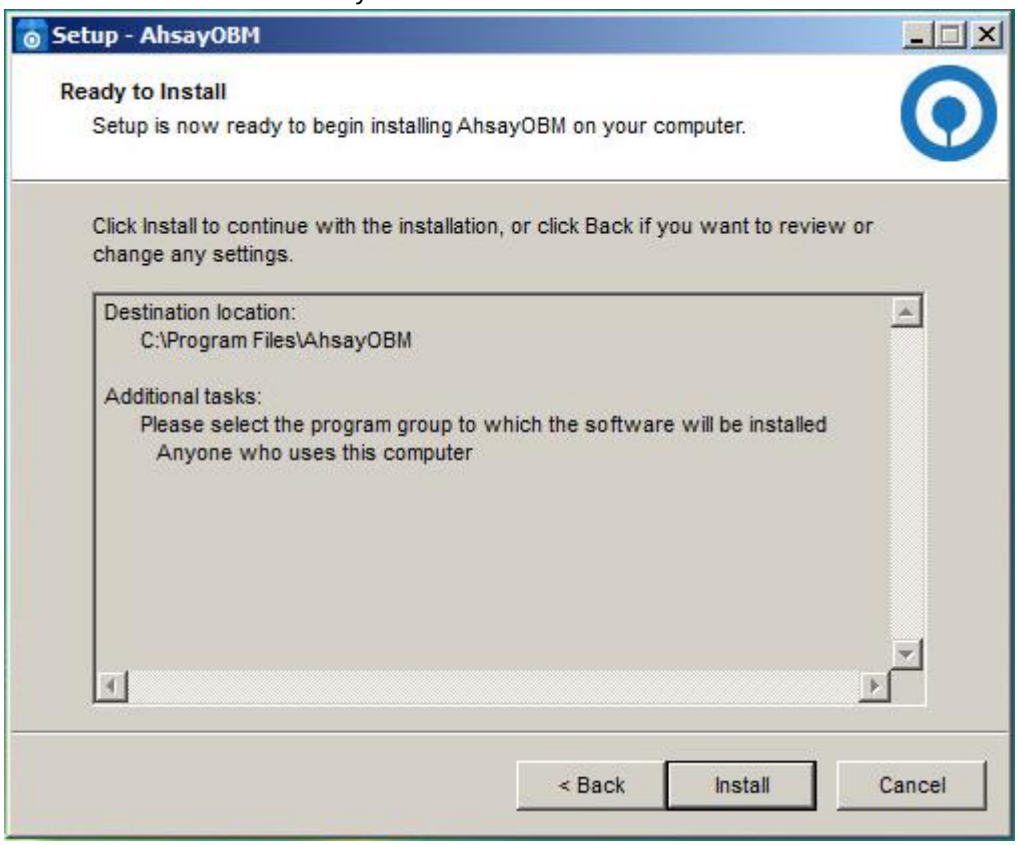
6. Choose the installation directory. Then, click **Next** to continue.



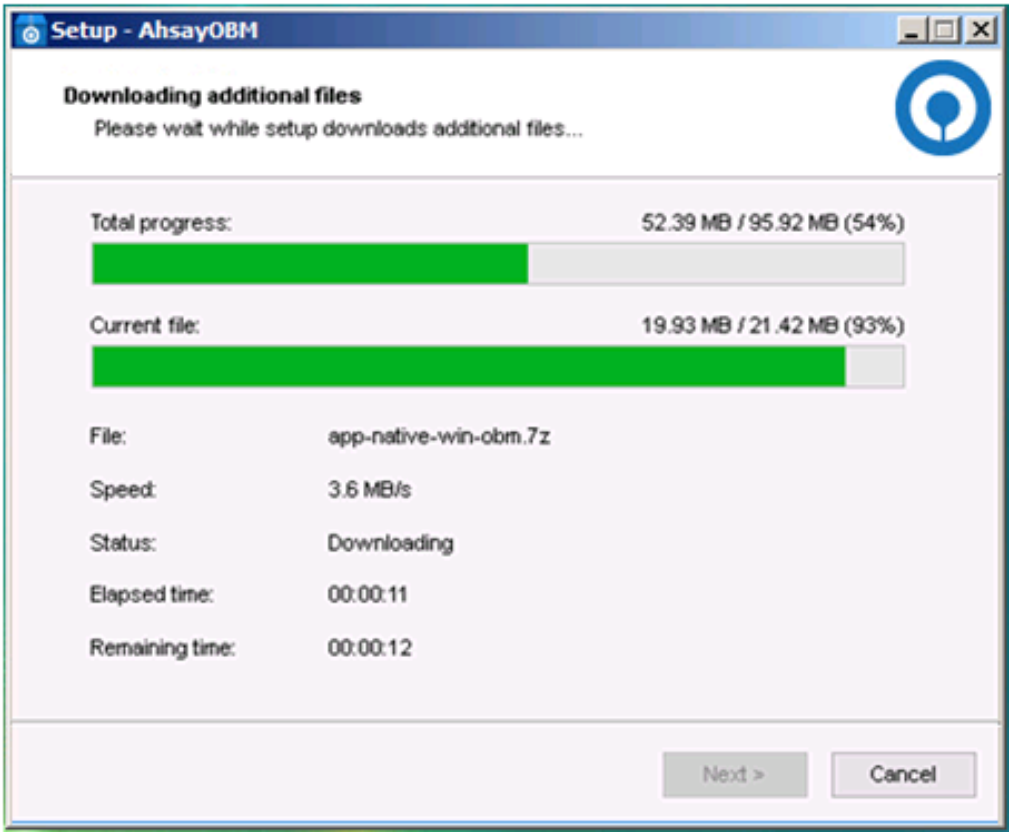
7. Select the program group to which the software will be installed. Then, click **Next** to proceed.



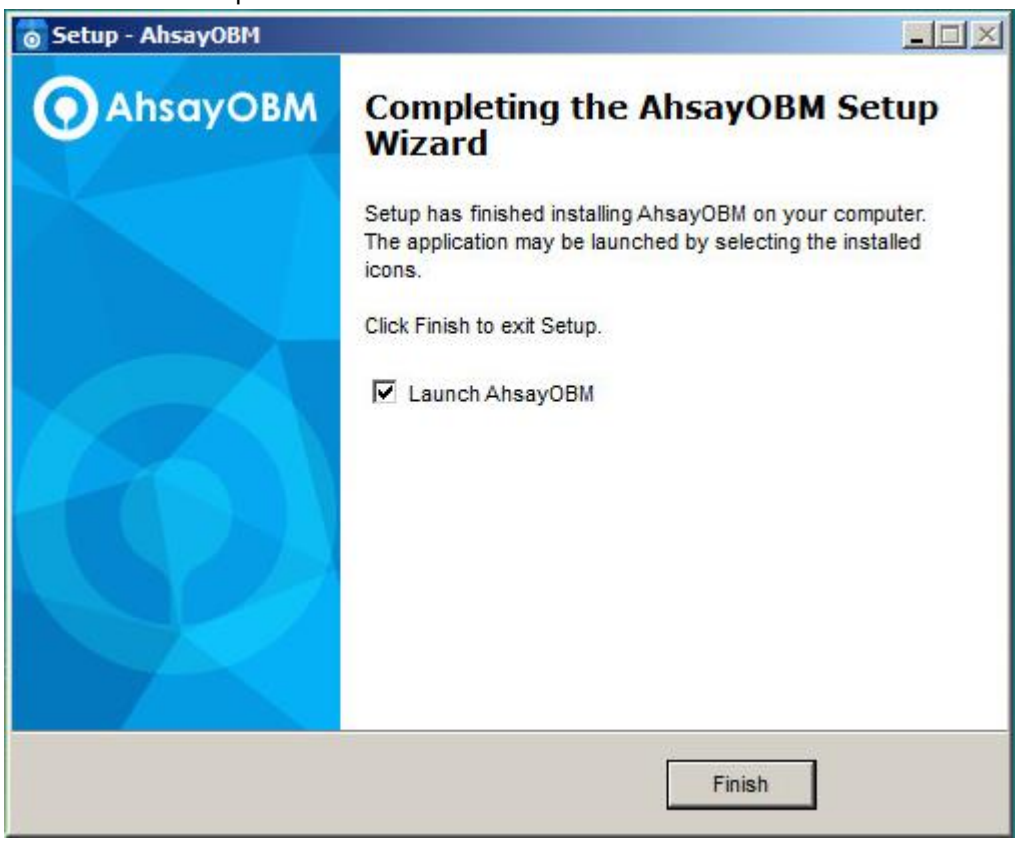
8. The installation will start after you click **Install**.



9. The component files will be downloaded first during installation.

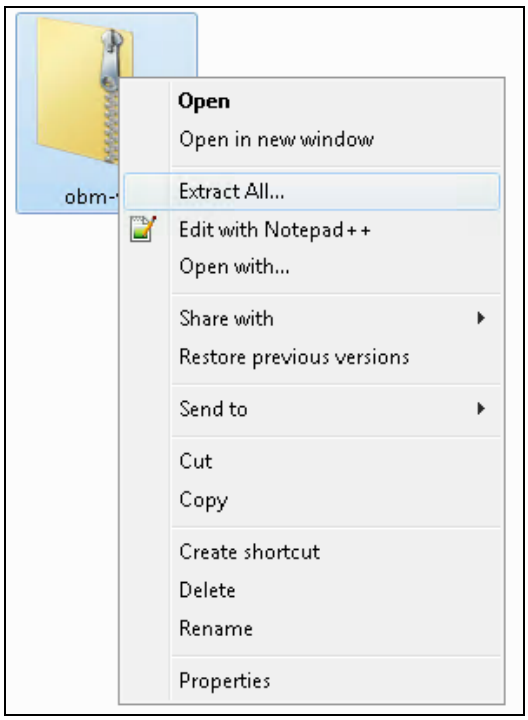


10. Click **Finish** to complete the installation.

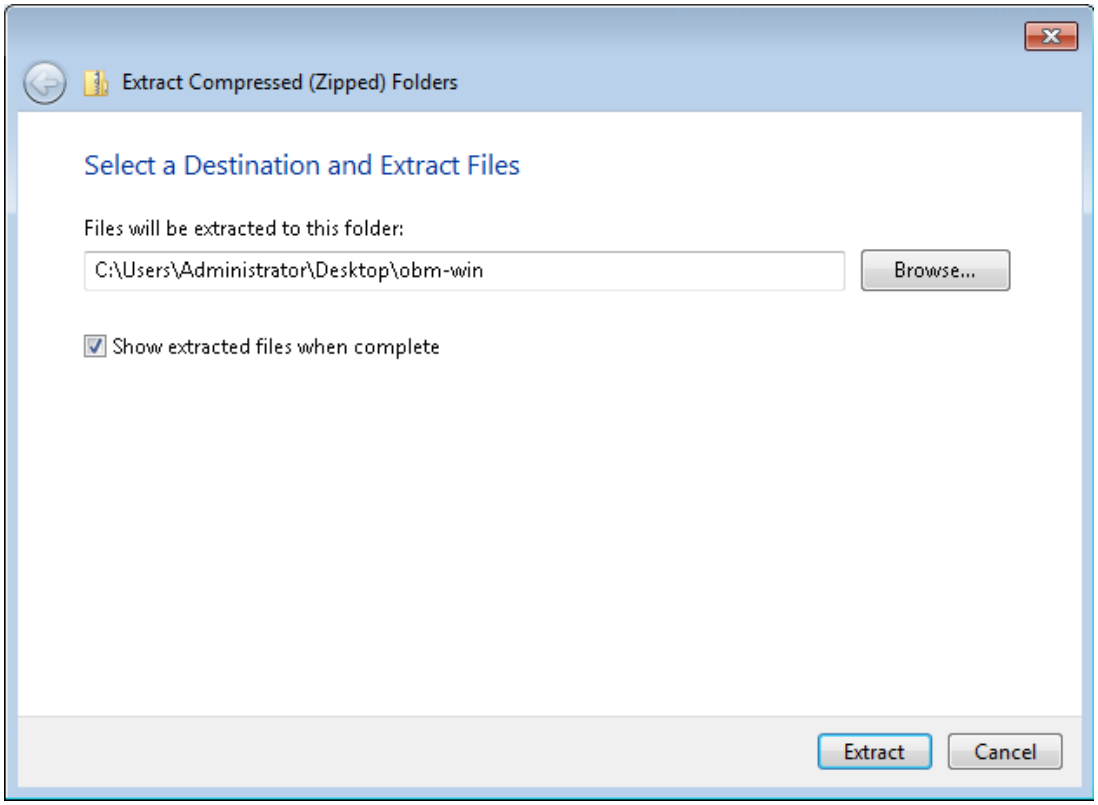


Option 2: Offline Installation Option

1. Extract the offline installation package file (**obm-win.zip**) you have downloaded from the download section above.



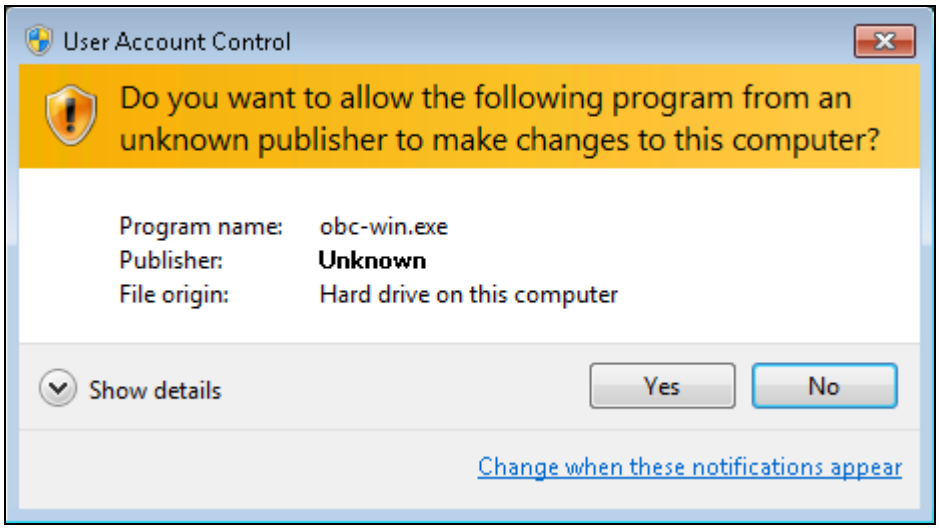
2. Select a destination and extract files.



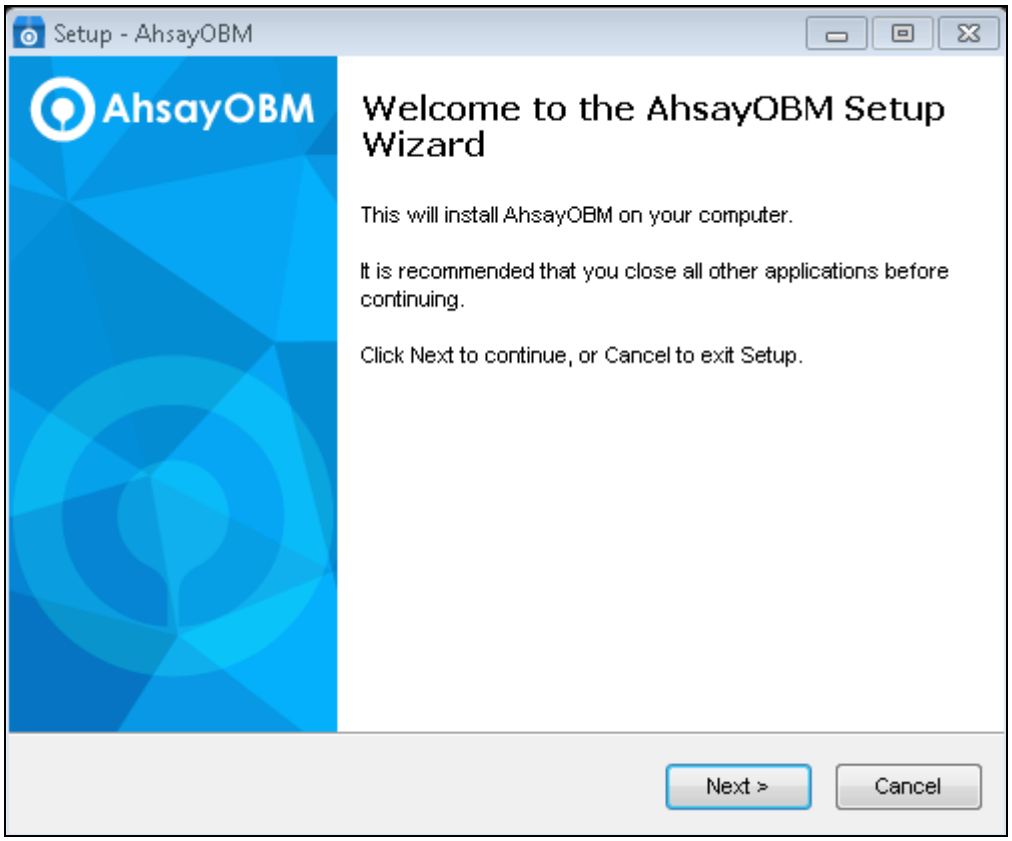
3. Launch the installer you have extracted from the zip format file.

4. Click **Run** when you see this message.

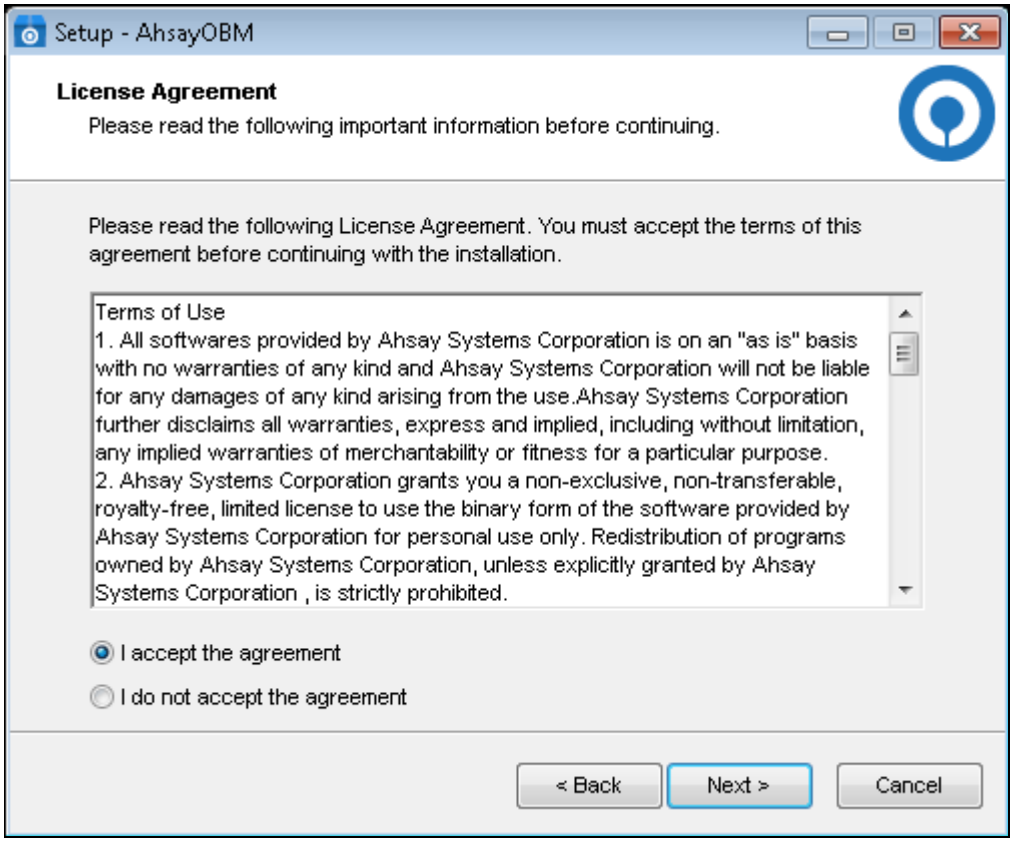
5. The following dialog box will appear only if User Account Control is enabled. Click **Yes** to start the installation.



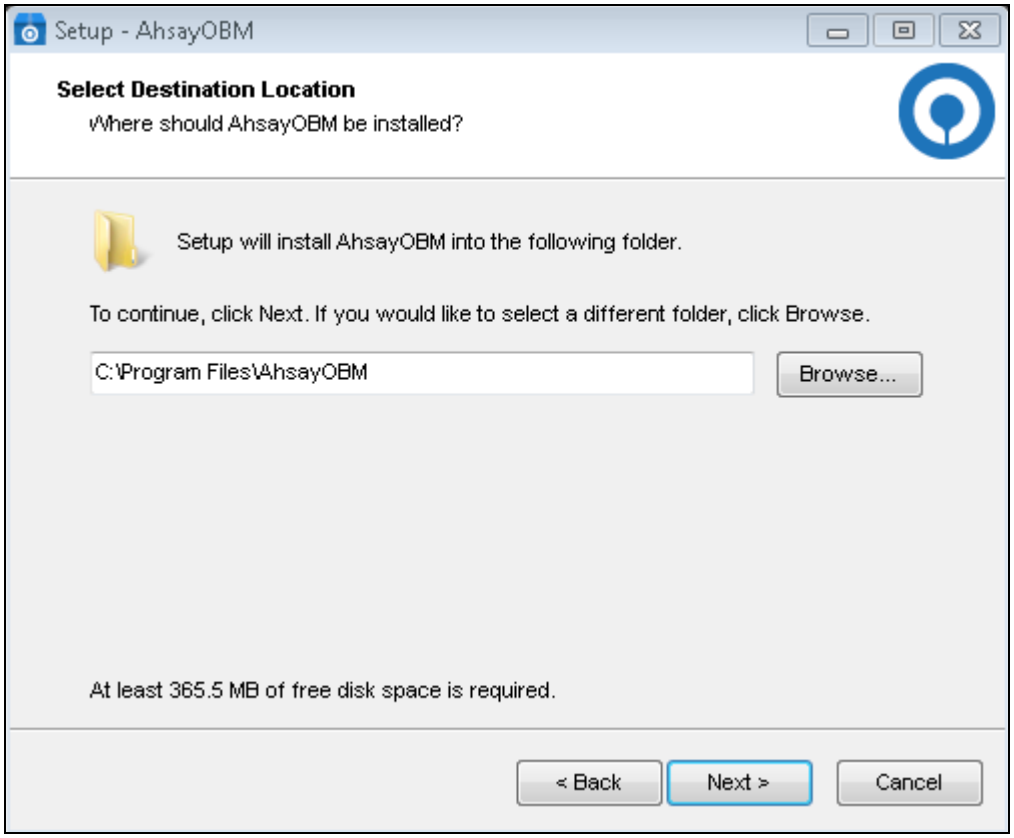
6. Click **Next** to continue.



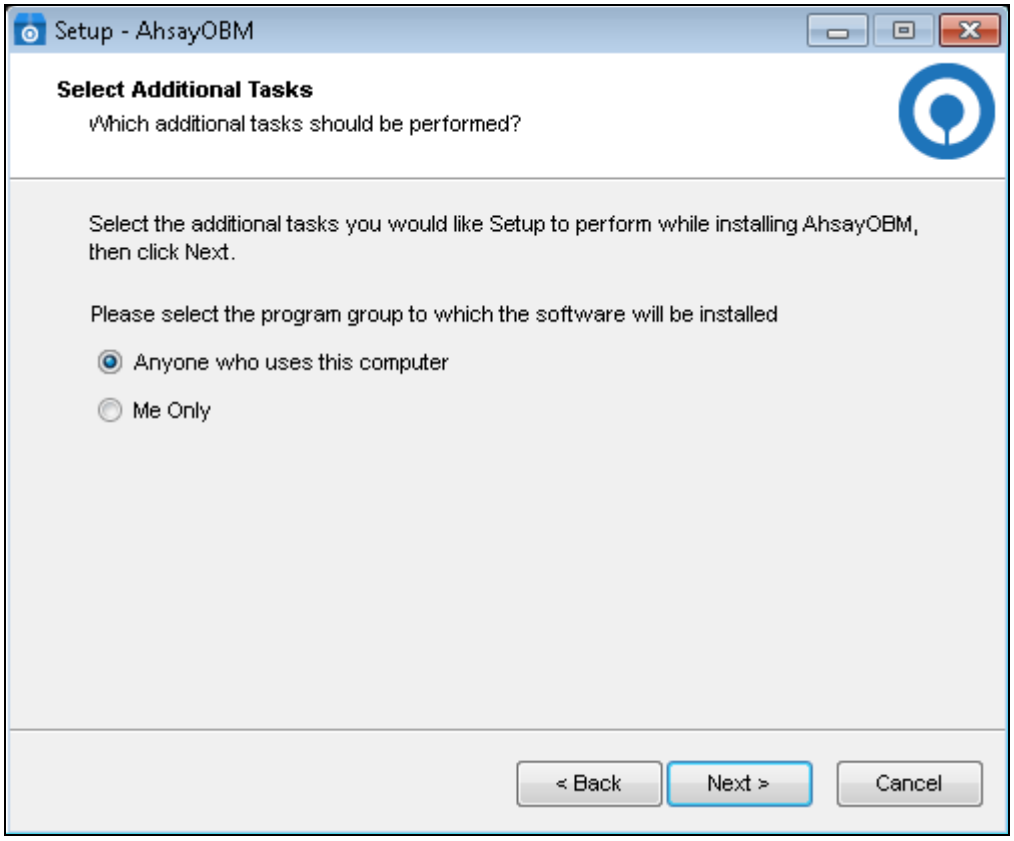
7. Select **I accept the agreement** after reading the license agreement. Then, click **Next** to proceed.



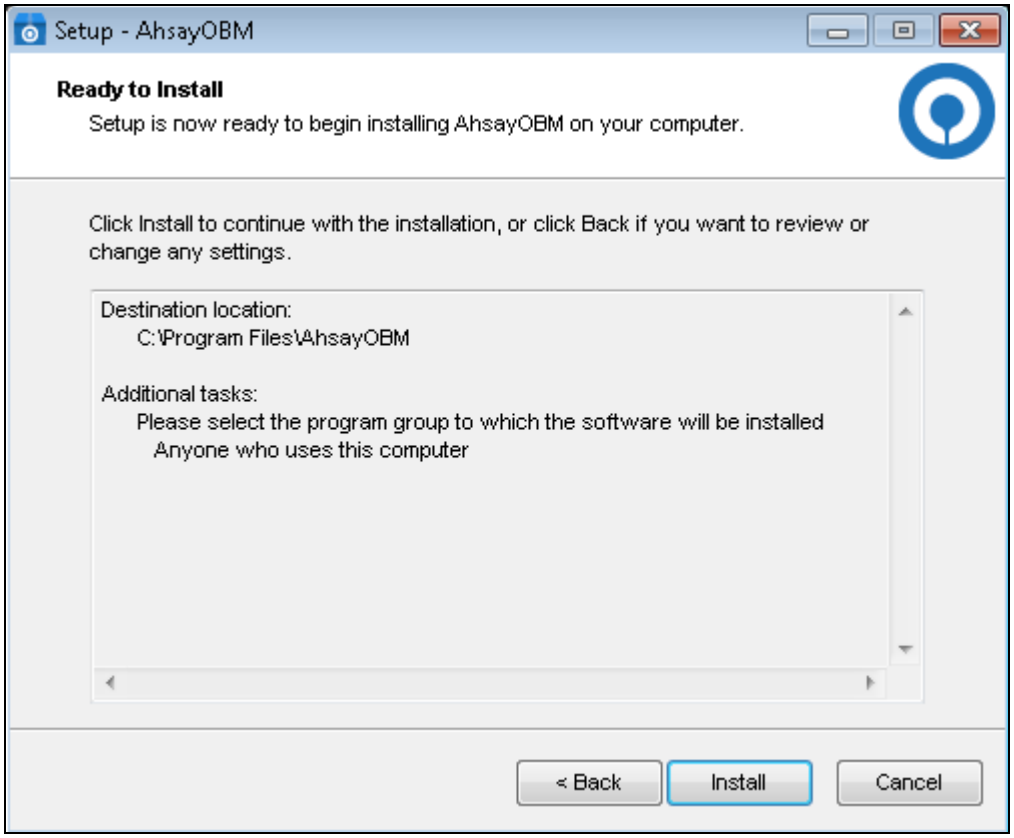
8. Choose the installation directory. Then, click **Next** to continue.



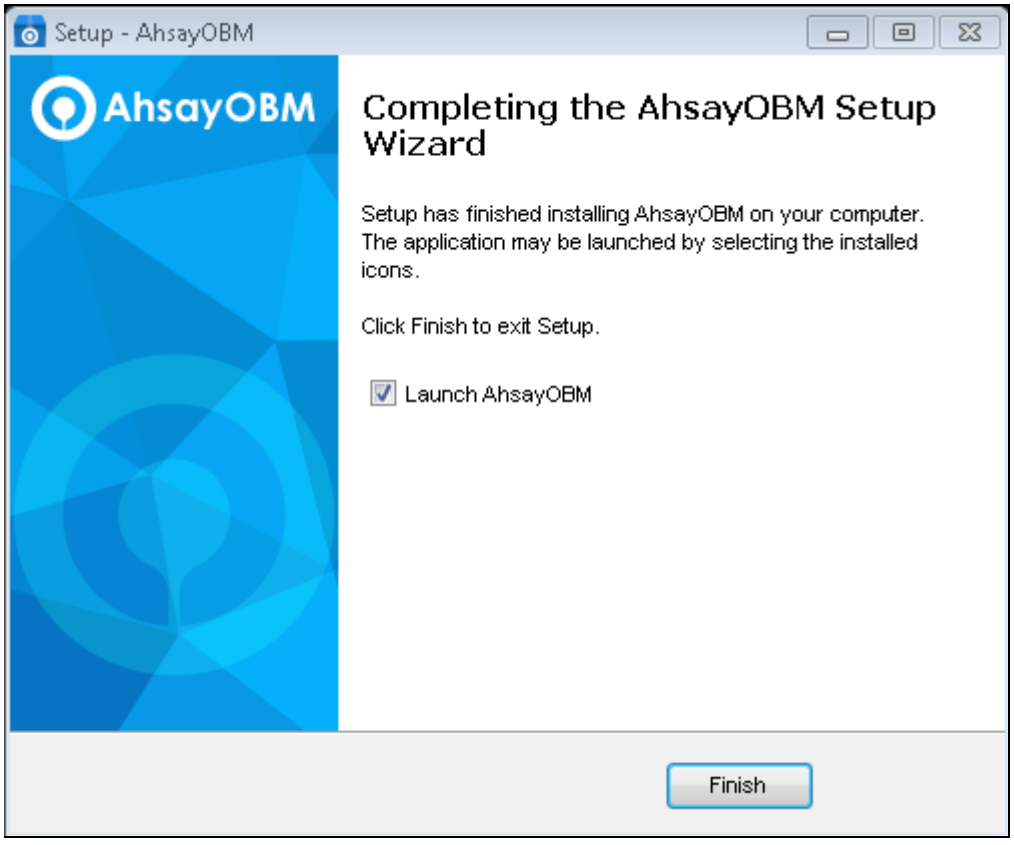
9. Select the program group to which the software will be installed. Then, click **Next** to proceed.



10. The installation will start after you click **Install**.



11. Click **Finish** to complete the installation.

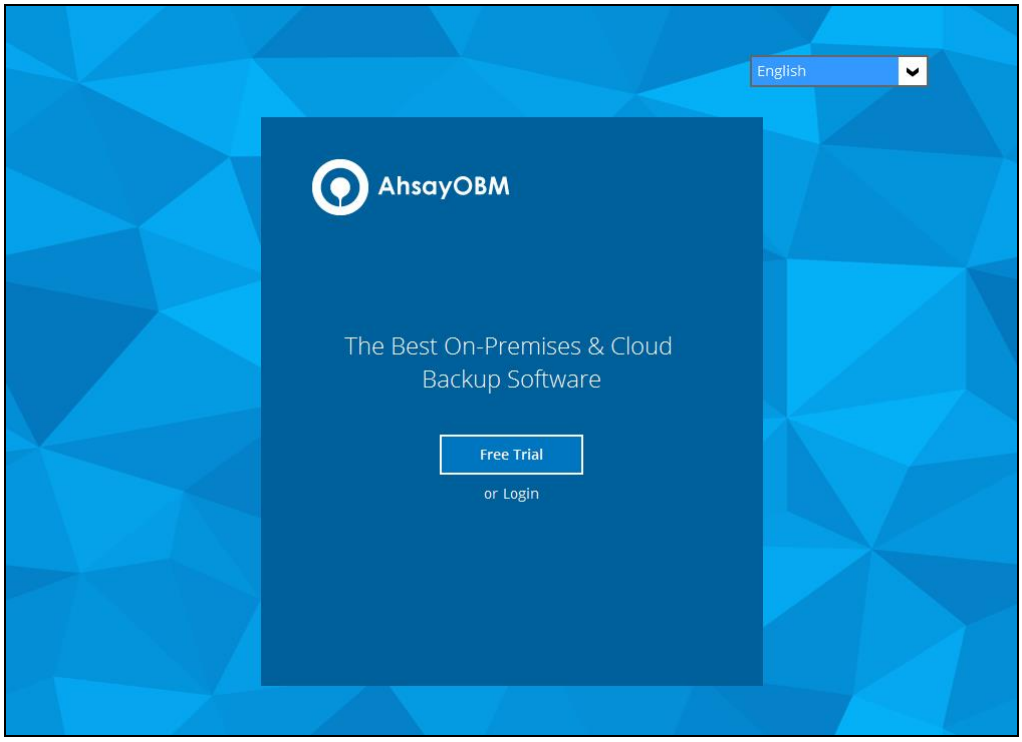


6 Start AhsayOBM

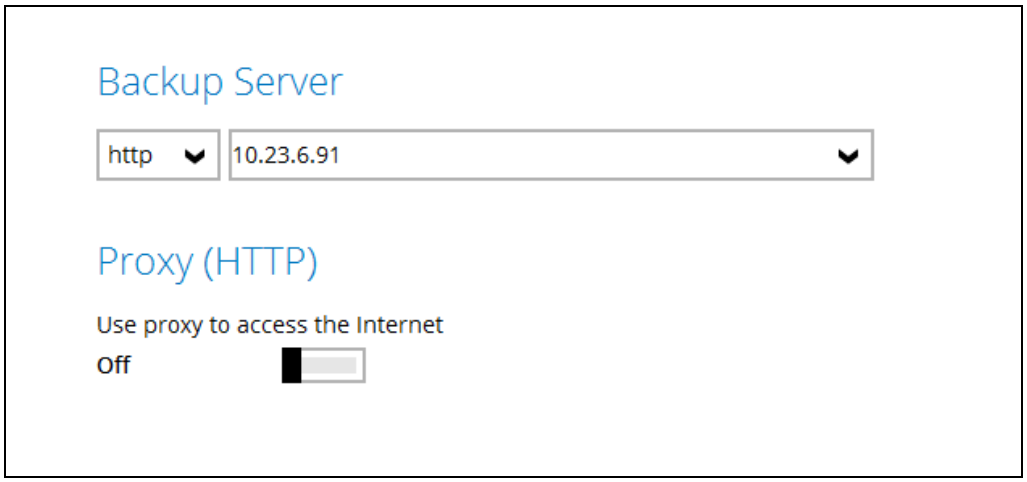
Login to AhsayOBM

1. A shortcut icon of AhsayOBM will be available on your desktop after installation. Double-click the icon to launch the application.

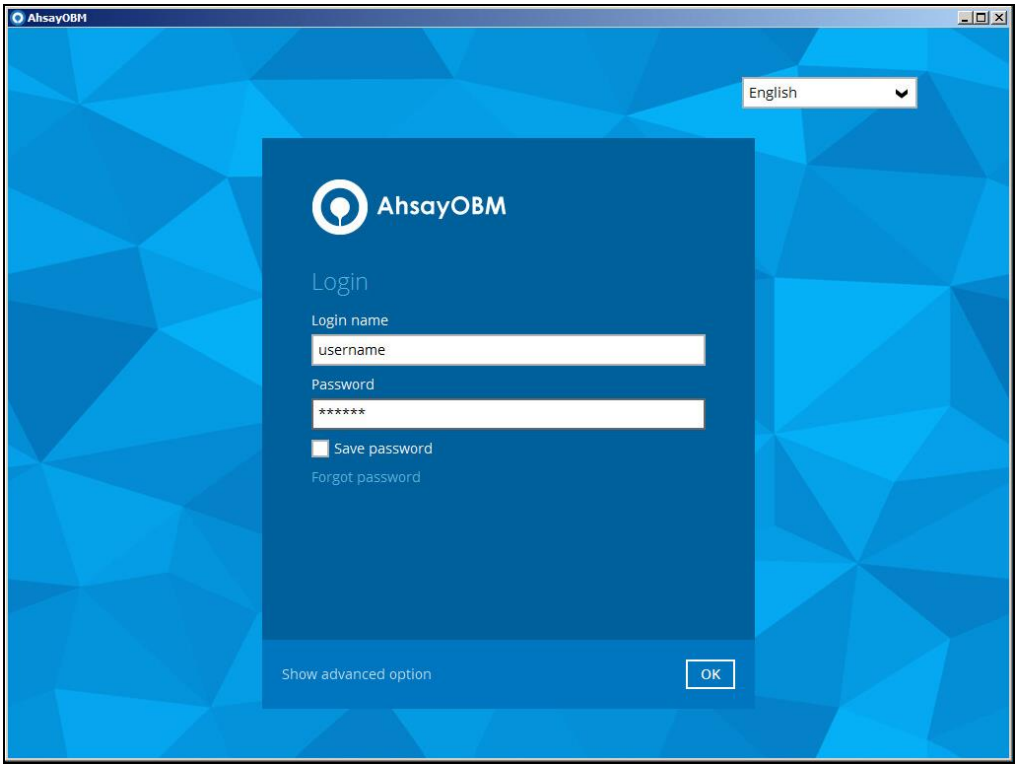
2. The Free Trial Registration menu may be displayed when you login for the first time. Click **Login** if you already have an AhsayOBM account, or click **Free Trial** to register for a trial backup account.



3. Click **Show advanced option** to enter the backup server settings provided by your backup service provider. Then, click **OK** to save the changes.

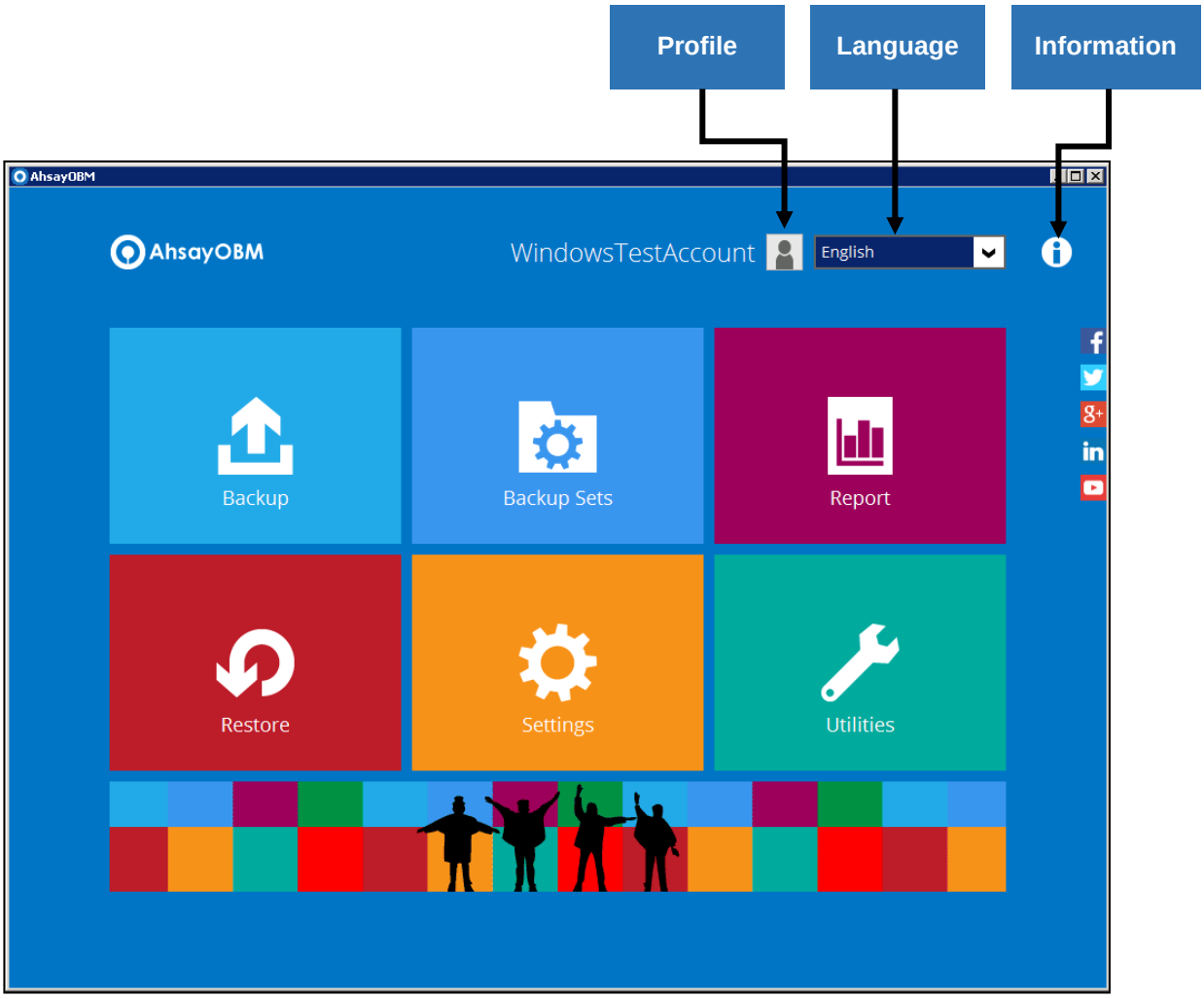


4. Enter the login name and password of your AhsayOBM account provided by your backup service provider. Then, click **OK** to login.



5. After successful login, the following screen will appear.

7 AhsayOBM Overview



AhsayOBM main interface has nine (9) icons that can be accessed by the user, namely:

- Profile
- Language
- Information
- Backup
- Backup Sets
- Report
- Restore
- Settings
- Utilities

Profile

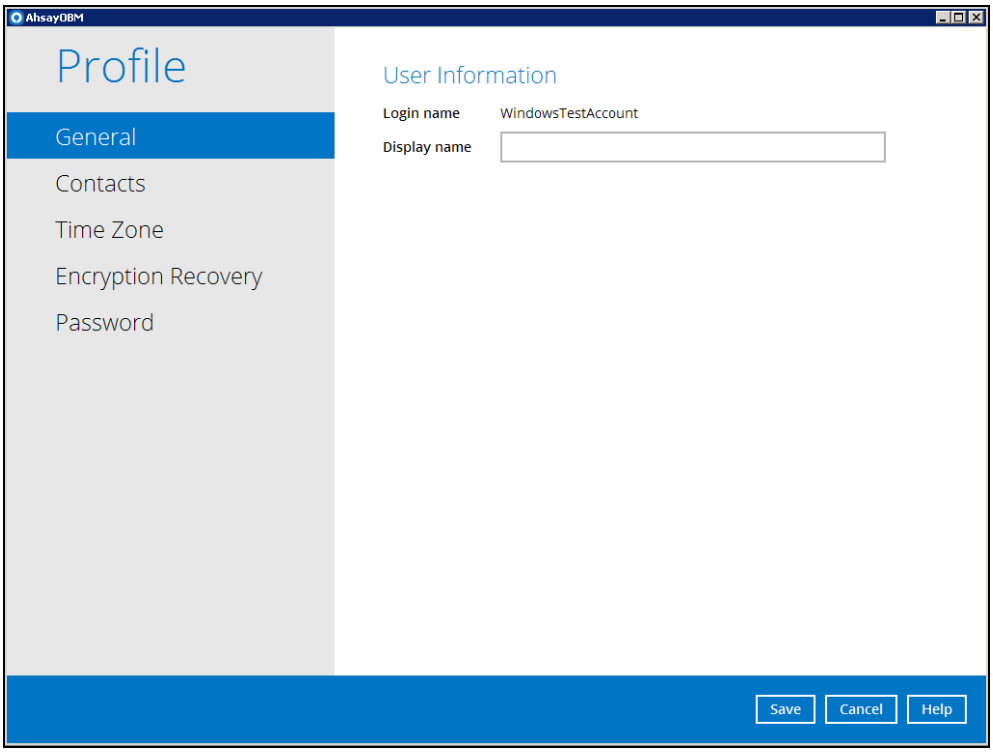
The **Profile** icon shows the settings that can be modified by the user.

There are five (5) available features:

- General
- Contacts
- Time Zone
- Encryption Recovery
- Password

General

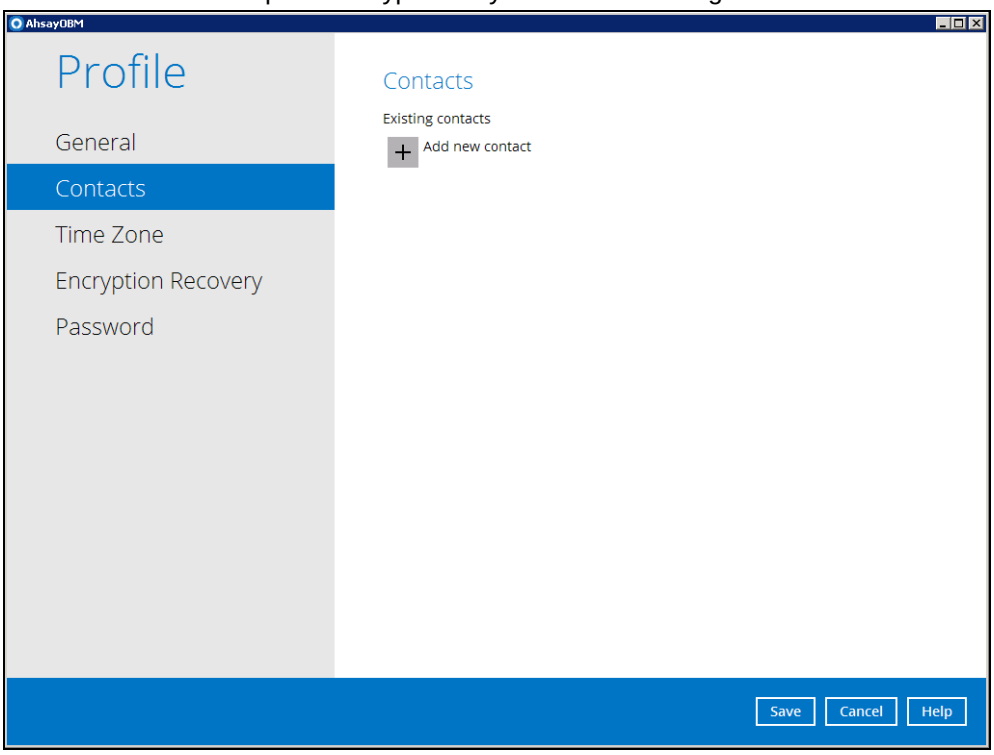
The General tab displays the user's information.



Control	Description
Login name	Name of the backup account.
Display name	Display name of the backup account upon logging in to the AhsayCBS User Web Console.

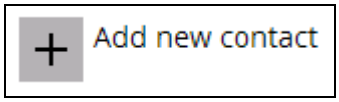
Contacts

This refers to the contact information of the user. You can also add multiple contacts or modify an existing contact information. Having this filled up will help in sending backup and daily reports and even recovered backup set encryption key in case it was forgotten or lost.

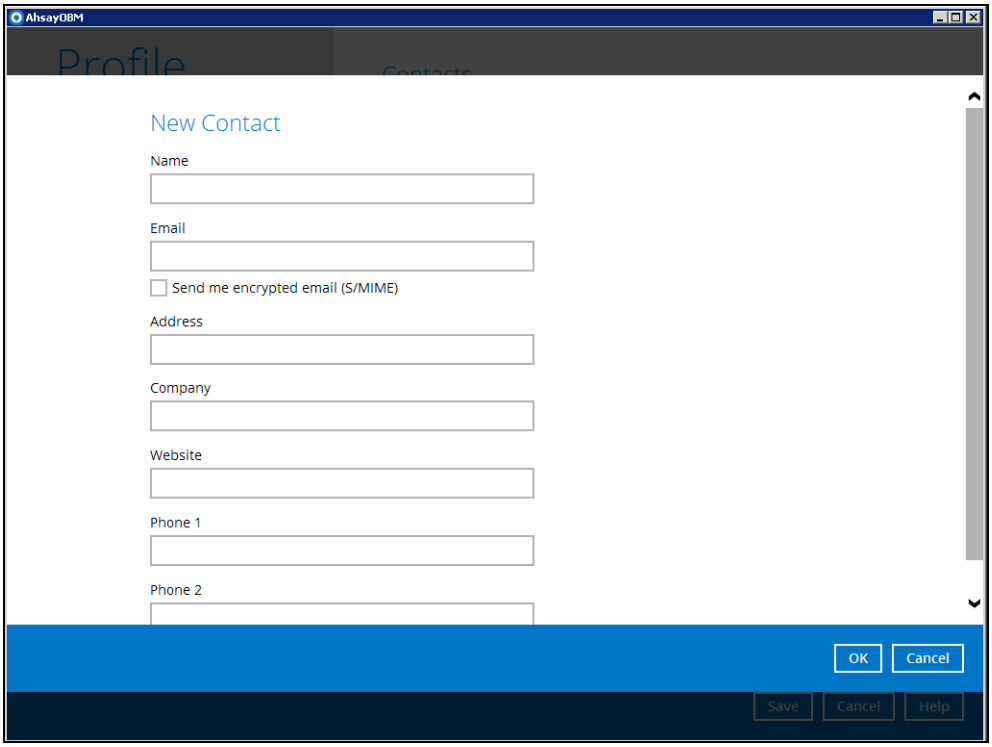


To add a new contact, follow the instructions below:

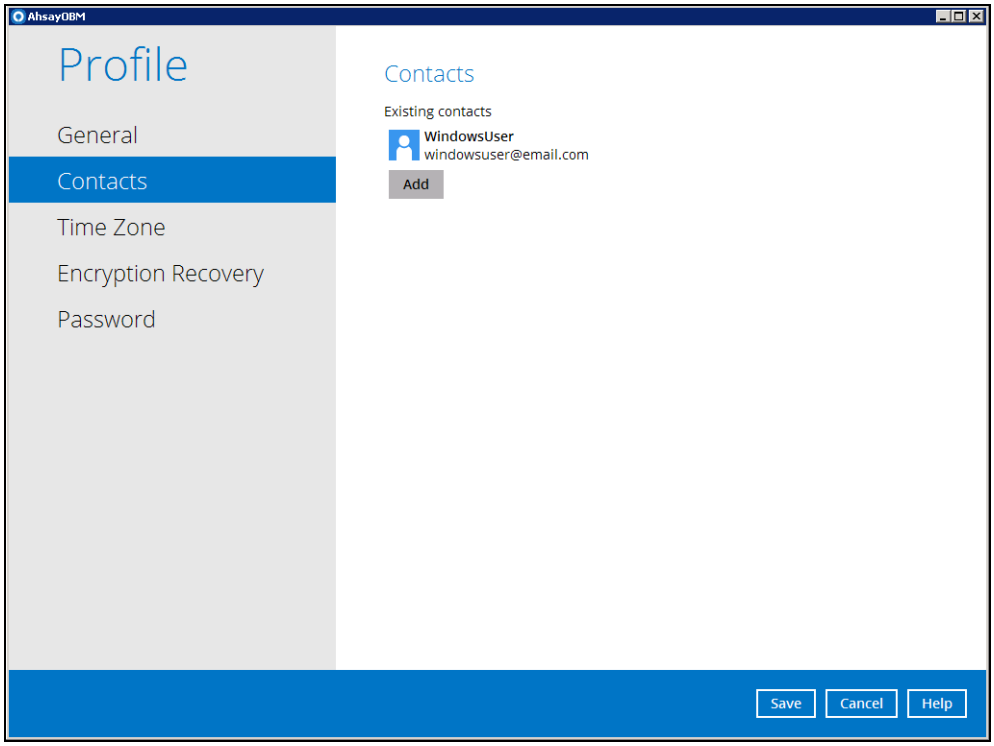
1. Click the [+] plus sign to add a new contact.



2. Complete the following fields then click the [OK] button to return to the main screen.
   - Name
   - Email
   - Address
   - Company
   - Website
   - Phone 1
   - Phone 2

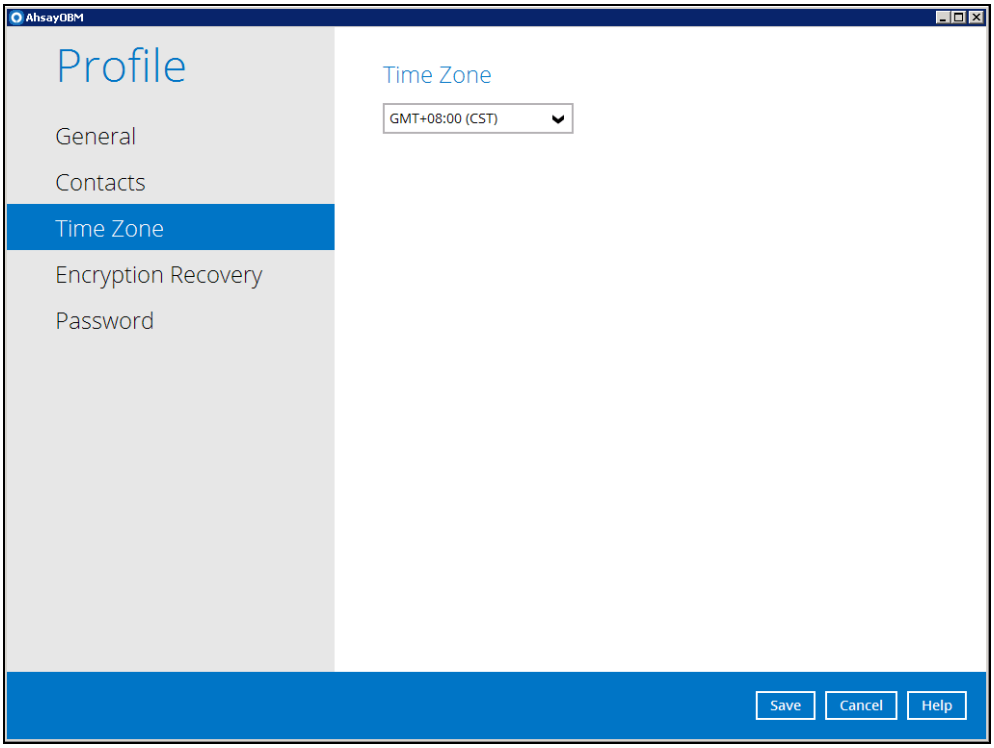


3. Click the [Save] button to store the contact information.



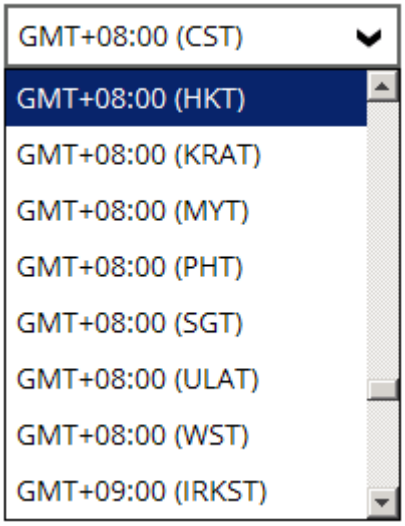
Time Zone

The time zone indicated.



To modify the time zone, follow the instructions below:

1. Select from the dropdown list.

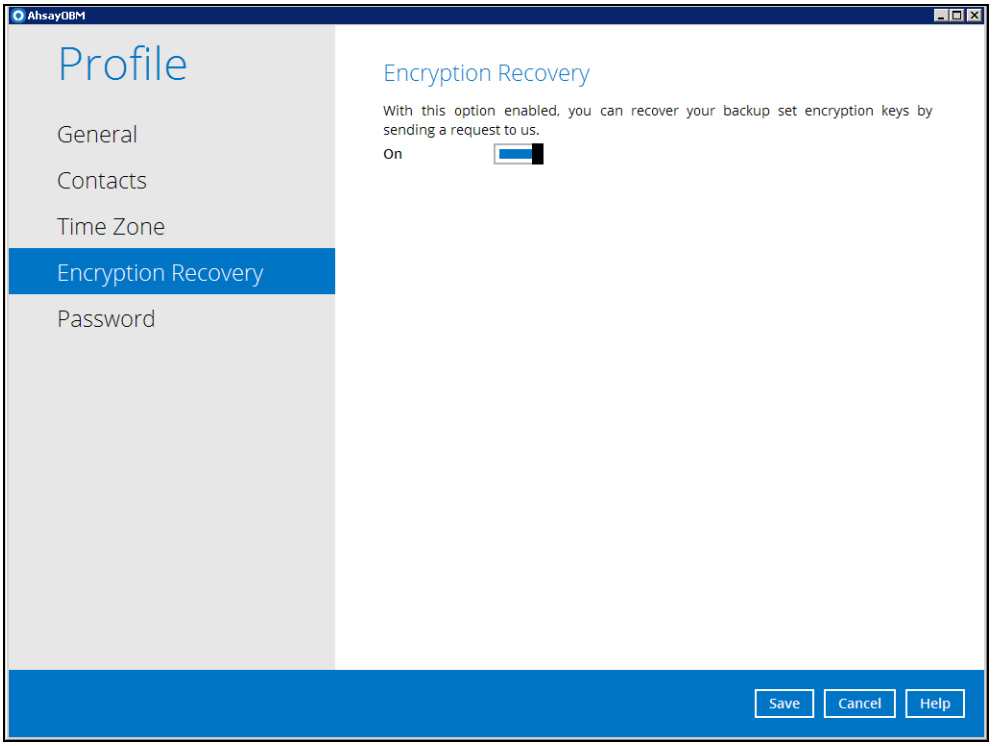


2. Click the [Save] button to save the updated time zone.

Encryption Recovery

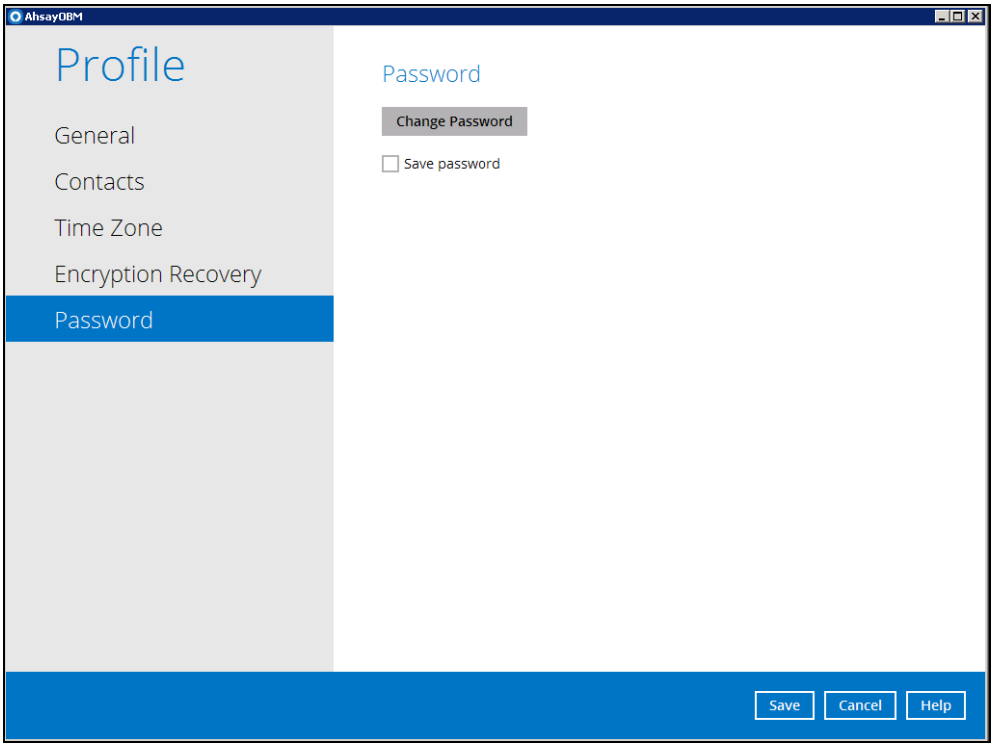
Backup set encryption key can be recovered by turning this feature on.

Note: This option may not be available. Please contact your backup service provider for more details.



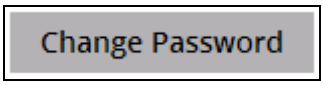
Password

Login password can be modified anytime. Tick the [Save Password] box to bypass the password entry upon opening the AhsayOBM.

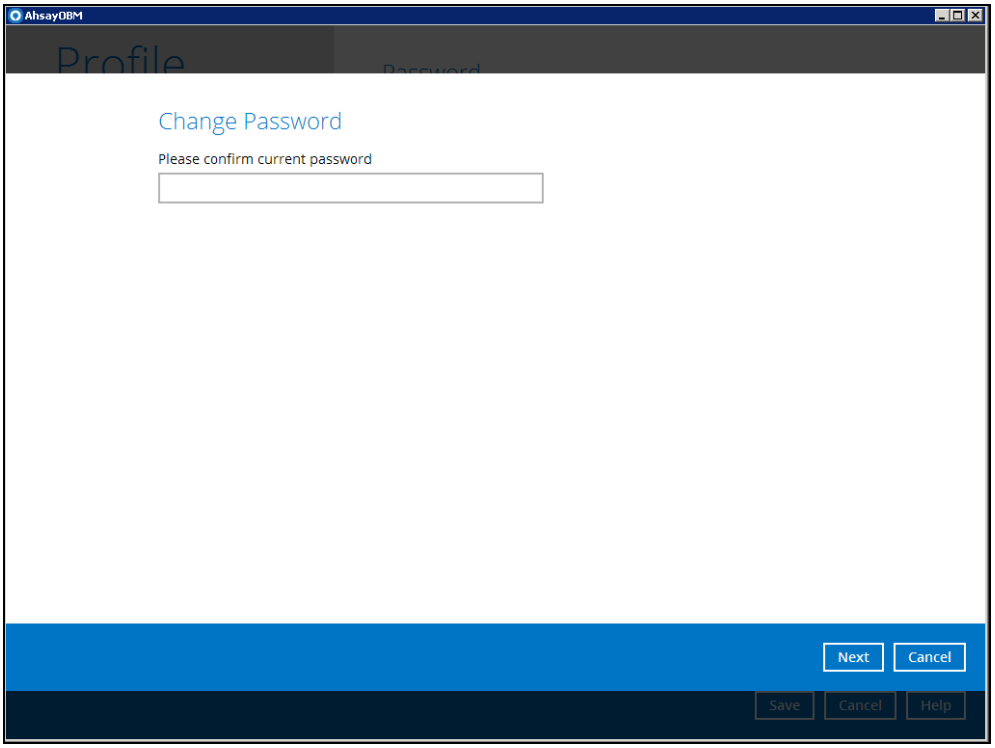


To modify the password, follow the instructions below:

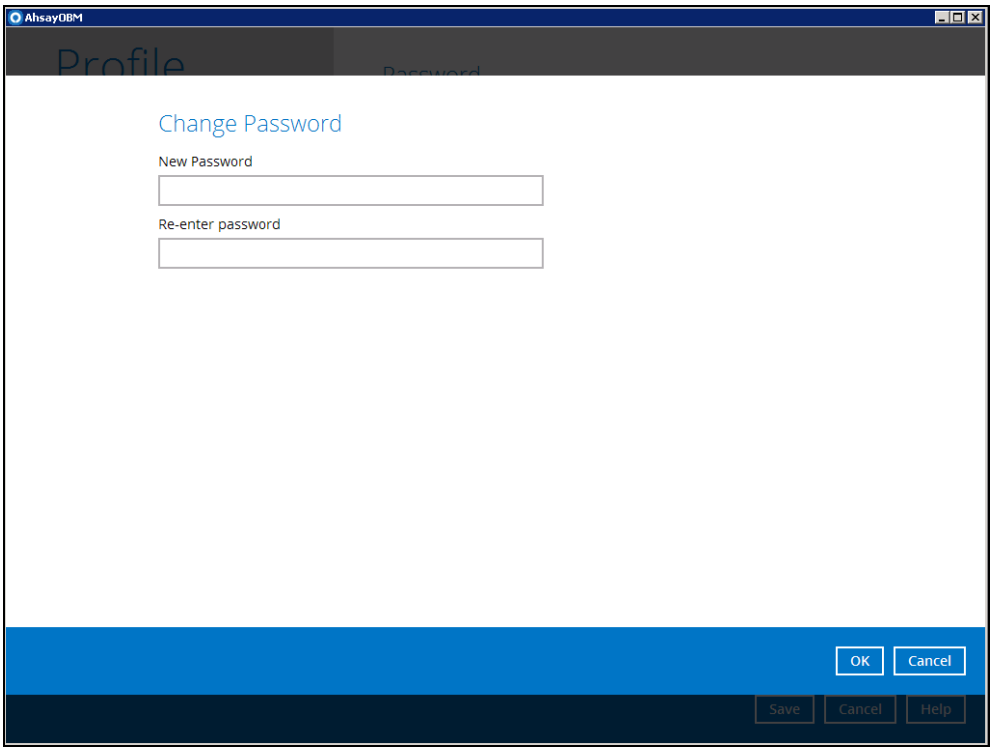
1. Click [Change Password].



2. Enter the current password, then click [Next].



3. Enter the New Password and re-enter the new password then click the [OK] button to return to the main screen.



4. Click the [Save] button to store the updated password.

Language

The list of available languages depends on the backup service provider.

Information

The **Information** icon displays the product version and system information of the machine where the AhsayOBM is installed.

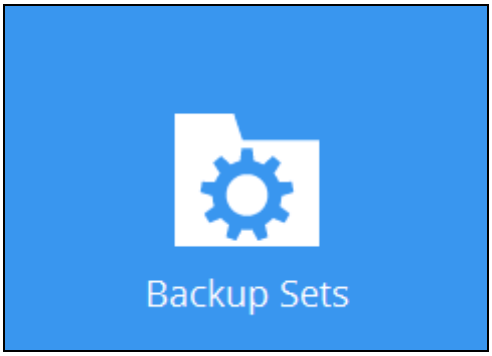
Backup

This feature is used to run the backup set/s.

To start backing up, follow the instructions on Chapter 10 Run Backup Jobs

Backup Sets

A backup set is a place for files and/or folders of your backed-up data. This feature allows the user to select files individually or an entire folder to backup. It is also used to delete backup set/s.



To create or modify a backup set, follow the instructions on Chapter 8 Create a Backup Set

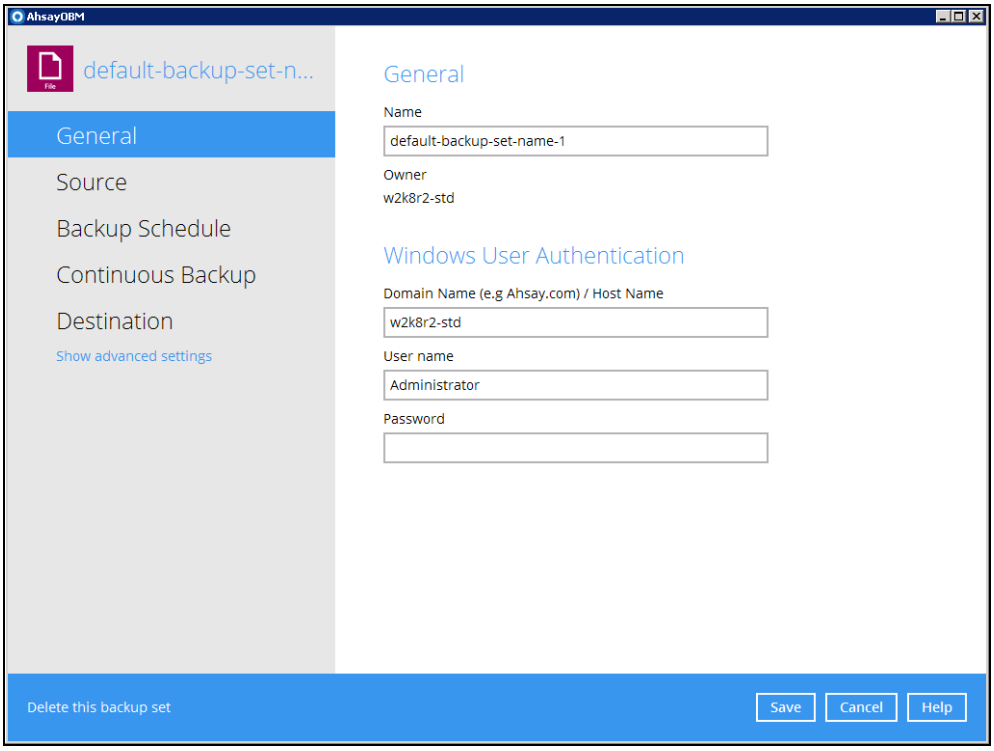
Backup Set Settings

Below is the list of configurable items under Backup Sets:

- General
- Source
- Backup Schedule
- Destination
- In-File Delta
- Retention Policy
- Command Line Tool
- Reminder
- Bandwidth Control
- Others

General

This allows the user to modify the name of the backup set and the windows user authentication credentials.



To modify the backup set name, follow the instructions below:

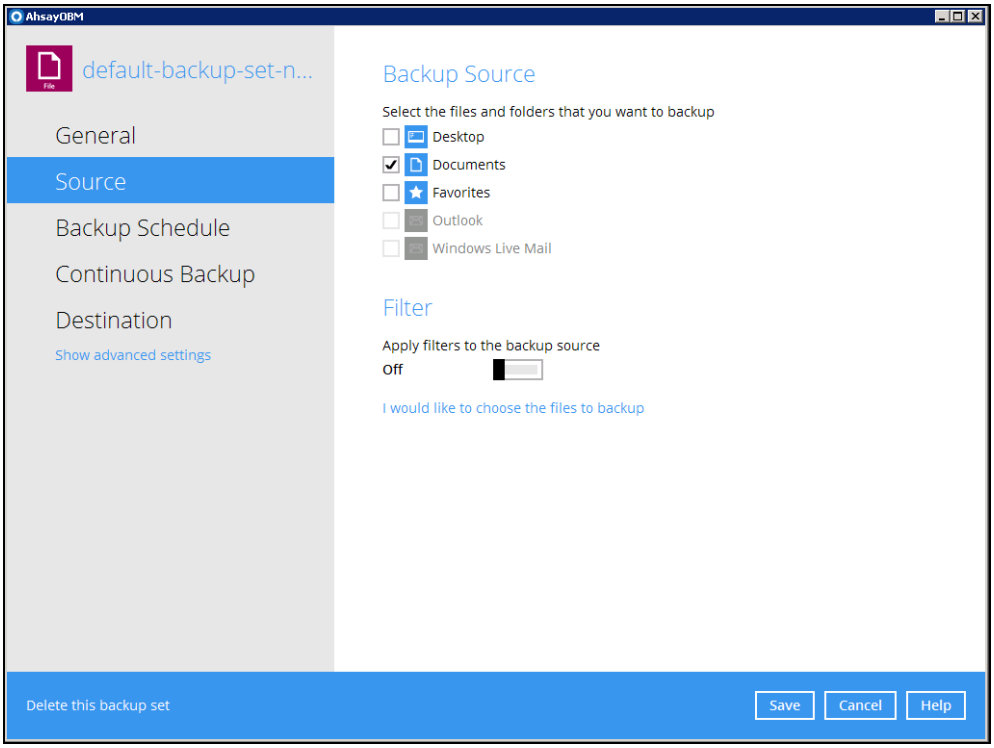
1. Enter the new backup set name in the Name field.
2. Click the [Save] button to save the new backup set name.

To modify the Windows User Authentication credentials, follow the instructions below:

1. Enter the new Domain Name / Host Name.
2. Enter the new User name.
3. Enter the new password.
4. Click the [Save] button to save the new settings.

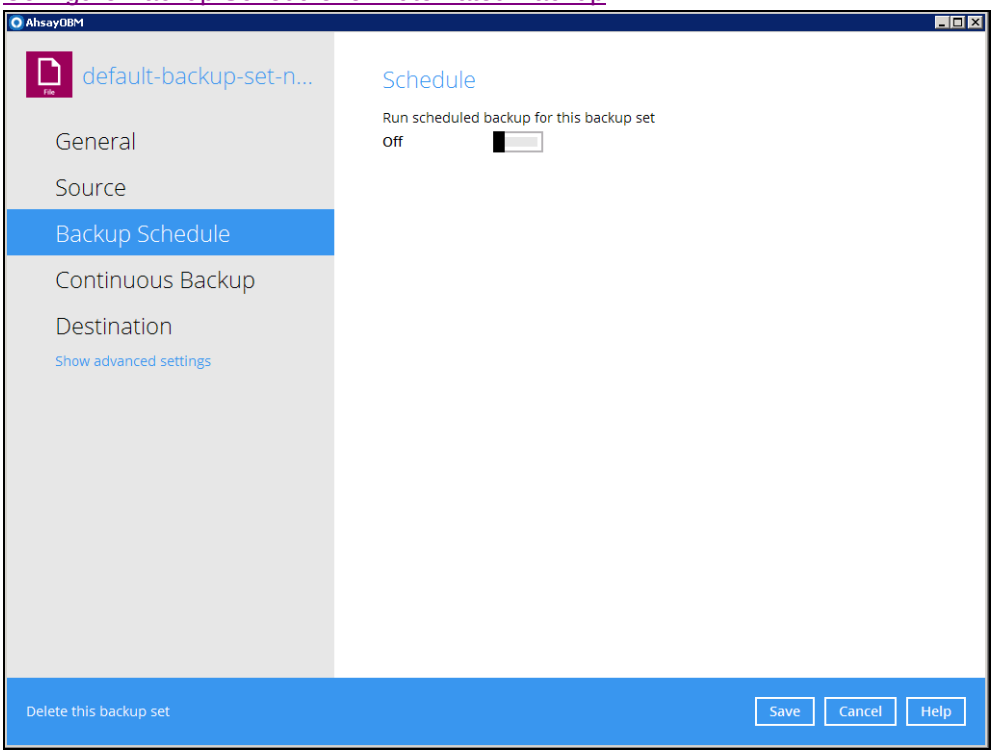
Source

This allows the user to select the files and/or folders that they would like to backup. To know more about filtering, please refer to the AhsayOBM v7 Backup Source File Filter Guide.



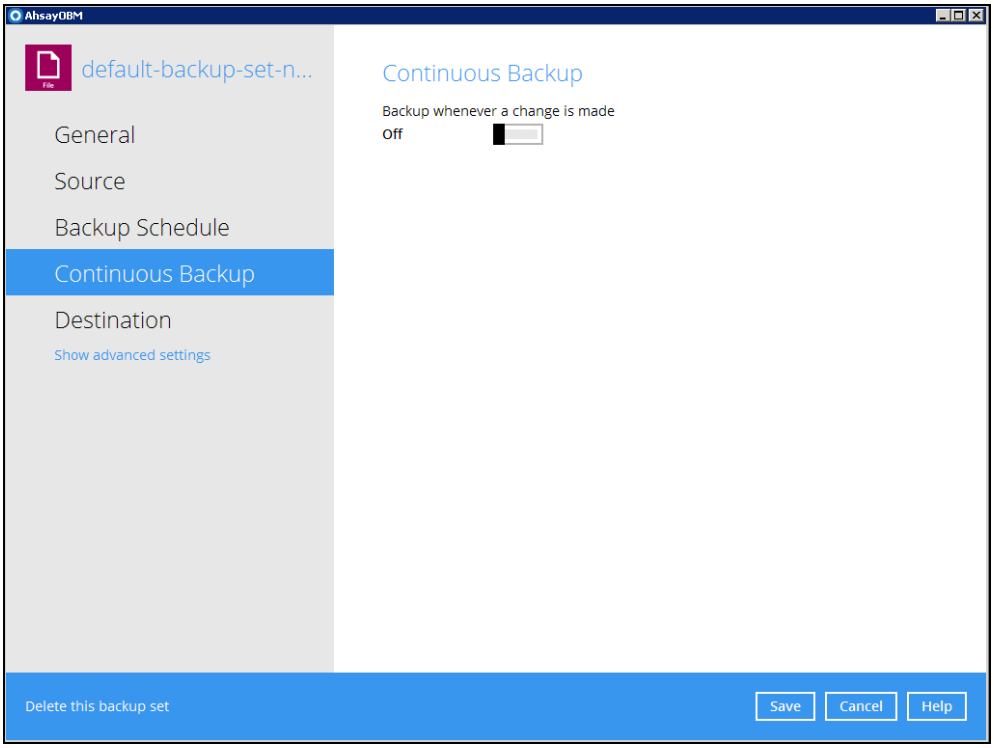
Backup Schedule

This allows the user to assign a backup schedule for the backup job to run automatically. For more details on how to configure a backup schedule, follow the instructions in Chapter 10 Configure Backup Schedule for Automated Backup.



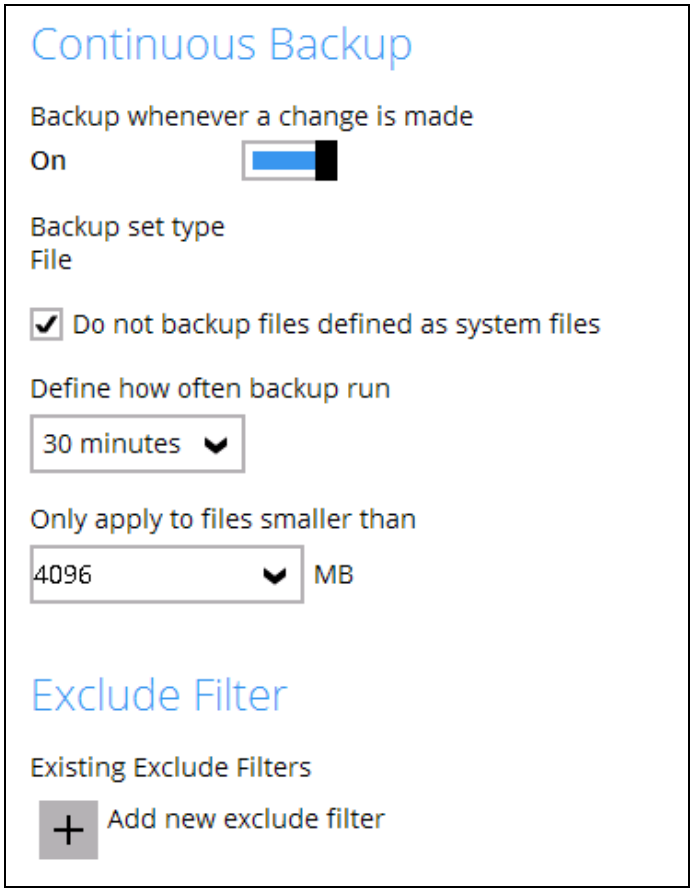
Continuous Backup

This allows the user to enable or disable the continuous backup feature which backs up selective data whenever a change is made.

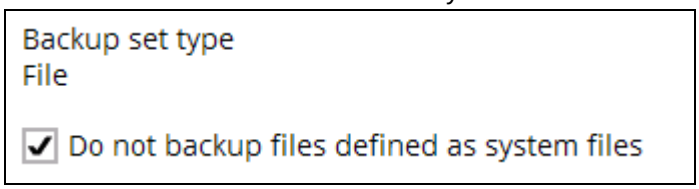


To configure continuous backup, follow the instructions below:

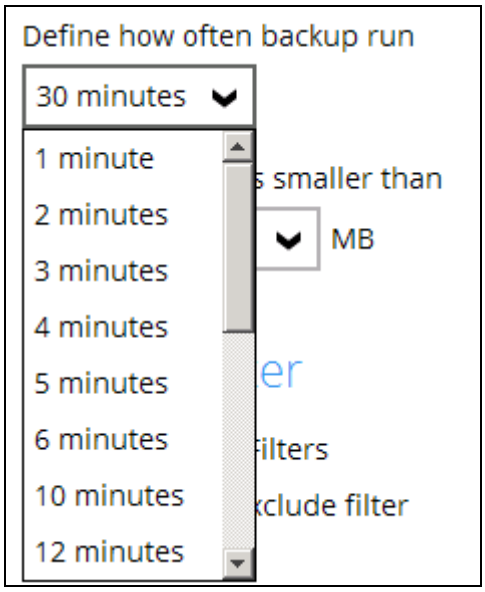
1. Slide the lever to the right to enable continuous backup.



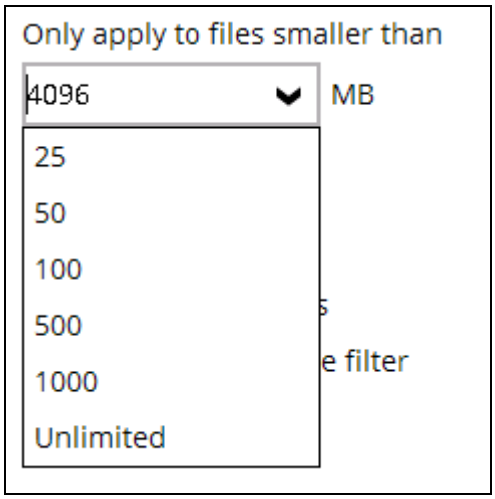
2. Check whether to exclude or include system files in the backup.



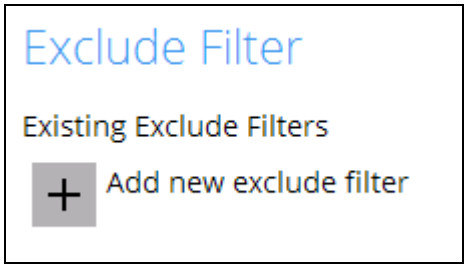
3. Select how often backup will run.



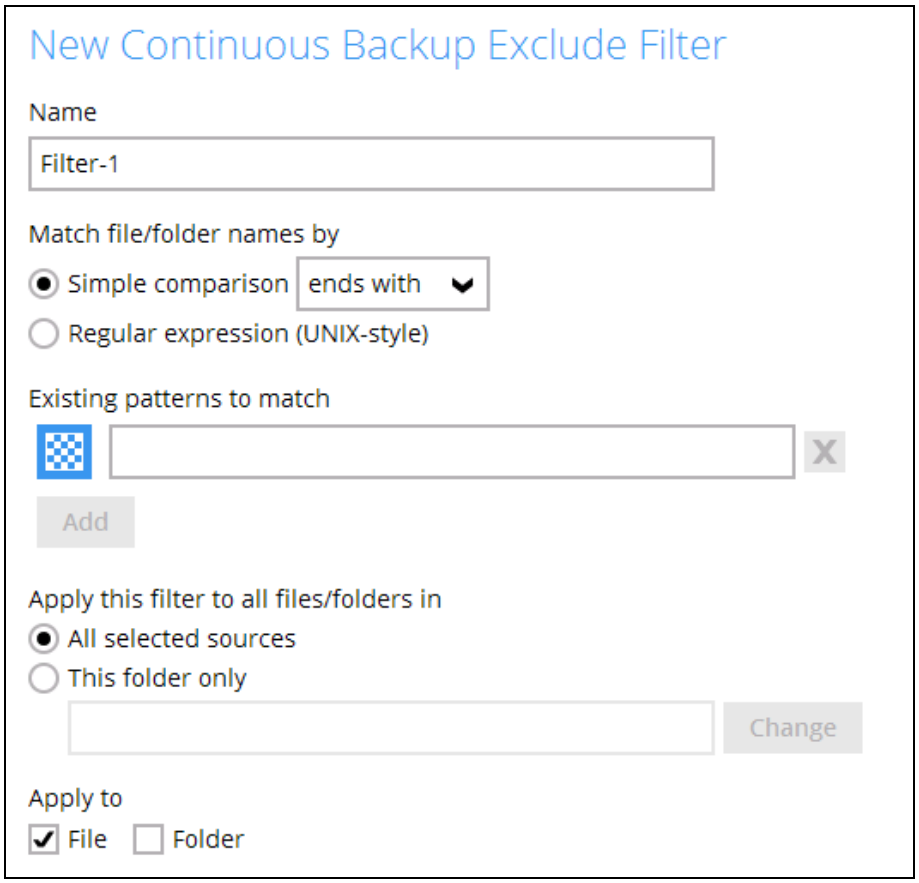
4. Select the file size of the files that will be included in the backup.



5. If an exclude filter will be used, click the [+] button.



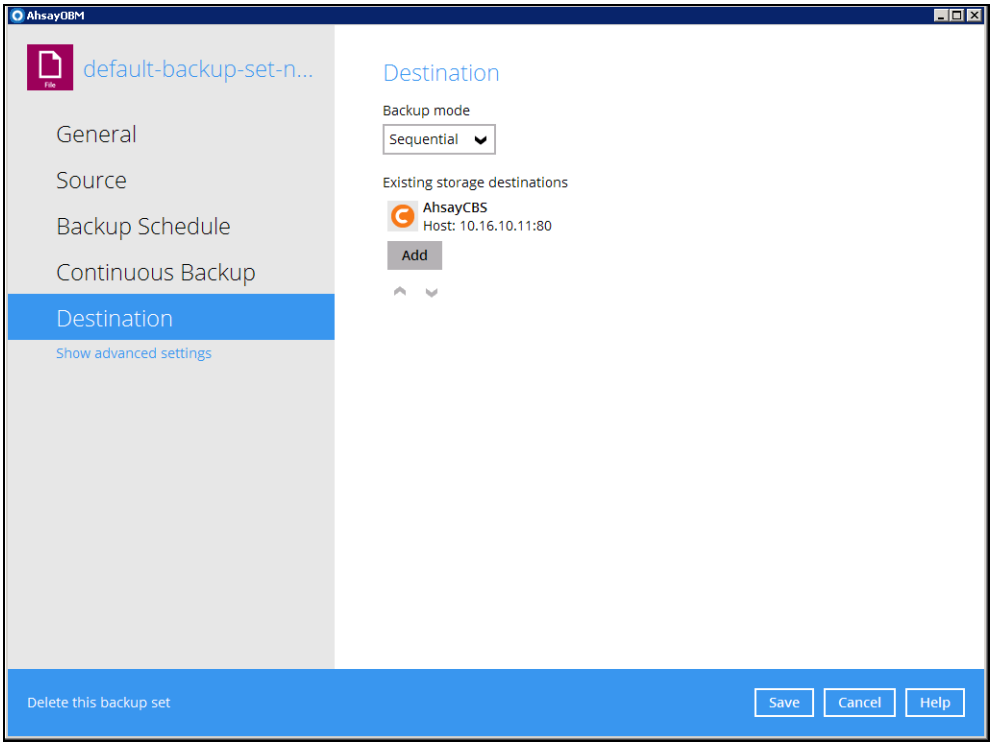
6. Configure the exclude filter that will be used. For more information regarding the exclude filter please refer to the AhsayOBM Backup Source Filter Guide



7. Click [OK] to save the exclude filter.
8. Click [Save] to save the settings.

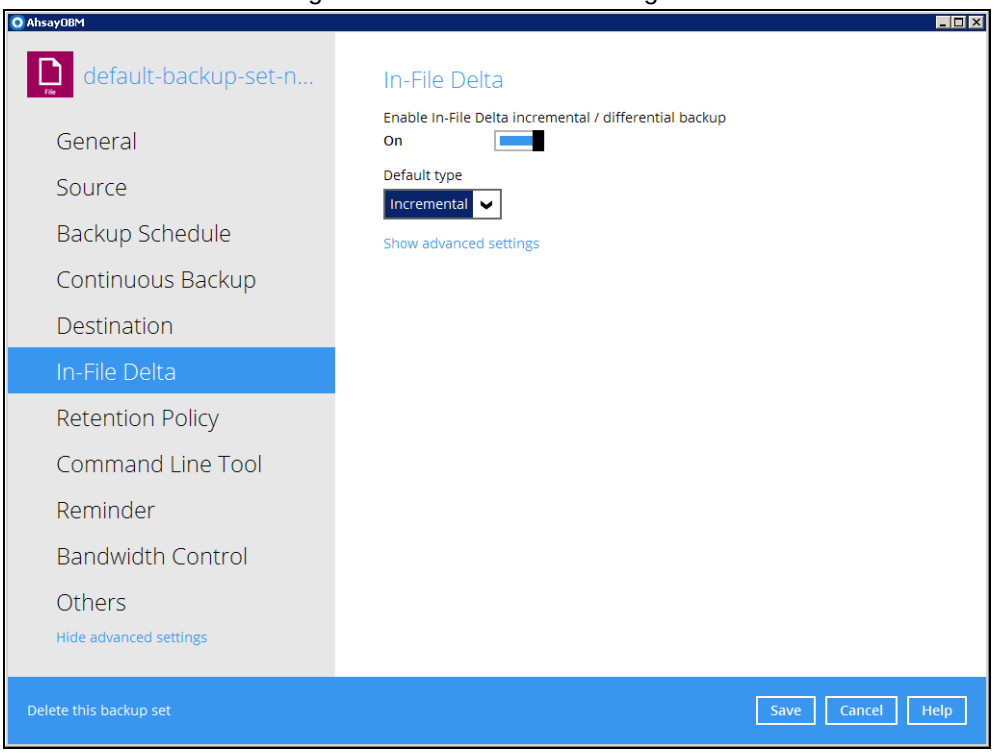
Destination

This allows the user to view the current backup mode and existing storage destinations. It also allows additional storage destinations to be added.



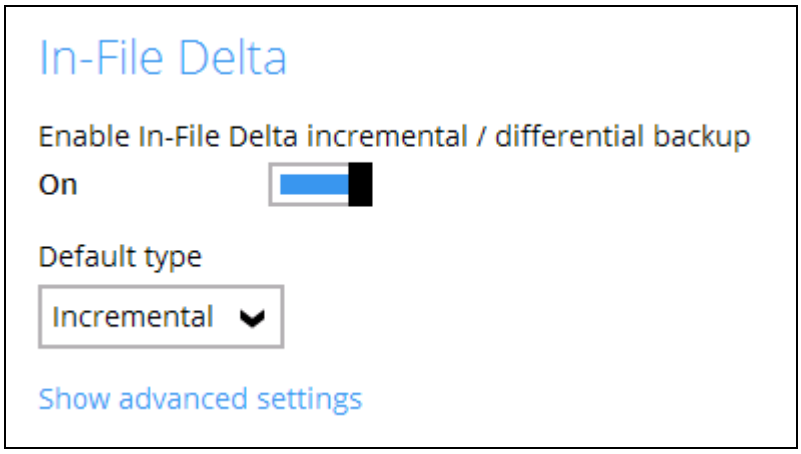
In-File Delta

This allows the user to select from the drop-down list: Differential or Incremental backup. Click the Show advanced settings to view the advance configurations of the in-file delta settings.



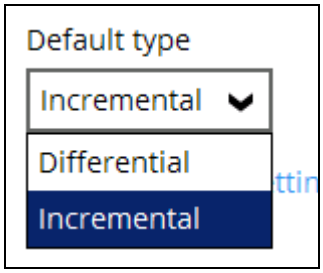
To configure the in-file delta settings, follow the instructions below:

1. Slide the lever to the right to enable the In-File Delta.

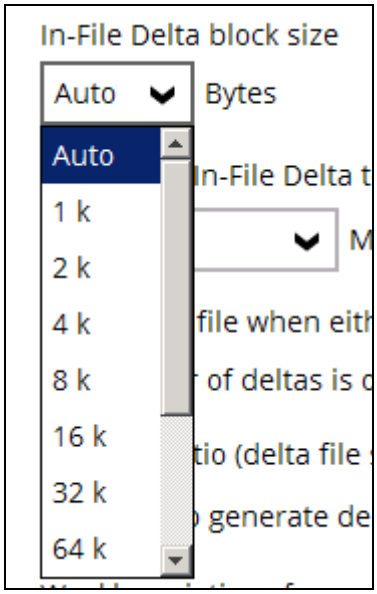


2. Select the type, whether Incremental or Differential.

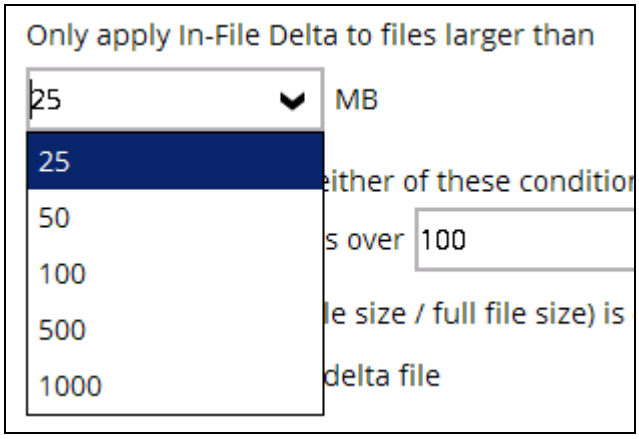
   - Incremental – delta is generated by comparing with the last uploaded full or delta file. This type uses the least bandwidth and is smaller in size. For restoration, the full file and all delta chains up to the required point-in-time are required to be restored and merged.
   - Differential – delta is generated by comparing the last uploaded full file only. This type will use more bandwidth and grow daily. For restoration, the full file and only a single delta is required to be restored and merged.



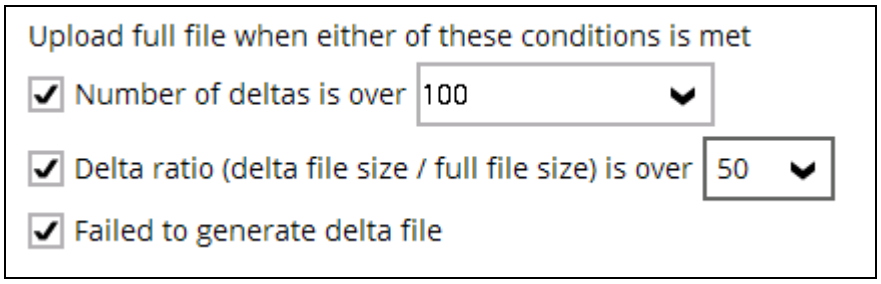
3. Click [Show advanced settings] if you want to configure the advanced settings.
4. Select the In-File Delta block size.



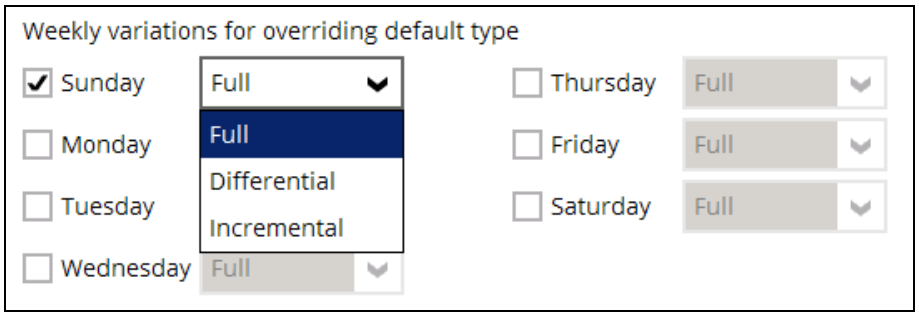
5. Select the file size where it will be applied.



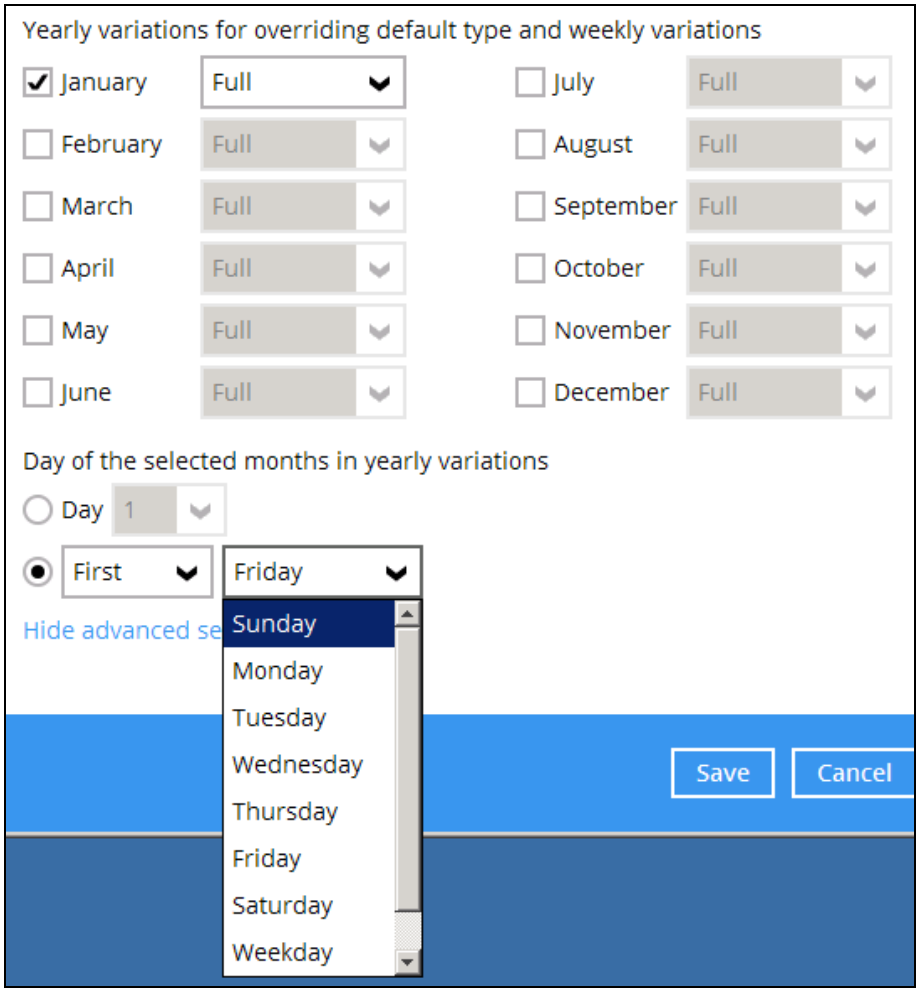
6. Check to determine when the full file will be uploaded.



7. Select the day of the week when default type will be overridden.

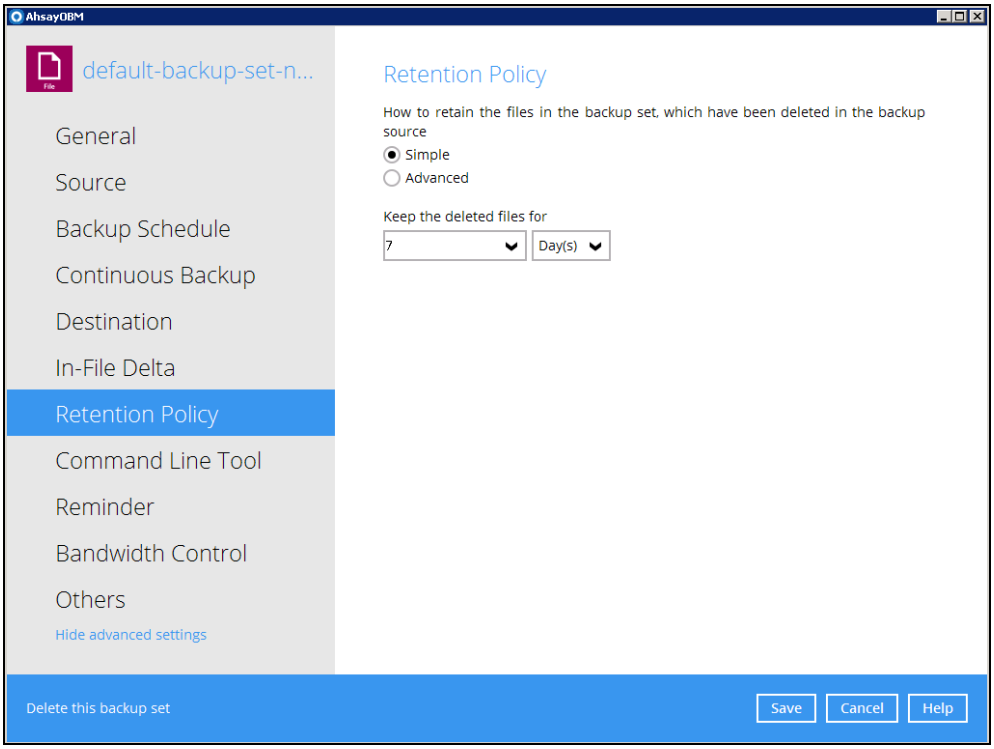


8. Select the month, week and day when default type will be overridden.



Retention Policy

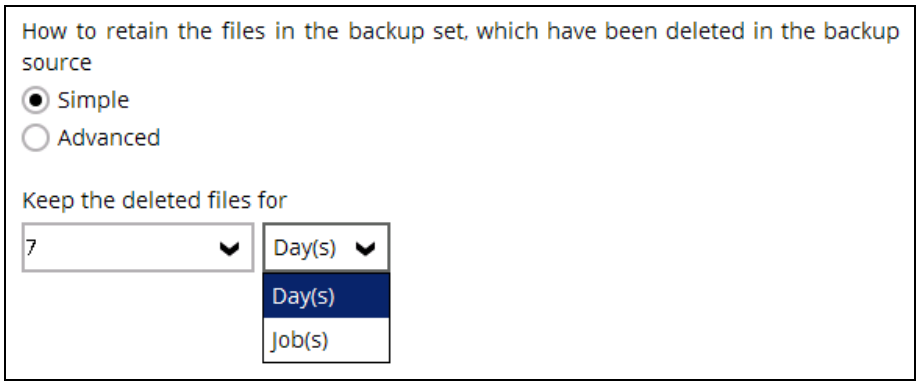
This allows the user to retain the deleted files based on the selected retention type policy.



To configure the retention policy, follow the instructions below:

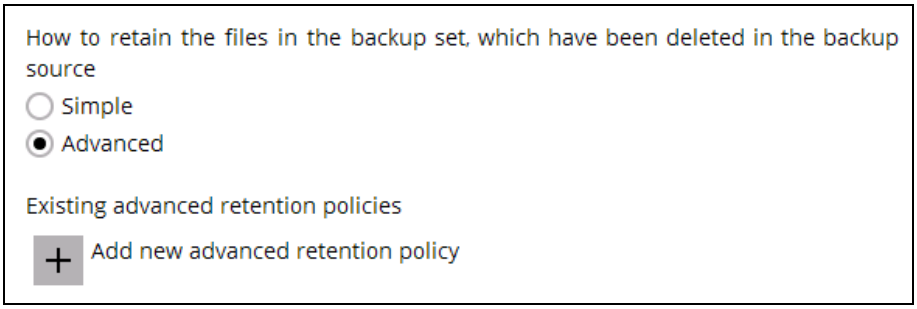
1. Select how to retain the files, whether Simple or Advanced.

   - For Simple, select how many days or jobs the deleted files will be kept.

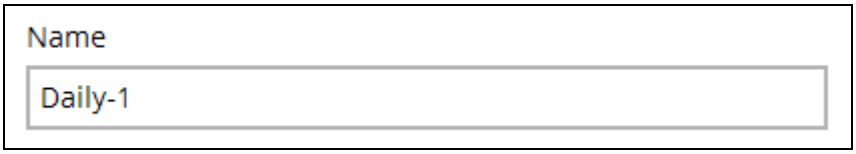


   - For Advanced, configure according to your preferred settings.

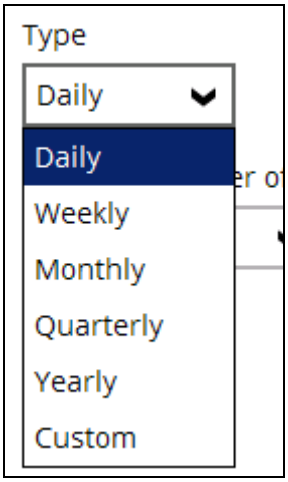
     a. Click the [+] button to add a retention policy.



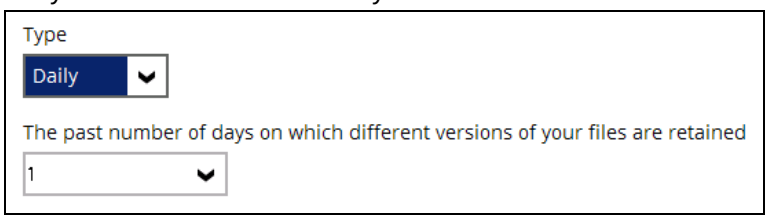
b. Specify the Name.



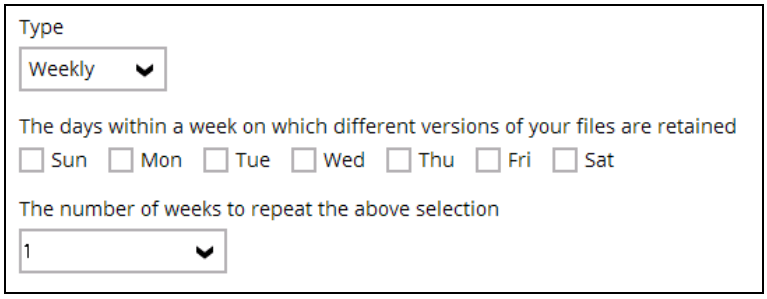
c. Select the Type.



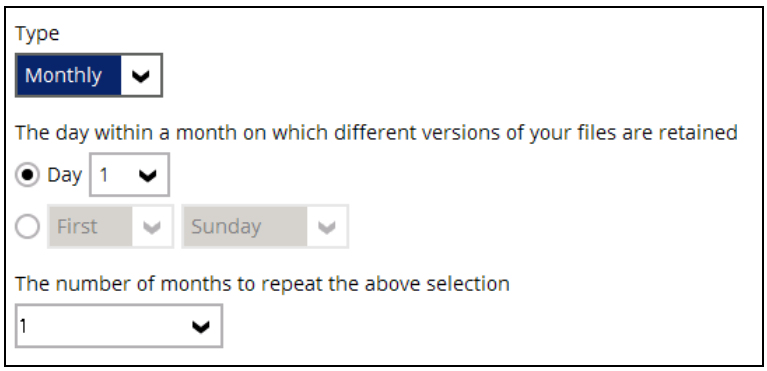
- Daily – select the number of days



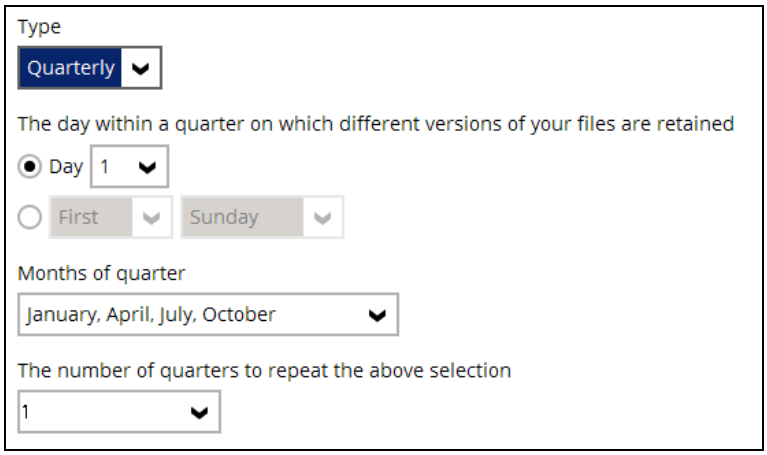
- Weekly – select the day and number of weeks



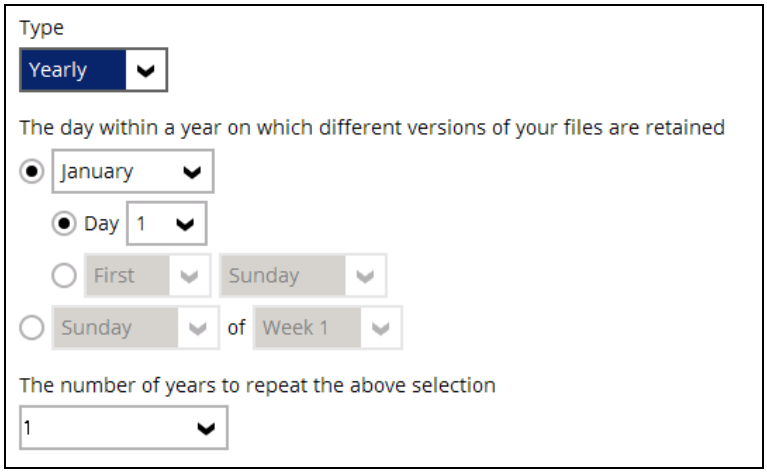
- Monthly – select the day or combination of day and week in a month and number of months



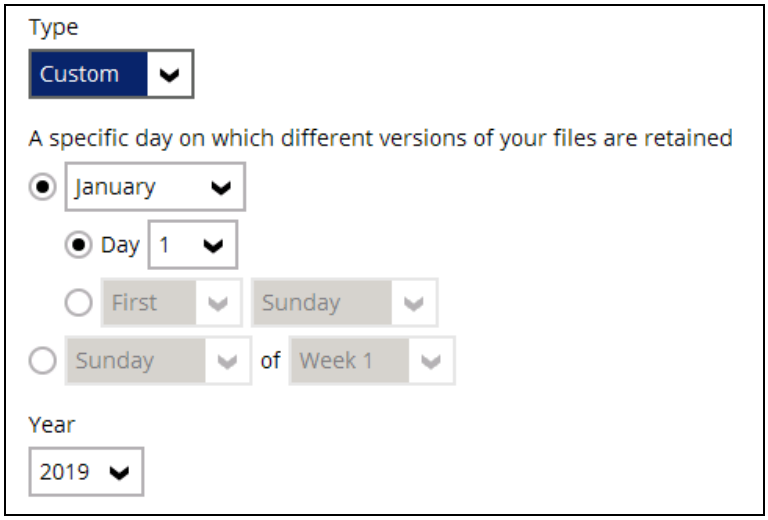
- Quarterly – select the day or combination of day and week in a month, months of quarter and number of quarters



- Yearly – select the month, day in a month or combination of day and week in a month or week and day in a month and number of years



- Custom – select the month, day in a month or combination of day and week in a month or week and day in a month and year



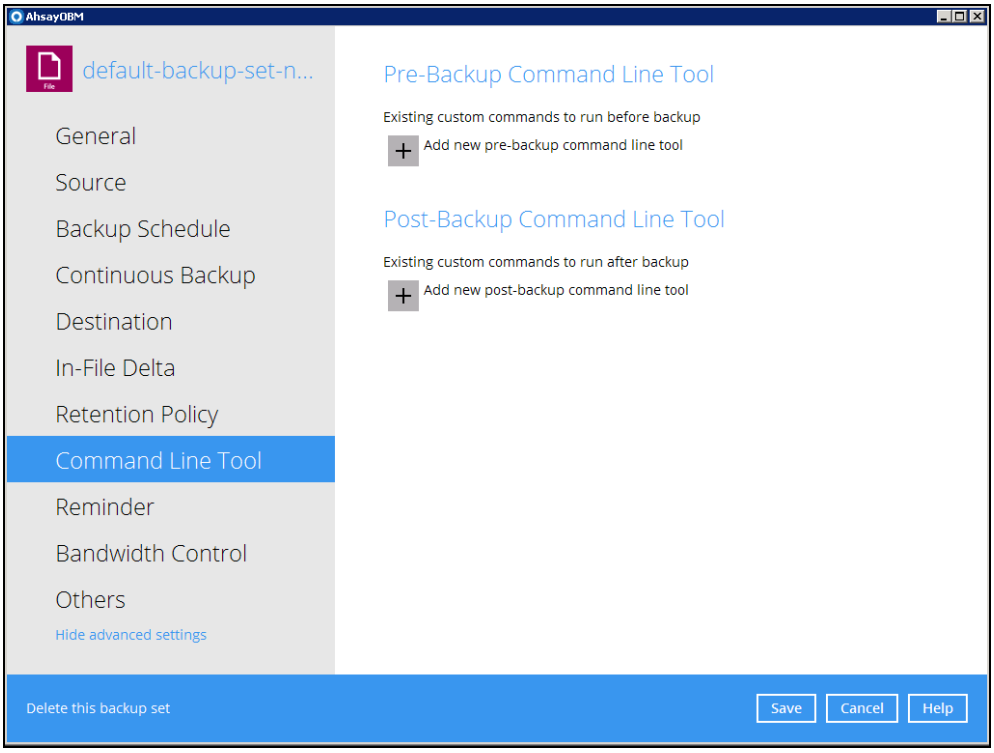
d. Click [OK] to save the retention policy.

2. Click the [Save] button to save the settings.

Command Line Tool

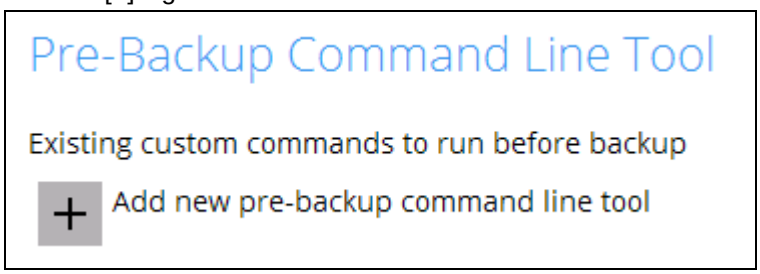
This allows the user to configure pre-backup or post backup command which can be; an operating system level command, a script or batch file, or third-party utilities to run before and after a backup job.

For example: connecting to a network drive and disconnecting a network drive, stopping a third-party database (not officially supported by Ahsay) to perform a cold backup and restarting a third-party database after the backup.

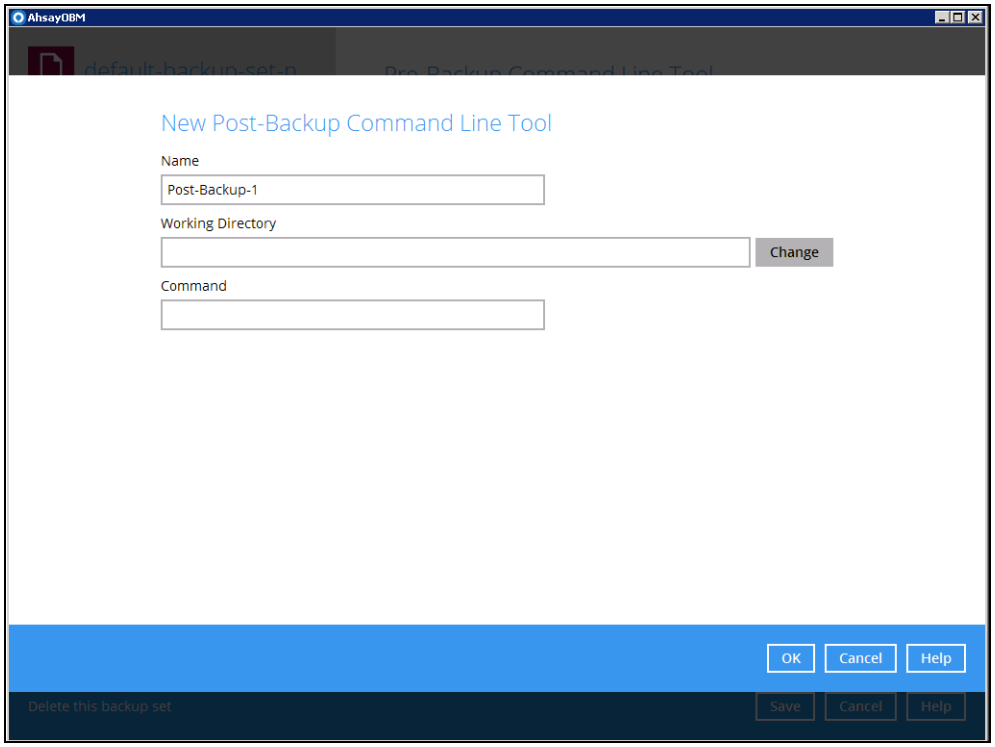


To add a pre-backup command, follow the instructions below:

1. Click the [+] sign or add button.



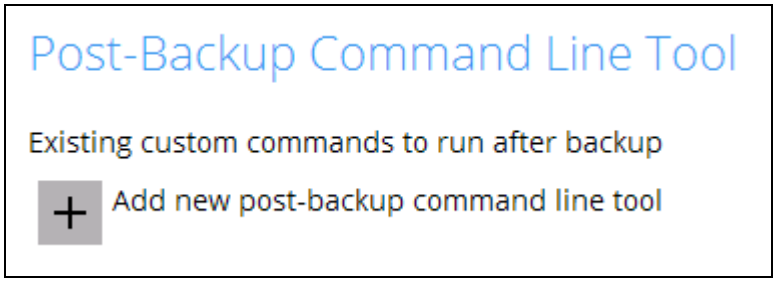
2. Complete the following fields:
    - Name
    - Working Directory
    - Command



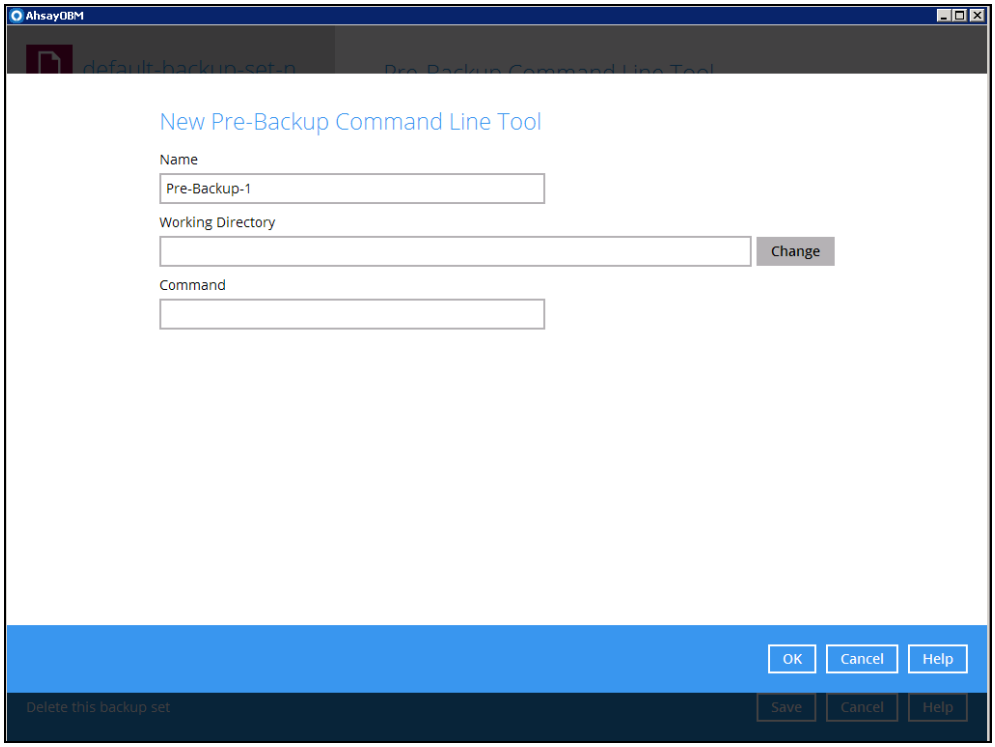
3. Click the [Change] button to select the working directory.
4. Click the [OK] button to save the settings.

To add a post-backup command, follow the instructions below:

1. Click the [+] sign or add button.



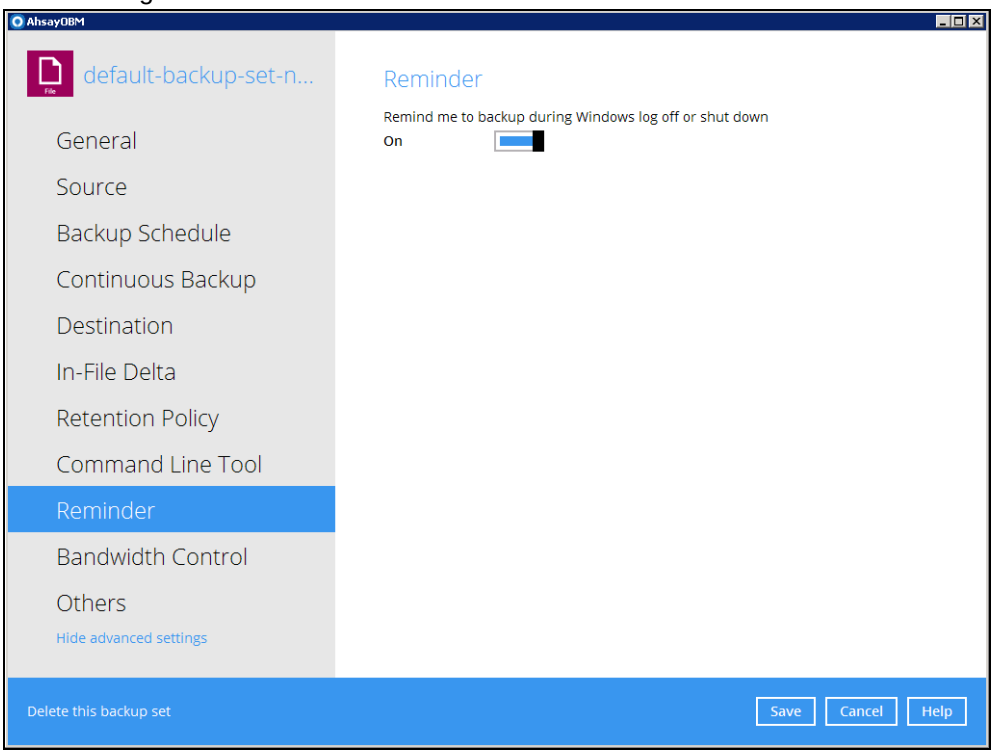
2. Complete the following fields:
    - Name
    - Working Directory
    - Command



3. Click the [Change] button to select the working directory.
4. Click the [OK] button to save the settings.

Reminder

This allows the user to set a reminder if there is an upcoming backup to be performed during Windows log off or shut down.

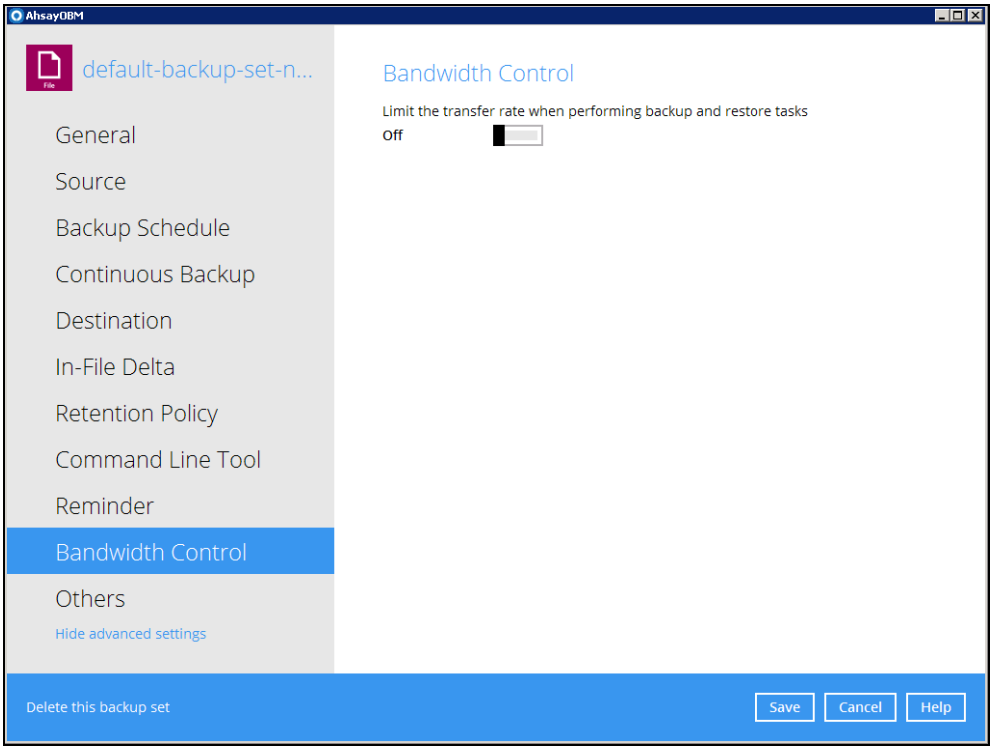


Bandwidth Control

This allows the user to limit the amount of bandwidth used by backup traffic between specified times. There are two modes in assigning a bandwidth control.

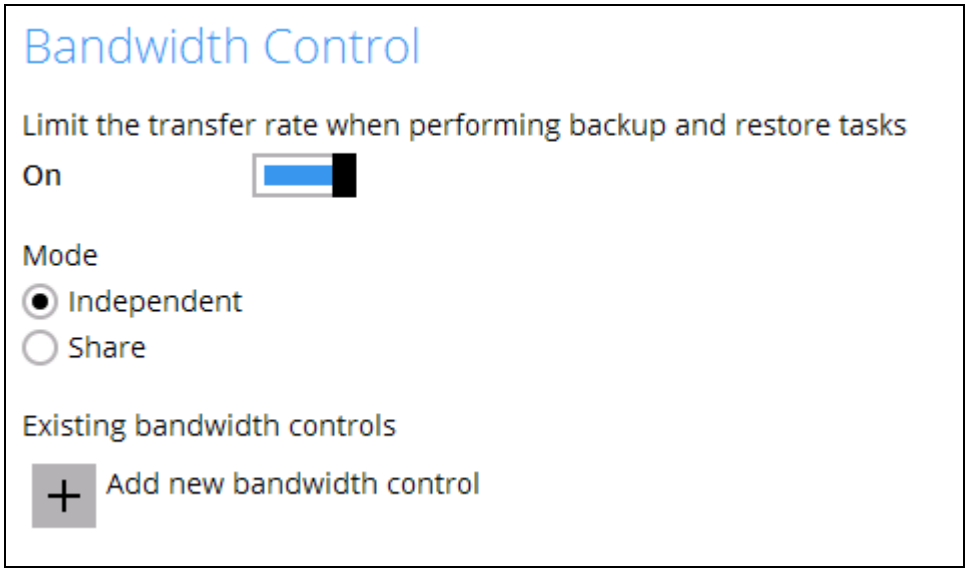
- Independent – each backup and restore has its assigned bandwidth
- Share – all backup and restore share the same assigned bandwidth

Note: Share mode does not support performing of backup jobs on multiple destinations concurrently.

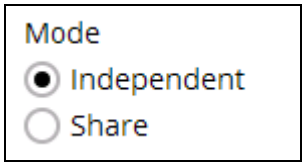


To enable, choose a mode and add a bandwidth control, follow the instructions below:

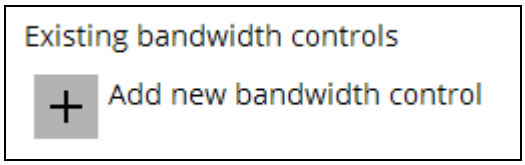
1. Slide the lever to the right to enable bandwidth control.



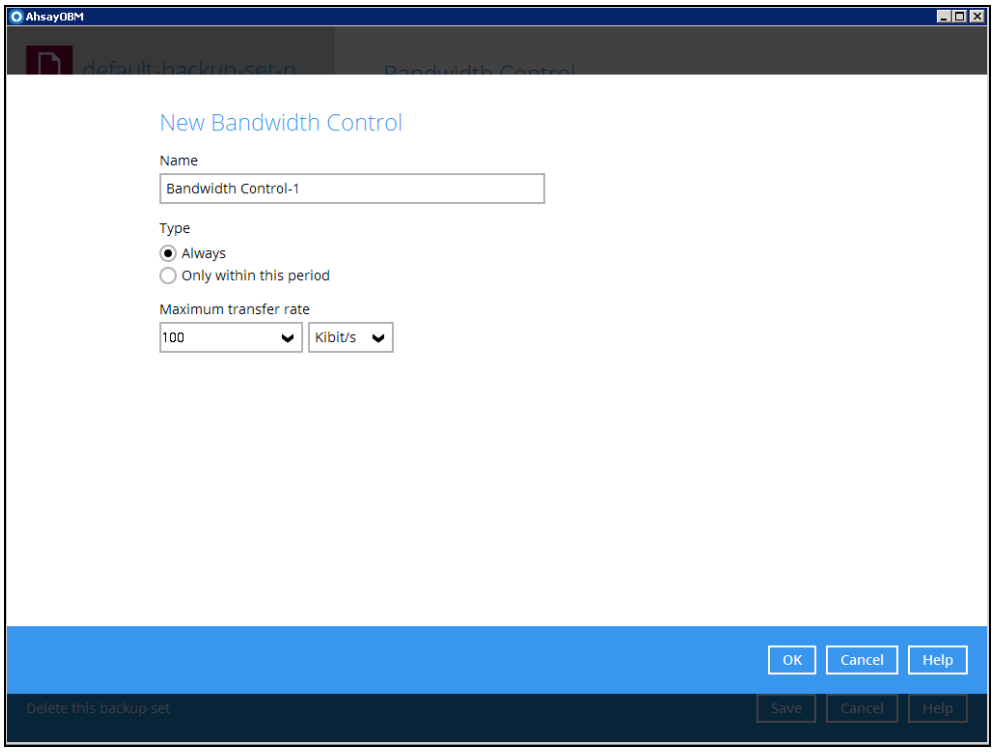
2. Select a mode: Independent or Share



3. Click the [+] sign or add button.



4. Complete the following fields:
    - Name
    - Type
    - Maximum transfer rate



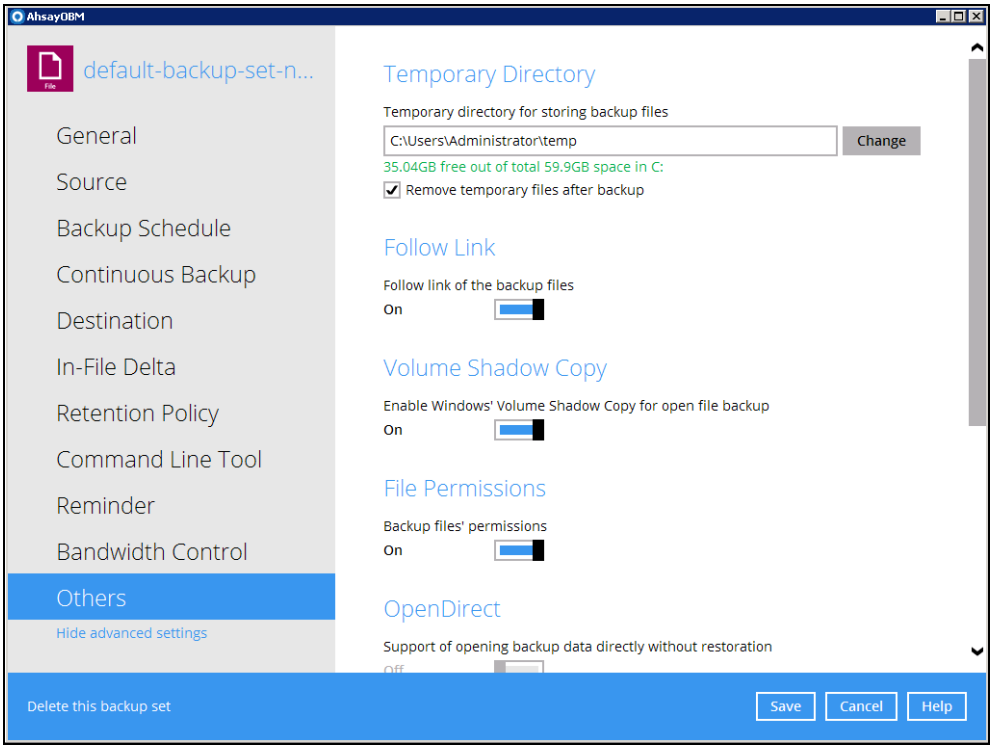
5. Click [OK] to save the settings.

Others

This allows the user to configure the following backup set settings:

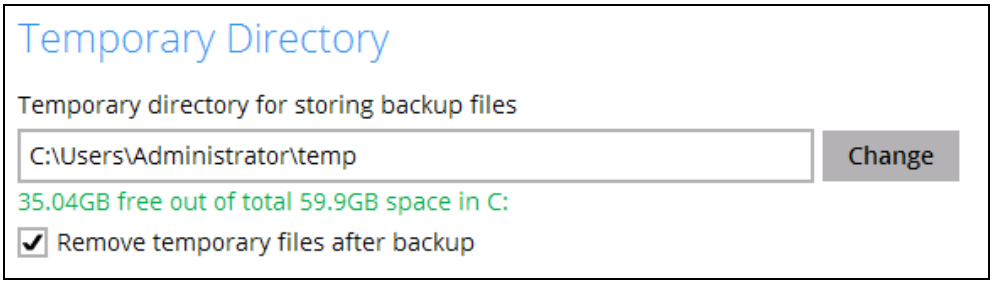
- Temporary Directory
- Follow Link
- Volume Shadow Copy
- File Premissions

- OpenDirect
- Compressions
- Encryption



Temporary Directory

This allows the user to configure the temporary directory of spooled files, remote file list and other temporary backup files.

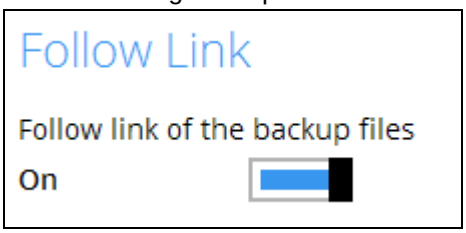


To configure the temporary directory, follow the instructions below:

1. Click the [Change] button to select a directory path for storing the temporary data.
2. You also have an option to check or uncheck the [Remove temporary files after backup].
3. Click the [Save] button to save the settings.

Follow Link

This allows the user to enable or disable the follow link which defines whether to include the NTFS junction point or symbolic link as well as the directories and files it links to will be included during backup.

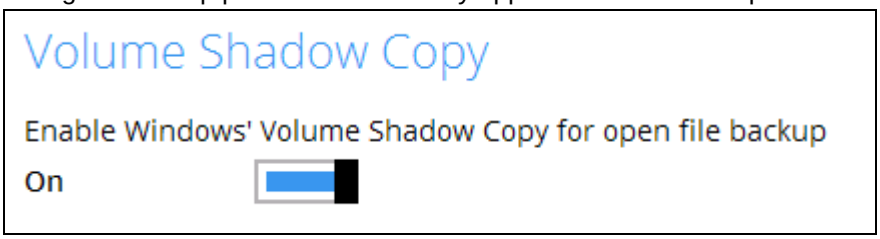


1. Slide the lever to the right to turn on the Follow Link option. Otherwise, slide to the left to turn it off.

2. Click the [Save] button to save the settings.

Volume Shadow Copy

This allows the user to enable or disable the backup of local files that are exclusively opened during the backup process. This is only applicable to file backup set.

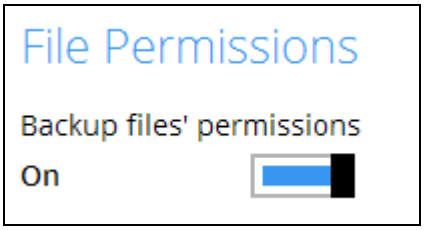


1. Slide the lever to the right to turn on the Volume Shadow Copy option. Otherwise, slide to the left to turn it off.

2. Click the [Save] button to save the settings.

File Permissions

This allows the user to enable or disable the backup file permission which backups the operating system file permission of the data selected as backup source.

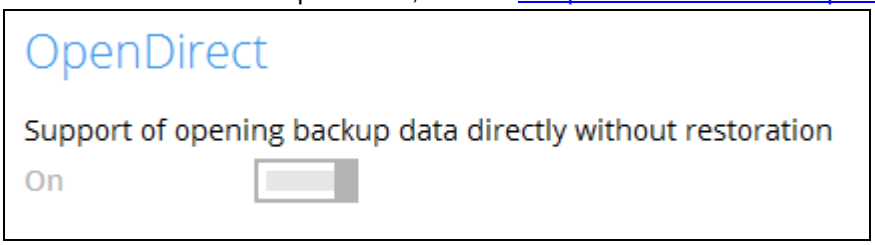


1. Slide the lever to the right to turn on the File Permissions option. Otherwise, slide to the left to turn it off.

2. Click the [Save] button to save the settings.

OpenDirect

The OpenDirect feature allows for fast and convenient restoration of individual files from a large image file or compressed file without the need to restore the image or compressed file first. For more details about OpenDirect, refer to Chapter 8 Create a Backup Set.

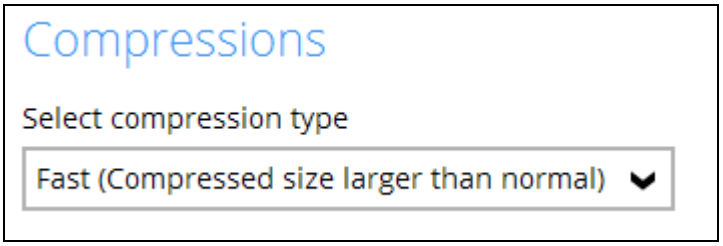


Note: The OpenDirect feature can only be configured during backup set creation process. Once it is enabled and the backup set is saved, it is not possible to disable it afterwards, and vice versa. A new backup set must be created if you wish to change the OpenDirect setting.

Compressions

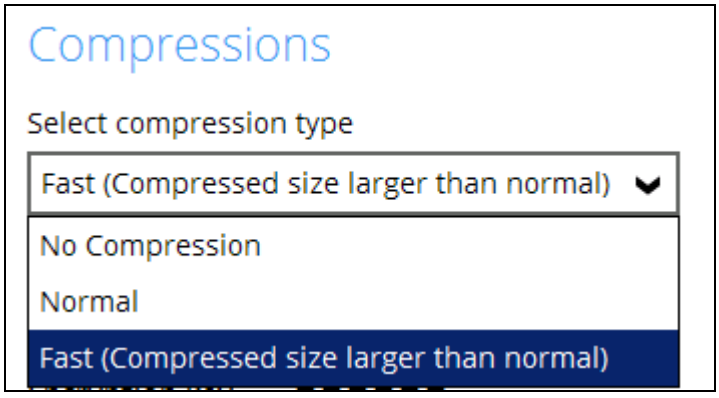
This allows the user to compress the data during backup job. There are three (3) compression types available:

- No Compression
- Normal
- Fast (Compressed size larger than normal)



To configure the compression, follow the instructions below:

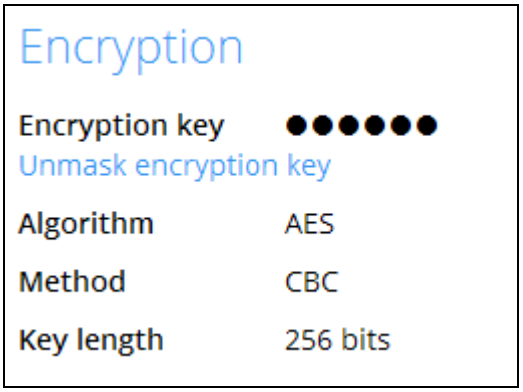
1. Click the drop-down list and select a compression type.



2. Click the [Save] button to save the settings.

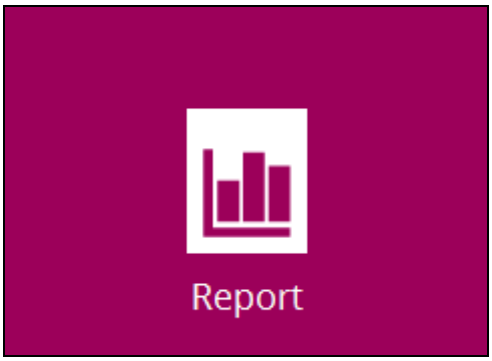
Encryption

This allows the user to view the current encryption settings. For more details about encryption, refer to Chapter 8 Create a Backup Set.



Report

This feature allows the user to view the backup and restore reports.



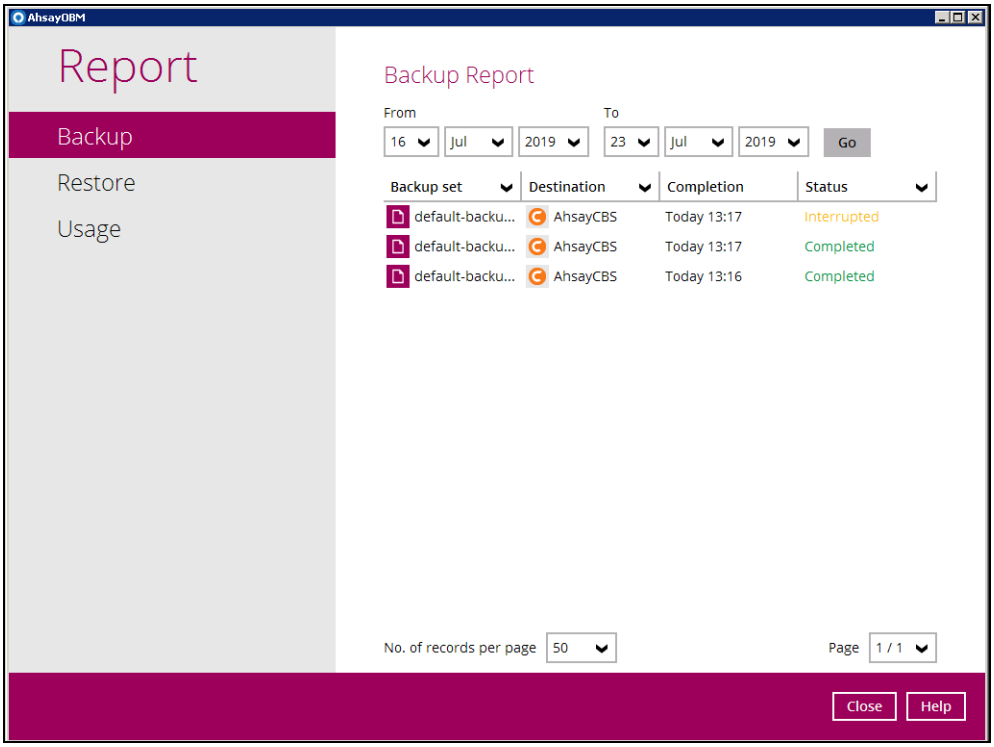
There are three (3) functions available for this feature:

- Backup
- Restore
- Usage

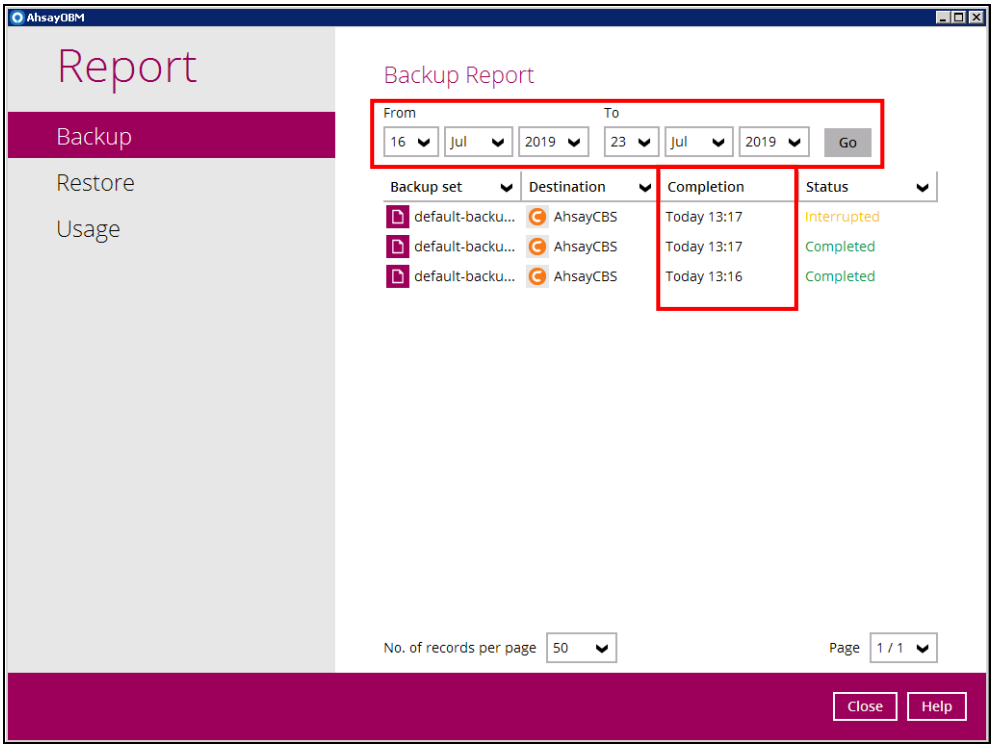
Backup

This shows the backup reports. There are four (4) filters that can be applied on this feature:

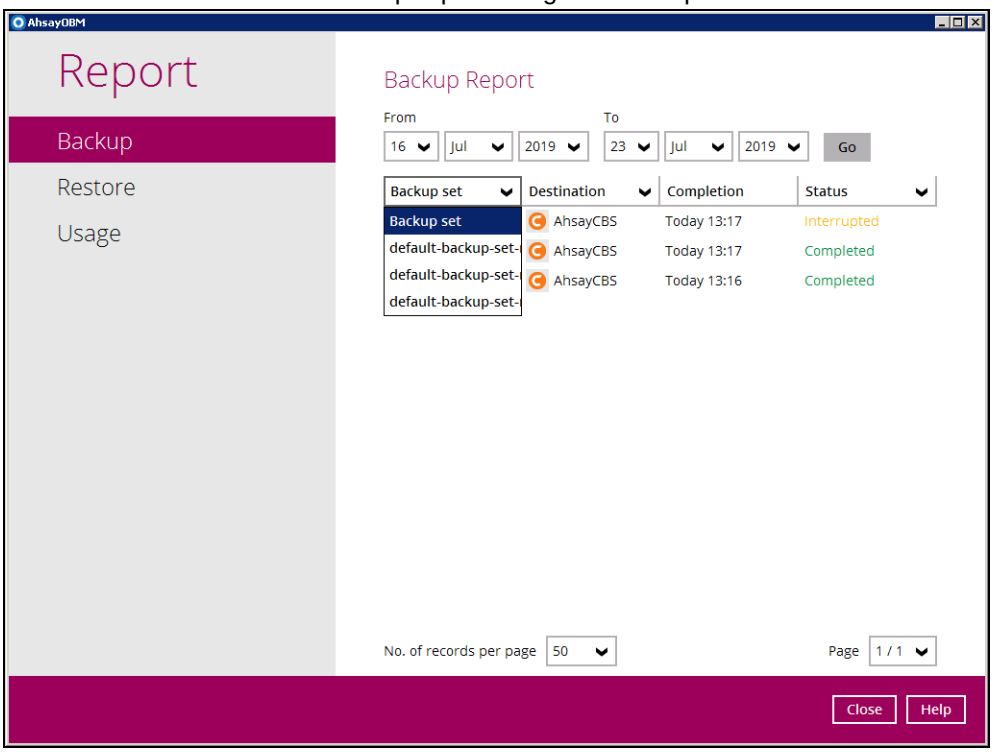
- Date
- Backup Set
- Destination
- Status



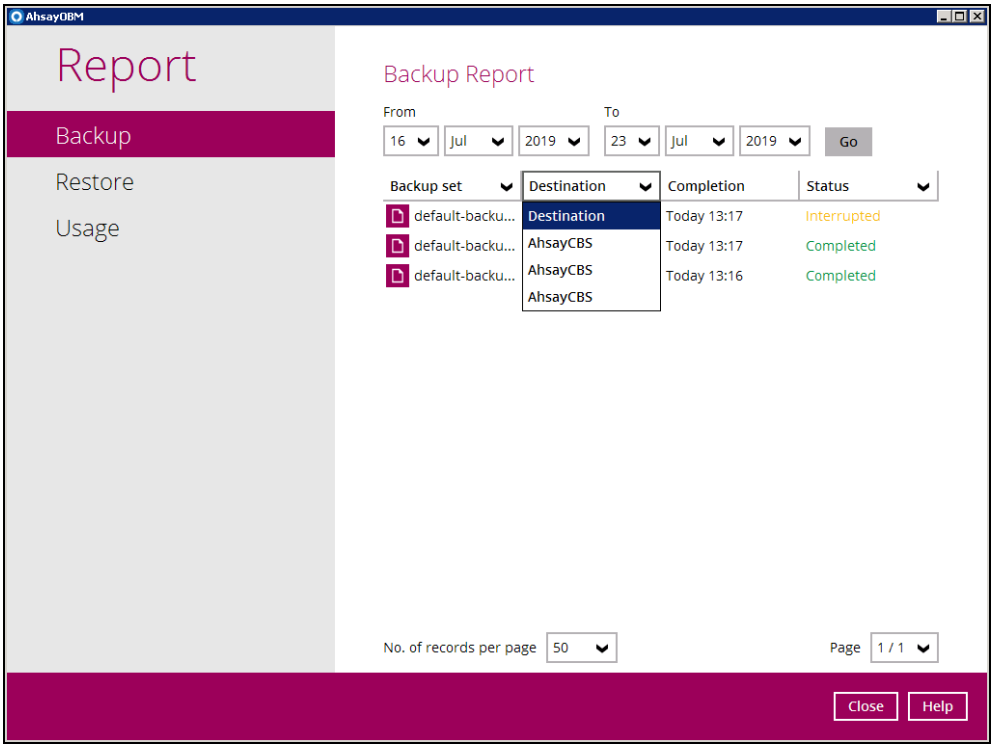
You can filter and view the backup report using the Date filter.



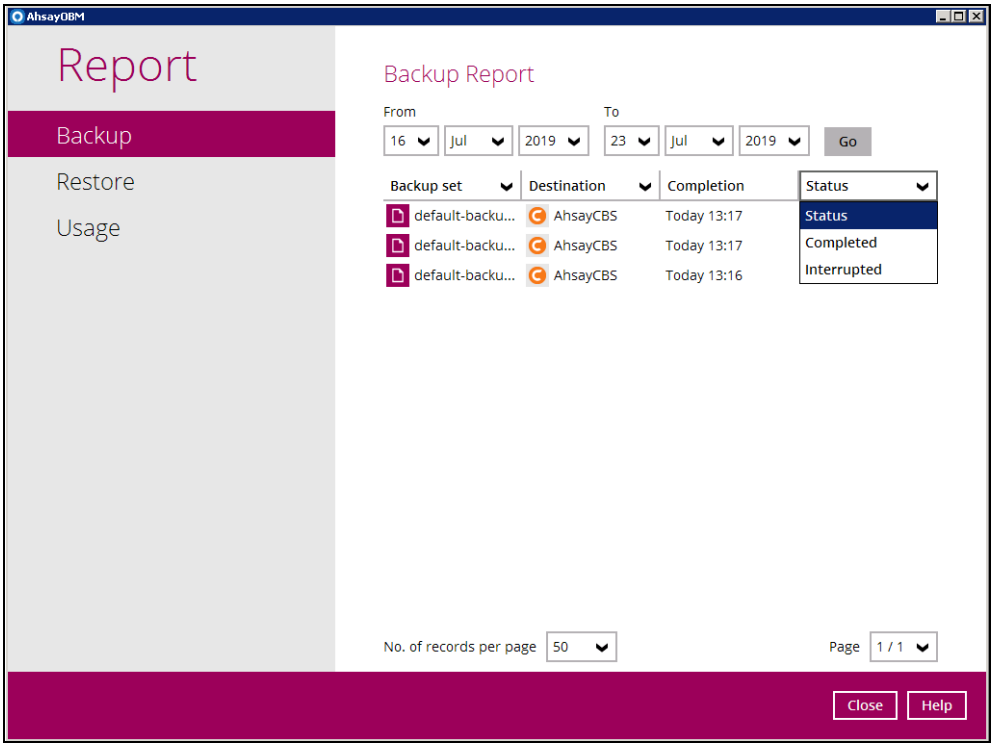
You can filter and view the backup report using the Backup set filter.



You can filter and view the backup report to your selected storage location using the Destination filter.

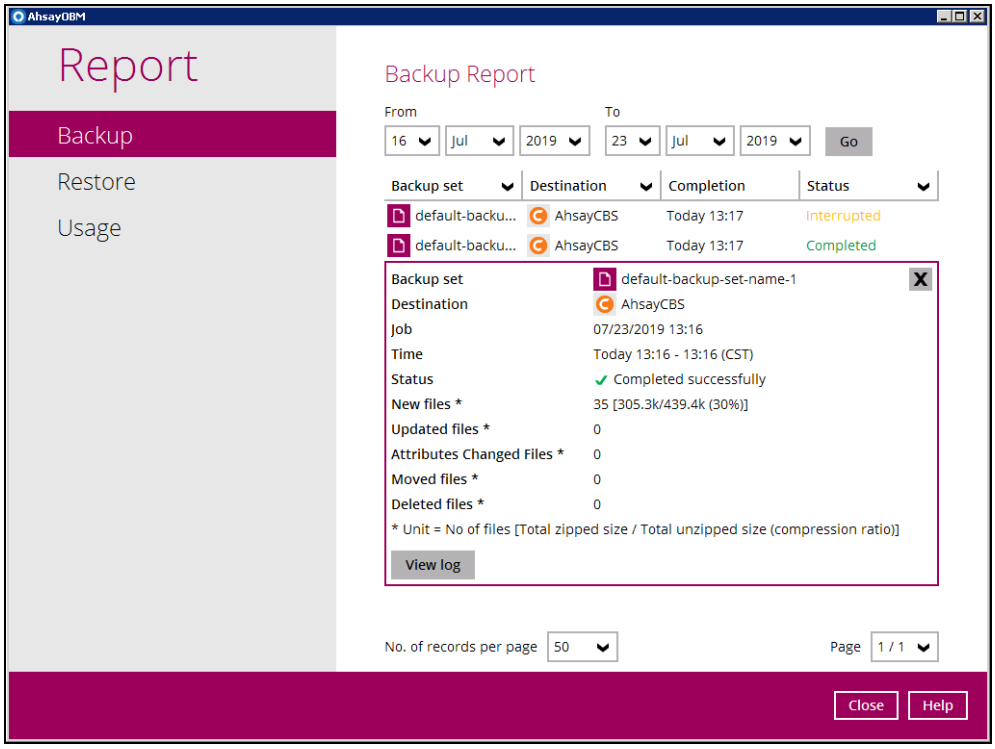


You can filter and view the backup report with the same status using the Status filter.



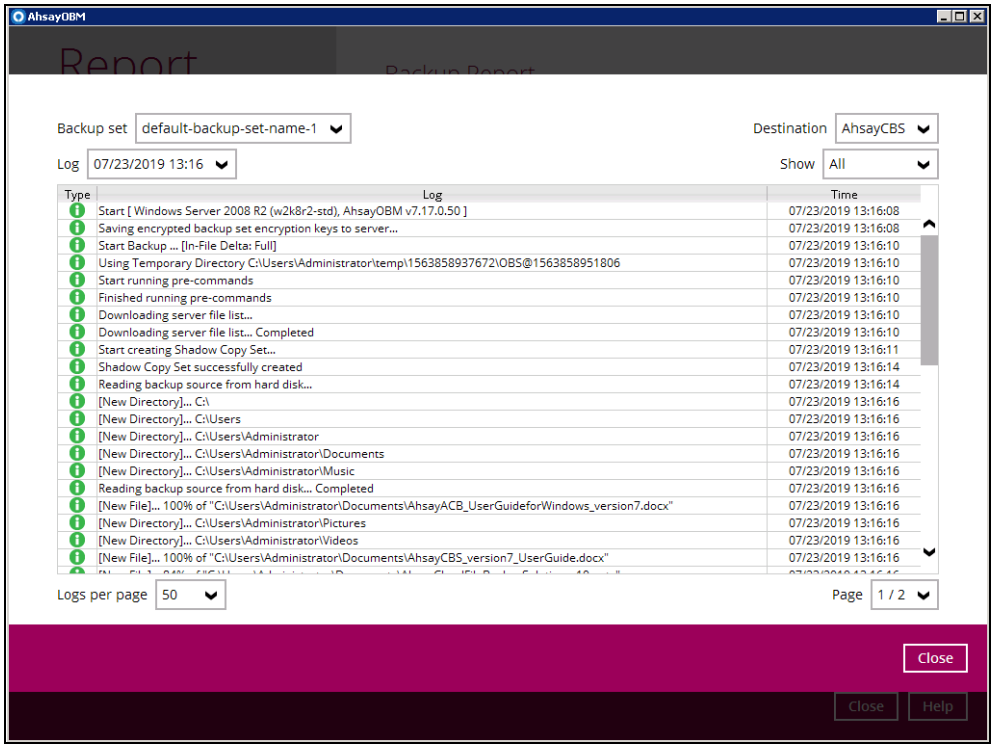
To view the backup log, follow the instructions below:

1. Select and click the backup report.



2. Click the [View log] button.

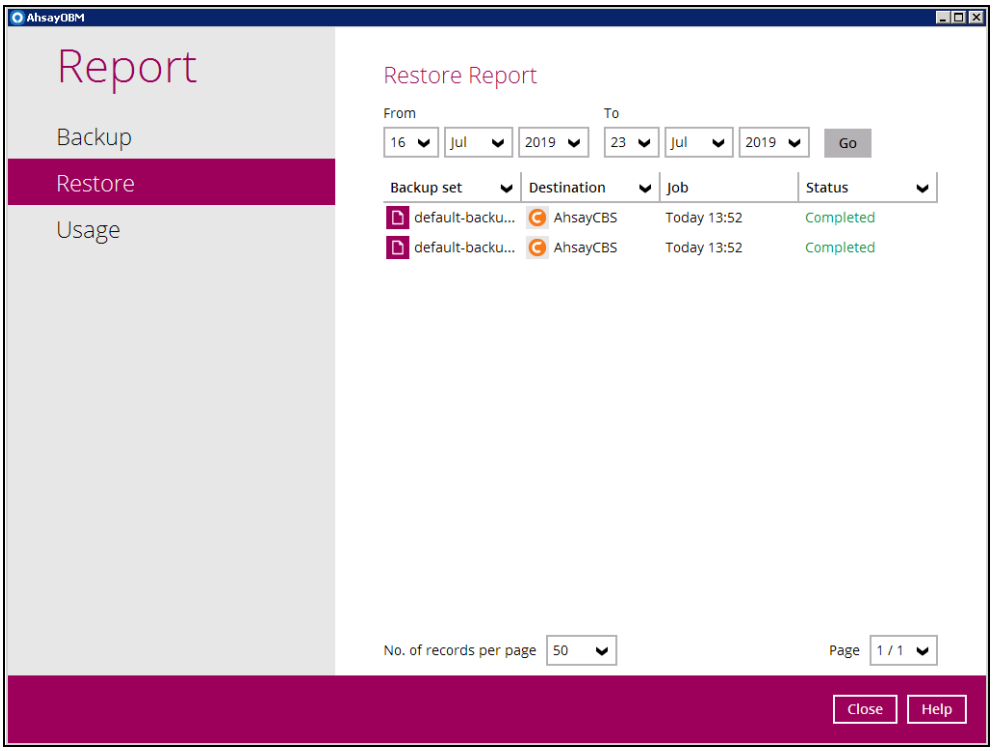
   Backup set, Destination, Log Date and Time, and Status can also be filtered as well as the number of logs per page.



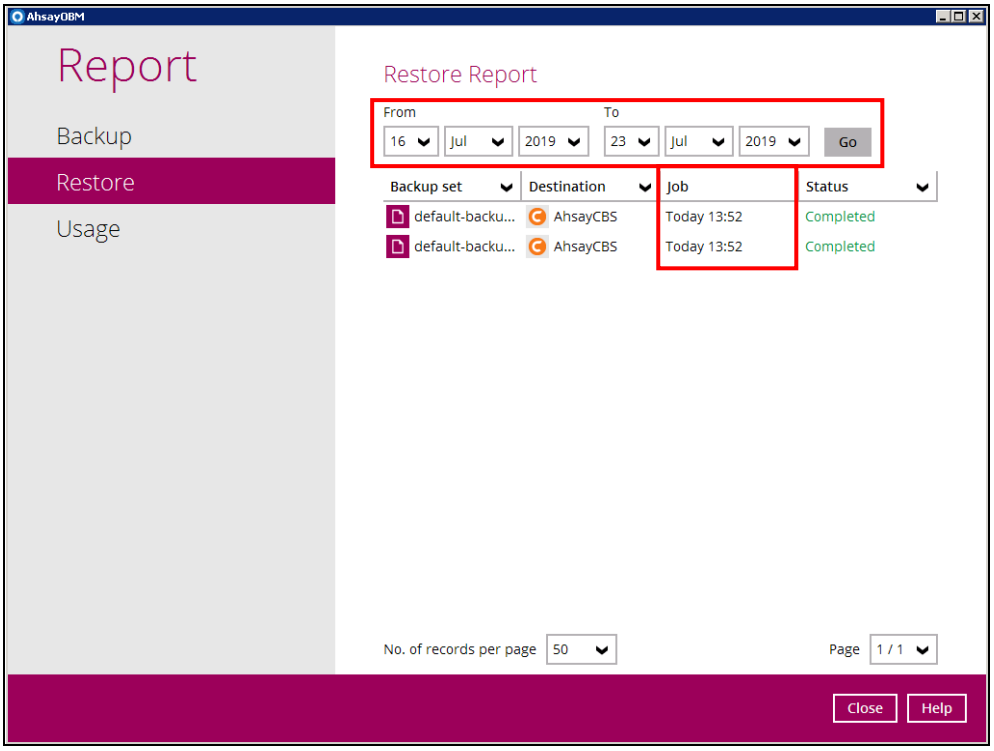
Restore

This shows the restore reports. There are four (4) filters that can be applied on this feature:

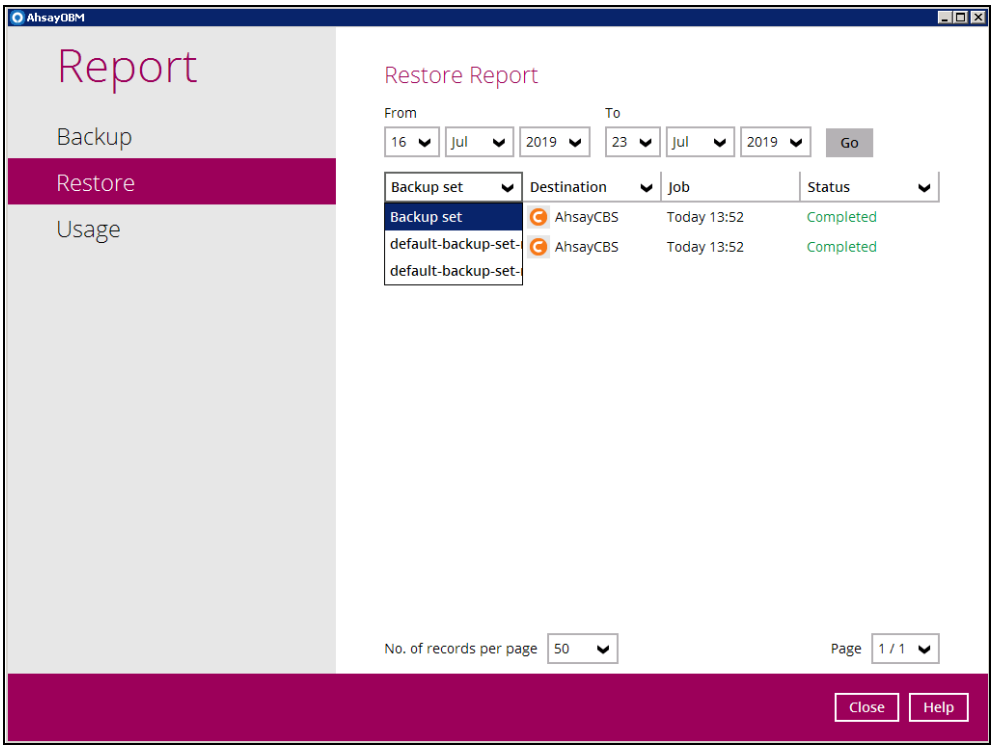
- Date
- Backup Set
- Destination
- Status



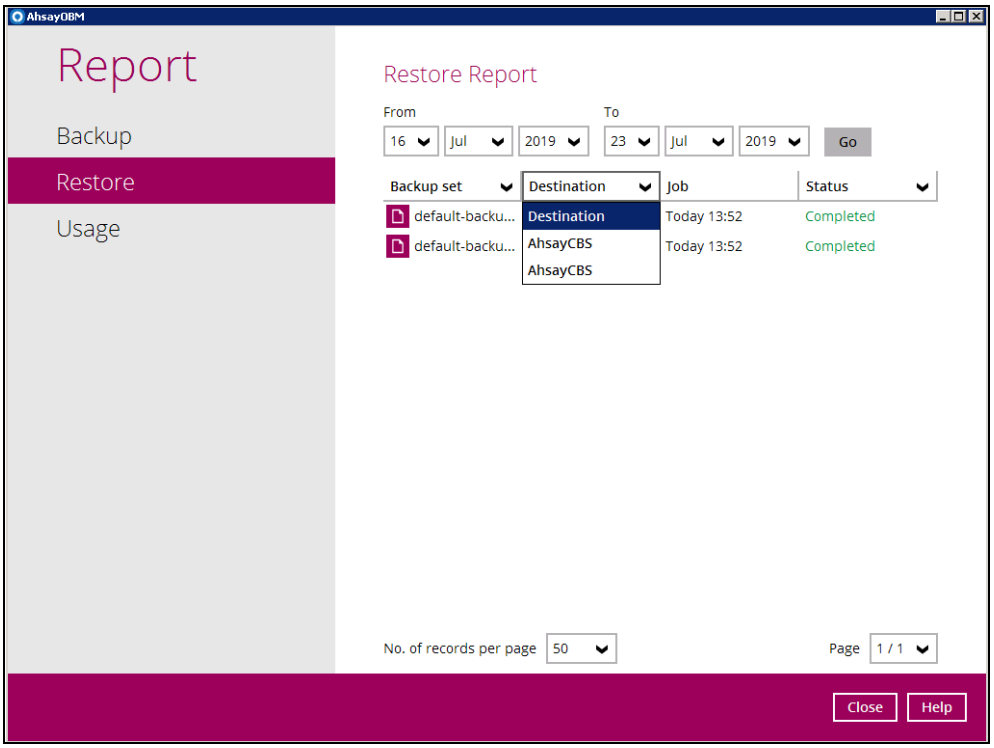
You can filter and view the restore report using the Date filter.



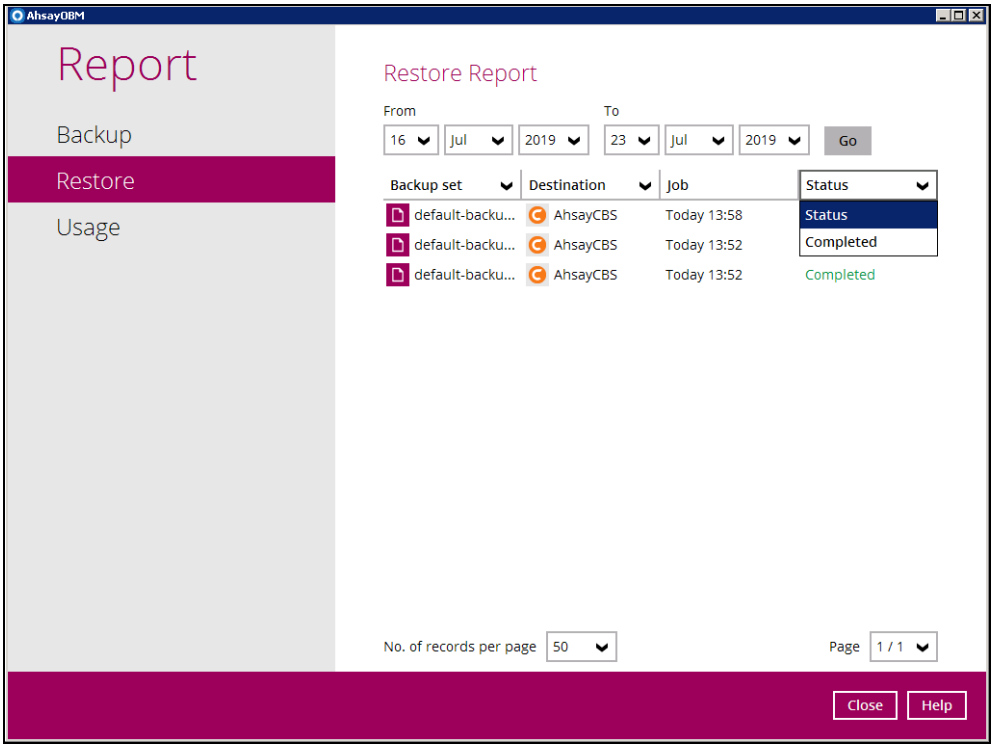
You can filter and view the restore report using the Backup set filter.



You can filter and view the restore report to your selected storage location using the Destination filter.

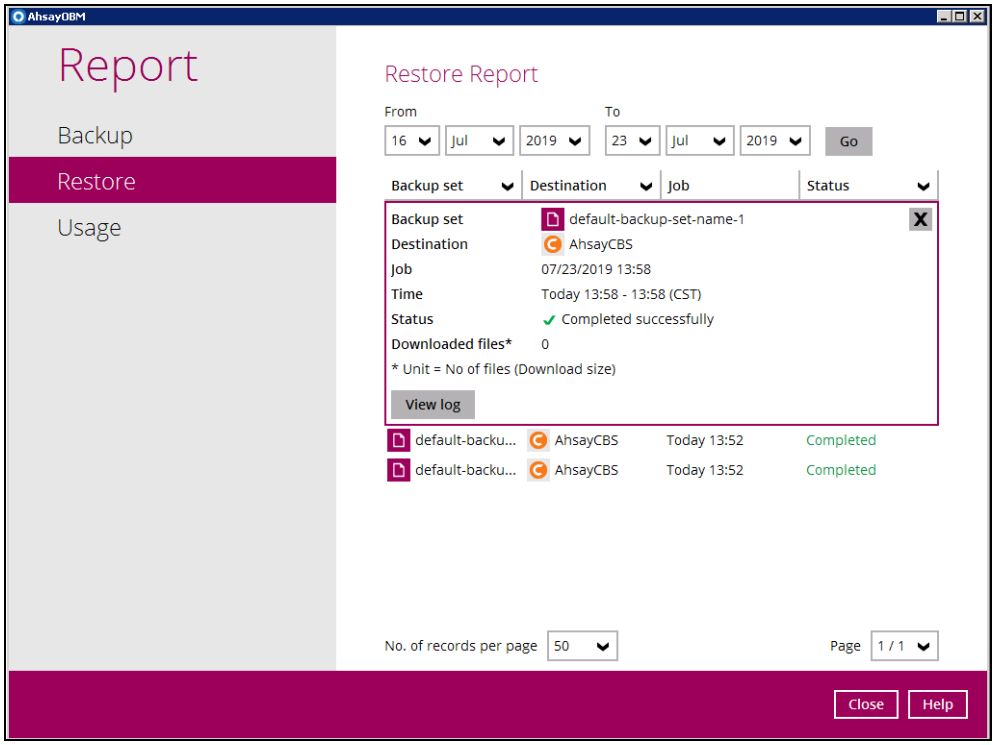


You can filter and view the restore report with the same status using the Status filter.



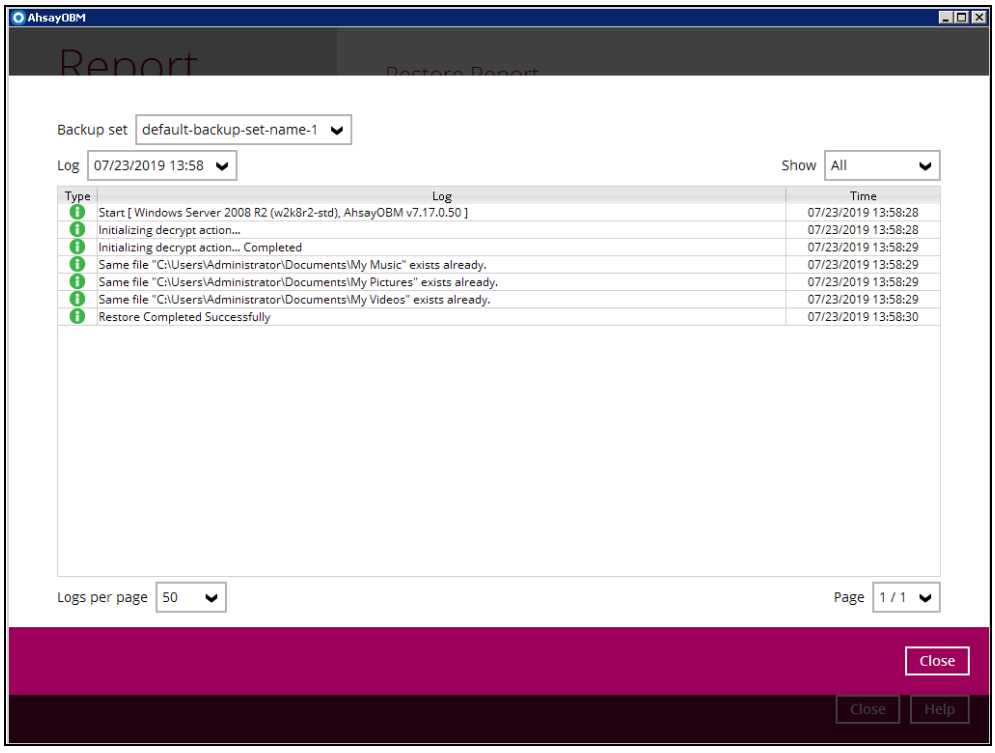
To view the restore log, follow the instructions below:

1. Select and click the restore report.



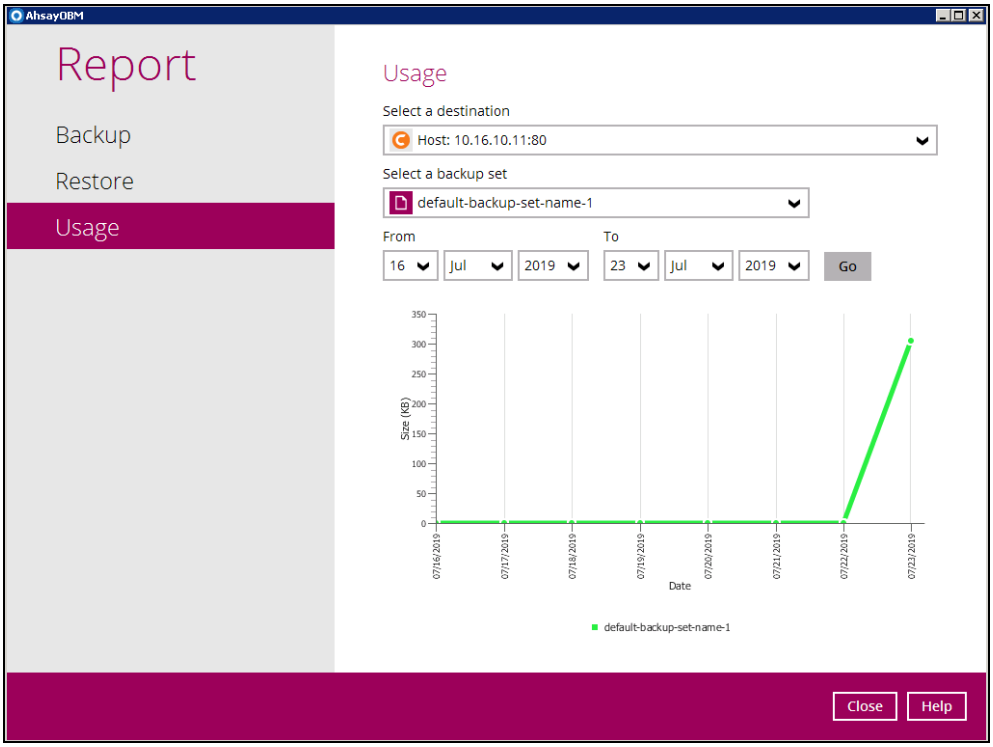
2. Click the [View log] button.

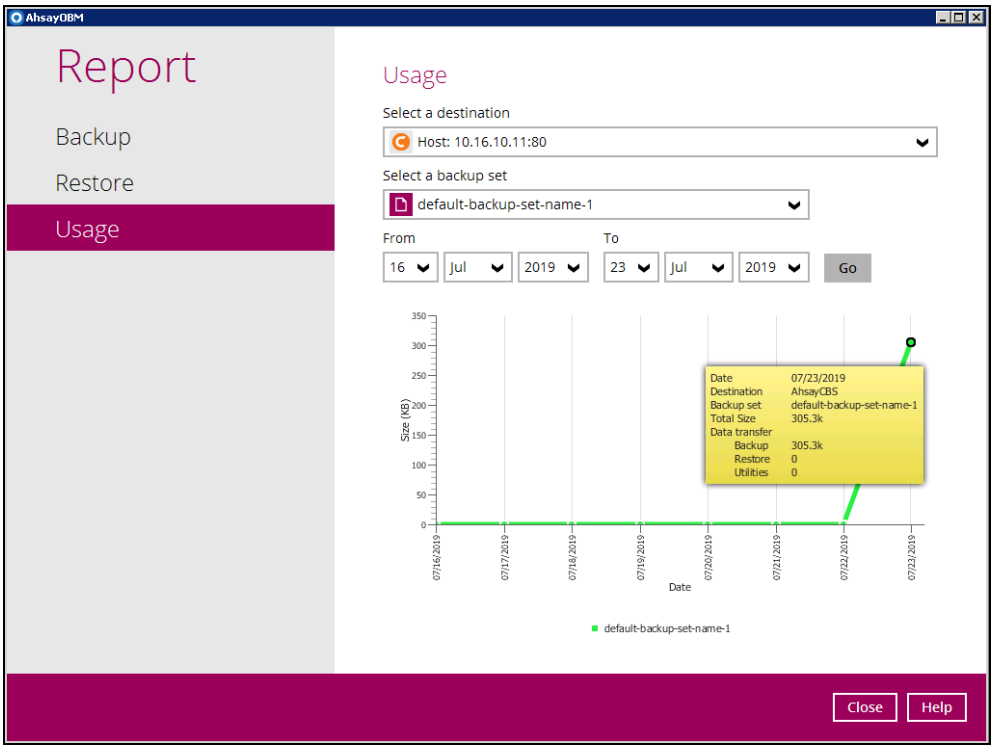
   Backup set, Log Date and Time, and Status can also be filtered as well as the number of logs per page.



Usage

This allows the user to generate and view the backup usage in a graphical view.





Restore

This feature is used to restore backed-up files to its original or alternate location.

To restore backed-up files, follow the instructions on Chapter 11 Restore Data.

Settings

This feature allows the user to enable the **Proxy Settings** and **Windows Event Log**.

There are two (2) functions available for this feature:

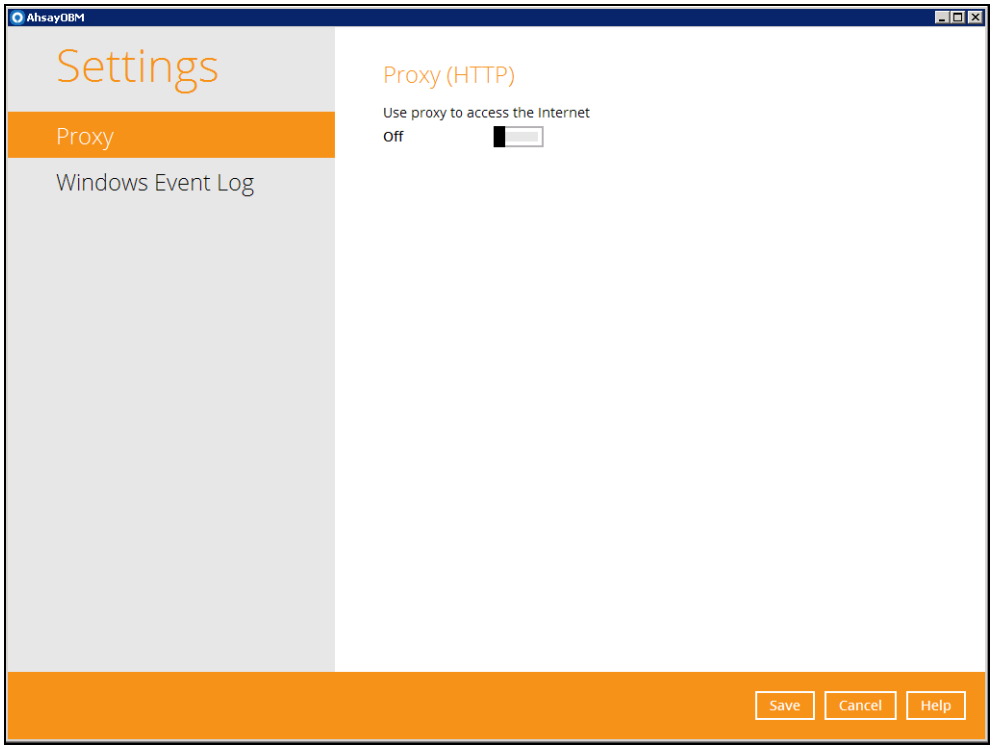
- Proxy
- Windows Event Log

Proxy

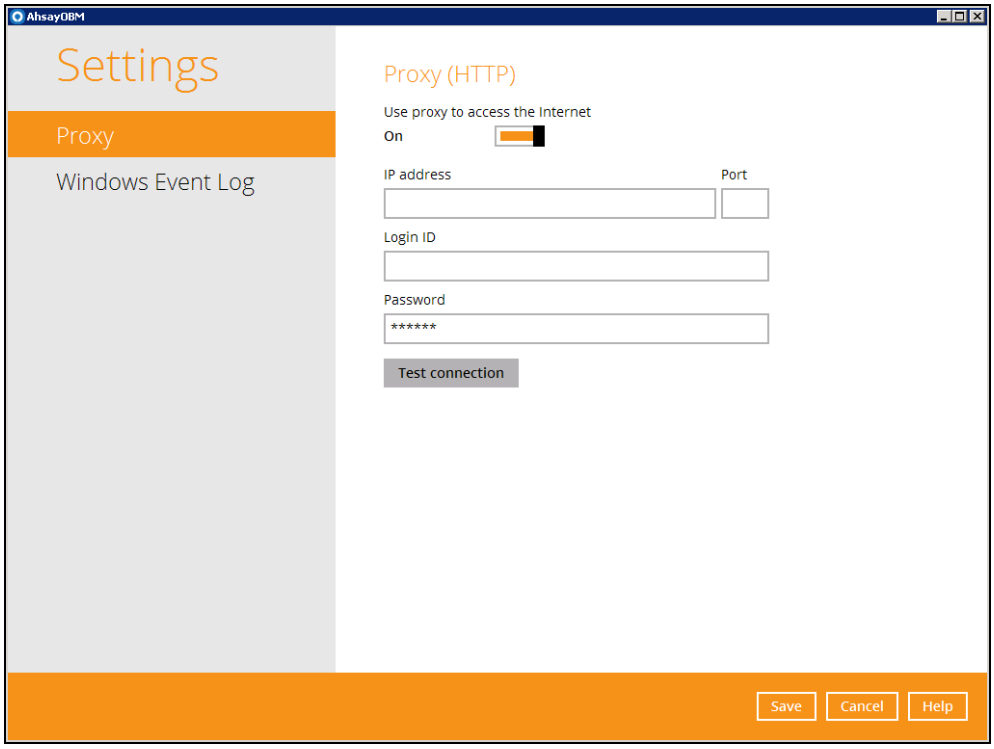
When this feature is on, AhsayOBM will use a proxy to gain access to the internet.

To enable the Proxy Settings, follow the instructions below:

1. Slide the lever to the right to turn it on.



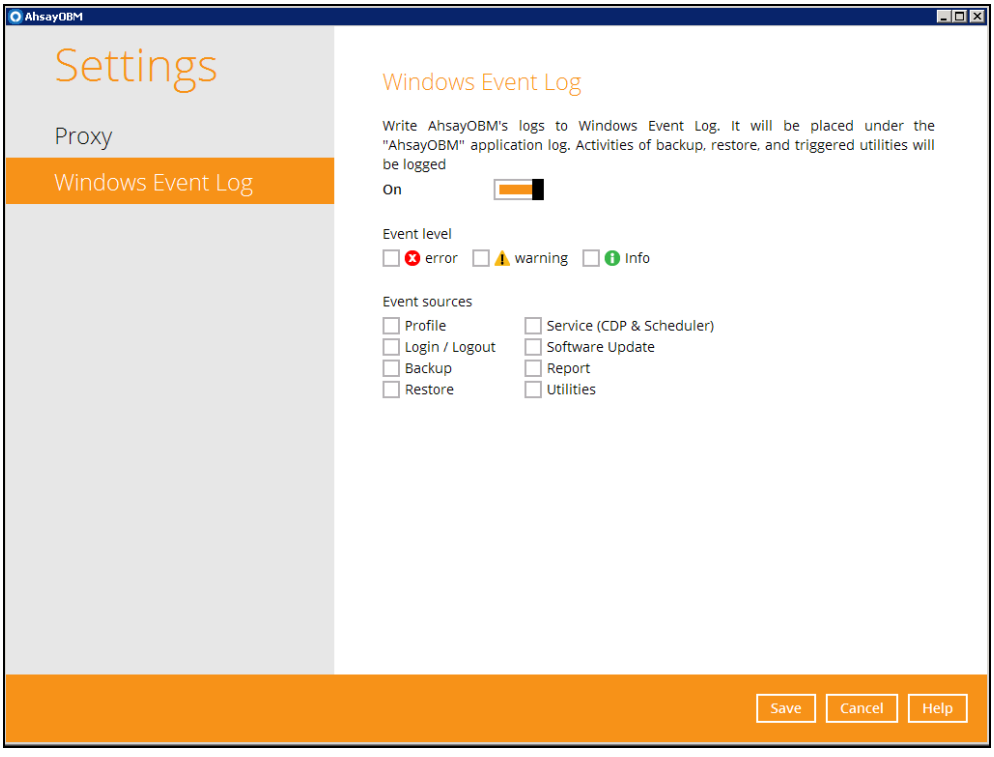
2. Complete the following fields:
    - IP address
    - Port
    - Login ID
    - Password



3. Click the [Test Connection] button to validate the connection.
4. Click the [Save] button to store the settings.

Windows Event Log

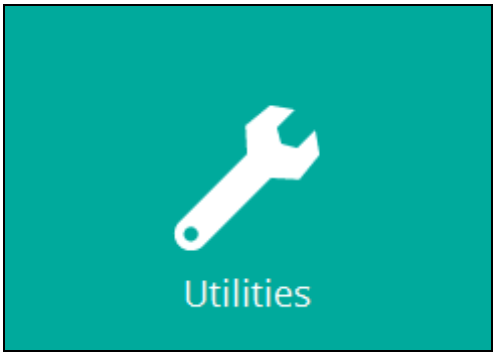
When this feature is on, all AhsayOBM system log information will be written under **Applications and Services Logs**. User may access them through **Windows event viewer** in the local machine.



Note: This feature is only applicable for Windows OS.

Utilities

This allows the user to perform health check on the backed-up data, free up storage from obsolete files, delete and decrypt backed-up data.



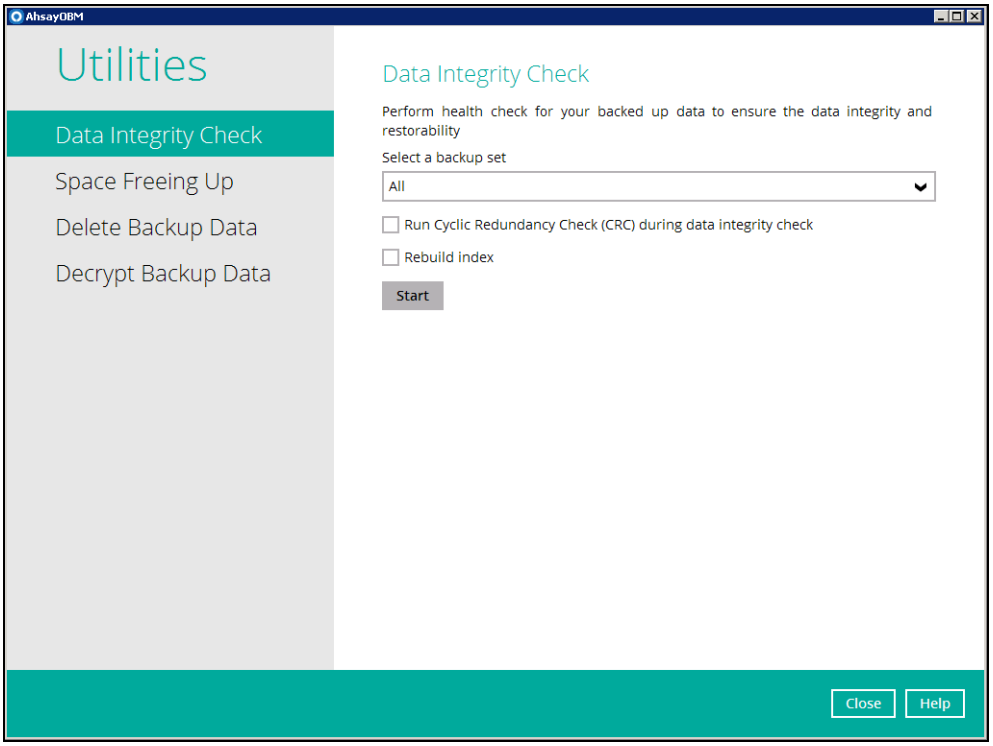
There are four (4) options available for this feature:

- Data Integrity Check
- Space Freeing Up
- Delete Backup Data
- Decrypt Backup Data

Data Integrity Check

This feature is used to identify and remove any corrupt file/s on the backup destination/s to ensure restorability.

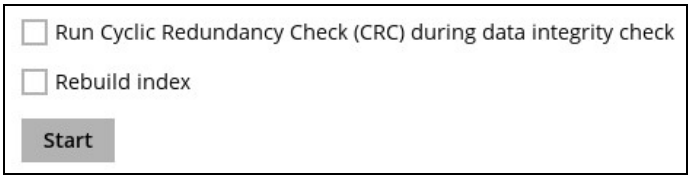
Note: Data Integrity Check can only be started when there is no manual, scheduled or continuous backup job running.



To perform Data Integrity Check, follow the instructions below:

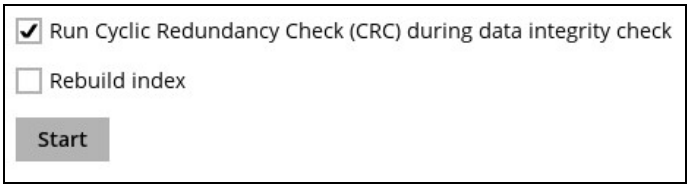
1. There are four (4) options in performing the Data Integrity Check:

Option #1



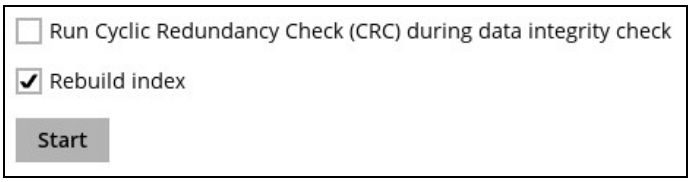
For checking the Index and Data

Option #2



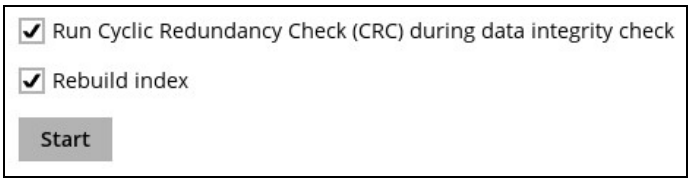
For checking the Index and Integrity of the files against the checksum file generated at the time of the backup job.

Option #3



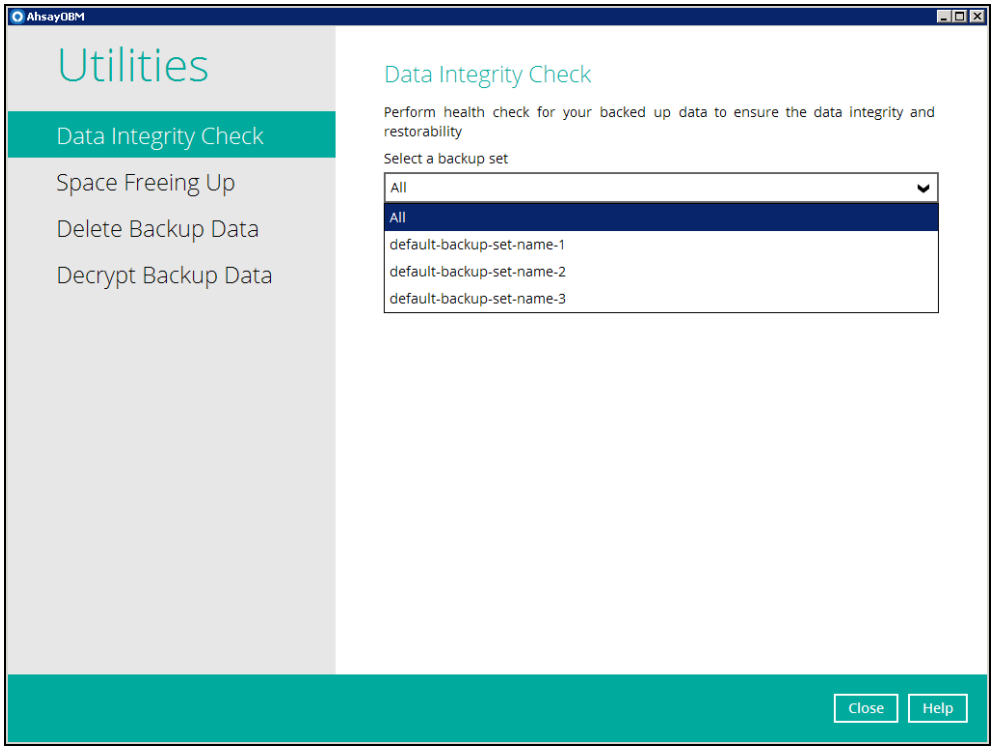
For checking the Index and rebuild the Index.

Option #4

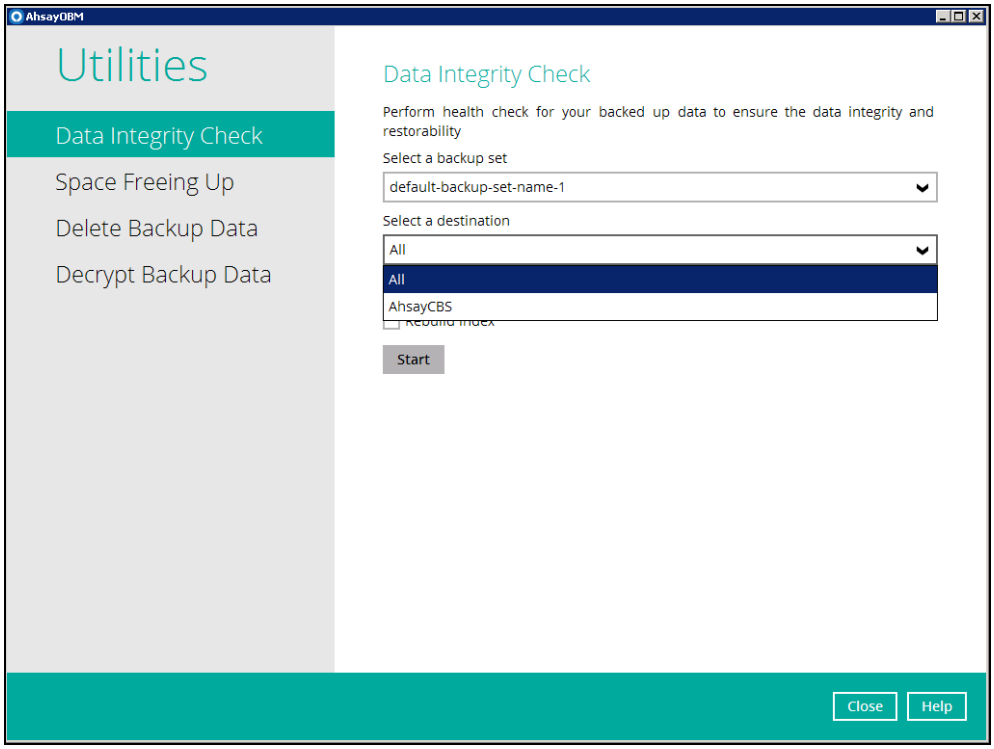


For checking the Index and Integrity of the files against the checksum file generated at the time of the backup job and rebuild Index.

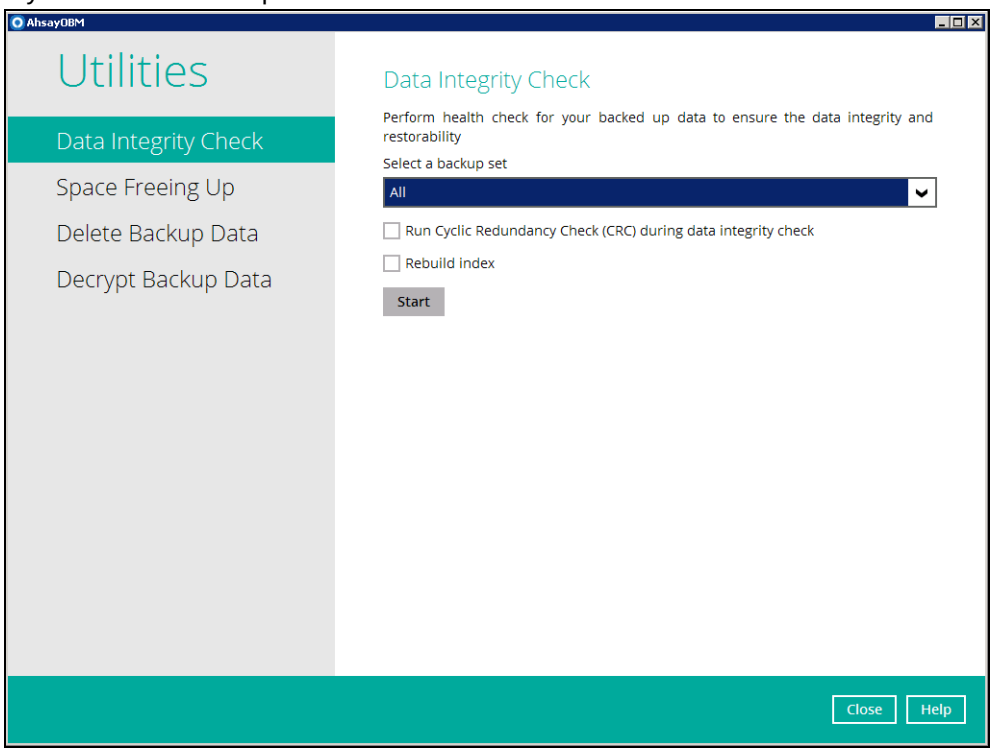
2. Select a backup set from the drop-down list.



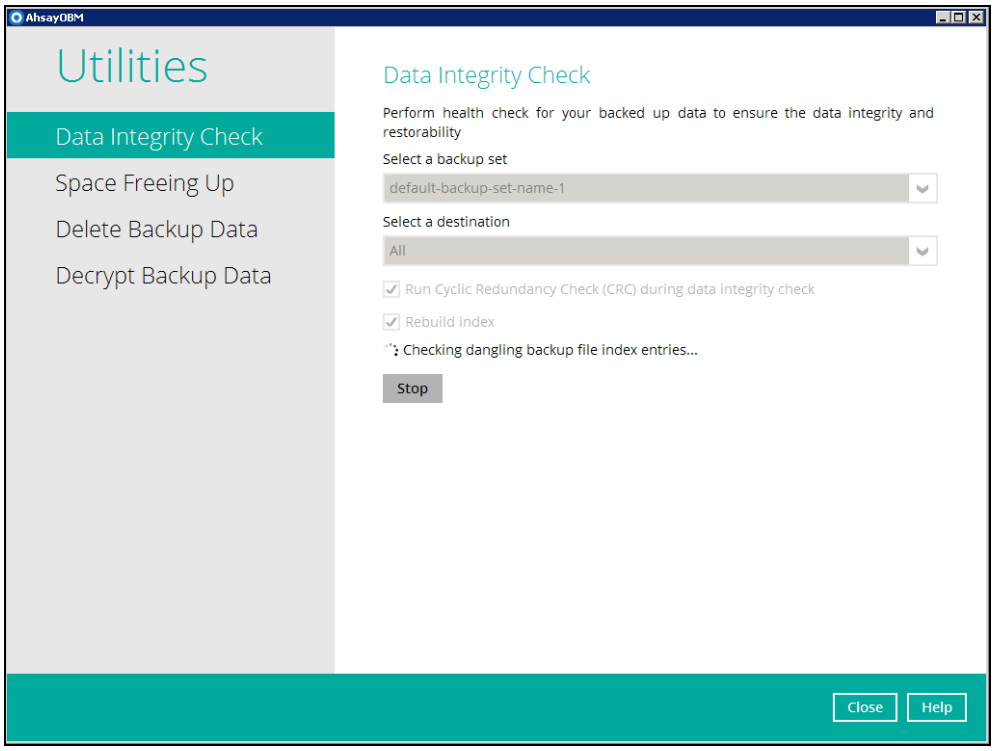
If you select a specific backup set, then you will also have to select a specific destination or all destinations.



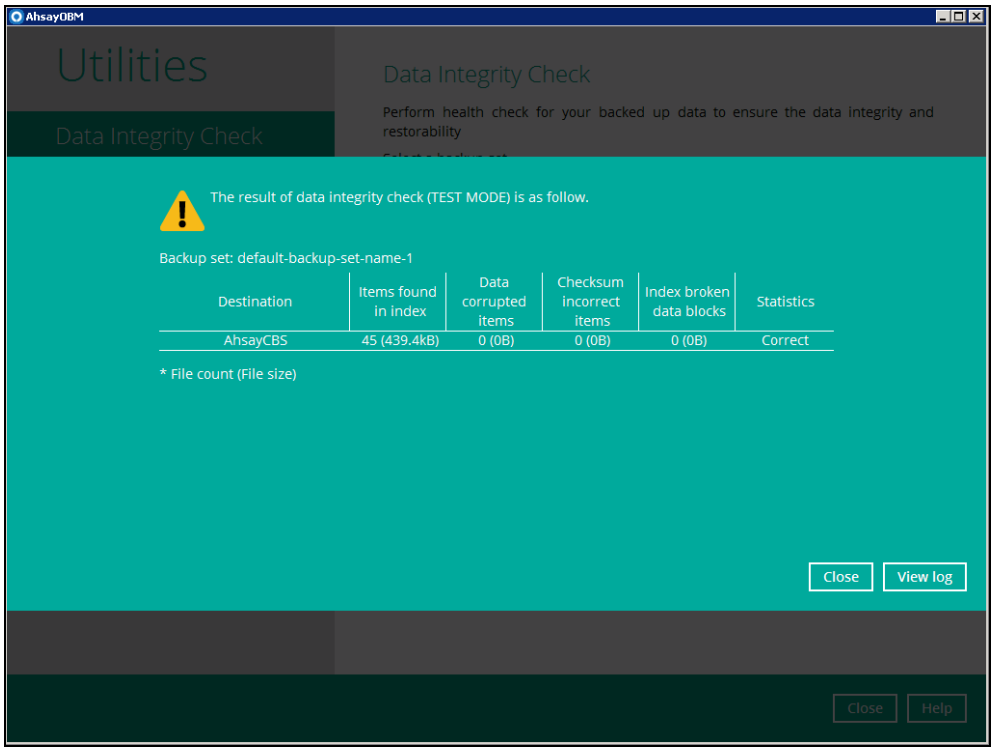
If you select All backup sets then there's no need to select a destination.

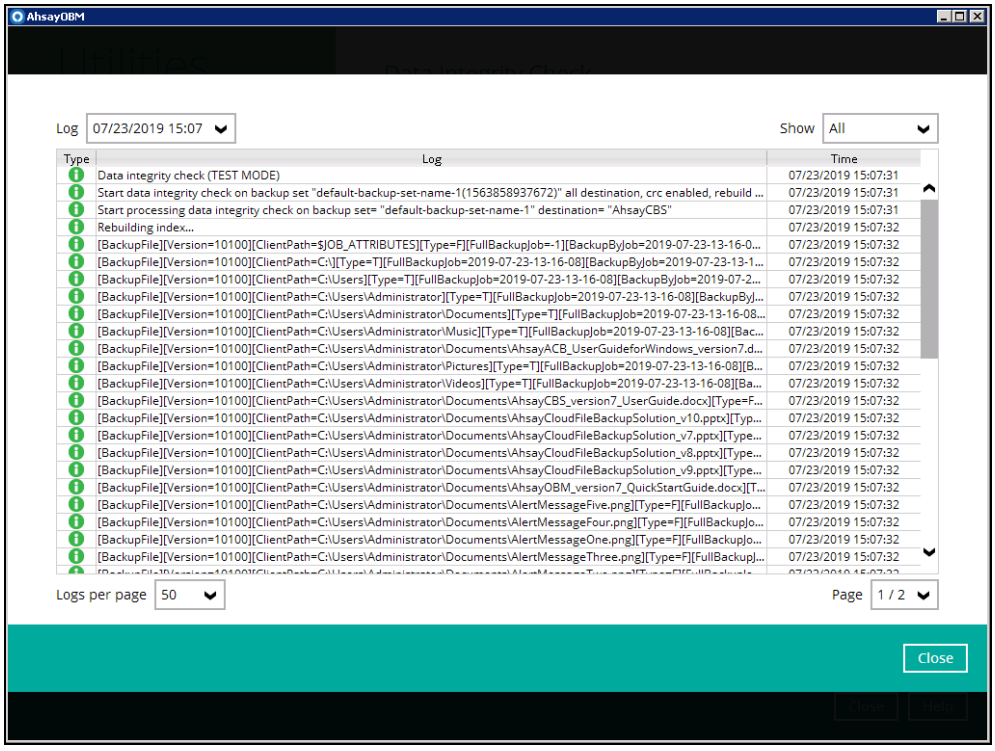


3. Click the [Start] button to perform the data integrity check.



4. The result will be shown once completed. Click [View Log] to see the event log during the data integrity check.



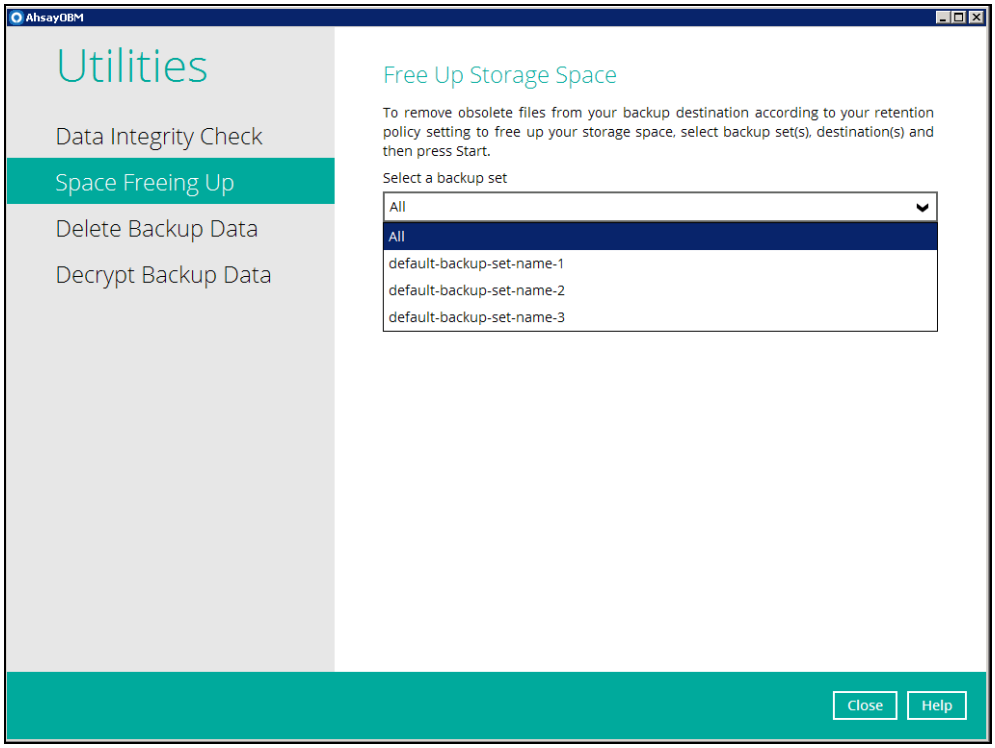


Space Freeing Up

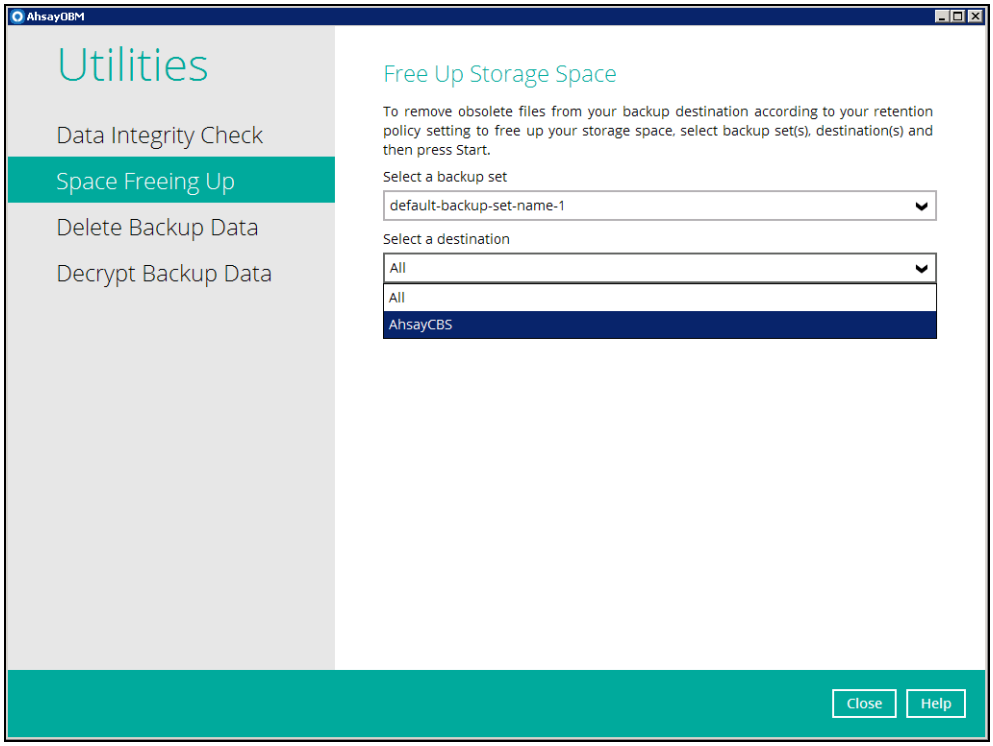
This feature is used to remove obsolete file/s from your backup set and destination.

To perform Space Freeing Up, follow the instructions below:

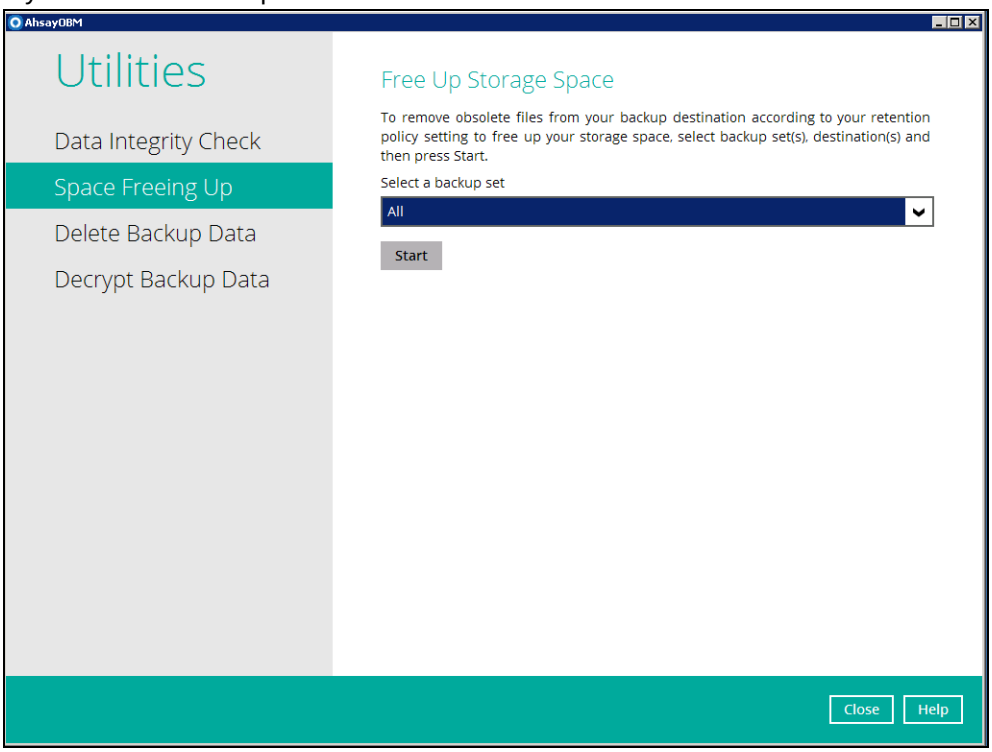
1. Select a backup set from the drop-down list.



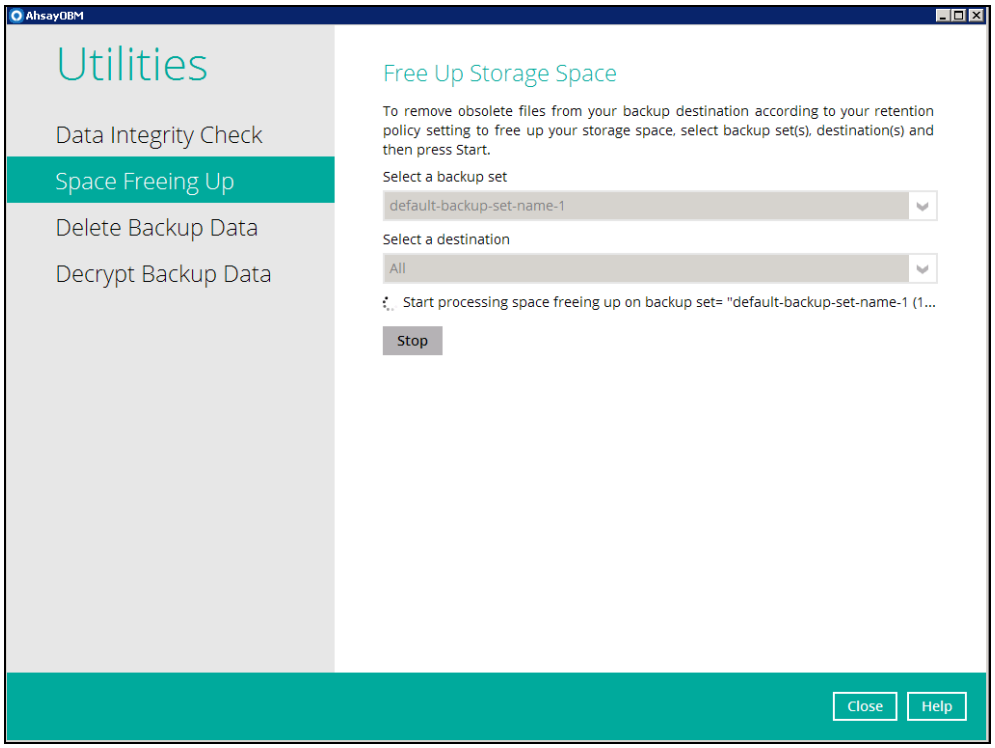
If you select a specific backup set, then you will also have to select a specific destination or all destinations.



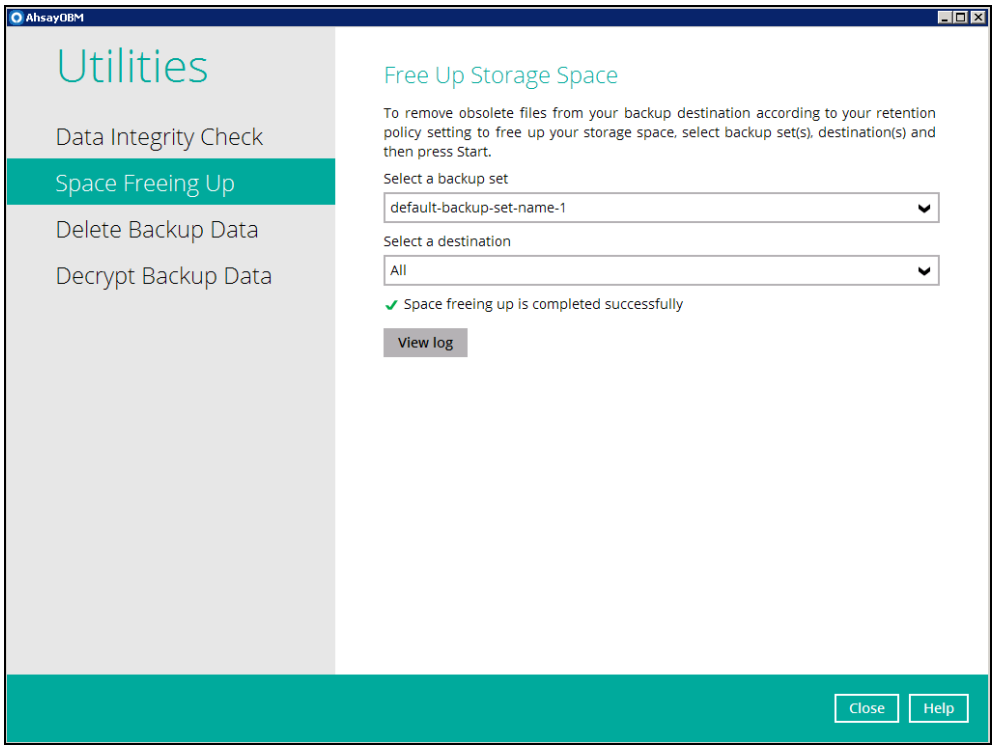
If you select All backup sets then there's no need to select a destination.

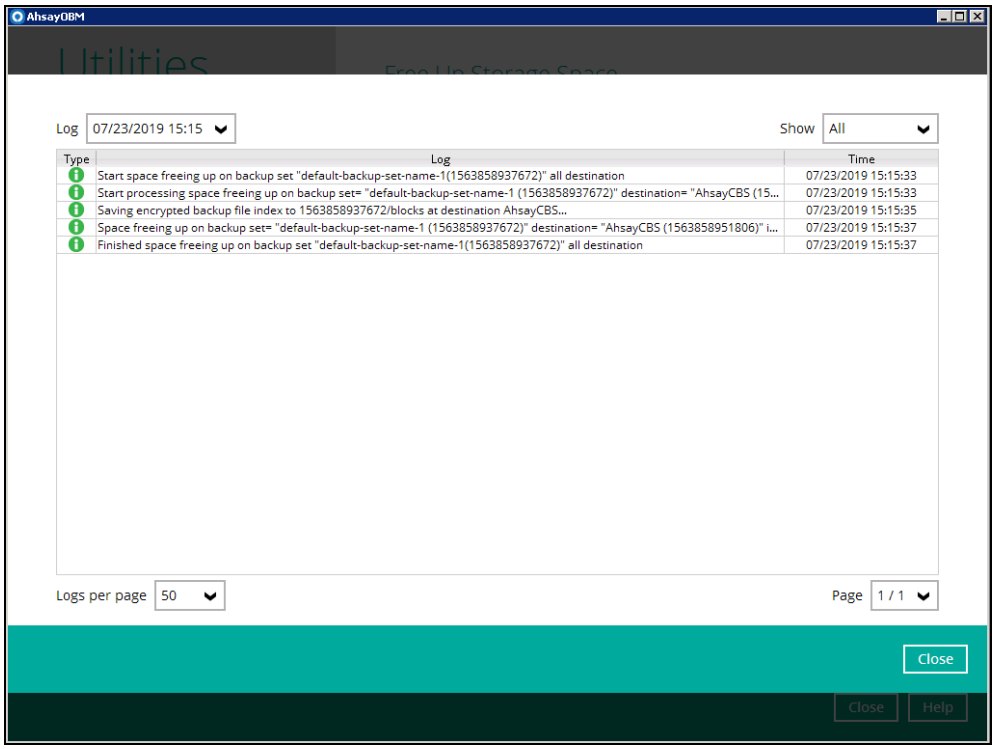


2. Click the [Start] button to perform space free up.



3. The status will be shown once completed. Click the [View Log] to see the event log during the space free up.



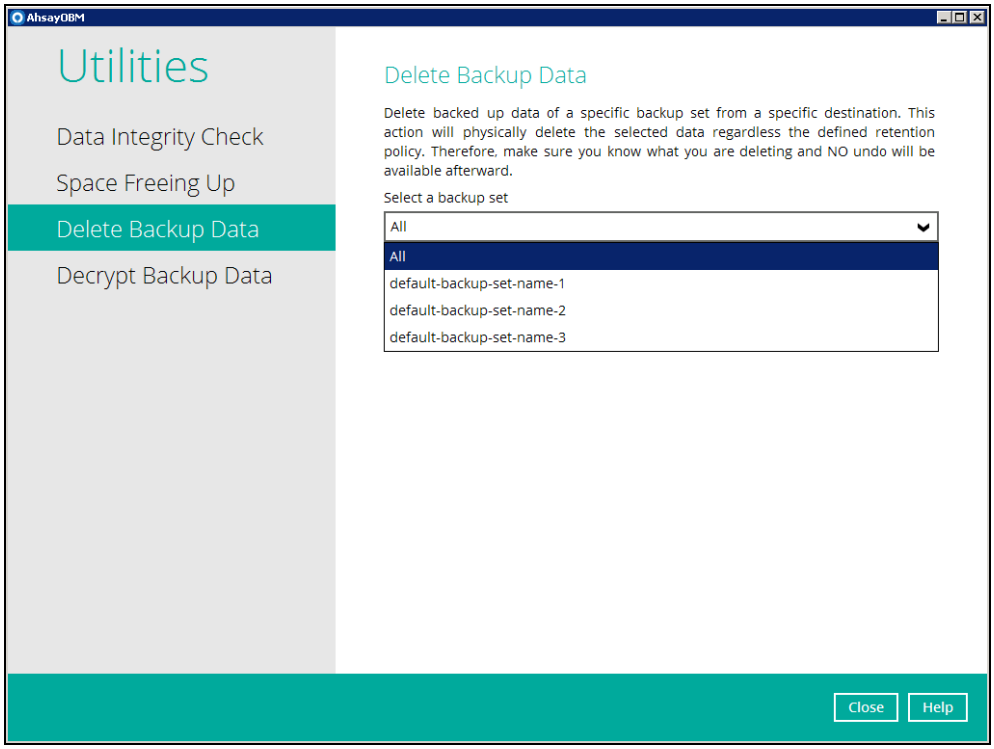


Delete Backup Data

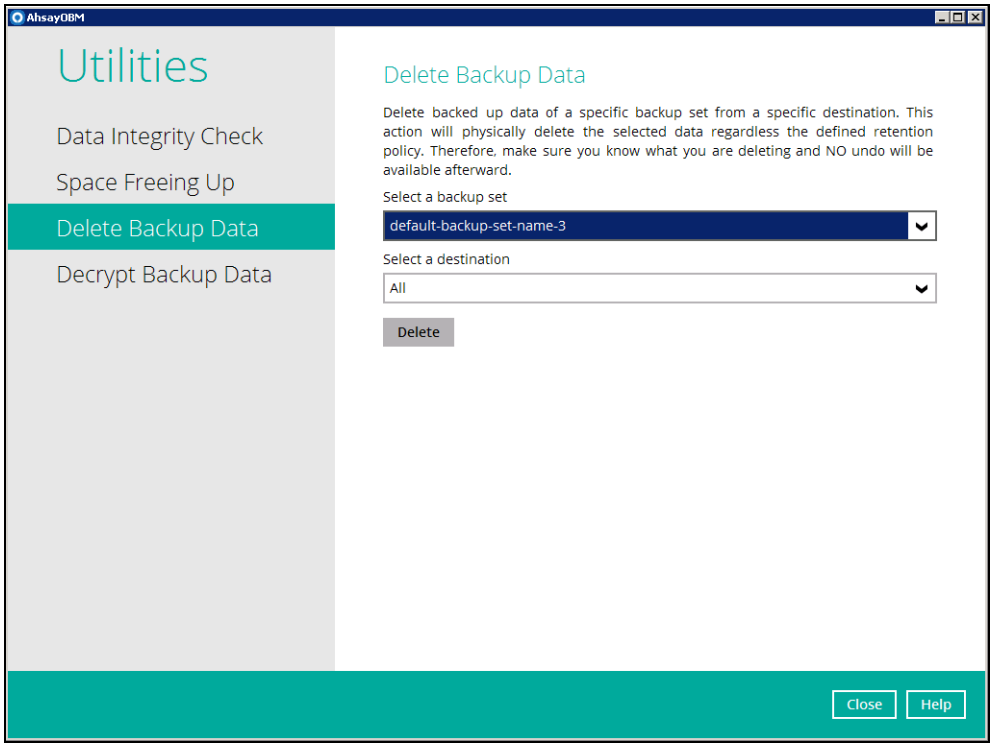
This feature is used to delete backed-up files from a specific or all backup sets.

To perform deletion of backup data, follow the instructions below:

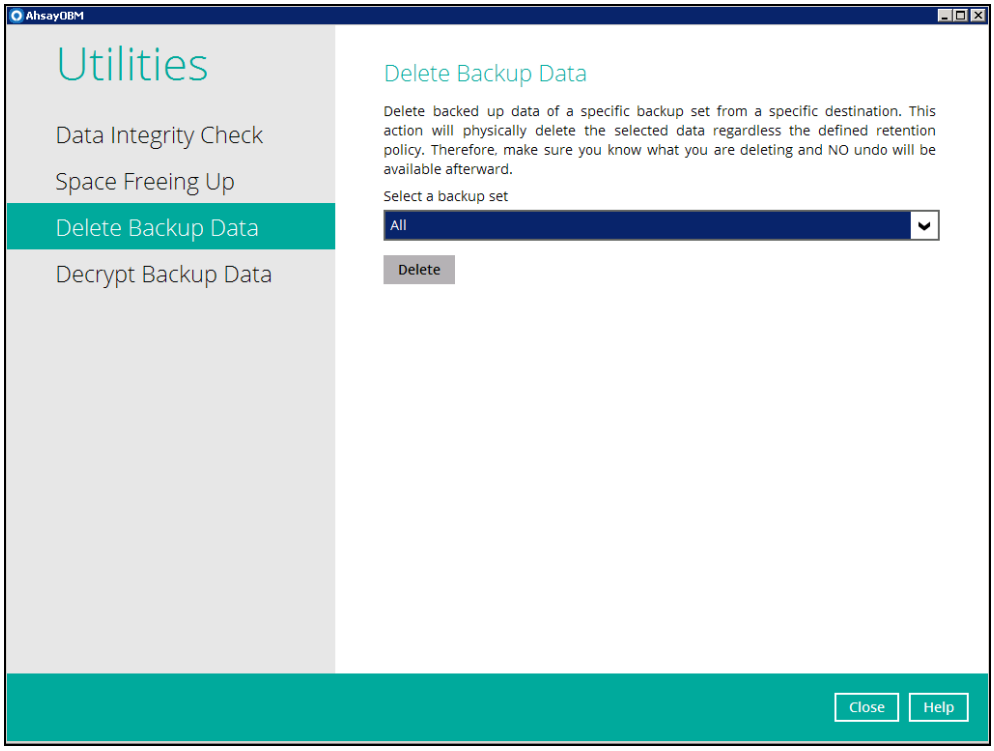
1. Select a backup set from the drop-down list.



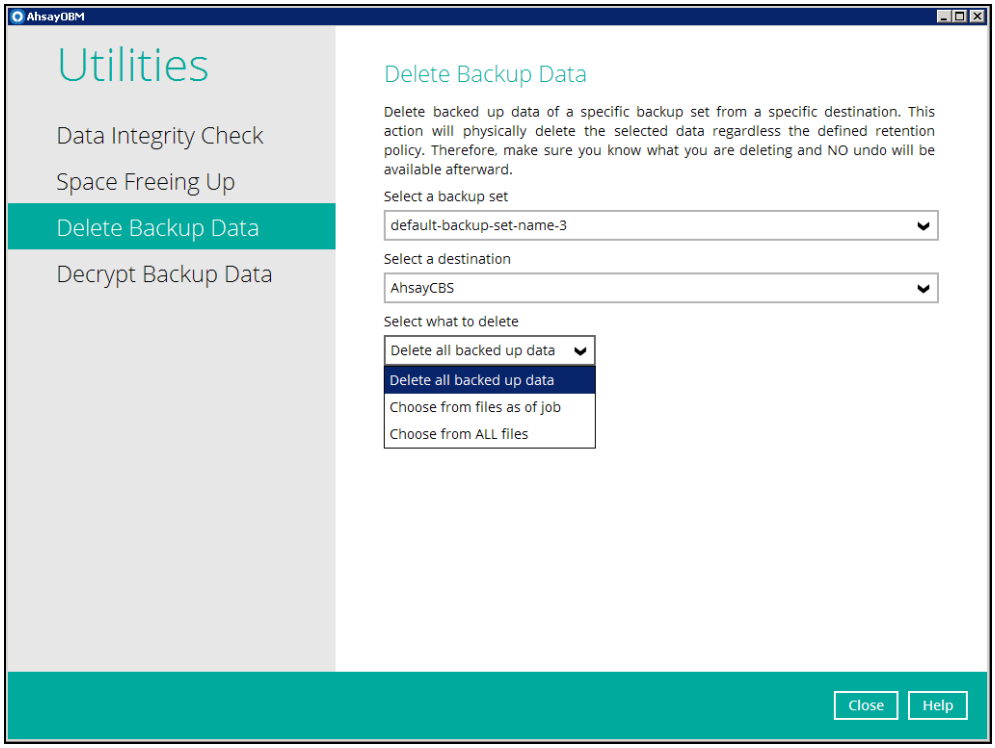
If you select a specific backup set, then you will also have to select a specific destination or all destinations.



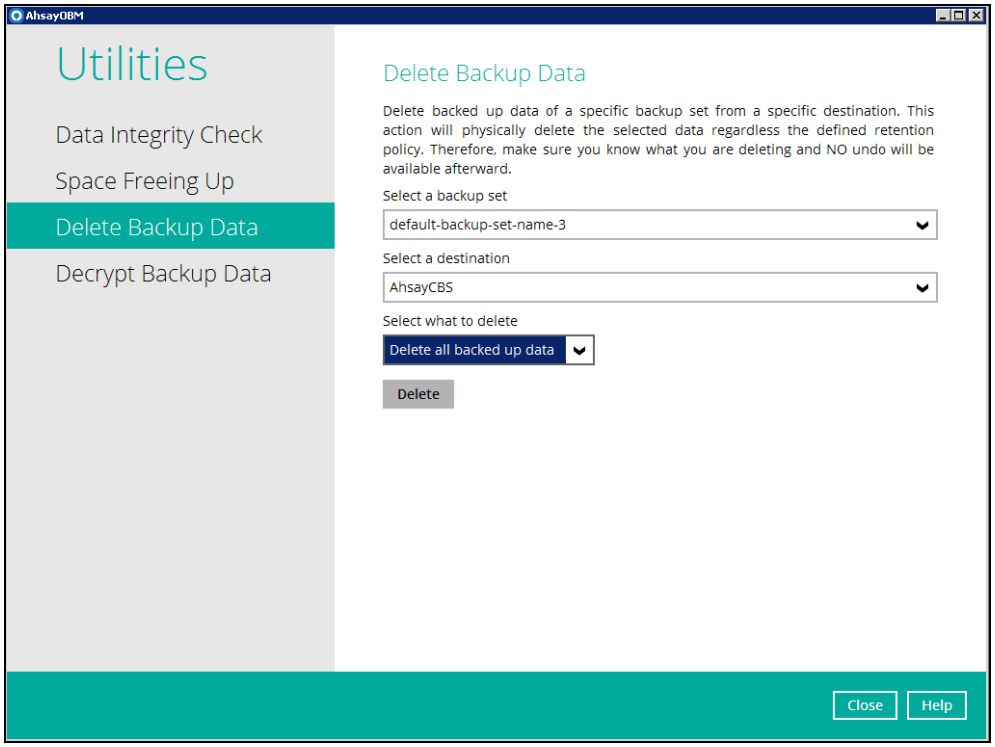
If you select All backup sets then there's no need to select a destination.



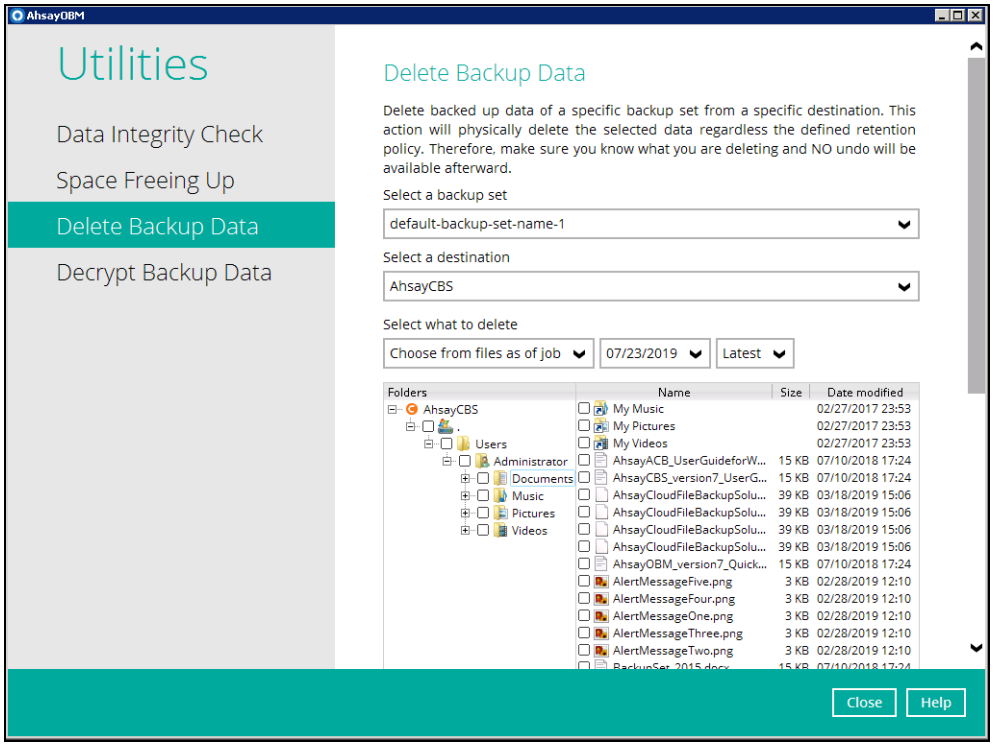
2. There are three (3) options for the type of files you wish to delete.
    - Delete all backed-up data
    - Choose from files as of job
    - Choose from ALL files



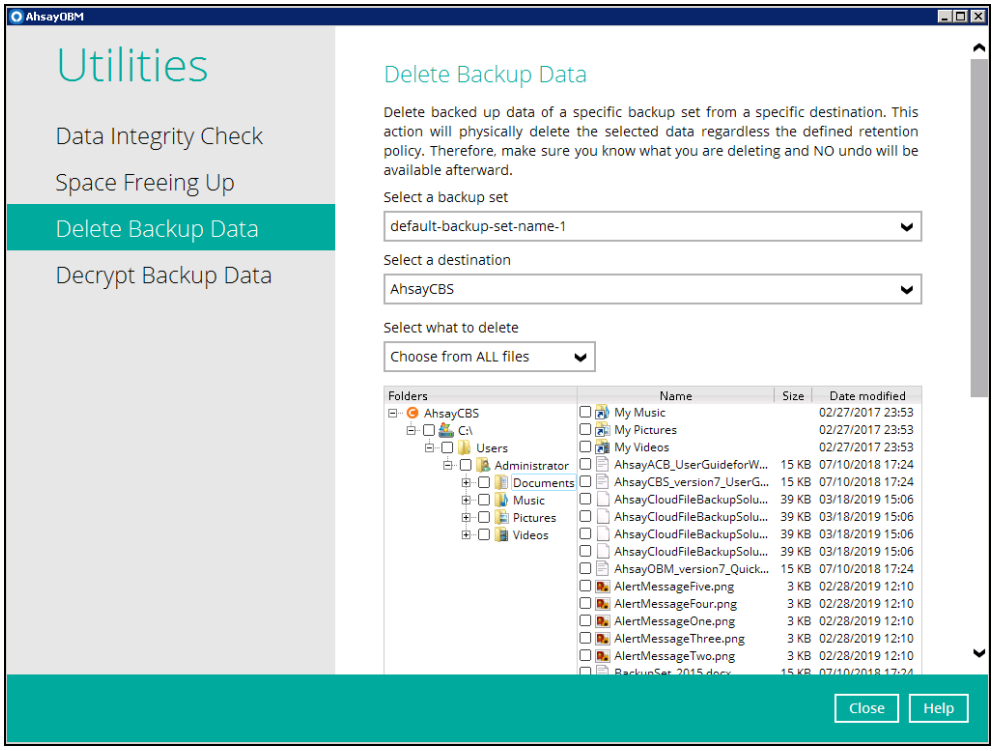
Delete all backup up data



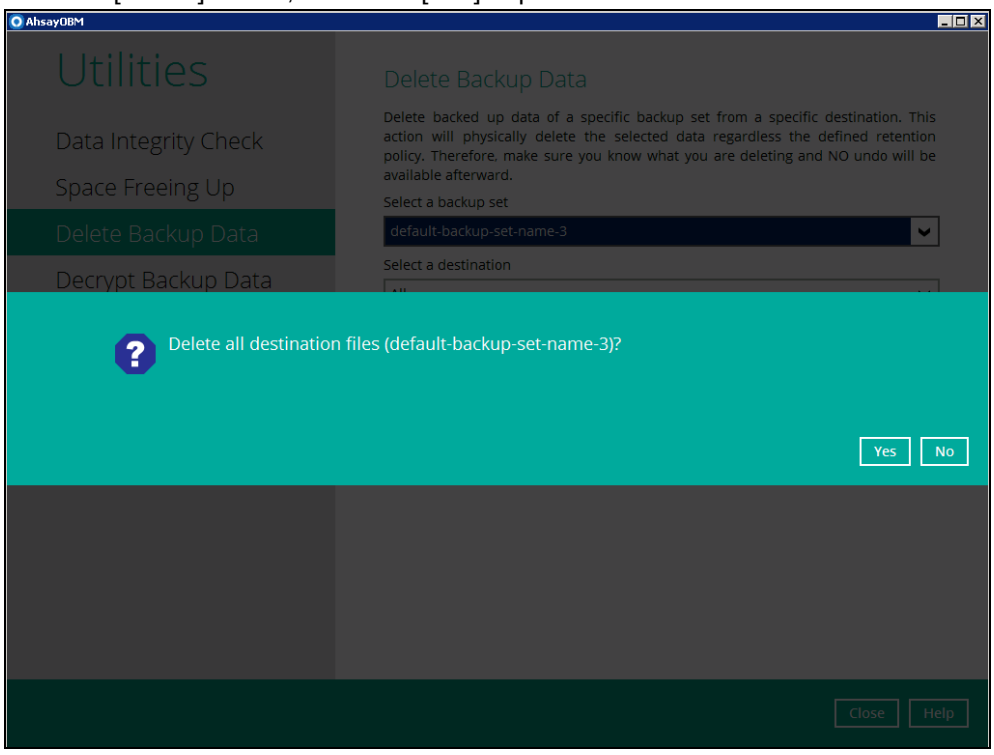
Choose from files as of job

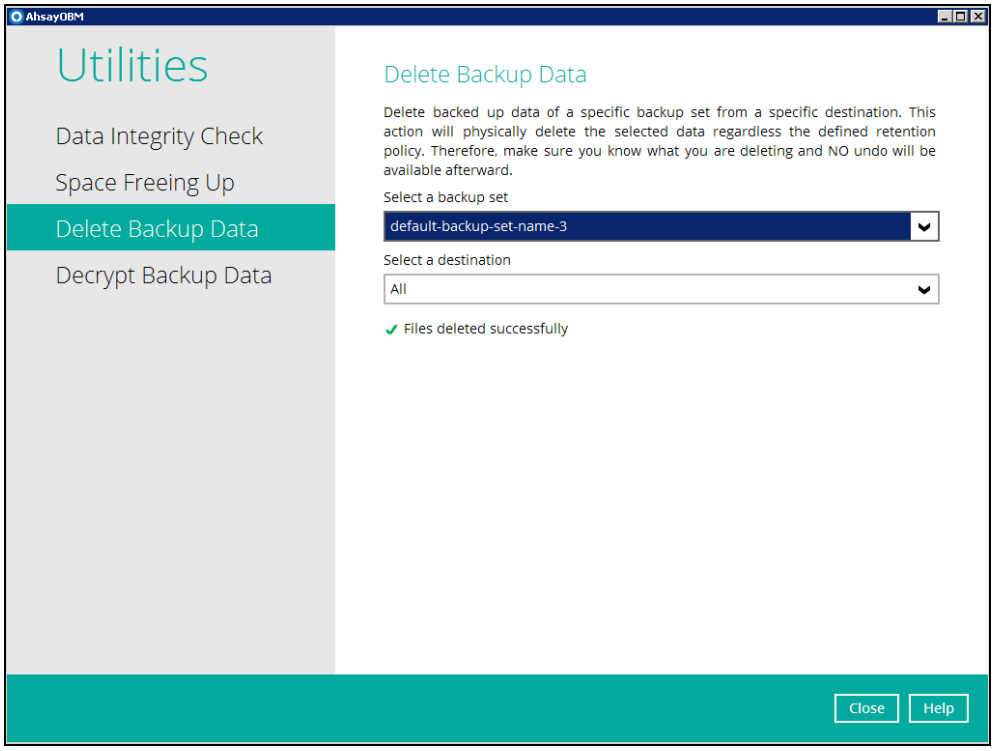


Choose from ALL files



3. Click the [Delete] button, then click [Yes] to perform deletion of files.



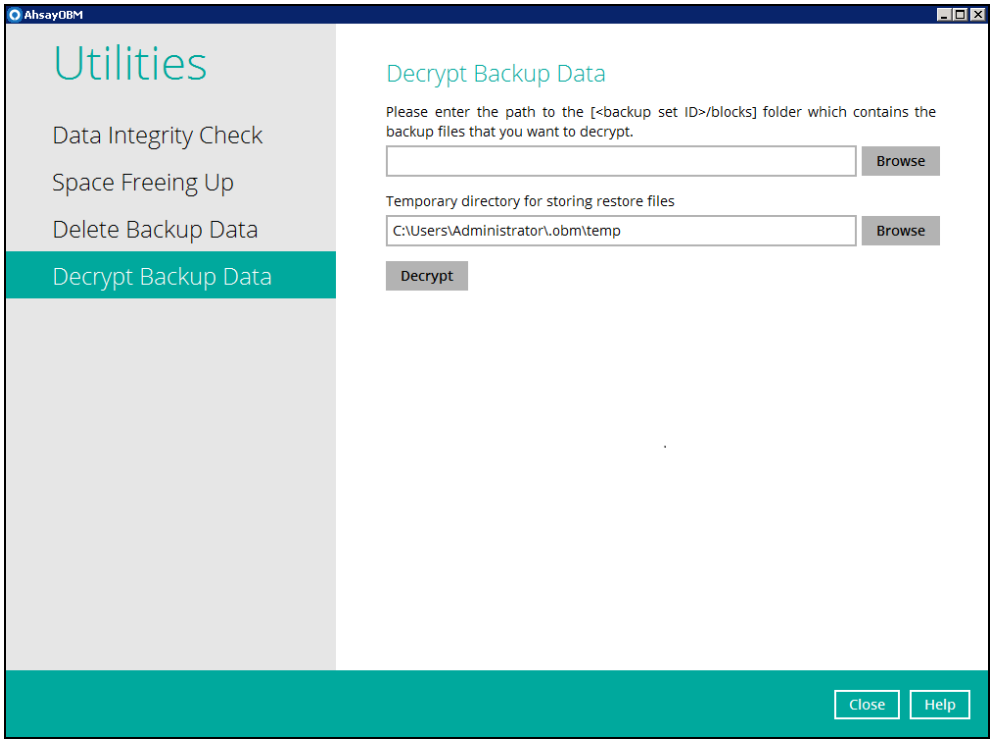


Decrypt Backup Data

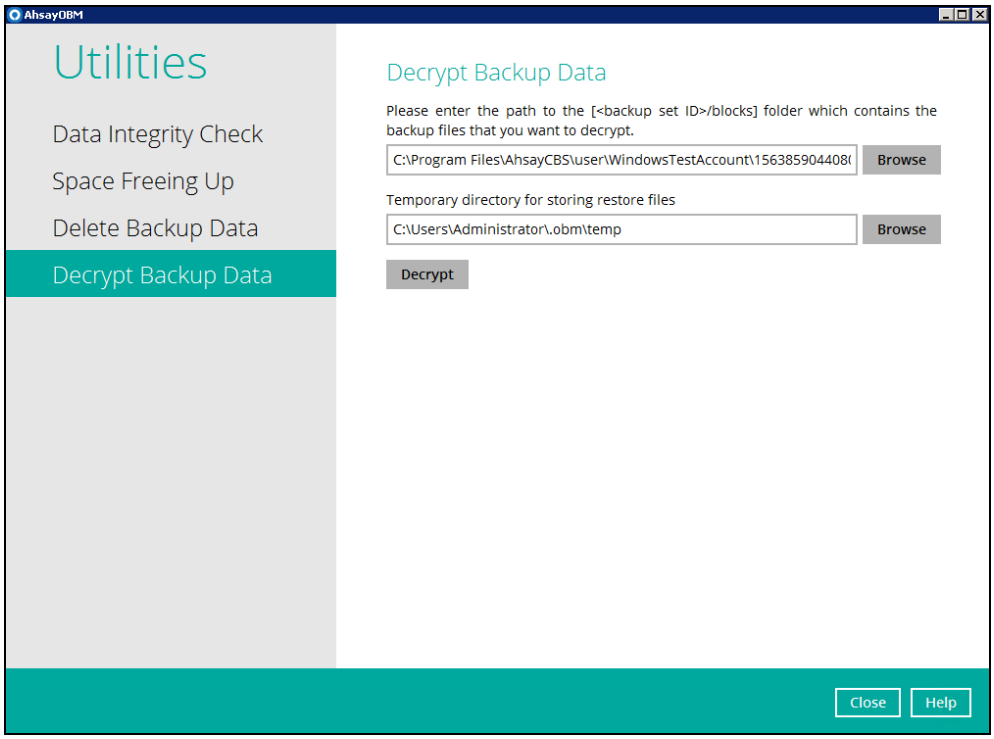
This feature is used to restore raw data by using the data encryption key that was set for the backup set.

To perform decryption of backup data, follow the instructions below:

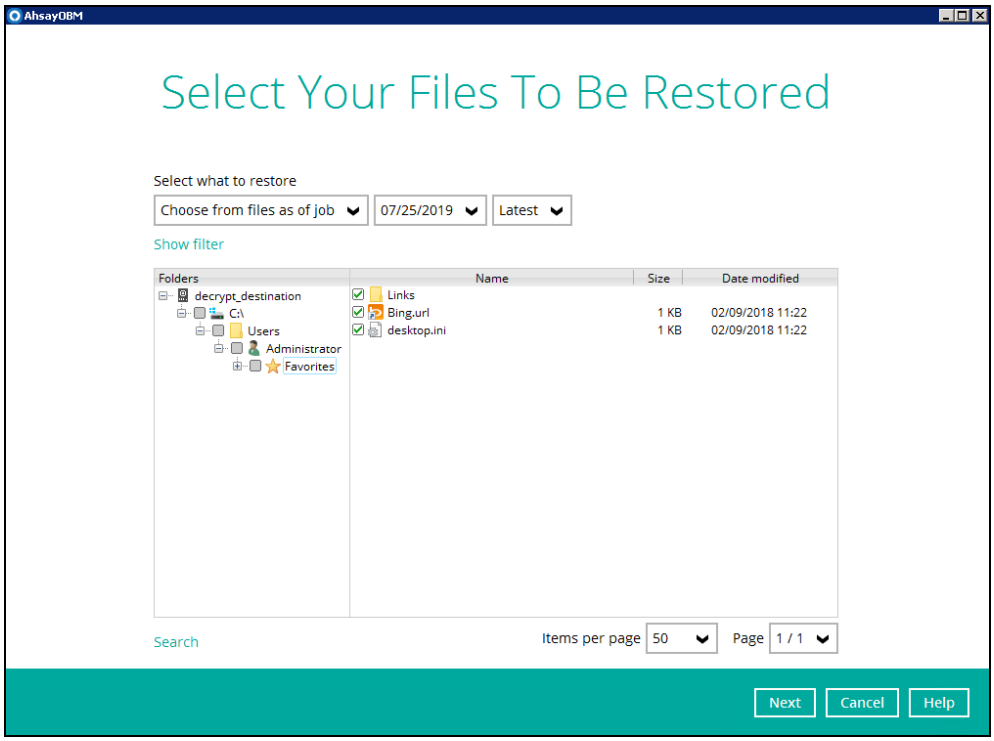
1. Click the [Browse] button to locate the path of the backup set ID / blocks folder.



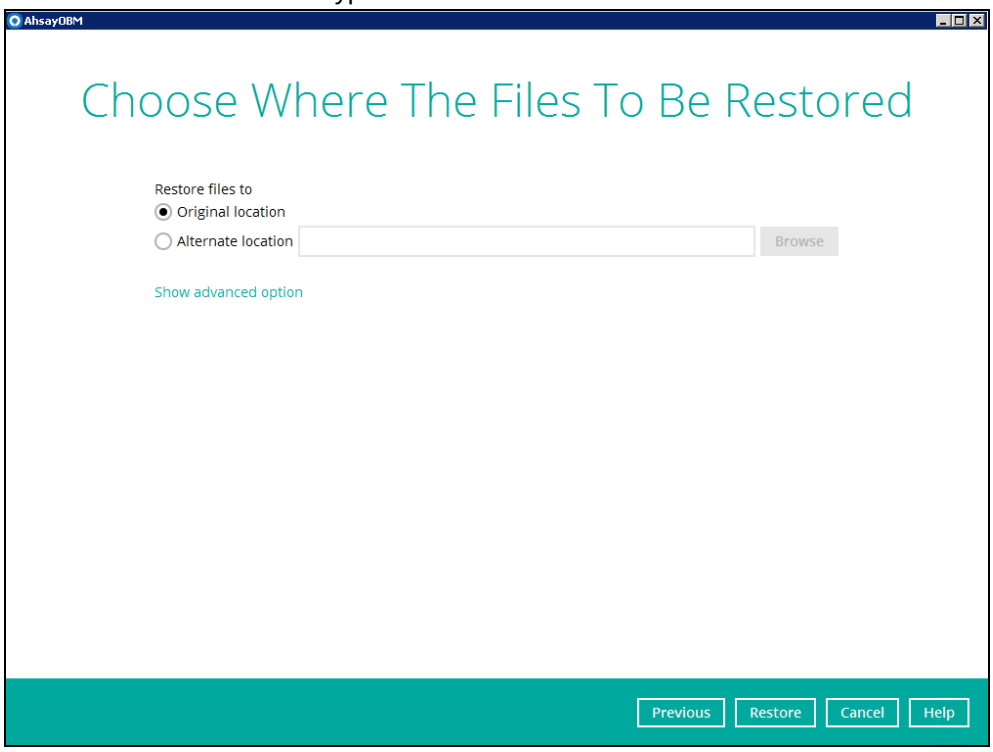
2. Click the [Browse] button to re-select the temporary folder for the decrypt process. Then click the [Decrypt] button to begin



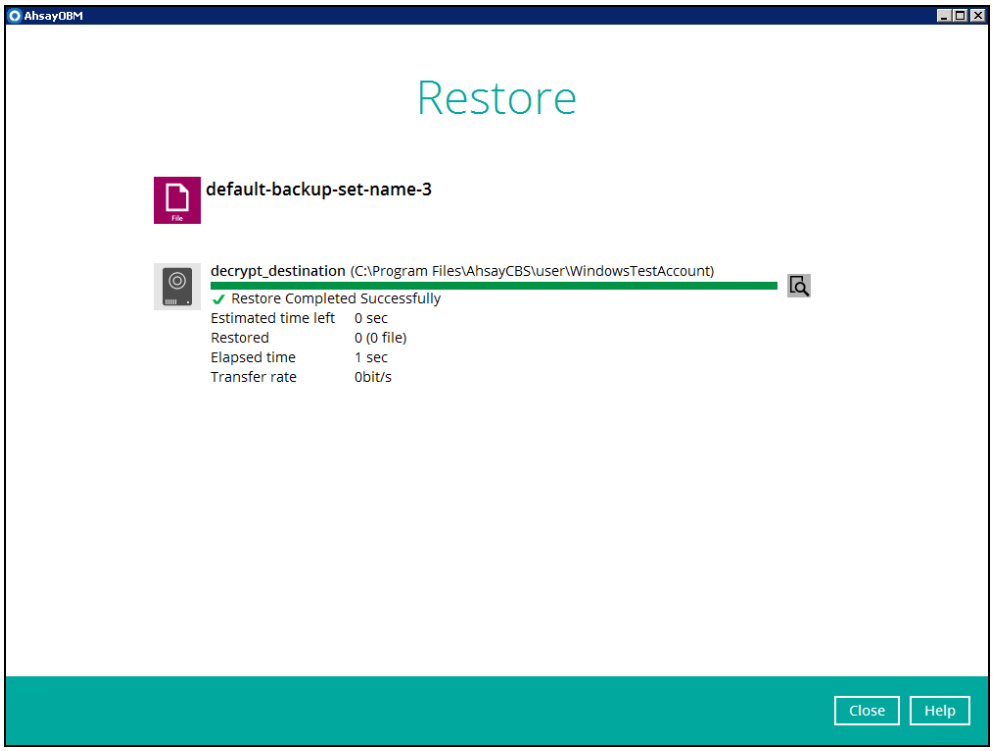
3. Select files to be decrypted.



4. Choose location where decrypted files will be restored to.

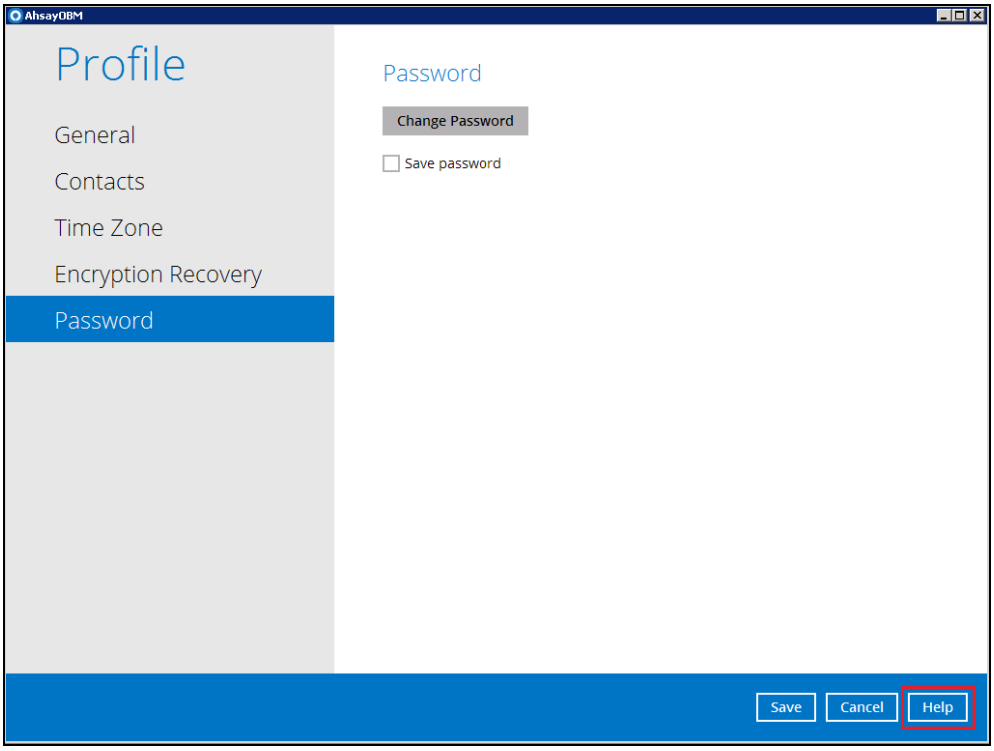


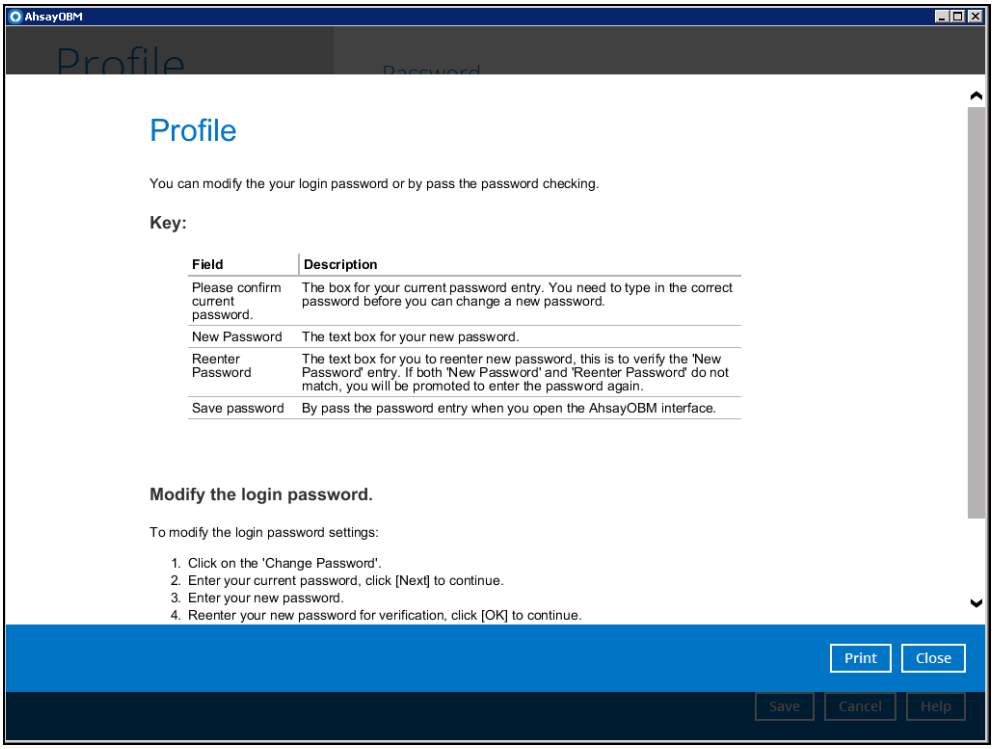
5. The status will be shown once completed.



Online Help

This allows the user to view the summary of information and instructions of each available features in AhsayOBM.

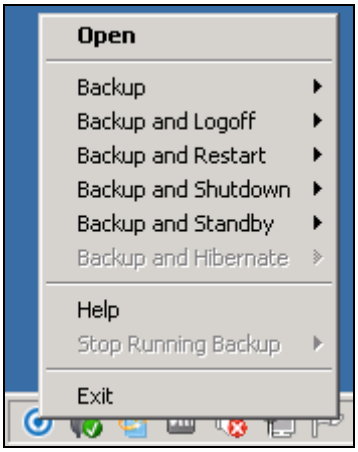




System Tray

If AhsayOBM is installed in the computer, you will see an AhsayOBM icon in the taskbar at the lower right corner of the screen.

When you right-click the AhsayOBM icon, a control menu will pop-up.

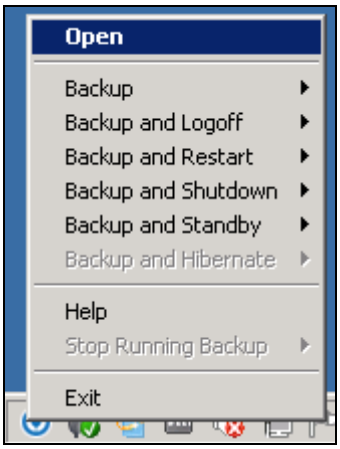


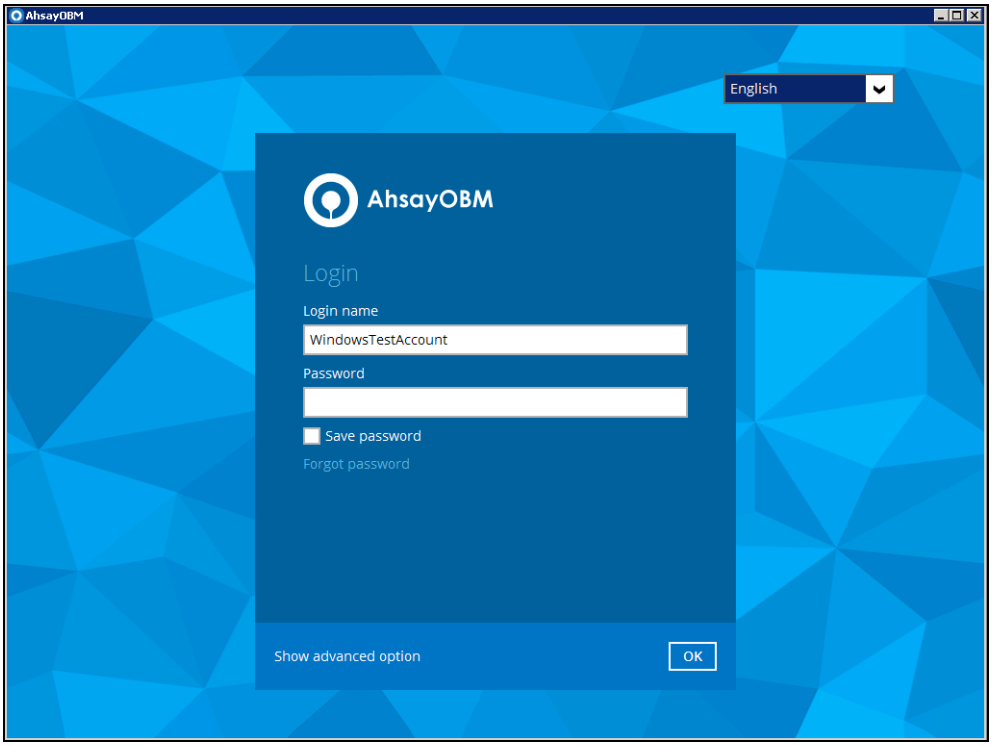
Ahsay OBM system tray has ten (10) controls:

- Open
- Backup
- Backup and Logoff
- Backup and Restart
- Backup and Shutdown
- Backup and Standby
- Backup and Hibernate
- Help
- Stop Running Backup
- Exit

Open

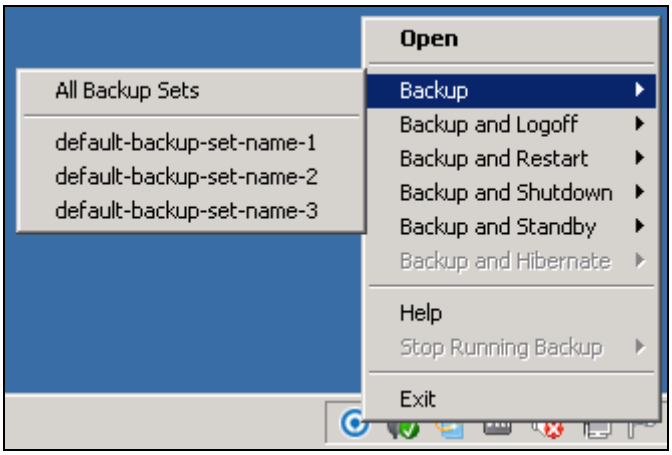
Select this option to open the AhsayOBM login screen.





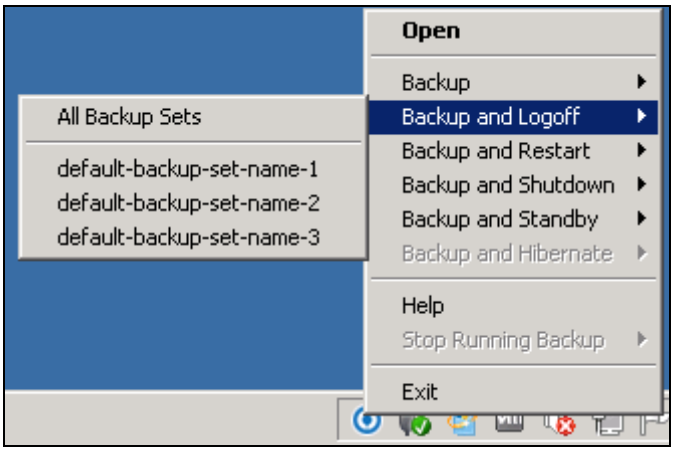
Backup

If you want to perform a backup without going to the interface, hover the mouse to this option and select the backup set you want to back up.



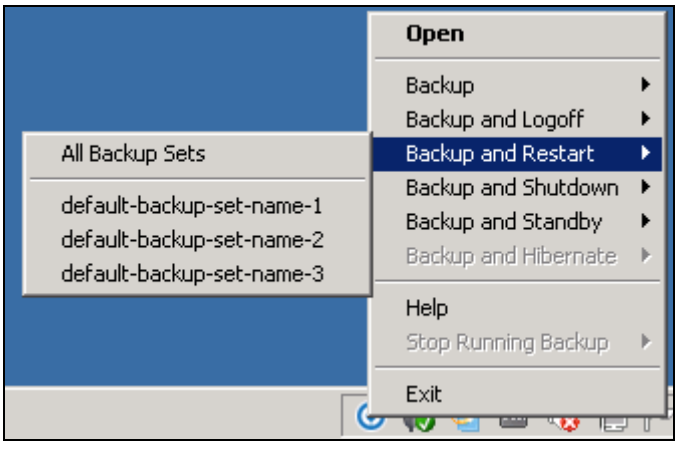
Backup and Logoff

Select this option if you want to logoff Windows after a manual backup job is done.



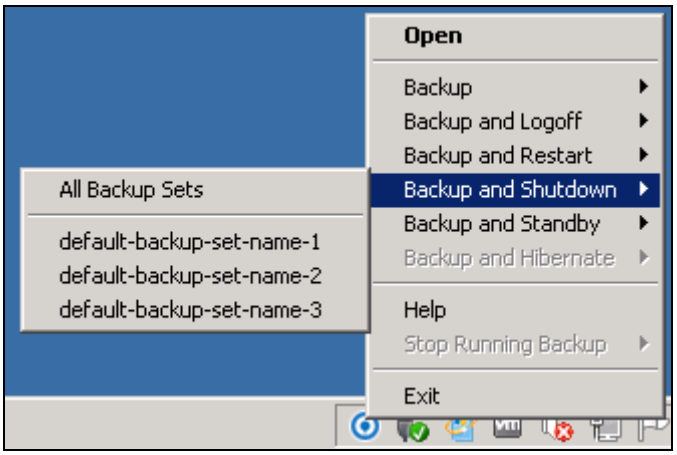
Backup and Restart

Choose this option if you want the machine to restart after a manual backup job is done.



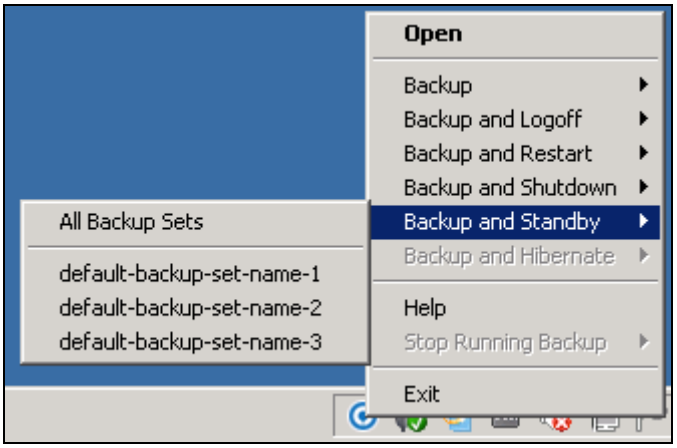
Backup and Shutdown

Choose this option if you want the machine to shut down after a manual backup job is done.



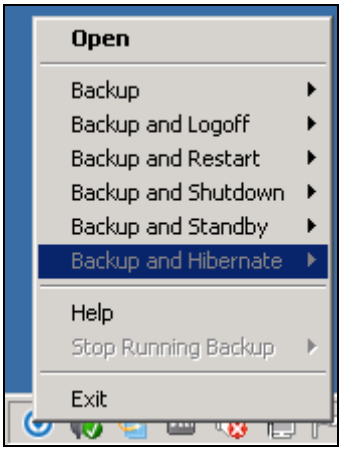
Backup and Standby

Choose this option if you want the machine to go on standby after a manual backup job is done.



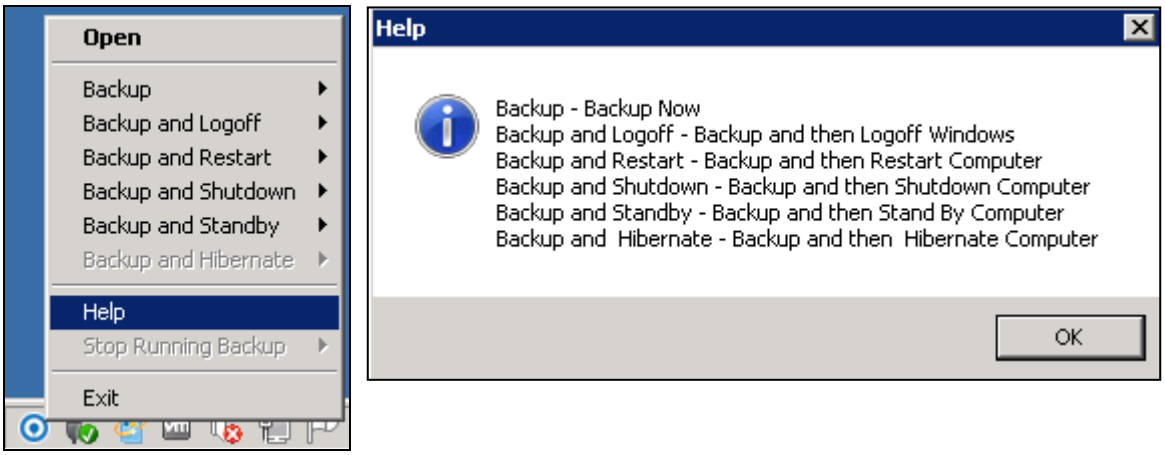
Backup and Hibernate

Choose this option if you want the machine to hibernate after a manual backup job is done. This will be disabled if hibernate mode is not available on the Windows version you are using.



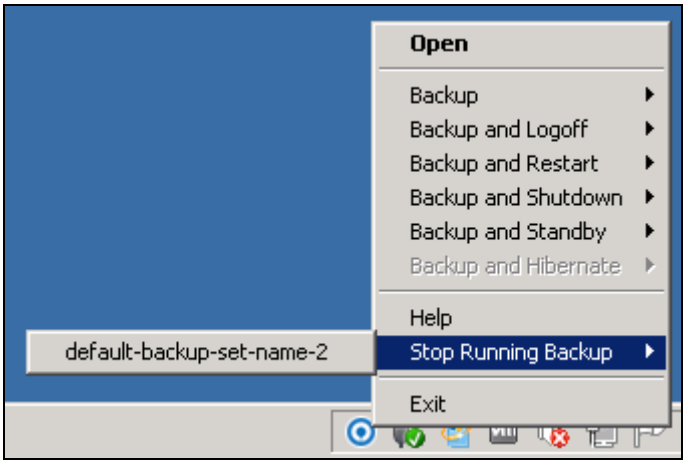
Help

This tab will show you the function of each backup option.

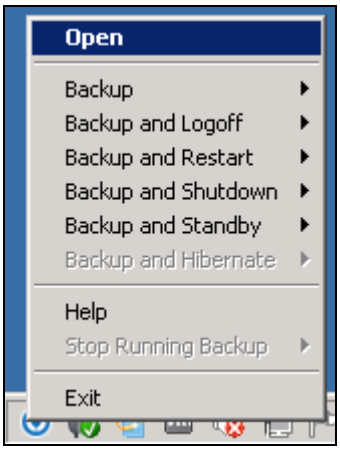


Stop Running Backup

Use this option if you wish to stop a running manual, continuous or scheduled backup.

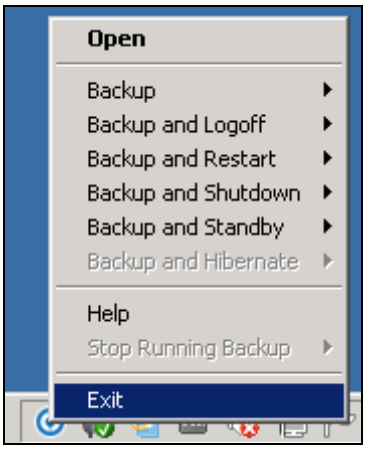


This option will be disabled if there is no backup job running.



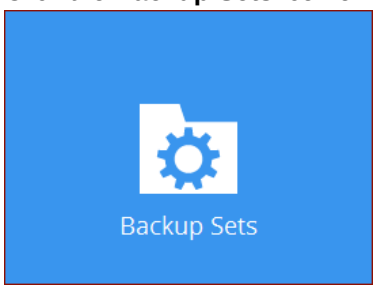
Exit

Select this option if you want to close the application including the AhsayOBM icon at the taskbar.

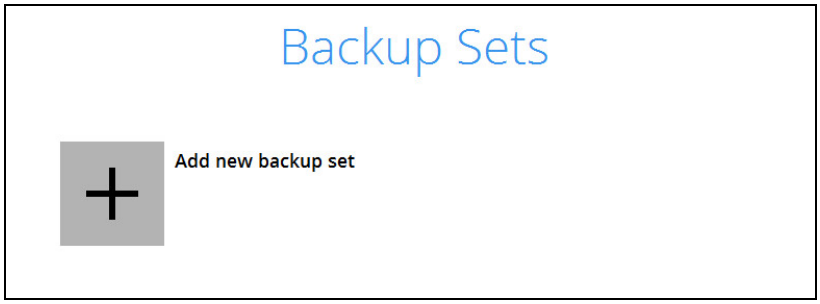


8 Create a Backup Set

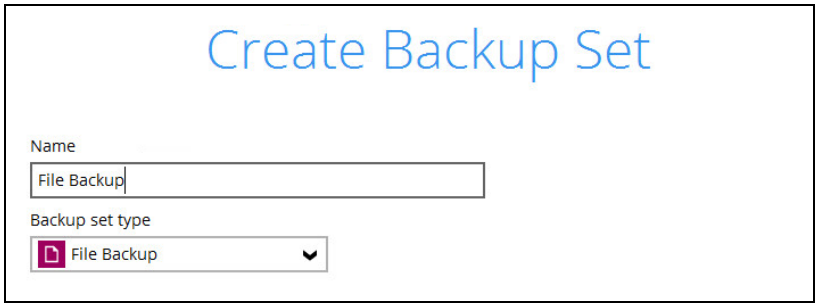
1. Click the **Backup Sets** icon on the AhsayOBM main interface.



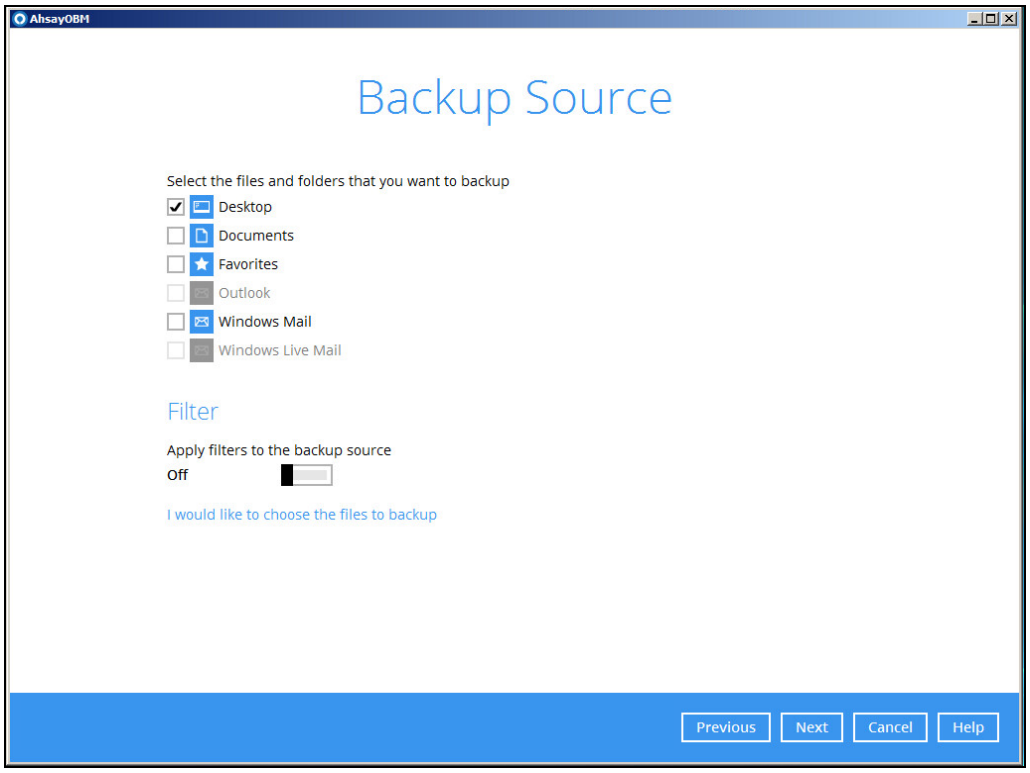
2. Create a new backup set by clicking the "**+**" icon next to **Add new backup set**.



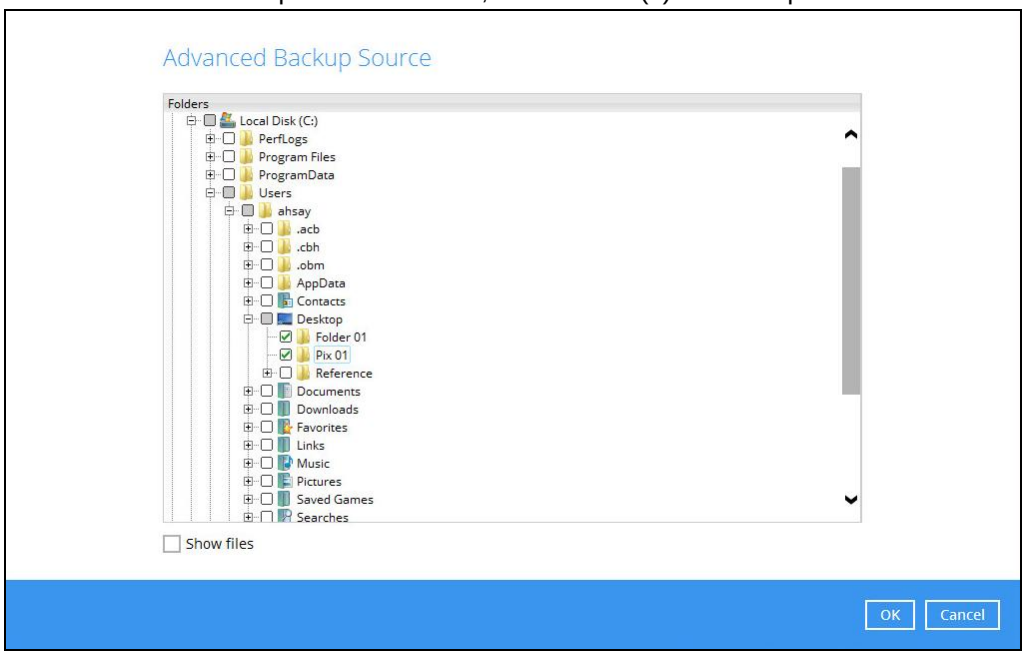
3. When the Create Backup Set window appears, name your new backup set and select the **Backup set type**. Then, click **Next** to proceed.



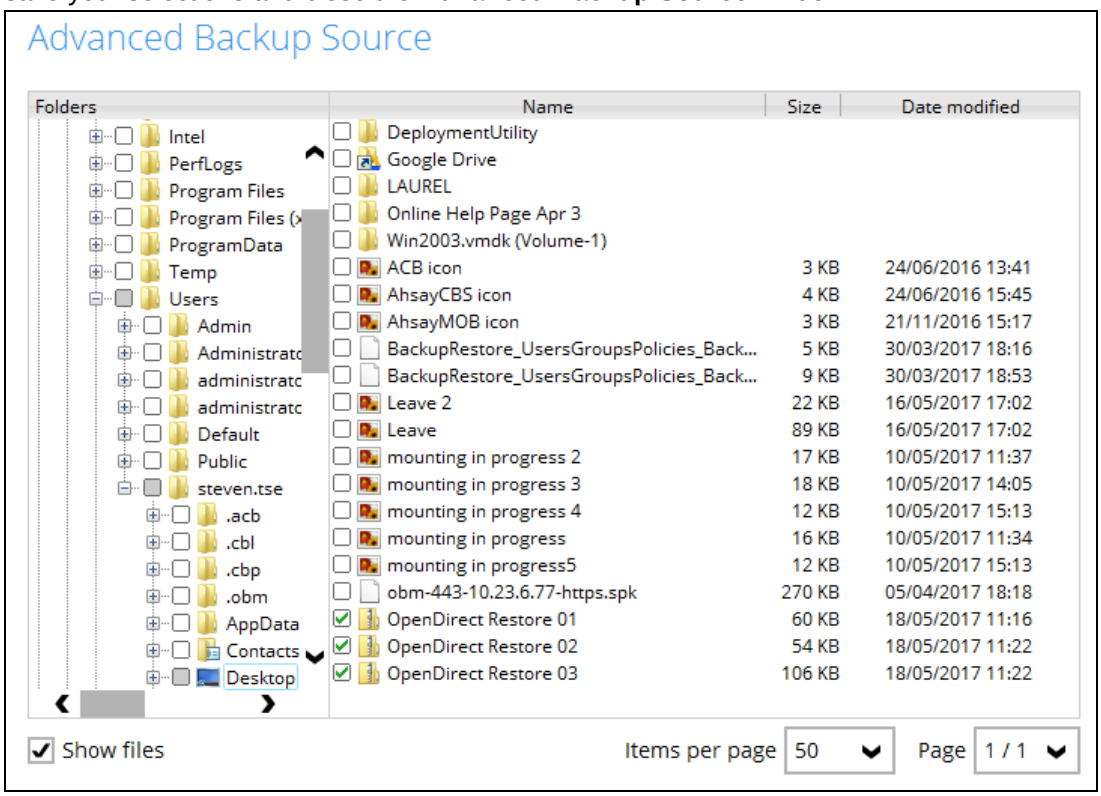
4. In the Backup Source window, select the files and folders for backup. Click **I would like to choose the files to backup** to select individual files for backup.



5. In the Advanced Backup Source window, select folder(s) to back up all files in the folder(s).



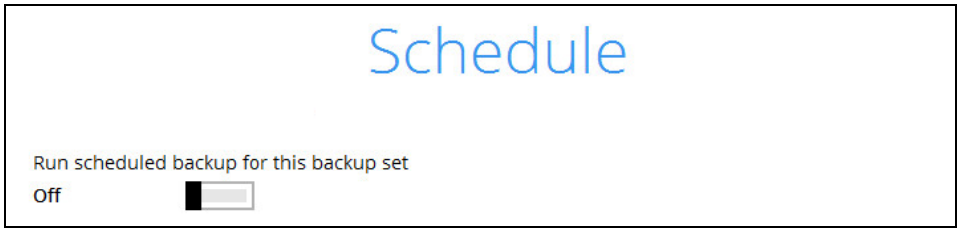
6. Alternatively, if you want to back up only individual files instead of all files in your selected folder(s), select the **Show files** checkbox at the bottom of the screen. A list of files will appear on the right-hand side. Select the checkbox(es) next to the file(s) to back up. Then, click **OK** to save your selections and close the **Advanced Backup Source** window.



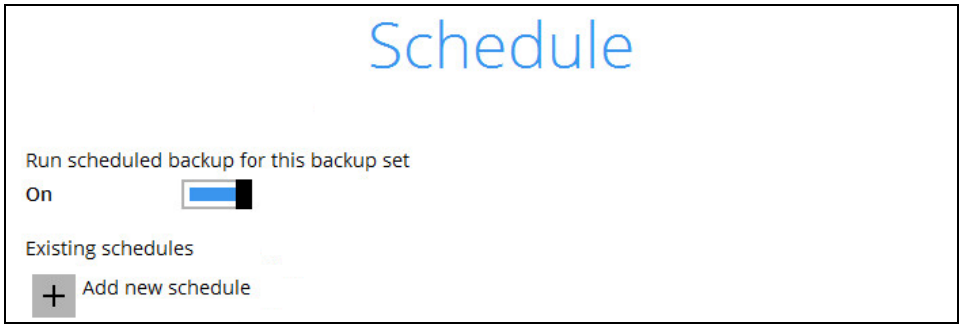
7. In the Backup Source window, click **Next** to proceed.

8. When the **Schedule** window appears, you can configure a backup schedule to automatically run a backup job at your specified time interval. In the Schedule window, the Run scheduled backup for this backup set is **Off** by default.

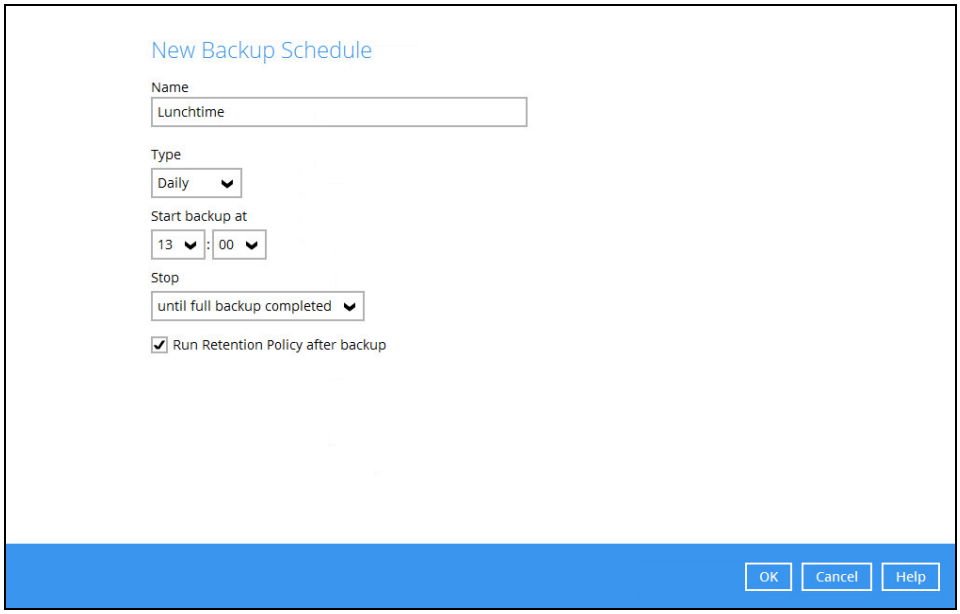
   - You can leave it as is if you want to add a schedule later.



   - If you want to add a schedule now, switch **On Run scheduled backup for this backup set**. Then, click + next to **Add new schedule**.



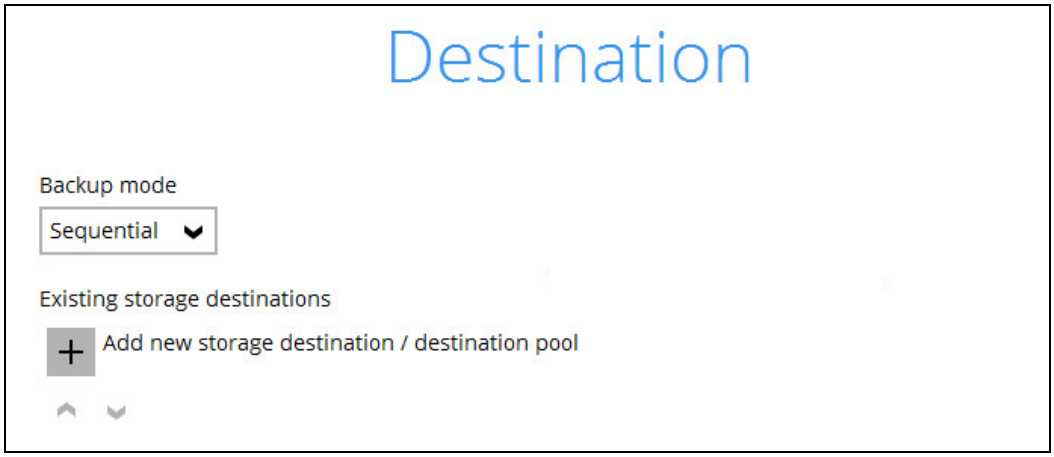
When the New Backup Schedule window appears, specify your backup schedule. Then, click **OK** to save your changes and close the New Backup Schedule window.



Note: For details about the options from the dropdown menus, please refer to chapter 9 Configure Backup Schedule for Automated Backup.

9. In case you have added a schedule, it will be shown in the Schedule window. Click **Next** to proceed when you are done setting.

10. The **Destination** window will appear.

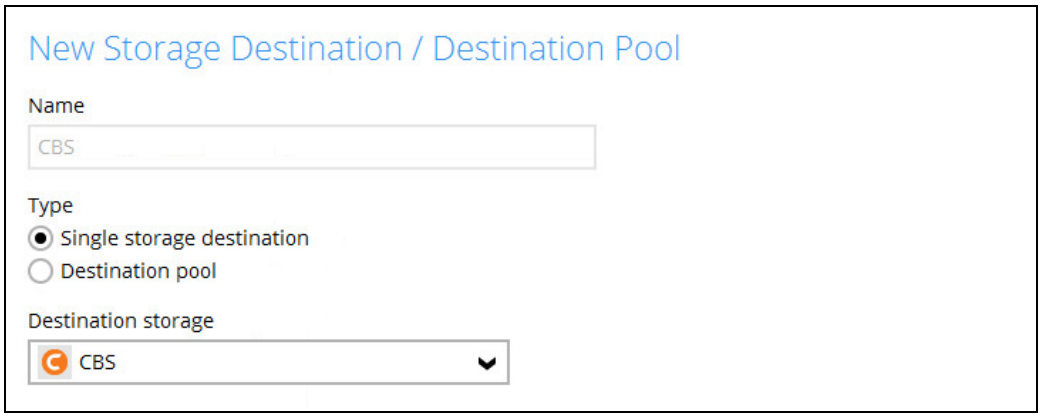


Select the appropriate option from the **Backup mode** dropdown menu.

- **Sequential** (default value) – run backup jobs to each backup destination one by one
- **Concurrent** – run backup jobs to all backup destinations at the same time

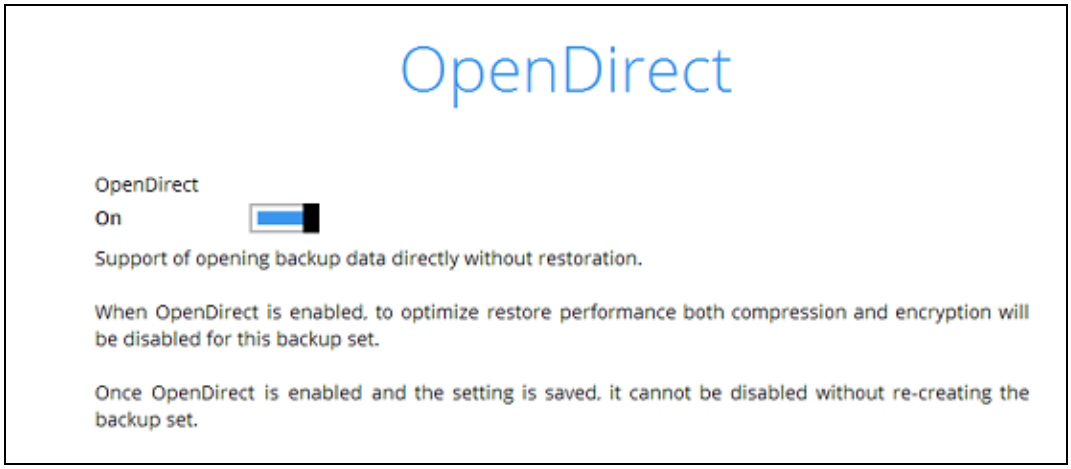
To select a backup destination for the backup data storage, click + next to **Add new storage destination / destination pool**.

11. In the **New Storage Destination / Destination Pool** window, select the destination type and destination storage. Then, click **OK** to confirm your selection.



12. In the **Destination** window, your selected storage destination will be shown. Click **Next** to proceed.

13. If you wish to enable the **OpenDirect Restore** feature, make sure you turn on the OpenDirect restore switch in this menu. Click **Next** to proceed.

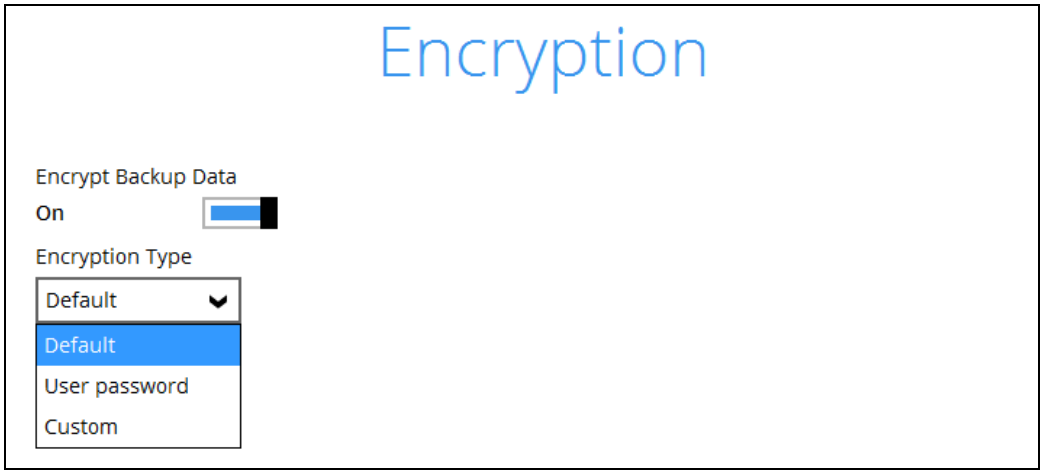


Notes

1. Once the OpenDirect Restore feature is enabled and the backup set is saved, it is **NOT** possible to disable it afterwards, and vice versa. A new backup set will have to be created again if you wish to do so.
2. It is possible to enable both OpenDirect restore and Run Direct restore at the same time. However, AhsayOBM restore job will only allow either OpenDirect or Run Direct to run, but not both to run concurrently.
3. OpenDirect restore requires an additional OpenDirect restore module license to work. Contact your backup service provider for further details.

14. **IMPORTANT:** If you have enabled the OpenDirect Restore, backup data will not be compressed and encrypted to optimize restore performance, therefore you can skip to step 17.

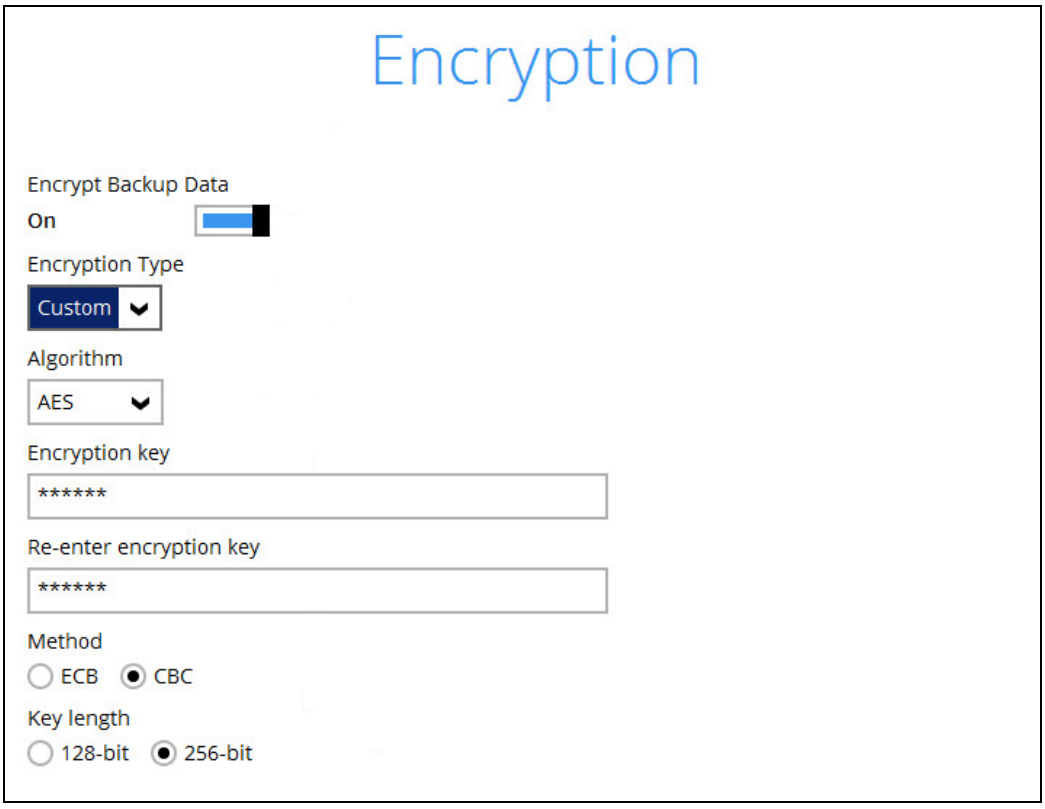
    In the Encryption window, the default **Encrypt Backup Data** option is enabled with an encryption key preset by the system which provides the most secure protection.



    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.

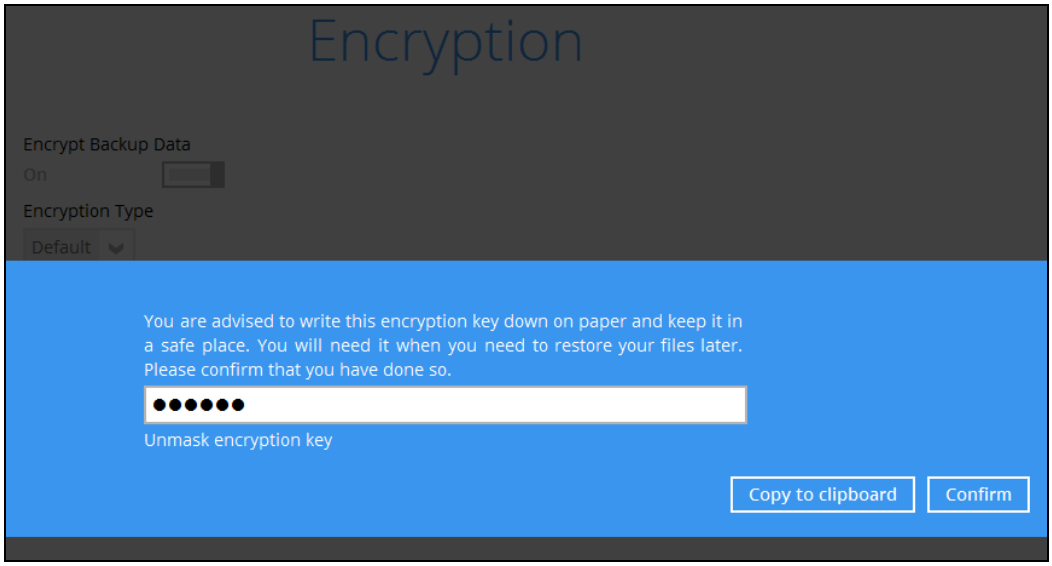
- **Custom** – you can customize your encryption key, where you can set your own algorithm, encryption key, method and key length.



Note: For best practice on managing your encryption key, refer to the following KB article. https://forum.ahsay.com/viewtopic.php?f=169&t=14090

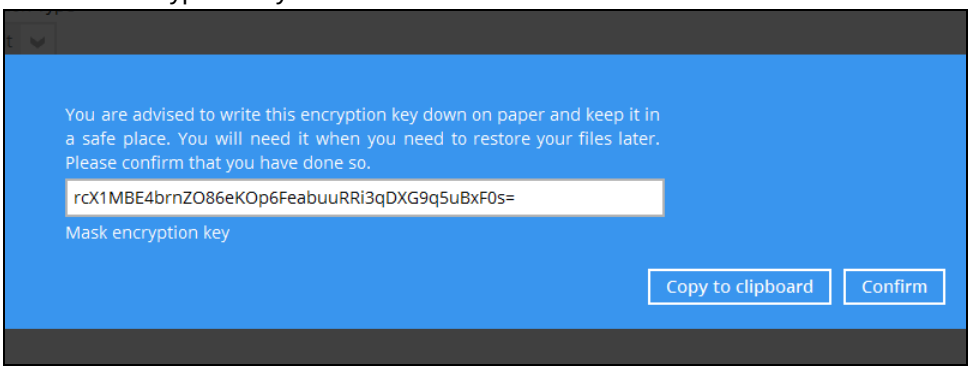
Click **Next** when you are done setting.

15. 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:

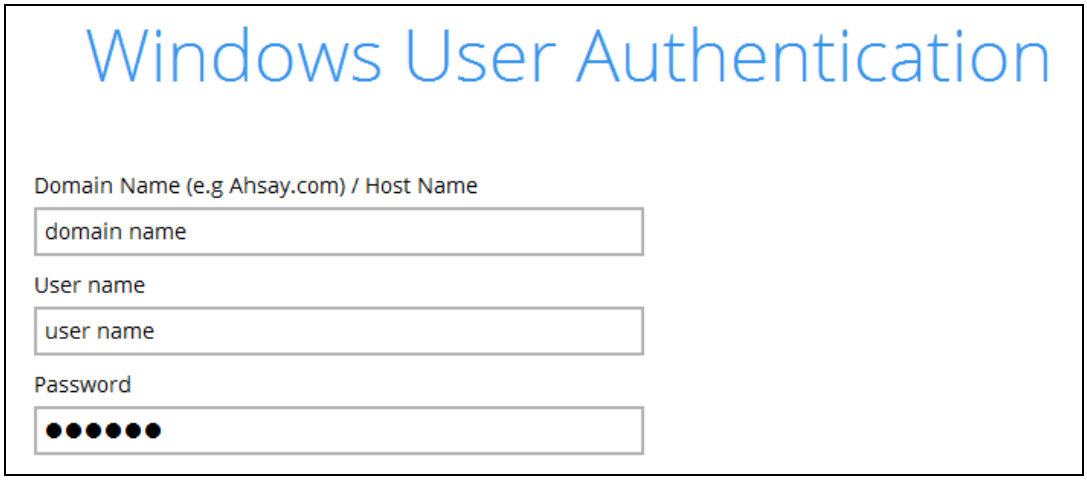
- **Unmask encryption key** – The encryption key is masked by default. Click this option to show the encryption key.



- **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.

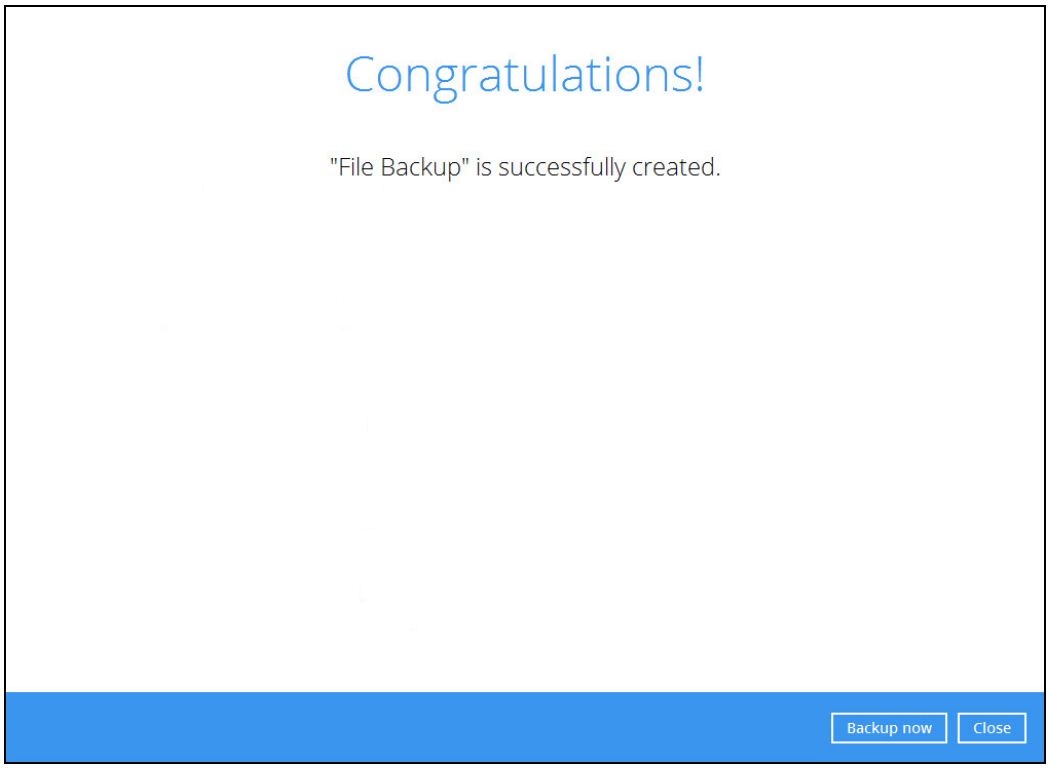
16. The following screen prompts you to enter the Windows login credentials for user authentication, if you have enabled the Schedule Backup feature in step 8.



Note

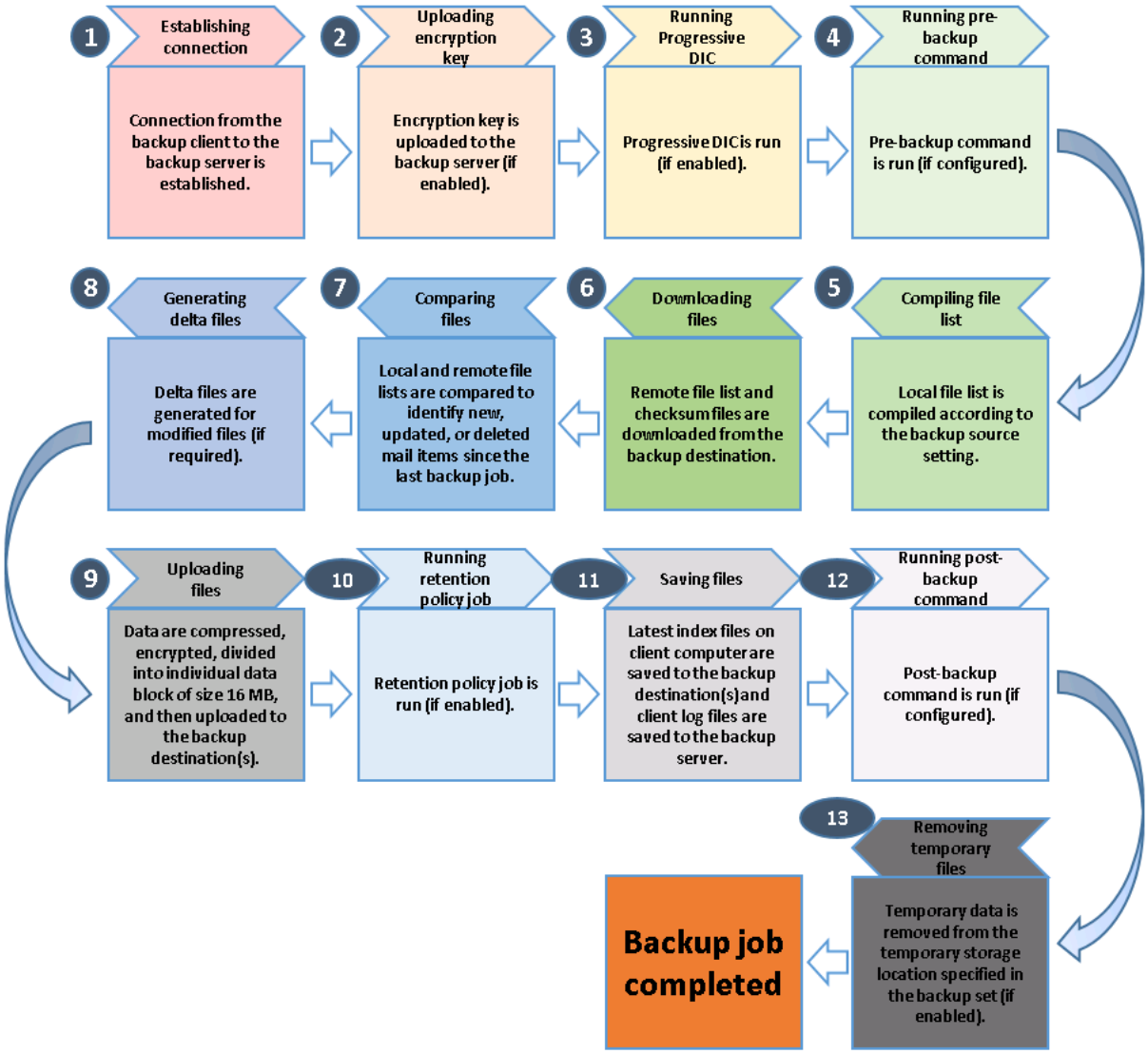
If you have selected to back up individual folder(s) / file(s) on your local computer's drive in step 5, the Windows User Authentication request will be bypassed and therefore the screen shown above will not display even though the Schedule Backup feature has been turned on.

17. Upon successful creation of the backup set, the following screen will appear. You can click **Backup now** to back up your data or click **Close** to exit.



9 Overview on Backup Process

The following steps are performed during a backup job:



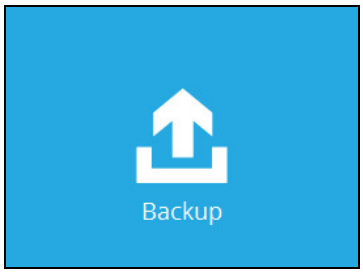
10 Run Backup Jobs

Login to AhsayOBM

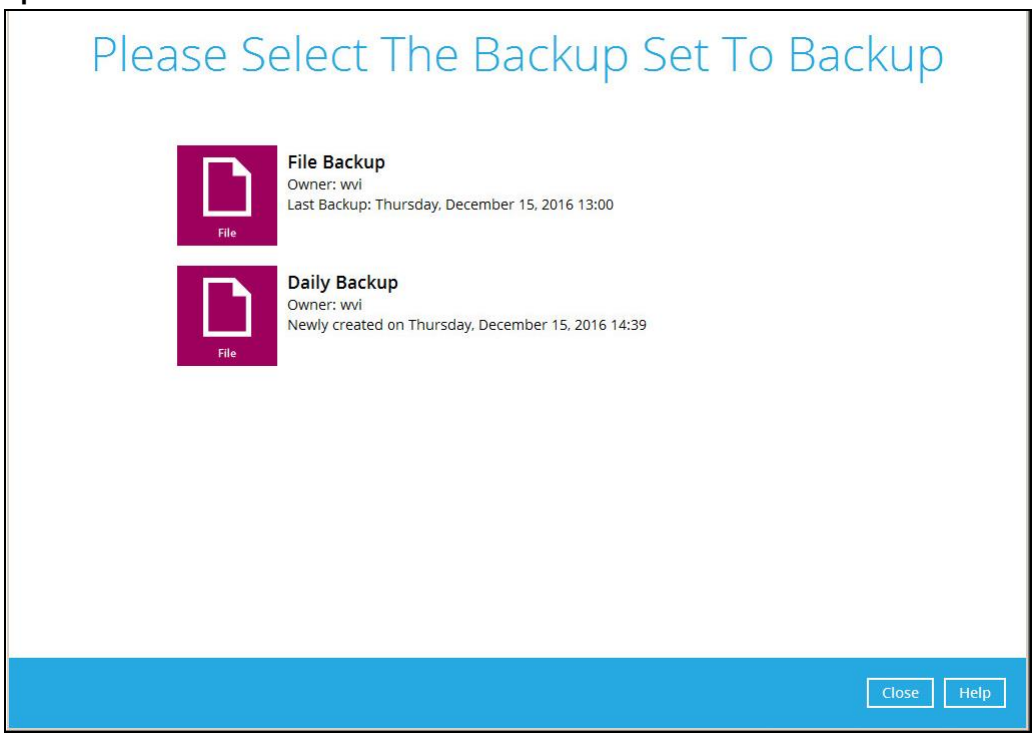
Login to the AhsayOBM application according to the instructions in section 6.1 Login to AhsayOBM.

Start a Manual Backup

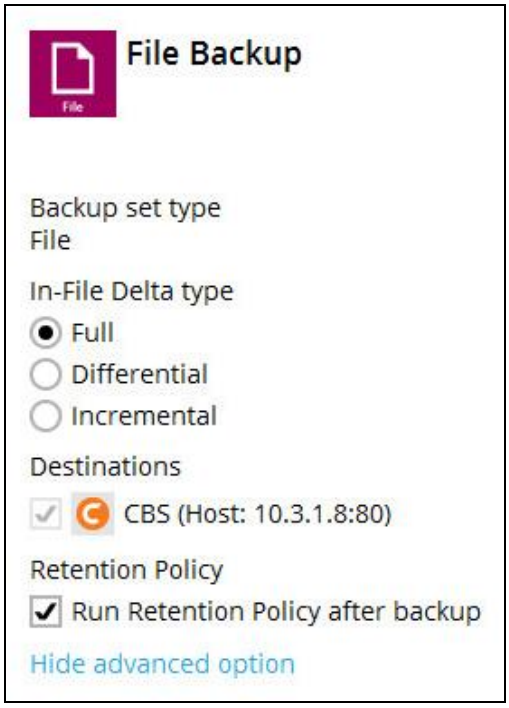
1. Click the **Backup** icon on the main interface of AhsayOBM.



2. Select the backup set which you would like to start a backup for. In case you want to modify the In-File Delta type, Destinations and Retention Policy settings, click **Show advanced option**.

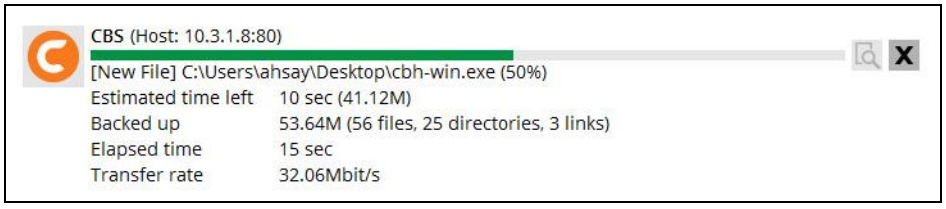


3. When advanced options are shown, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** in the Retention Policy section at the bottom. This will help you save hard disk quota in the long run. In the In-File Delta type section, the following three options are available:

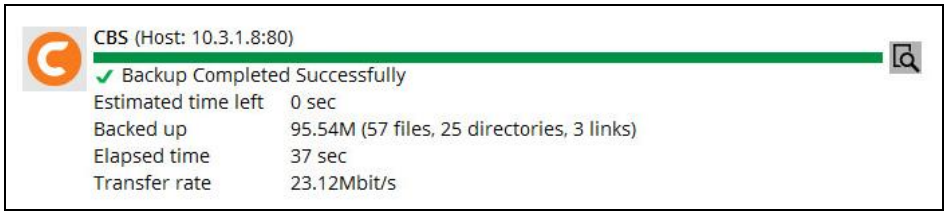


- **Full** – A full backup captures all the data that you want to protect. When you run a backup job for the first time, AhsayOBM will run a full backup regardless of the in-file delta setting.
- **Differential** – A differential backup captures only the changes made as compared with the last uploaded full file only (i.e. changes since the last full backup, not since the last differential backup).
- **Incremental** – An incremental backup captures only the changes made as compared with the last uploaded full or delta file (i.e. changes since the last incremental backup).

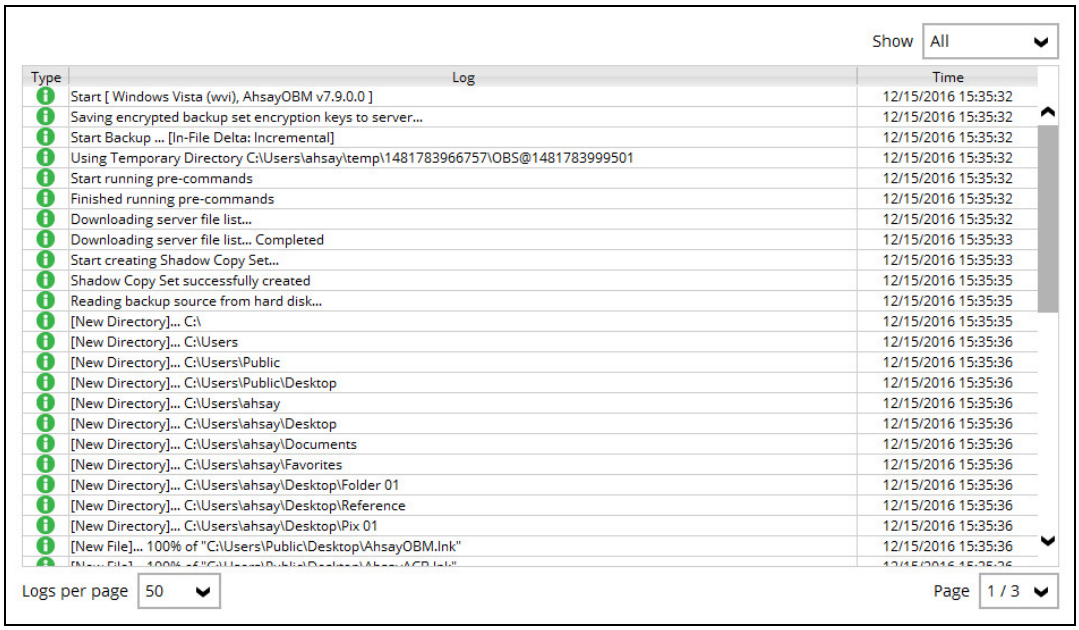
4. Click Backup to start the backup job. The status will be shown.



5. When the backup is completed, the progress bar will be green in color and the message "Backup Completed Successfully" will appear.

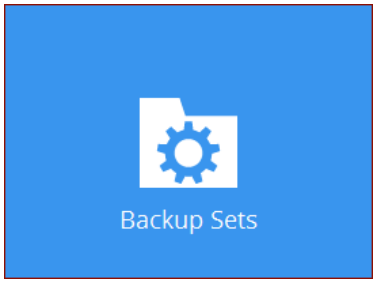


6. You can click the **View** icon on the right-hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.



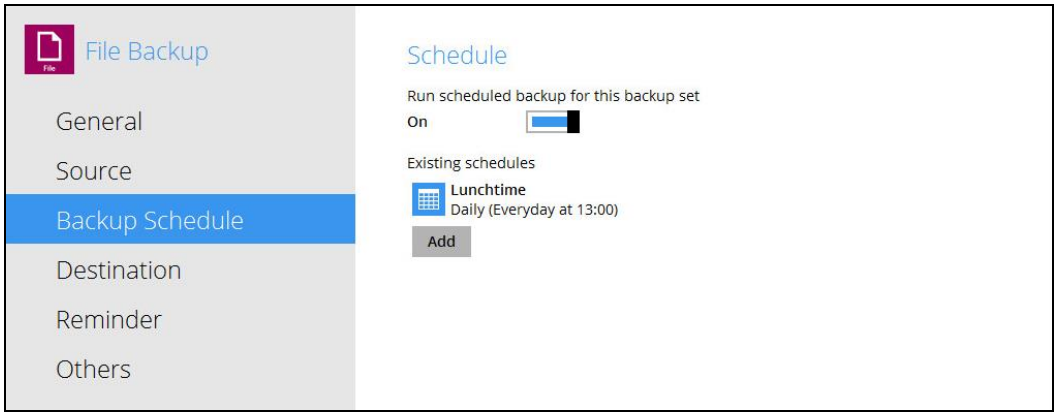
Configure Backup Schedule for Automated Backup

1. Click the **Backup Sets** icon on the AhsayOBM main interface.

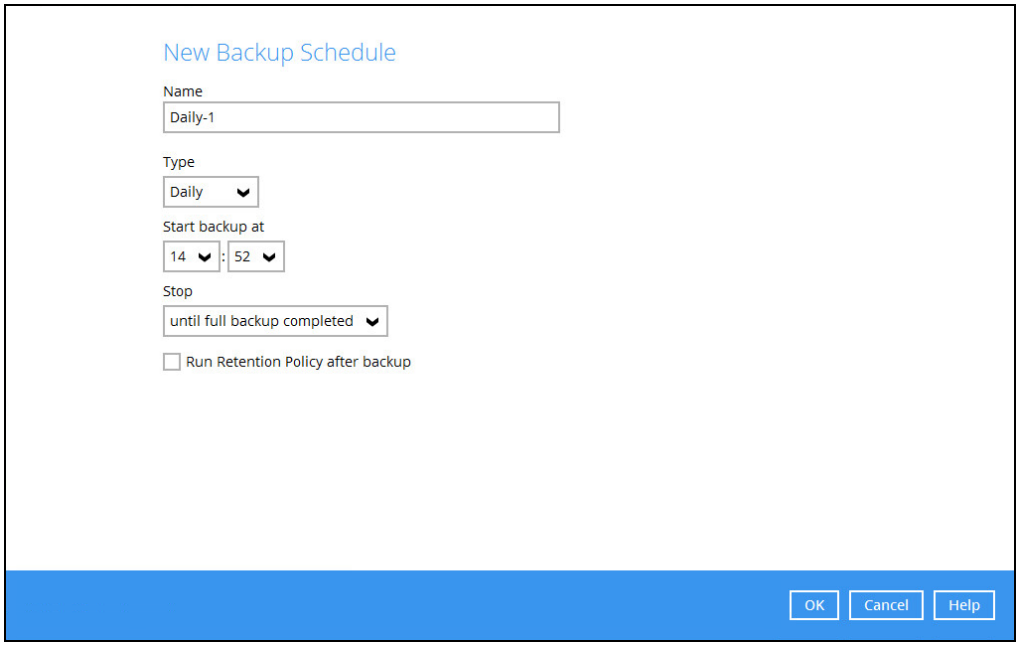


2. All backup sets will be listed. Select the backup set that you would like to create a backup schedule for. A screen will pop up, showing the General tab.

3. Go to the **Backup Schedule** tab. In case Run scheduled backup for this backup set is off, switch it **On**. Existing schedules will be listed at the bottom if there is any.

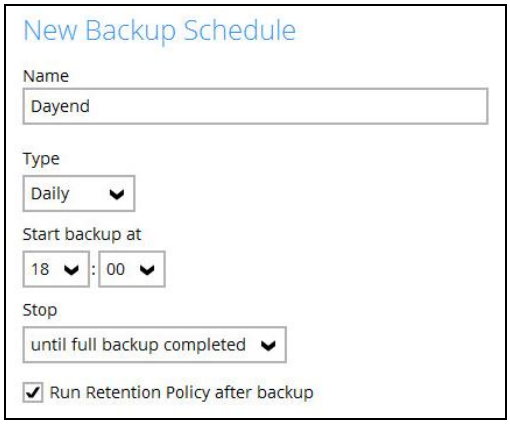


4. Click **Add** to add a backup schedule. The New Backup Schedule window will appear.

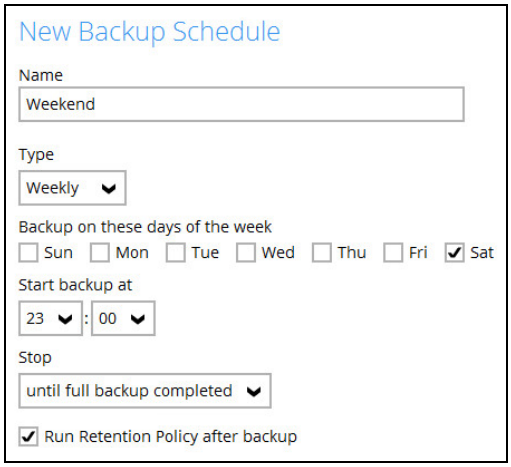


5. In the New Backup Schedule window, you can configure your backup schedule settings. To save hard disk quota in the long run, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** at the bottom. The rest of the setting options will vary by which option you choose from the **Type** dropdown menu:

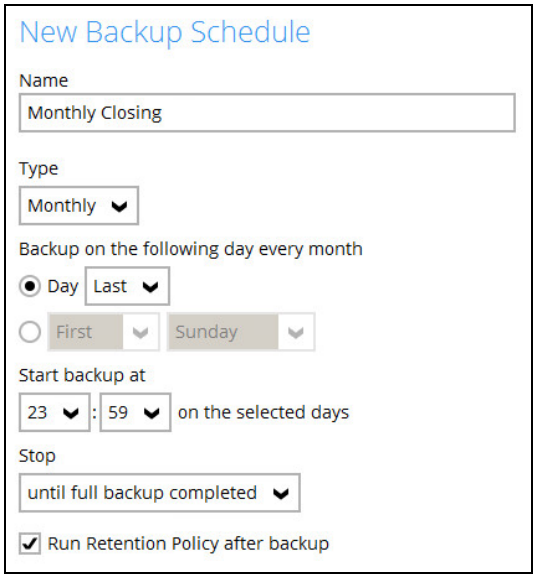
- **Daily** – what time to start the backup job



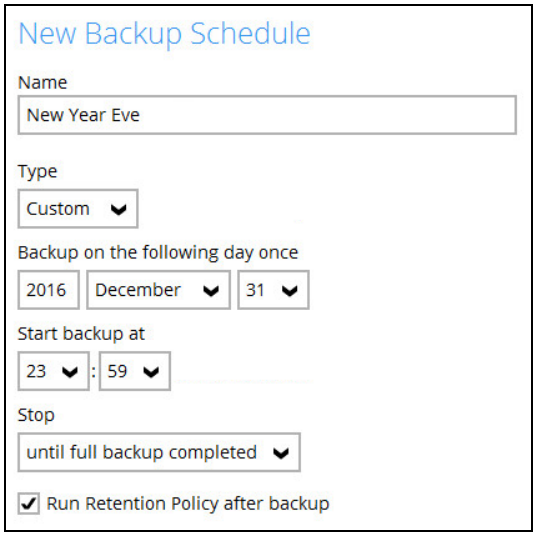
- **Weekly** – which day of the week and what time that day to start the backup job



- **Monthly** – which day of the month and what time that day to start the backup job

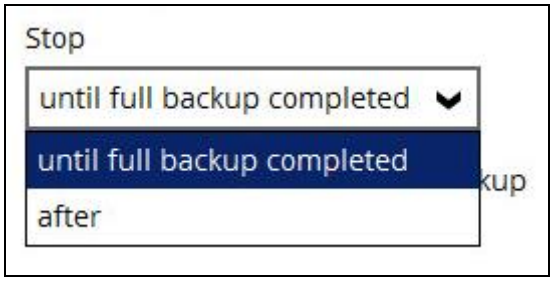


- **Custom** – which particular date to start a one-off backup job



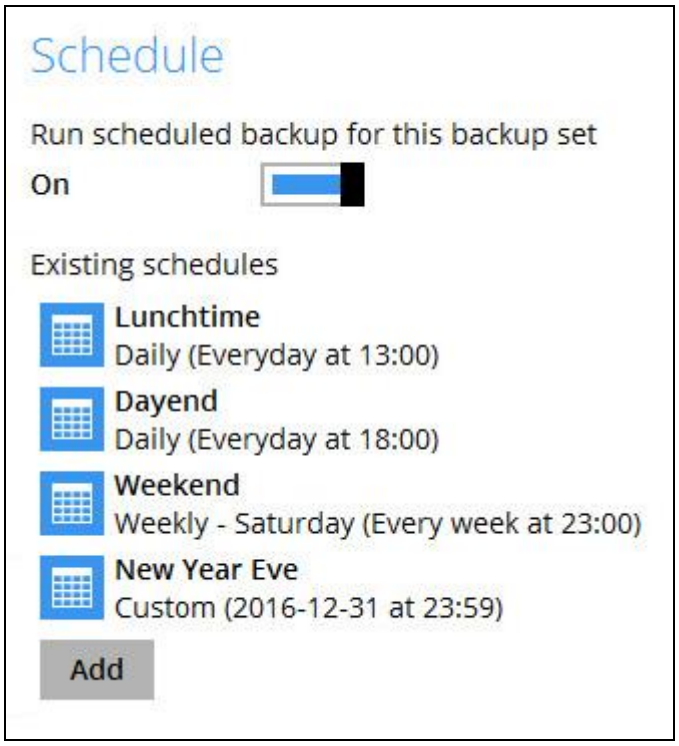
The **Stop** dropdown menu offers two options:

- **until full backup completed** – in case you prefer a complete backup



- **after [how many] hr** – in case you prefer the backup job to stop after a certain number of hours regardless of whether or not the backup job is completed

As an example, the four types of backup schedules may look like the following.



6. Click **Save** to confirm your settings. Then, click **Close** to exit Backup Sets.

11 Restore Data

Restore Method

There are two restore methods available, the traditional restore and OpenDirect restore. OpenDirect restore applies only to File backup sets with OpenDirect feature enabled.

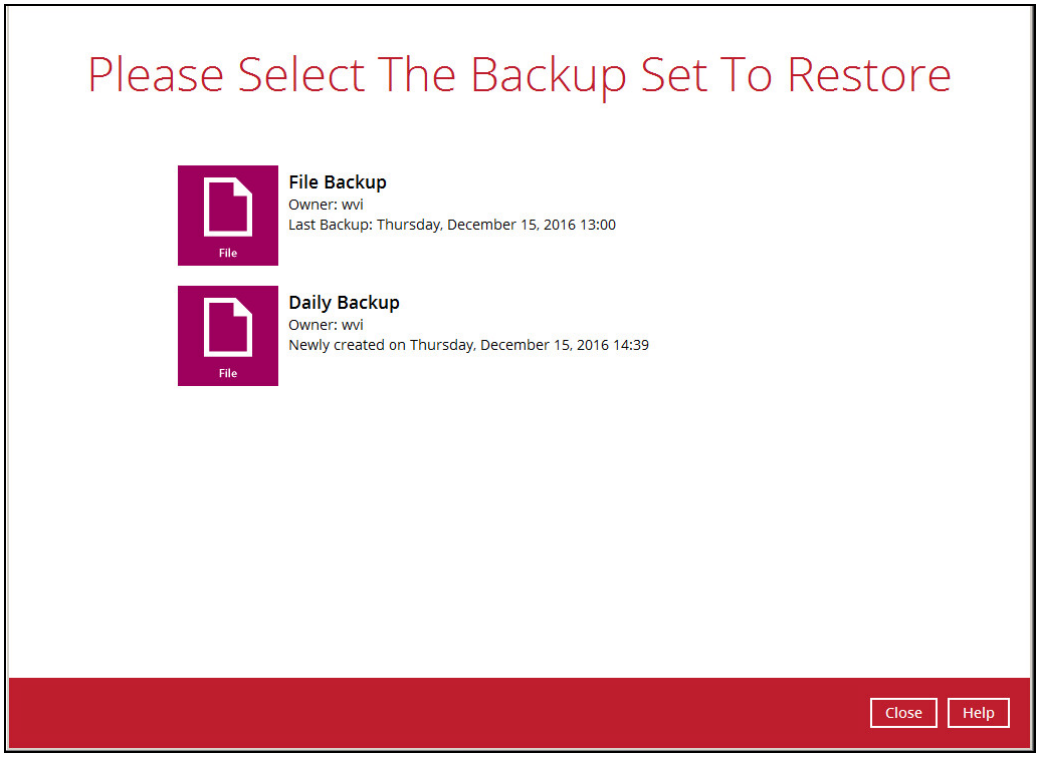
For more details on the differences of the two restore methods, refer to Benefits of using OpenDirect Restore.

Traditional Restore

1. Log in to the AhsayOBM application according to the instructions in section Login to AhsayOBM.

2. Click the **Restore** icon on the AhsayOBM main interface.

3. All the available backup sets for restore will be listed. Select the backup set that you would like to restore data from.



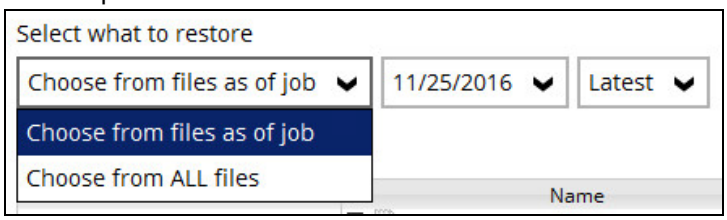
4. Select where you would like to restore your data from.

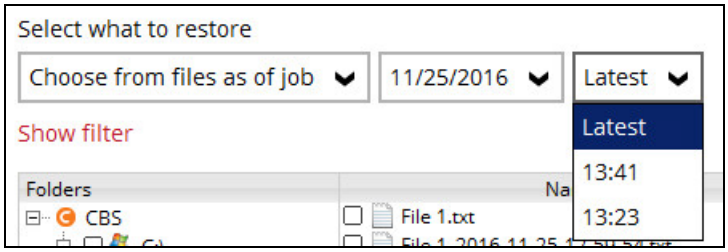
5. Select **Normal restore**.

6. Select to restore files from a specific backup job, or from all files available, then select the files or folders that you would like to restore.

   There are two options from the **Select what to restore** dropdown menu:

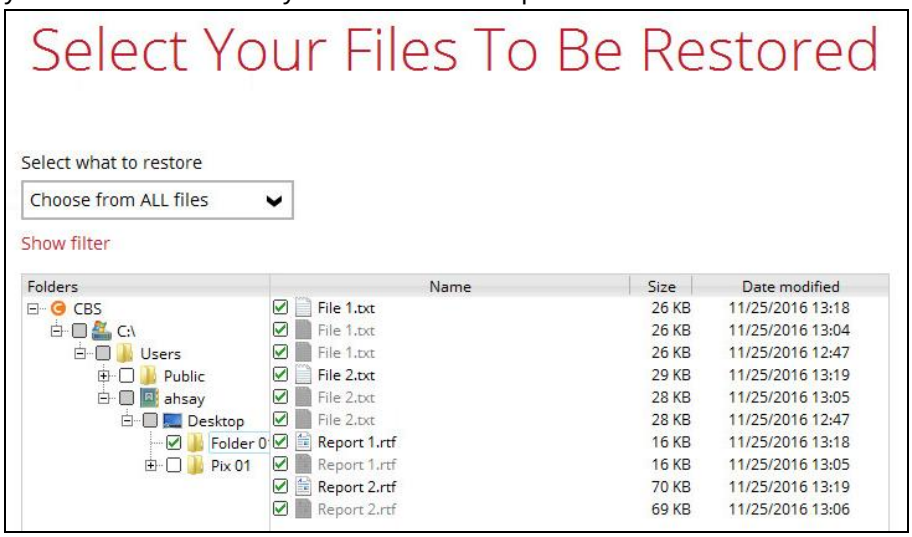
   - **Choose from files as of job** – This option allows you to select a backup version from a specific date and time to restore.



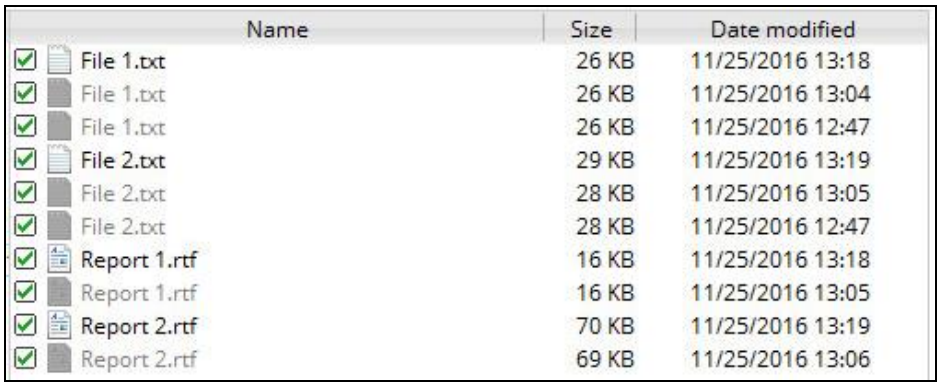


   - **Choose from ALL files** – This option allows you to restore all the available backup versions for this backup set. Among all the available backup versions,

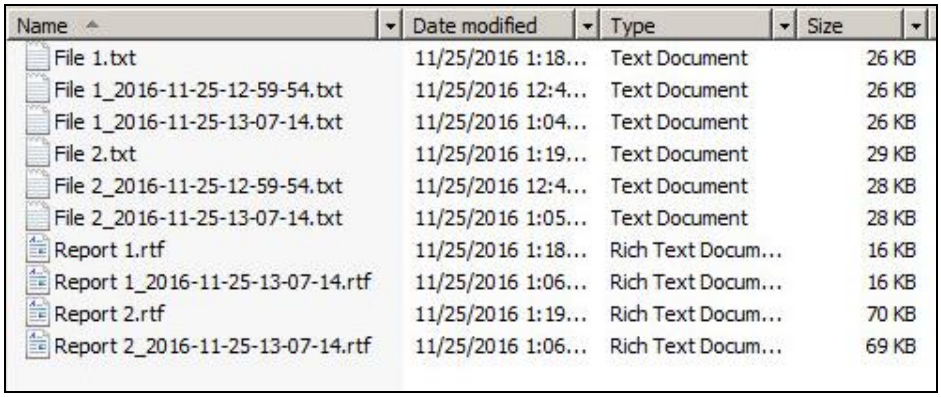
you can even select only some of the backup versions of a file to restore.



The following is an example showing all the available backup versions of the file **File 1.txt**. The latest version is shown in solid black color and all the previous versions are shown in grey color. You can identify the file version from the **Date modified** column.



When the restore is done, you will see all the selected backup versions in the restore destination. The latest backup version has the file name as the original file, while the previous versions have the time stamps added to their file names for easy identification.

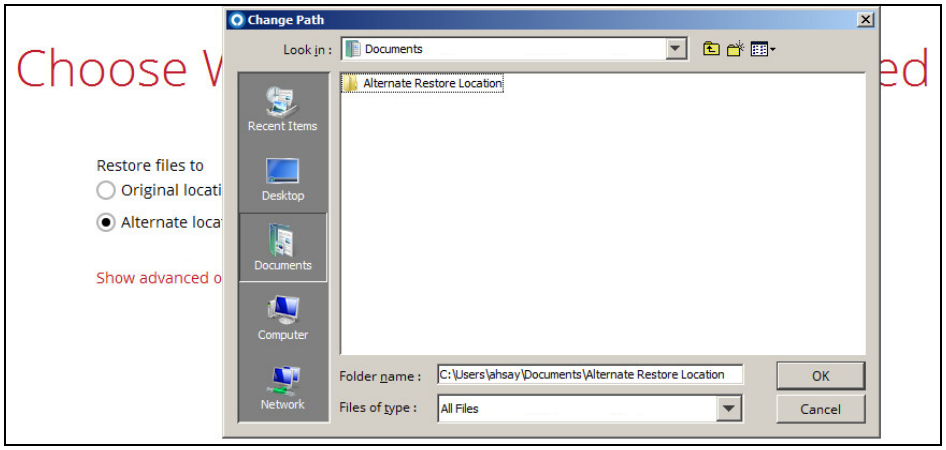


7. Click the **Show files** checkbox to select individual files for restoration. Click **Next** to proceed when you are done with the selections.

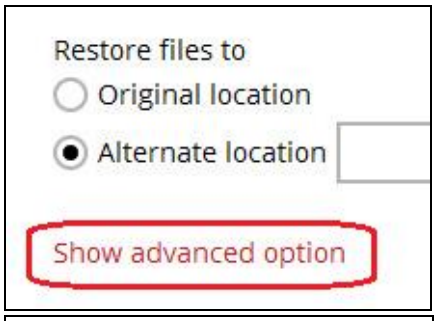
8. Select to restore the files to their **Original location**, or to an **Alternate location**. Then, click **Next** to proceed.

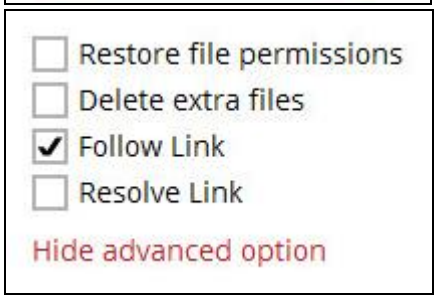
- **Original location** – The backed-up data will be restored to the computer running AhsayOBM under the same directory path as on the machine storing the backup source. For example, if the backup source files are stored under **Users/[User's Name]/Downloads** folder, the data will be restored to **Users/[User's Name]/Downloads** as well on the computer running AhsayOBM.

- **Alternate location** – You can choose to restore the data to a location of your choice on the computer where AhsayOBM is running.



9. Click **Show advanced option** to configure other restore settings:





- **Restore file permissions**
  Restore file permissions are disabled by default. When you perform a file restore on shared files or folders using a shared computer, it is recommended that you

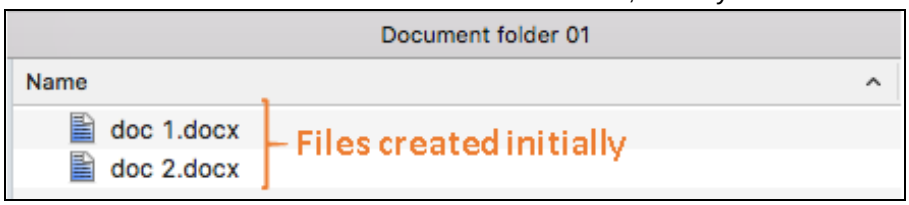
enable Restore file permissions by ticking the checkbox so that the files restored will not be fully accessible to everyone using the shared computer.

Delete extra files

By enabling this option, the restore process will attempt to synchronize the selected restore source with the restore destination, making sure the data in the restore destination is exactly the same as the restore source. Any data created after backup will be treated as "extra files" and will be deleted from the restore source if this feature is enabled.

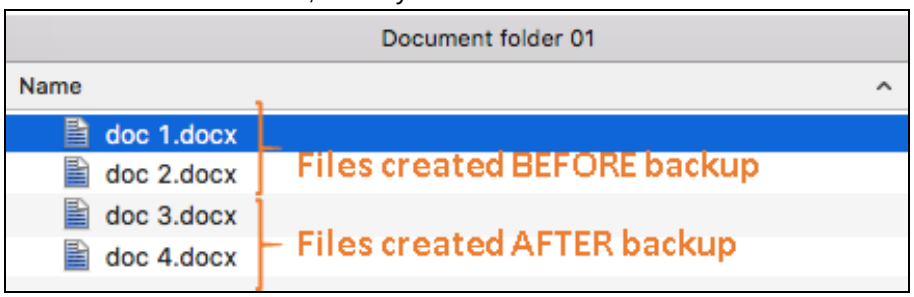
Example:

i) Two files are created under the **Document folder 01**, namely doc 1 & doc 2.



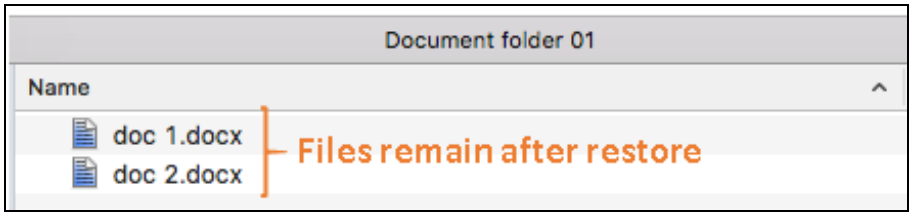
ii) A backup is performed for folder **Document folder 01**.

iii) Two new files are created, namely doc 3 & doc 4.



iv) A restore is performed for the **Document folder 01**, with **Delete extra files** option enabled.

v) Since doc 3 & doc 4 have never been backed up, therefore they will be deleted from **Document folder 01**, leaving only the two files that have been backed up.



WARNING

Please exercise extra caution when enabling this feature. Consider what data in the restore destination has not been backed up and what impact it would cause if those data is deleted.

Prior to the data restore and synchronization, a warning message shows as the one shown below. Only clicking **Yes** will the "extra file" be deleted. You can click **Apply to all** to confirm deleting all the "extra files" at a time.

- **Follow Link (Enabled by default)**
  When this option is enabled, not only the symbolic link or junction point will be restored, the directories and files that the symbolic link or junction point links to will also be restored.

  The table below summarizes the behaviors when a restore is performed with different settings.

Follow Link	Restore to	Behavior
Enabled	**Original location**	Symbolic link or junction point is restored to the original backup location. Target directories or files are also restored to the original backup location.
	Alternate location	Symbolic link or junction point is restored to the location specified. Target directories or files are also restored to the alternate location specified.
Disabled	**Original location**	Symbolic link or junction point is restored to the original backup location. Target directories or files are **NOT** restored to the original backup location.
	Alternate location	Symbolic link or junction point is restored to the location specified. Target directories or files are **NOT** restored to the alternate location specified.

- **Resolve Link (Only for restoring to Alternate Location)**
  This option must be used in conjunction with the **Follow Link** option. When this option is enabled, the symbolic link or junction point, as well as the directories and files that the symbolic link or junction point links to will also be restored in the alternate location you have chosen. That means the link or junction will point to the alternate location instead of the original location.

  The table below summarizes the behaviors when a restore is performed with this option turned on and off.

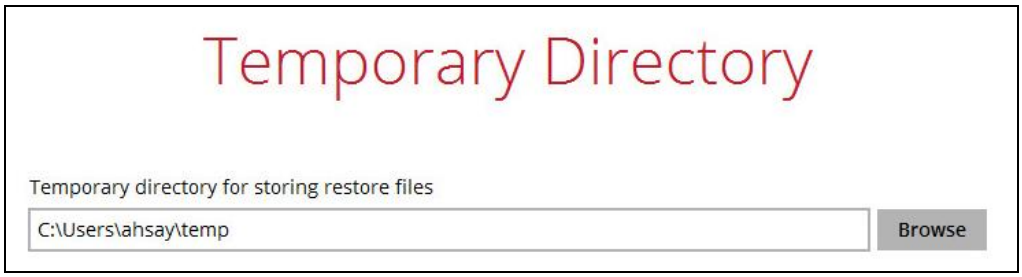
Resolve Link	Behavior
Enabled	Symbolic link or junction point is restored to the alternate location specified, with its target directories and files also restored to the same location in their relative path. Target of the link or junction is updated to the new relative path. In other word, the link or junction now points to the new alternate location.

Disabled	Symbolic link or junction point is restored to the alternate location specified, with its target directories and files also restored to the same location in their relative path. However, target of the link or junction is **NOT** updated to the new relative path. In other word, the link or junction still points to the original location.

Click **Next** to proceed.

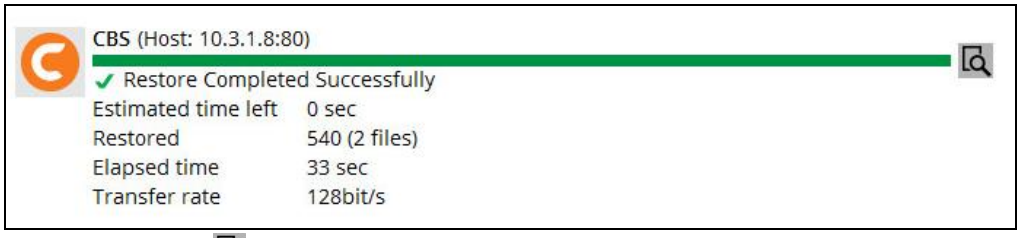
10. Select the temporary directory for storing temporary files, such as delta files, when they are being merged.

    By default, the temporary files are stored under the temp directory of the user profile directory. In case the same directory path does not exist in the computer you are running AhsayOBM, you have to click **Browse** to define a new location for storing the temporary files. Otherwise, you will not be able to perform a restore.

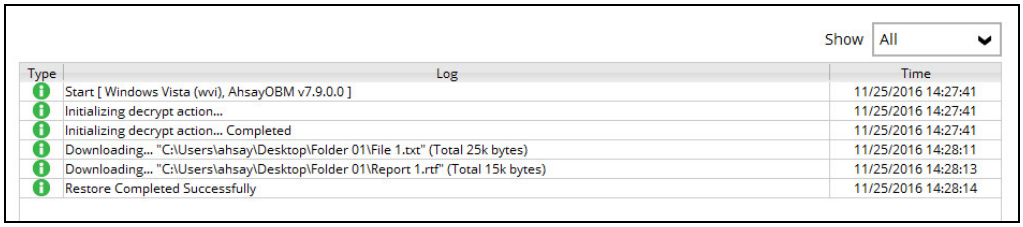


11. Click **Restore** to start the restore. The status will be shown.

12. When the restore is completed, the message “Restore Completed Successfully” will appear.



You can click the **View** icon on the right-hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.



13. In the Restore window, click **Cancel** to close the Restore window.

14. To exit AhsayOBM, click the “**x**” on the top right corner. A message will appear to ask for your confirmation. Click **Yes** to close the application. If you wish to use AhsayOBM again, you will then have to launch it again.

OpenDirect Restore

This restore method applies to backup sets created with OpenDirect restore enabled only.

IMPORTANT

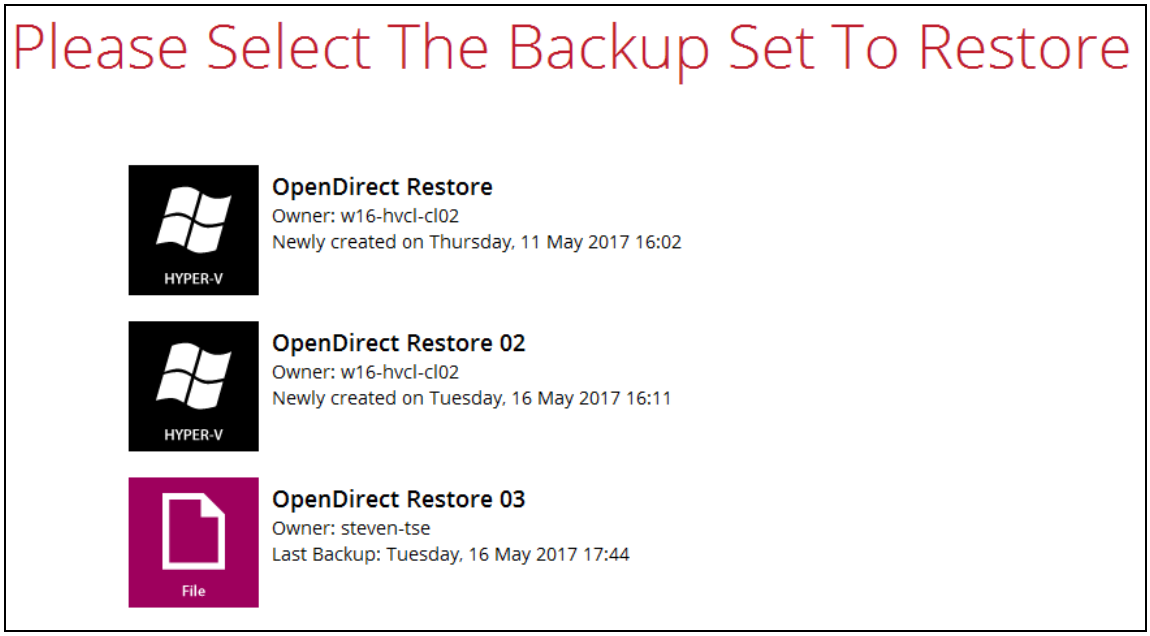
Before you proceed with the OpenDirect Restore, make sure the following dependencies are fulfilled. Failure to do so may cause the restore to fail.

- Microsoft Visual C++ 2015 Redistributable (x86) / (x64)
  https://www.microsoft.com/en-us/download/details.aspx?id=48145
- Update for Universal C Runtime in Windows
  https://support.microsoft.com/en-us/help/2999226/update-for-universal-c-runtime-in-windows
- Microsoft Security Advisory 3033929 (for Windows 7 and Windows Server 2008 R2)
  https://technet.microsoft.com/en-us/library/security/3033929.aspx

1. Log in to the AhsayOBM application according to the instructions in section Login to AhsayOBM.

2. Click the **Restore** icon on the AhsayOBM main interface.

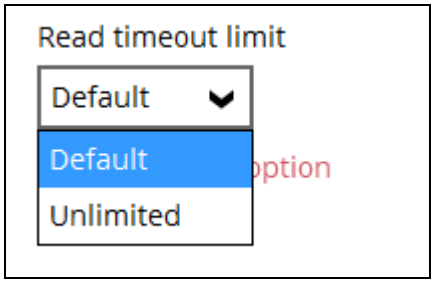
3. All the available backup sets for restore will be listed. Select the backup set that you would like to restore data from.



4. Select where you would like to restore your data from.

5. Select **Open backup data directly without restoration (OpenDirect).**

You may select the **Read timeout limit** by clicking Show advanced option.



This selection defines the duration when the OpenDirect restore session will be disconnected if there is no response from the mounted compressed or image file.

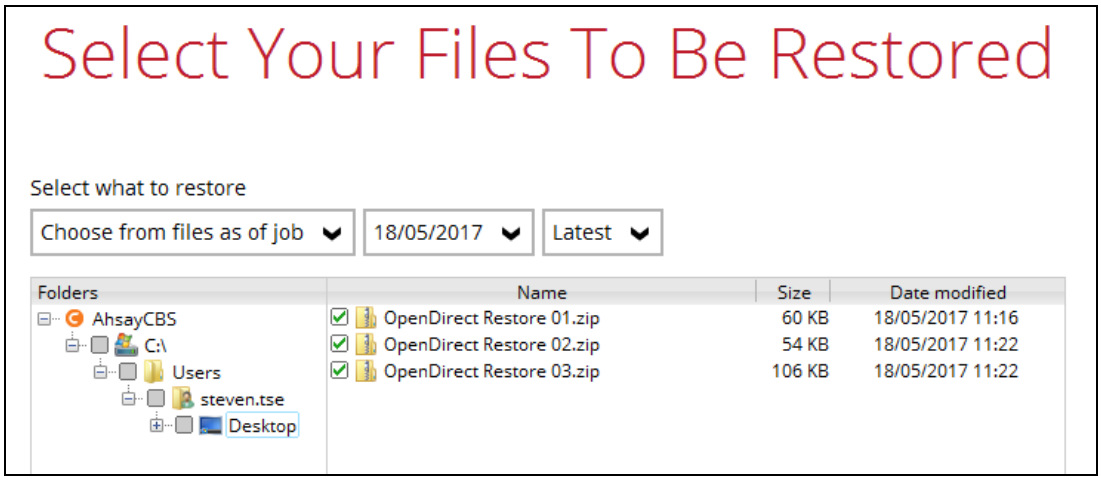
- **Default** – This setting should be suitable for compressed or image file located on a local, removable, or network drive. The time out value is15 seconds.
- **Unlimited** – the connection will not be time out when this is selected. This selection is recommended under the following usage:
  - Backup destination is a cloud stroage.
  - AhsayCBS over the Internet.
  - A large compressed or image file with large incremental delta chain.

Note

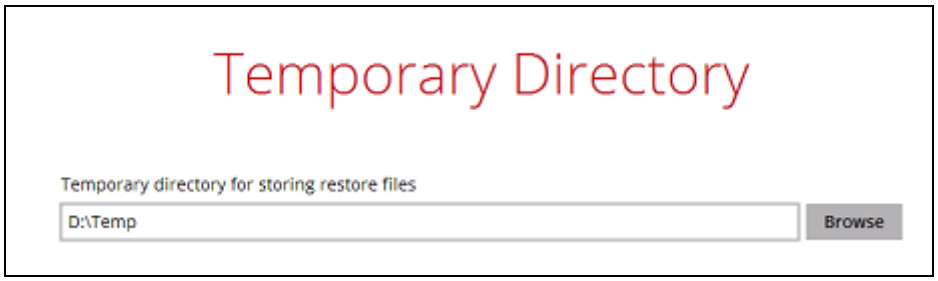
If in doubt or unsure about the compressed or image file size or network stability, it is recommended to use **Unlimited**.

Click **Next** to proceed when you are done with the selection.

6. Select to restore files from a specific backup job, or from all files available, then select the files or folders that you would like to restore.

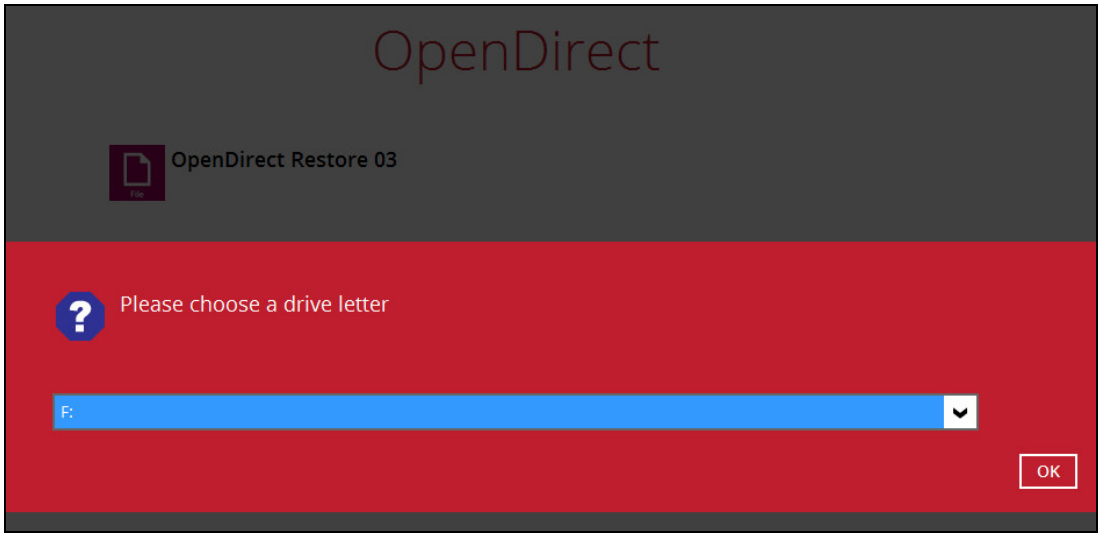


7. Select a temporary directory for storing restore files, then click Restore to start the OpenDirect restore.



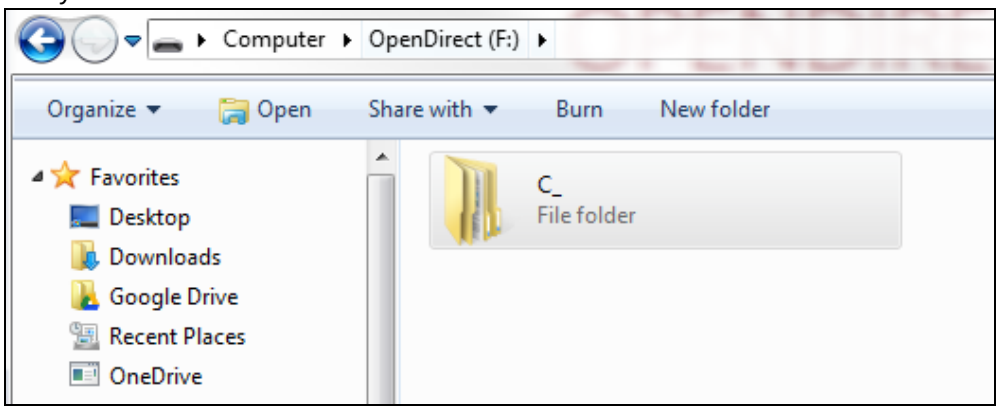
8. Click **Restore** to start the restore. The status will be shown.

9. You will be prompted to select drive letter where you wish the mounted files to be mapped on your machine, click **OK** when you have finished selection.

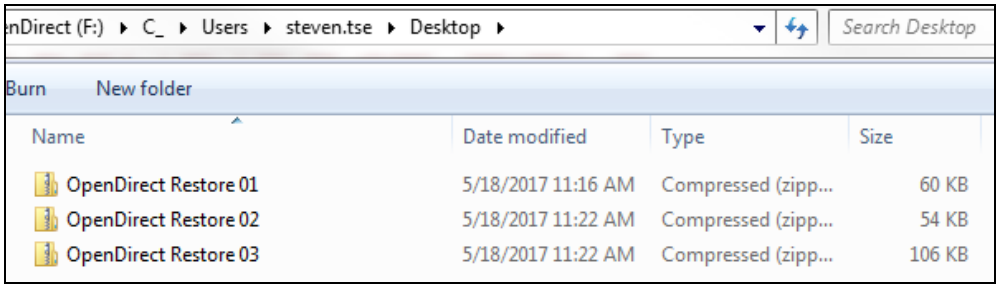


10. The following screen shows when you perform OpenDirect restore for this backup set on this machine for the first time only. Make sure you click **Yes** to confirm mounting the file(s) on this machine. Clicking **No** will exit the restore process.

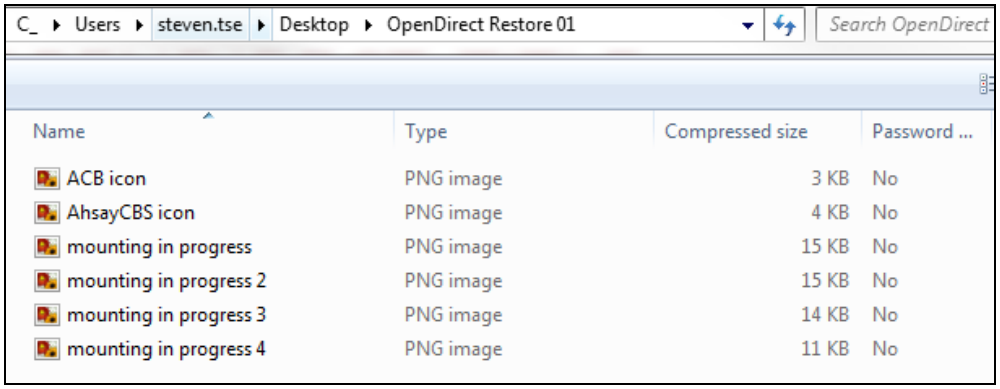
11. The selected drive letter will be mapped and prompted in the Windows Files Explorer with the files you wish to restore shown.



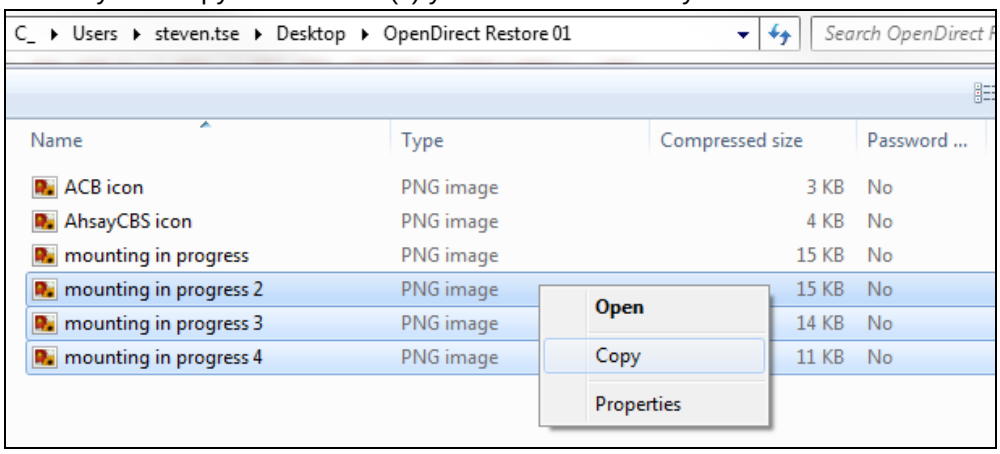
12. You can now click on the files to view them directly from here, which will be in read-only mode.



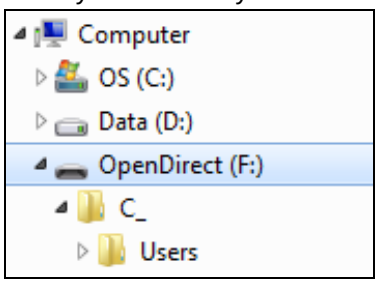
If it is a zipped file, you can directly click on it to see all the individual files inside.



You may also copy individual file(s) you wish to restore toyour local machine.



13. The mounted drive letter cannot be ejected from the Windows File Explorer, it will only be closed when you exit AhsayOBM.



14. When you have finished restoring the necessary files, you can go back to AhsayOBM and click **Cancel** to exit the OpenDirect Restore.

IMPORTANT

1. As a result of the limitation of the virtual file system library, the mapped drive will only be unmounted from your machine when you exit AhsayOBM. In other words, each OpenDirect restore session on AhsayOBM can only mount and unmount once.

2. **OpenDirect restore** of file backup sets:

   - Will not show up on the **Restore Status** tab in **Live Activities** of the backup service provider AhsayCBS. **Restore Status** tab in **Live Activities** only applies to the restore performed directly through AhsayOBM.

   - Will not generate restore reports or report email on backup service provider AhsayCBS.

   - Will not generate restore log on AhsayOBM.

12 Contact Ahsay

Technical Assistance

To contact Ahsay support representatives for technical assistance, visit the following website:
https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

Also use the Ahsay Knowledge Base for resource such as Hardware Compatibility List, Software Compatibility List, and other product information:
https://forum.ahsay.com

Documentation

Documentations for all Ahsay products are available at:
https://www.ahsay.com/jsp/en/home/index.jsp?pageContentKey=ahsay_downloads_documentation_guides

You can send us suggestions for improvements or report on issues in the documentation, by contacting us at:
https://www.ahsay.com/jsp/en/contact/kbQuestion.jsp

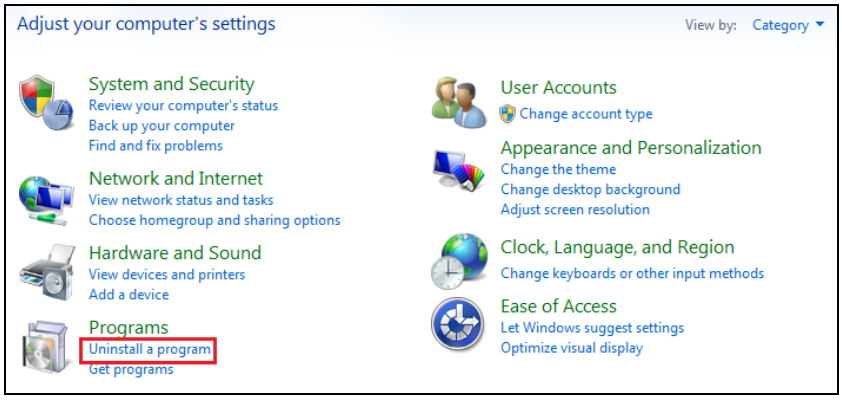
The specific document title as well as the change required/suggestion when contacting us.

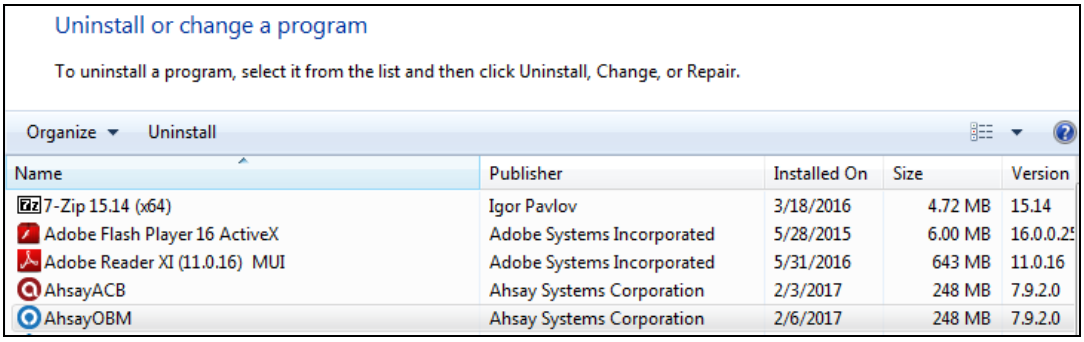
Appendix

Uninstall AhsayOBM

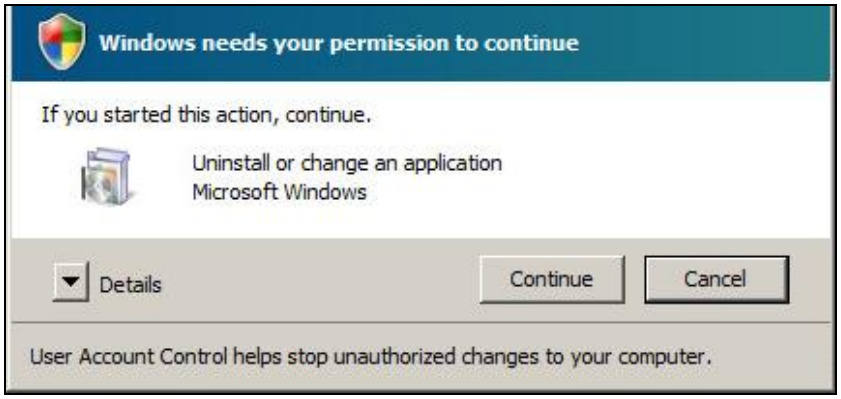
Follow the steps below to uninstall AhsayOBM from your Windows.

1. Go to **Control Panel** > **Programs and Features** > **Uninstall a program**, then look for AhsayOBM and double click on it.

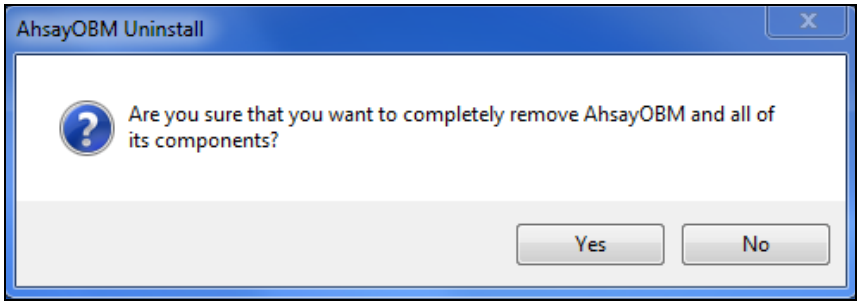




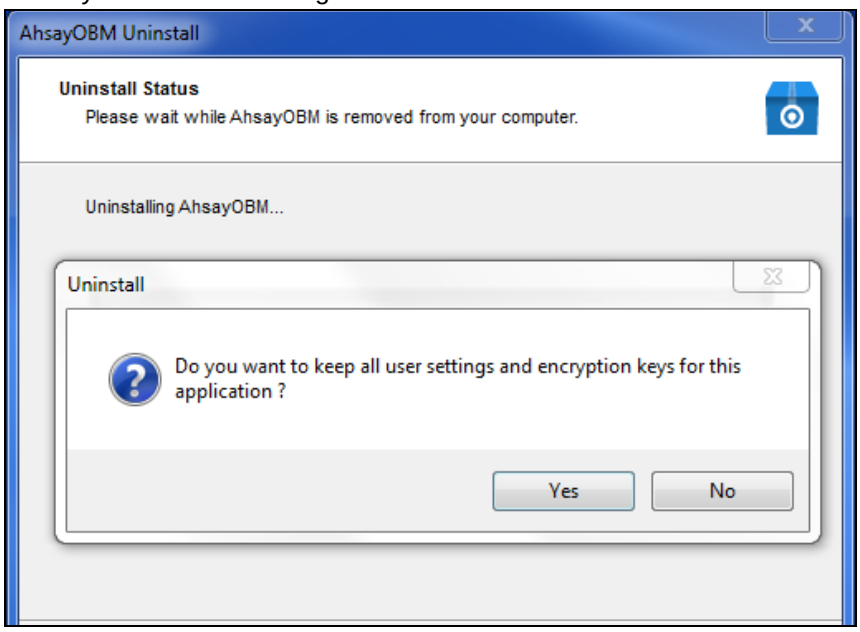
2. The following dialog box will appear only if User Account Control is enabled. Click **Continue** when you see the following message.



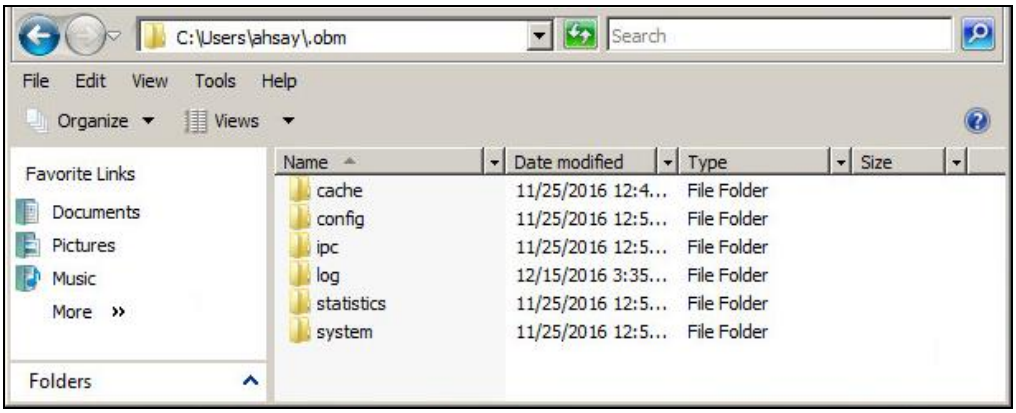
3. Click **Yes** to confirm and proceed with the uninstallation.



4. When you see the following screen:



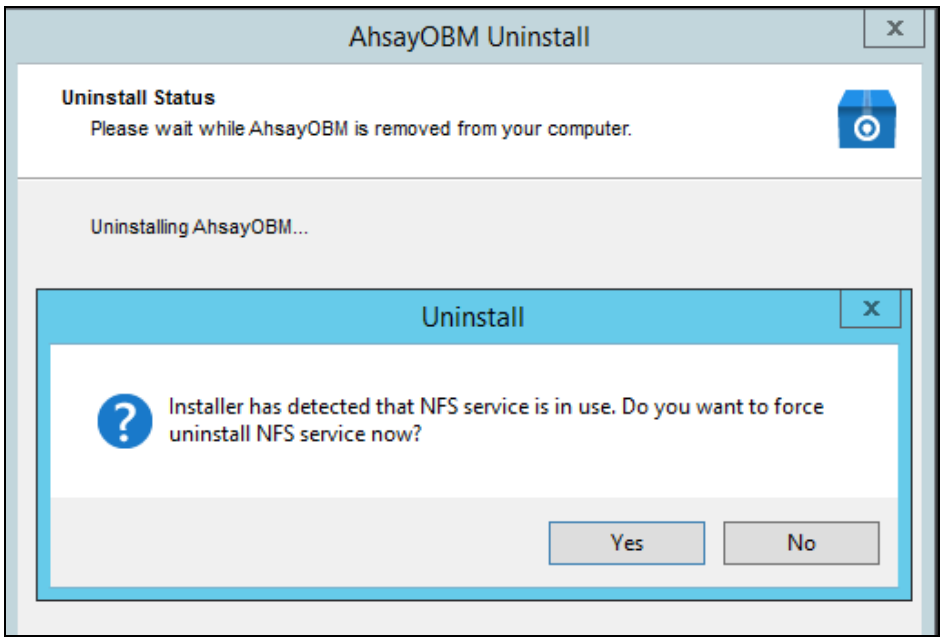
- Choose **Yes** to keep all user settings and the encryption keys associated with the users. If you are likely to install AhsayOBM on the same machine in the future again, the user settings, e.g. login details, backup sets and so forth will remain in **C:\Users\[username]\.obm** by default. The screen capture below shows the folders remain in the machine after uninstallation.



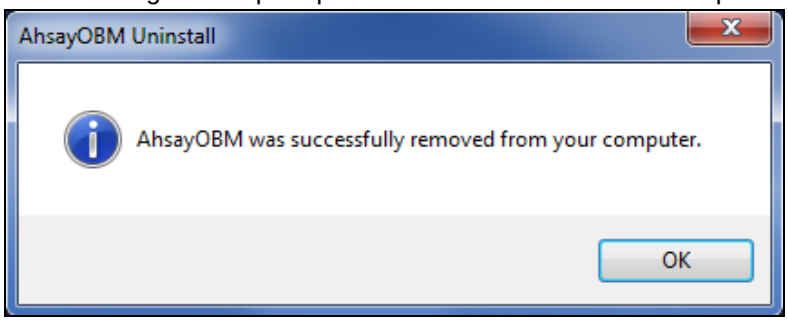
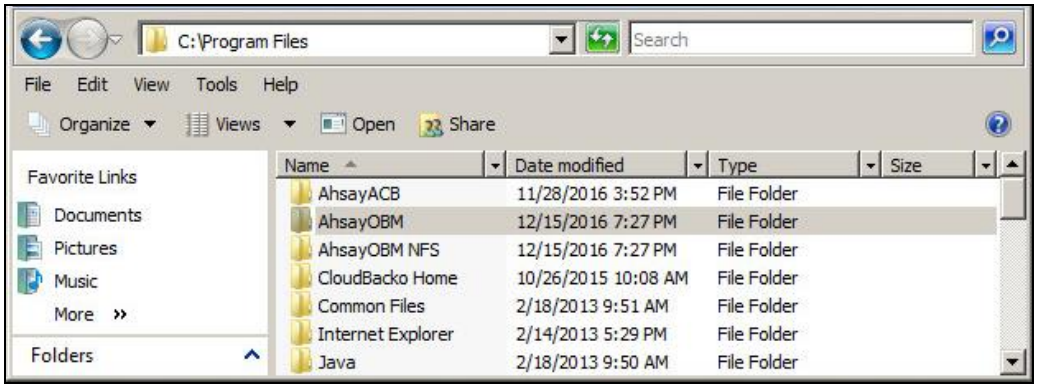
- Choose **No** to delete all user settings and encryption keys with this uninstallation. Please be reminded that the encryption keys are not retrievable once they have been deleted unless the encryption keys have been uploaded to AhsayCBS server, and therefore it will no longer be possible for backup user to recover their encryption key in case they do not have a separate written record.

5. If there is a Run Direct restore running at the time of the AhsayOBM uninstallation, the following screen prompts to alert you the NFS service is in use.

   - Select **No** if you do not wish to force uninstall the NFS service. AhsayOBM will be uninstalled without affecting the NFS service, where the Run Direct restore will not be interrupted.
   - Select **Yes** to force uninstall the NFS service. Both AhsayOBM and NFS service will be uninstalled from the machine. The VM running Run Direct restore and the datastore are both unmounted from the VMware server.



6. The following screen prompts when the uninstallation is completed.



7. (Optional) For a complete removal of all AhsayOBM-related files in your machine, please go to **C:\Program Files** and manually remove the **AhsayOBM** folder.