Ahsay Backup

Ahsay A-Click Backup 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.1.3; Updated Overview of backup process for Ch.7	New/ Modification
31 July 2019	Added Chapter 6 AhsayACB Overview; Added Chapter 2 Preparing Backup and Restore - Limitations	New

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1 Requirements for AhsayACB on Windows

Hardware Requirements

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

Software Requirements

Refer to the following link for details of the operating systems, applications and databases supported by AhsayACB:
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 Restore:
FAQ: Ahsay Software Compatibility List (SCL) for Granular and OpenDirect Restore

Antivirus Exclusion Requirement

To optimize performance of AhsayACB 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

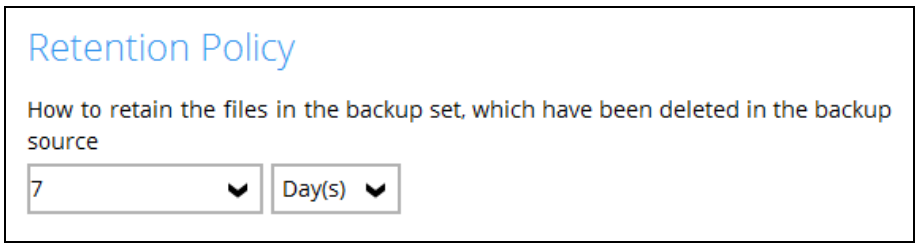
NOTE

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

2 Preparing for Backup and Restore

Limitations

1. AhsayACB is supported Windows for Desktop such as Windows XP, Windows Vista, Windows 7, Windows 8, and Windows 10.
2. Command Line Tool (Pre-Backup and Post-Backup) is not supported.
3. Only Simple Retention Policy is supported while Advanced Retention Policy setting is not supported.



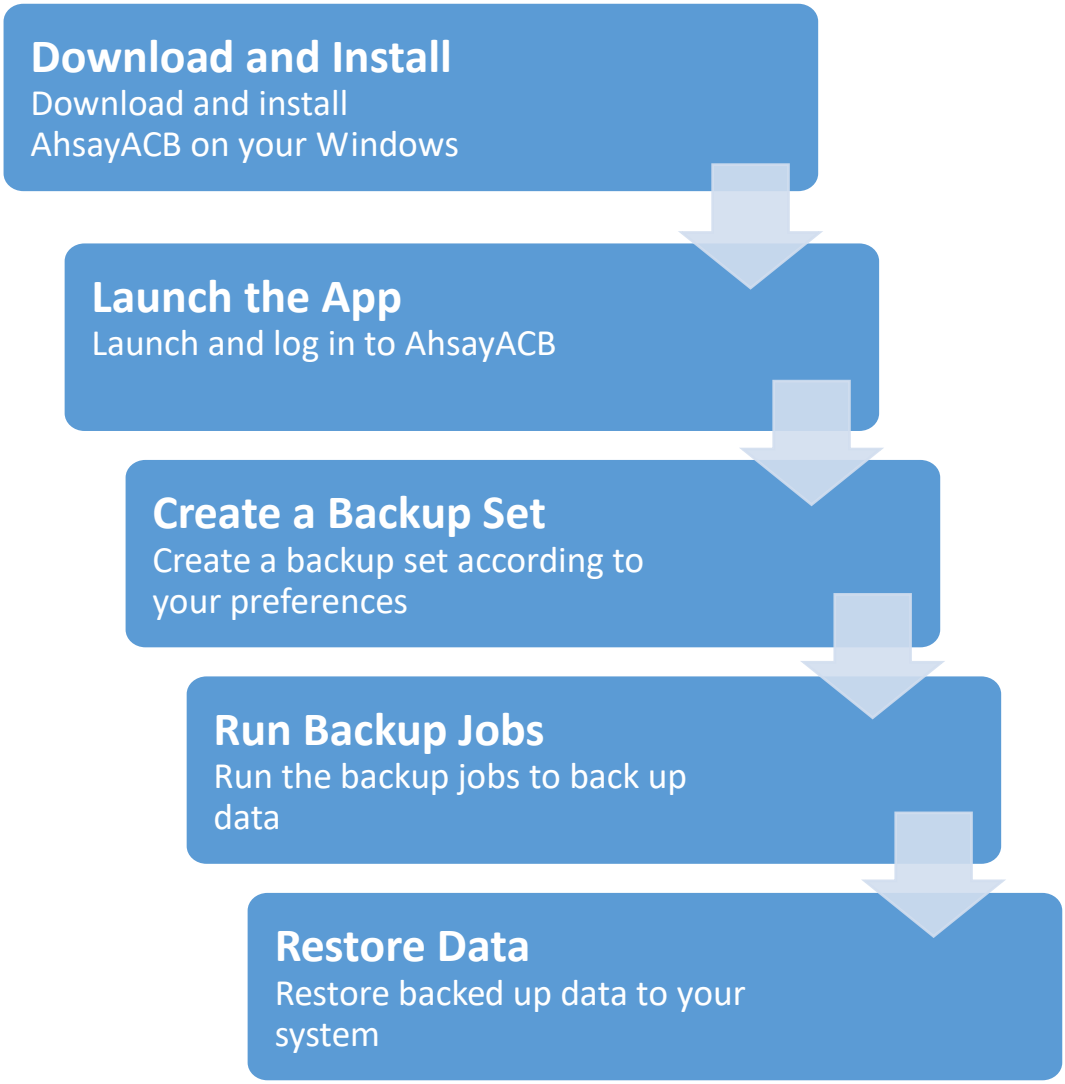
4. For Compression type, only the Fast type is supported while No Compression and Normal Compression types are not supported.
5. The following backup set settings are not available on the AhsayACB User interface as these have been set with default values during backup set creation:
    - In-File Delta, by default this is set to incremental.
    - Bandwidth Control, by default this is disabled.
    - Follow Link, by default this is enabled.
    - Compression Type, by default only Fast compression is available.
    - Continuous Backup, by default Exclude Filter and Exclude System Files are not available.

In case you will require these features: Command Line Tool, Advanced Retention Policy, Compressions, and Continuous Backup for VMs and Databases please use AhsayOBM. For more details, refer to this link AhsayOBM Quick Start Guide for Windows.

To know more about the comprehensive features of AhsayACB, refer to this link: https://www.ahsay.com/jsp/en/products/ahsay-products_backup-software_features_clients.jsp

3 Get Started with AhsayACB

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



4 OpenDirect Restore

What is OpenDirect Restore?

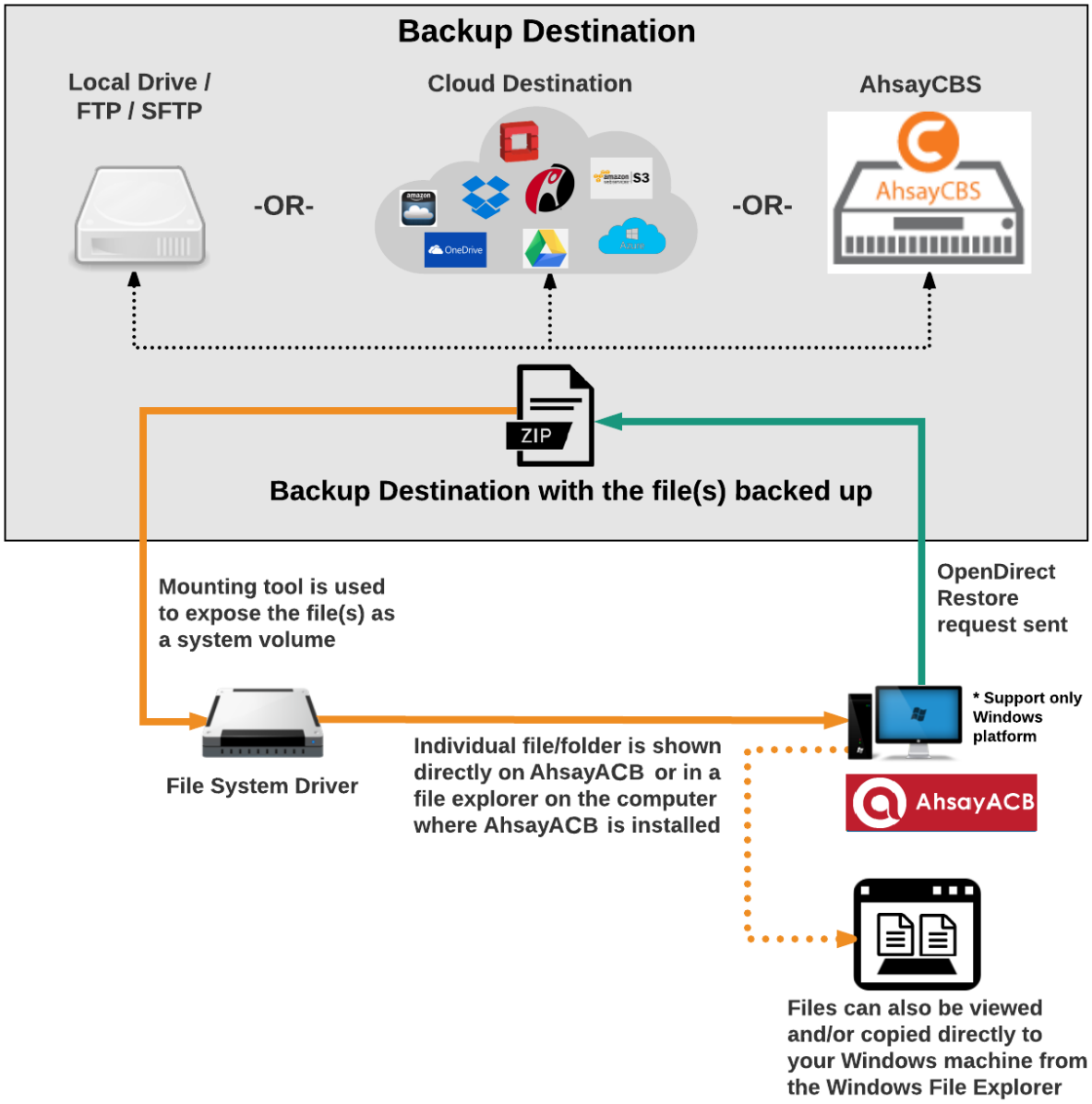
OpenDirect restore is an additional restore options for restoring files from a Windows File backup set available from AhsayACB v7.13.0.0 or above. The OpenDirect restore method makes use of the granular restore technology to make selective restore of individual files from a large compressed file or image, for example zip, RAR, ISO files, without the need to restore the compressed file or image 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 AhsayACB 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 file or image by viewing and/or copying files from the file explorer on the Windows machine you are performing the restore, without having to fully restore the whole compressed file or image first.	
Pros	
Restore of Entire Compressed File Not Required	As opposed to the traditional restore where you have to restore the entire compressed file or image first before you can access any individual file in it, OpenDirect restore allows you to view and download individual files from a compressed file or image, without having to restore compressed file or image first.
Ability to Restore Selected Files	When restoring a large compressed file or image, 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. 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 file or image 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 AhsayACB 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

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

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 file or image 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 OpenDirect restore process, as the compressed file or image is mounted on Windows as a logical drive. AhsayACB will automatically take the next available drive letter in alphabetical order for the mounted compressed file or image.

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 AhsayACB 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 AhsayACB 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 only**

  Microsoft Security Advisory 3033929
  https://docs.microsoft.com/en-us/security-updates/SecurityAdvisories/2015/3033929

Permissions

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

5 Download and Install AhsayACB

From version 7.15.0.0 onwards, there are two installation modes of AhsayACB, 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 110MB depending on operating system) each time the installation is run. ➢ Online installer size is 0.1MB 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 110MB 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 AhsayACB

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

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

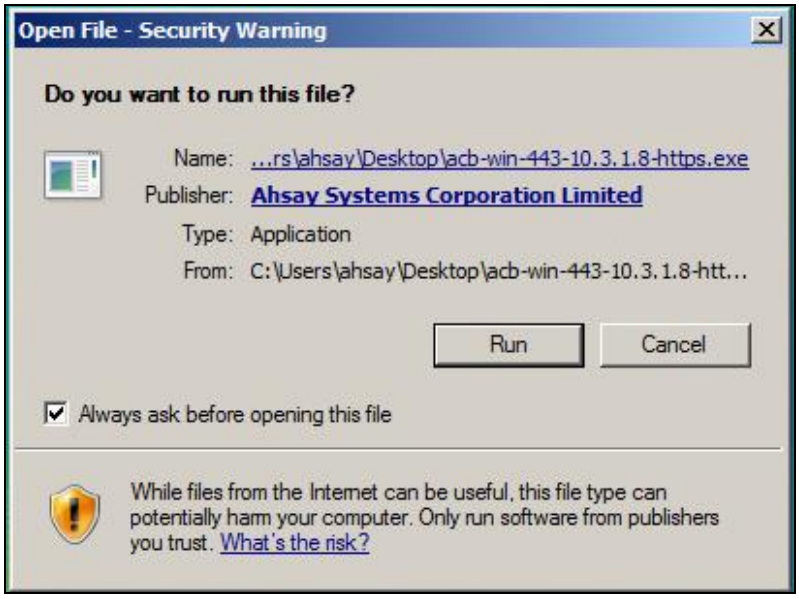
3. In the **Windows** section, click on the **Download (Online)** or **Download (Offline)** button to download the AhsayACB installation package.

Install AhsayACB

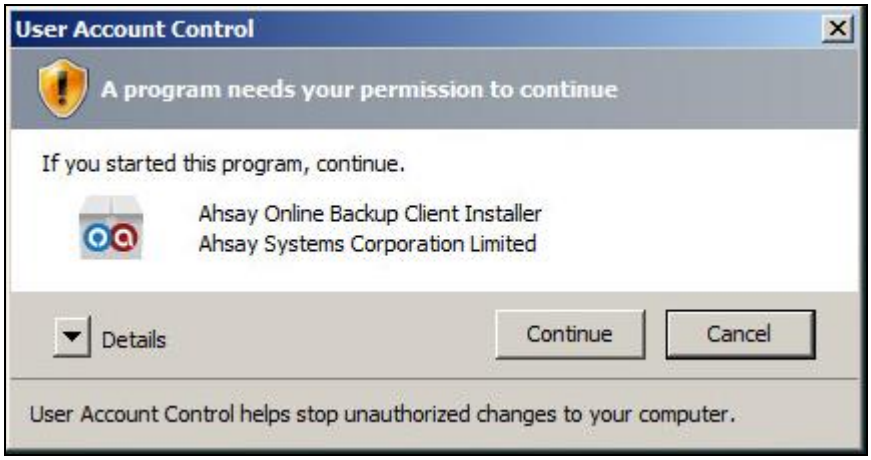
Option 1: Online Installation Option

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

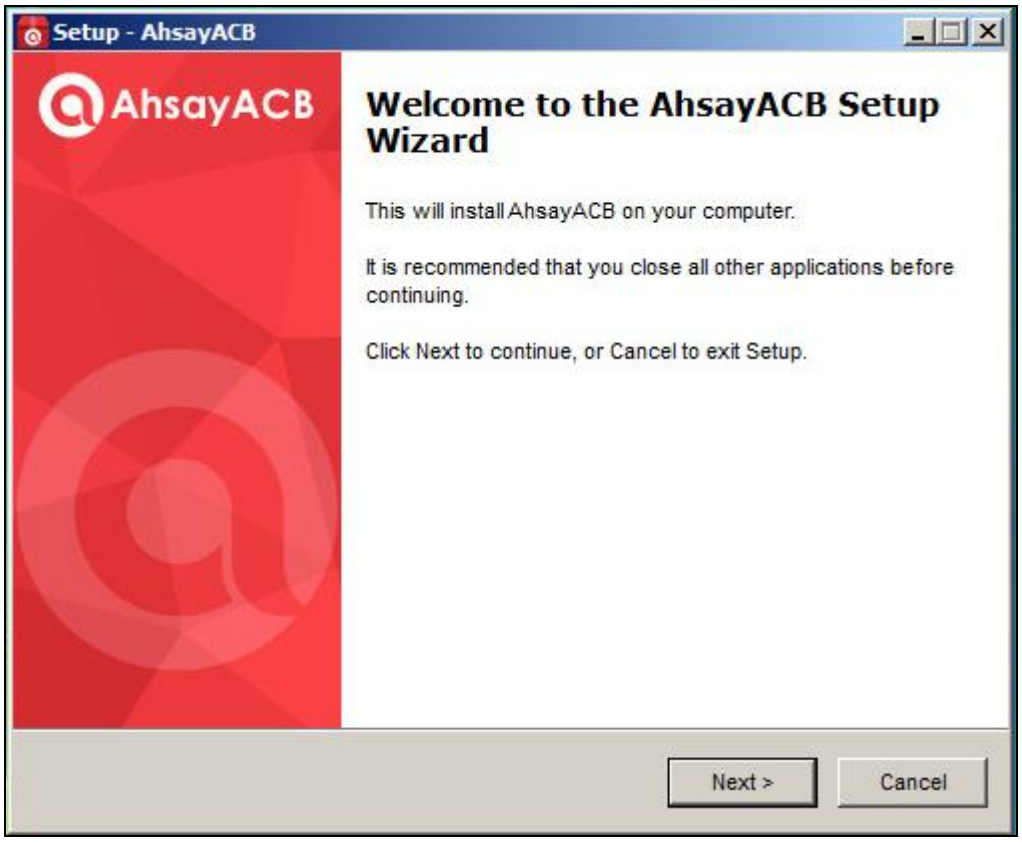
2. Click **Run** when you see this message.



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

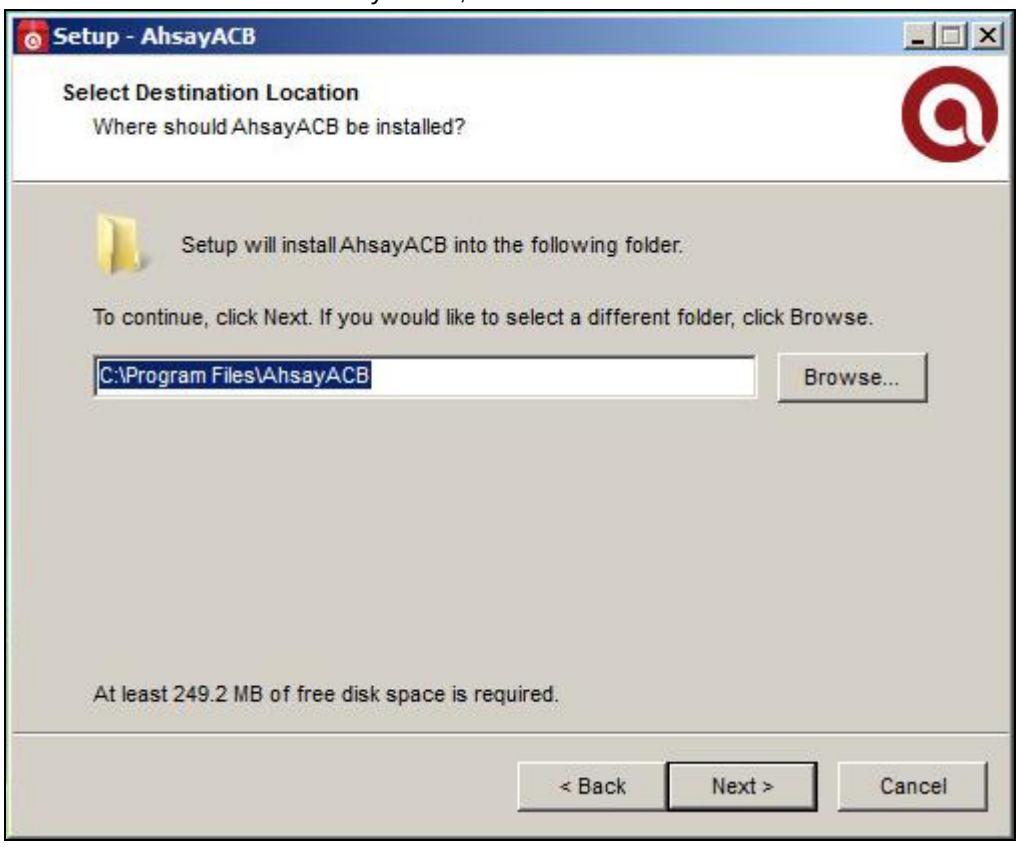


4. Click **Next** to continue.

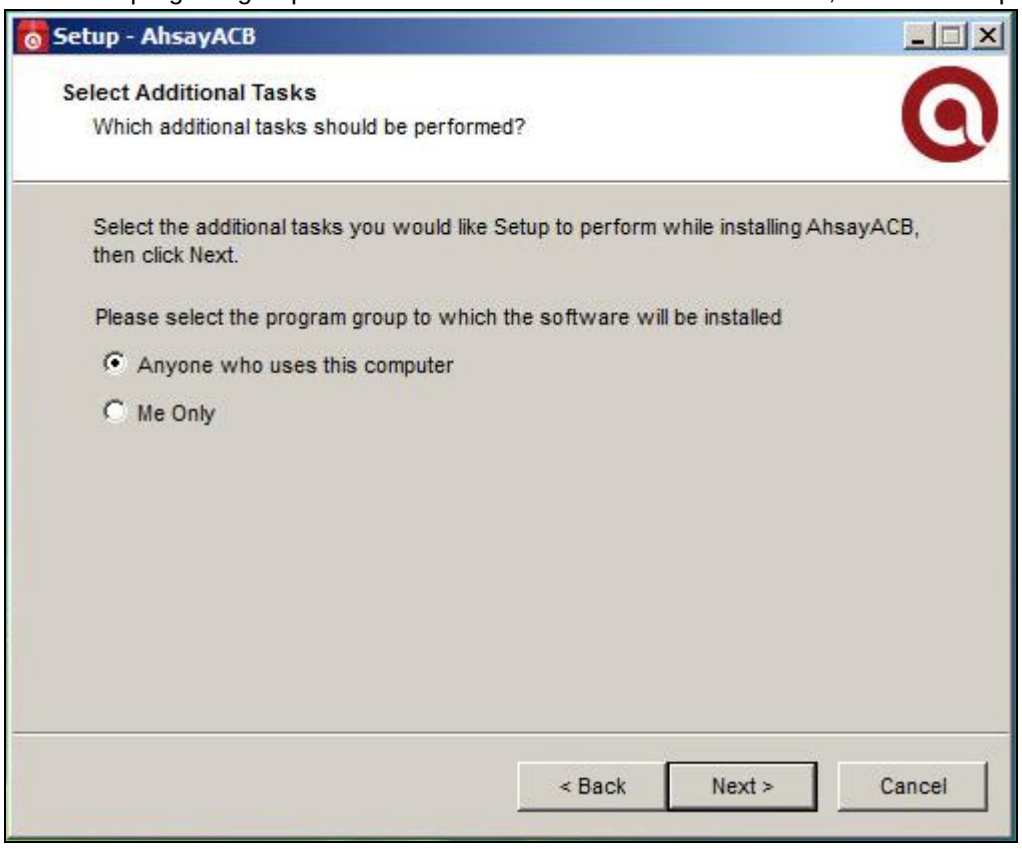


5. Select **I accept the agreement** after reading the license agreement. Then, click **Next** to proceed.

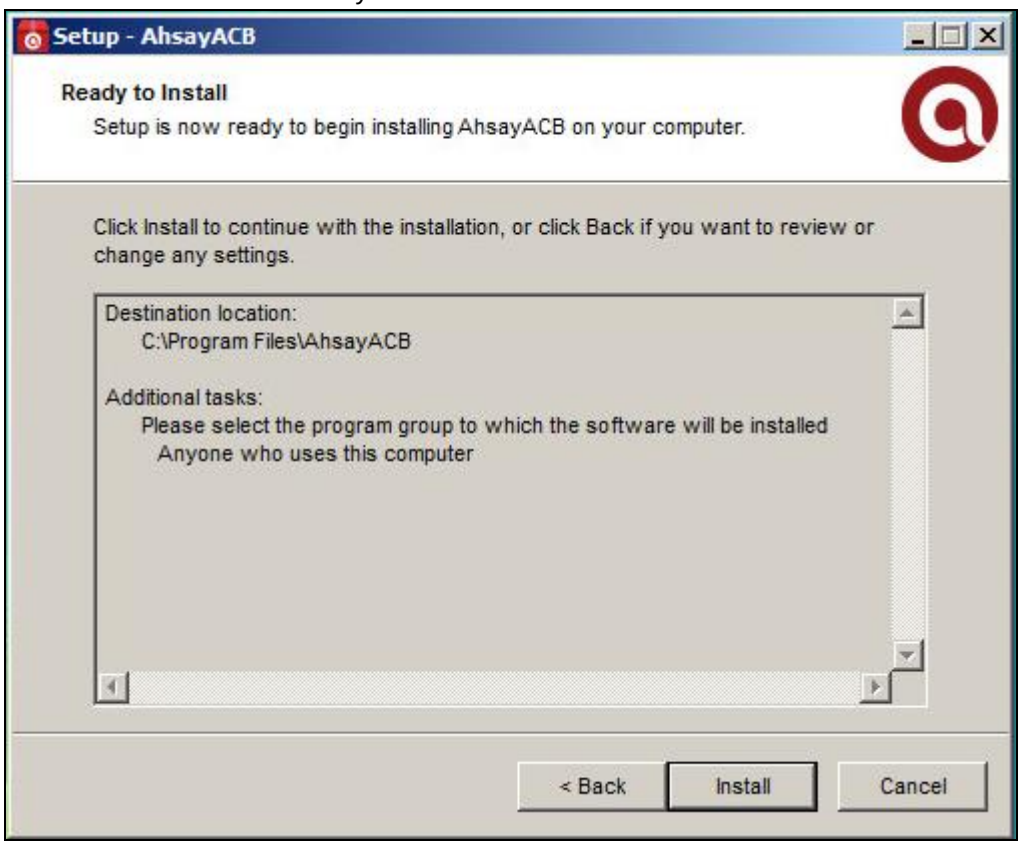
6. Choose the installation directory. Then, click **Next** to continue.



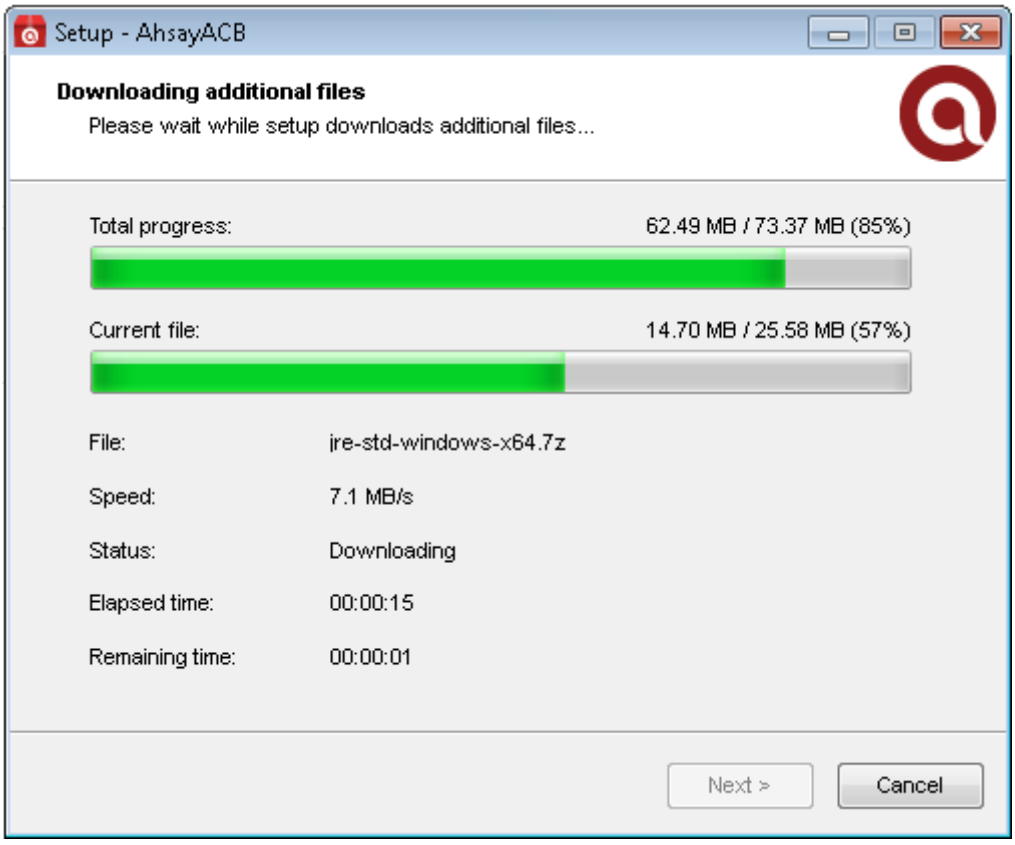
7. Select the program group to which the software will be installed. Then, click **Next** to proceed.



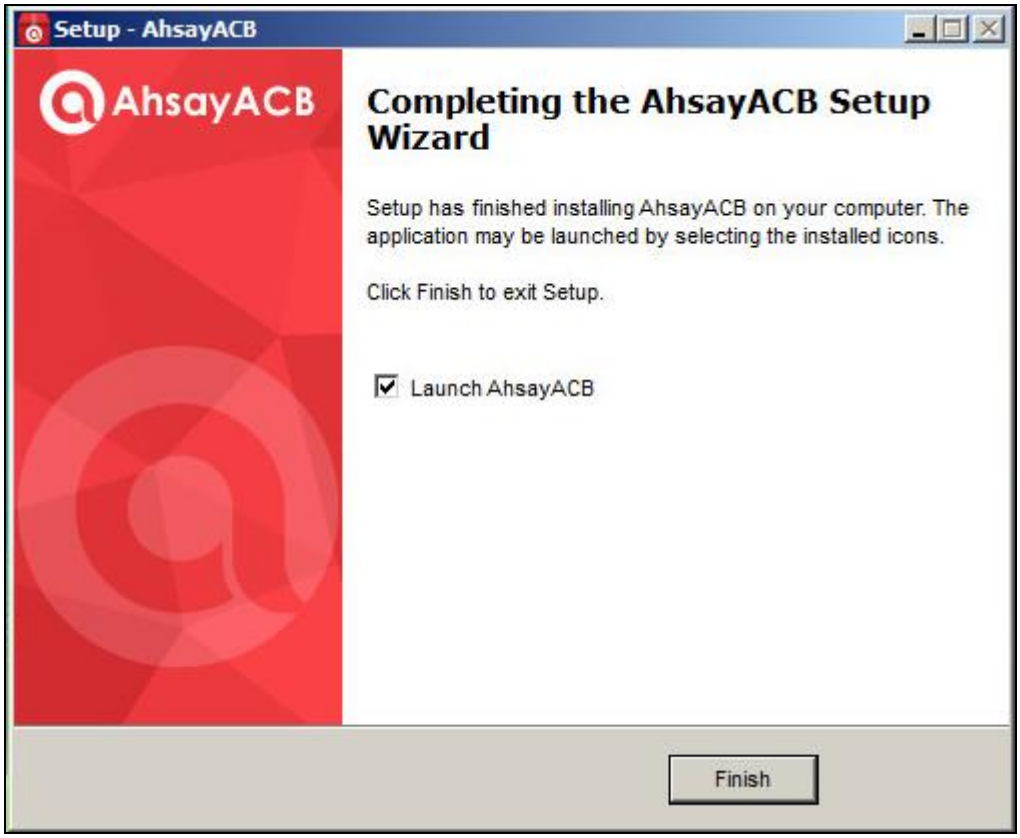
8. The installation will start after you click **Install**.



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

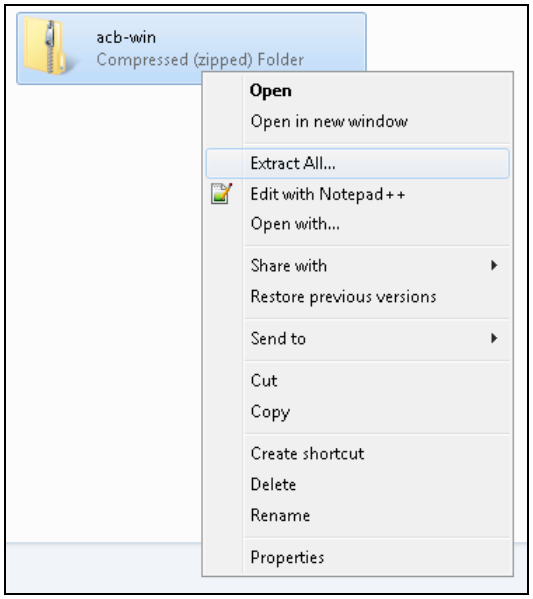


10. Click **Finish** to complete the installation.

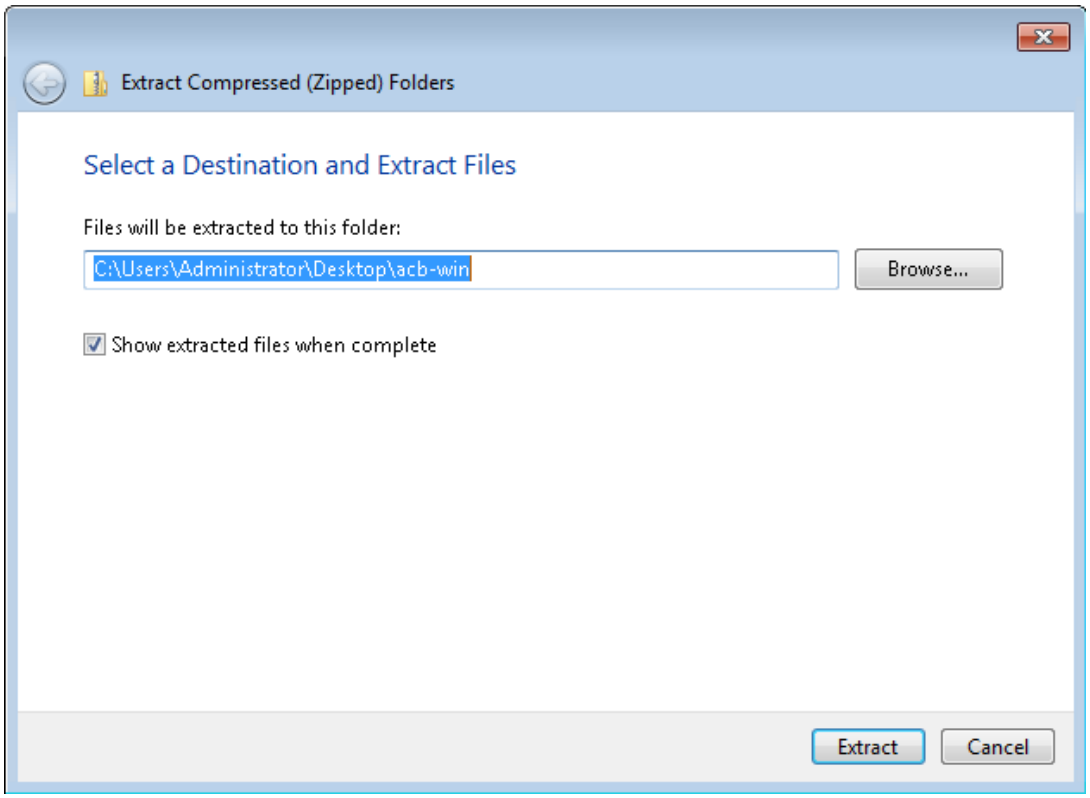


Option 2: Offline Installation Option

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



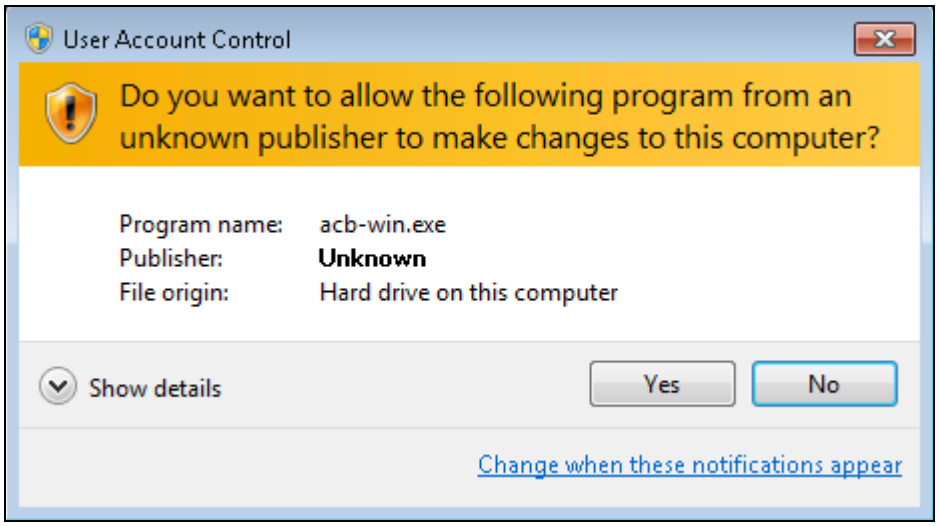
2. Select a destination and extract files.



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

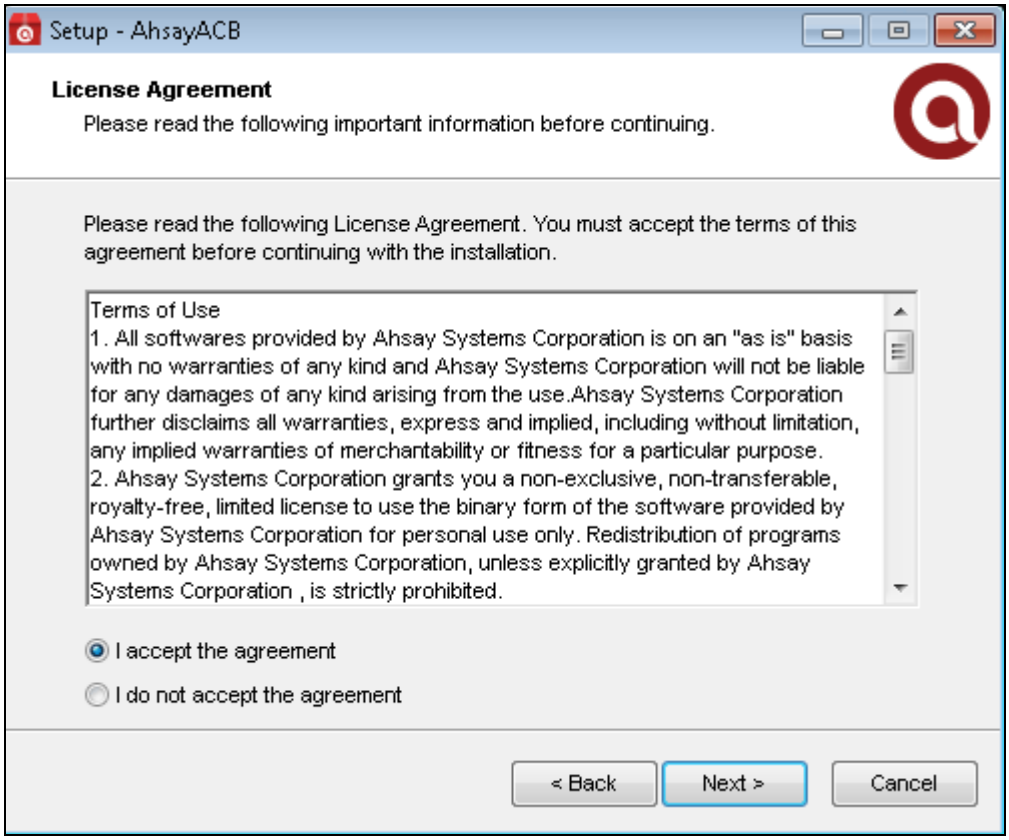
4. Click **Run** when you see this message.

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

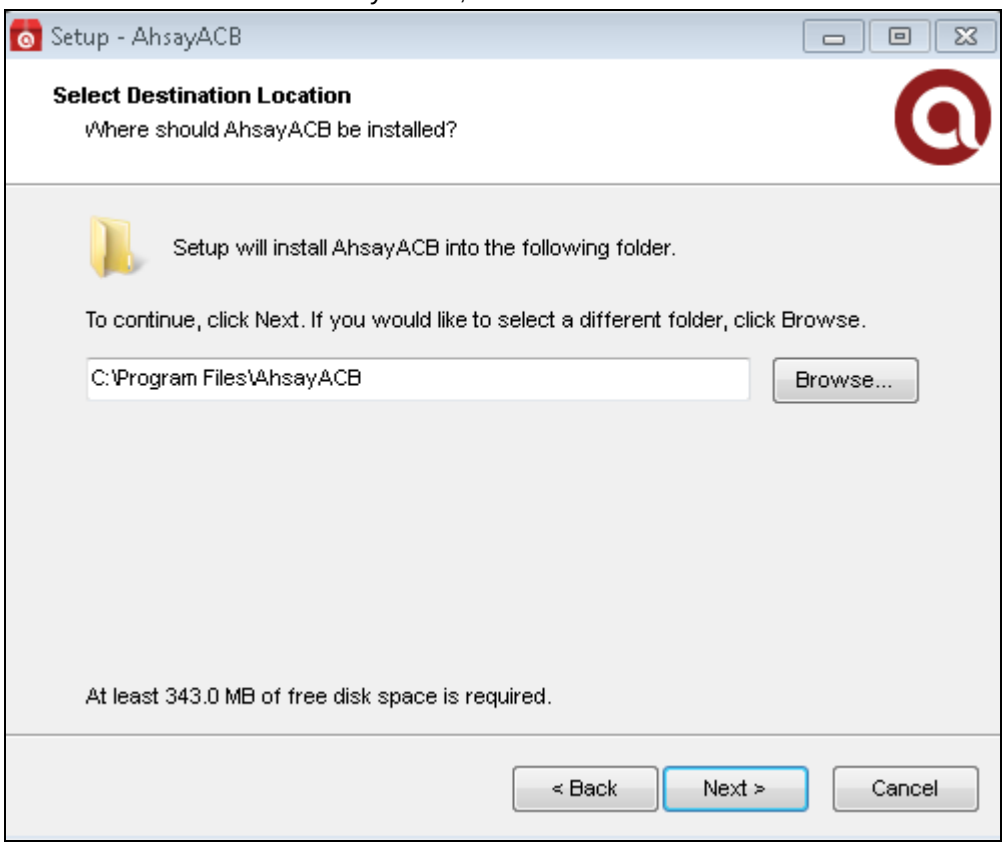


6. Click **Next** to continue.

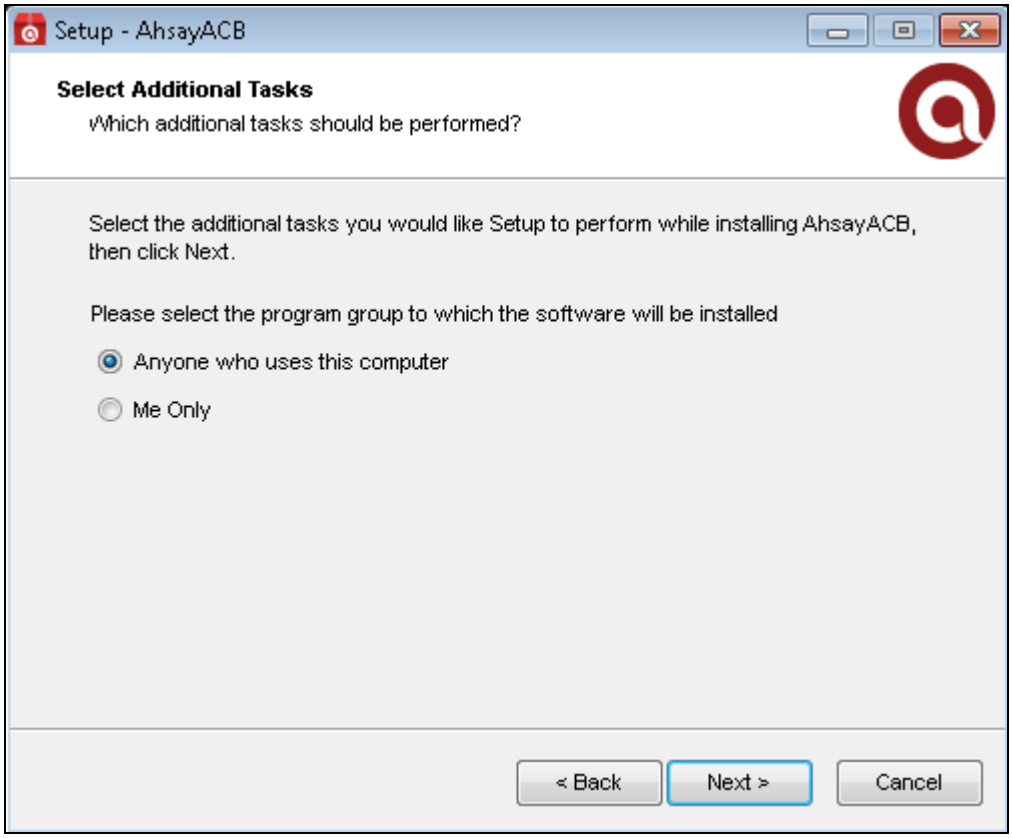
7. Select **I accept the agreement** after reading the license agreement. Then, click **Next** to proceed.



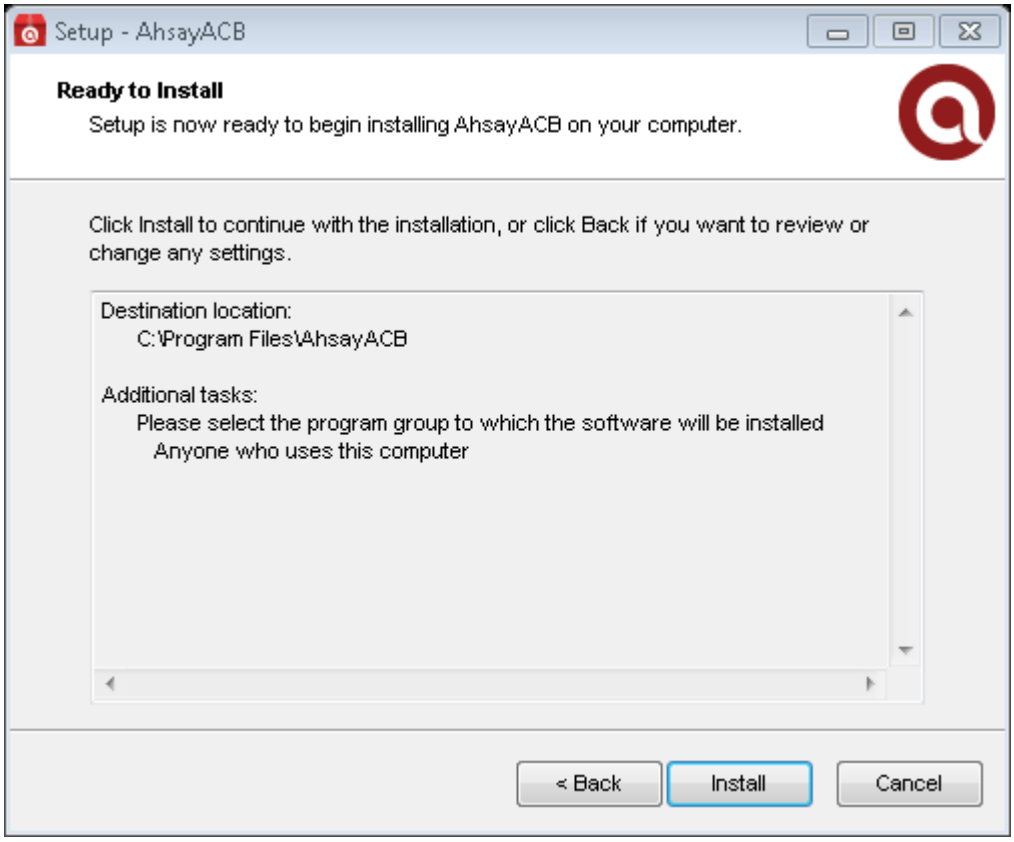
8. Choose the installation directory. Then, click **Next** to continue.



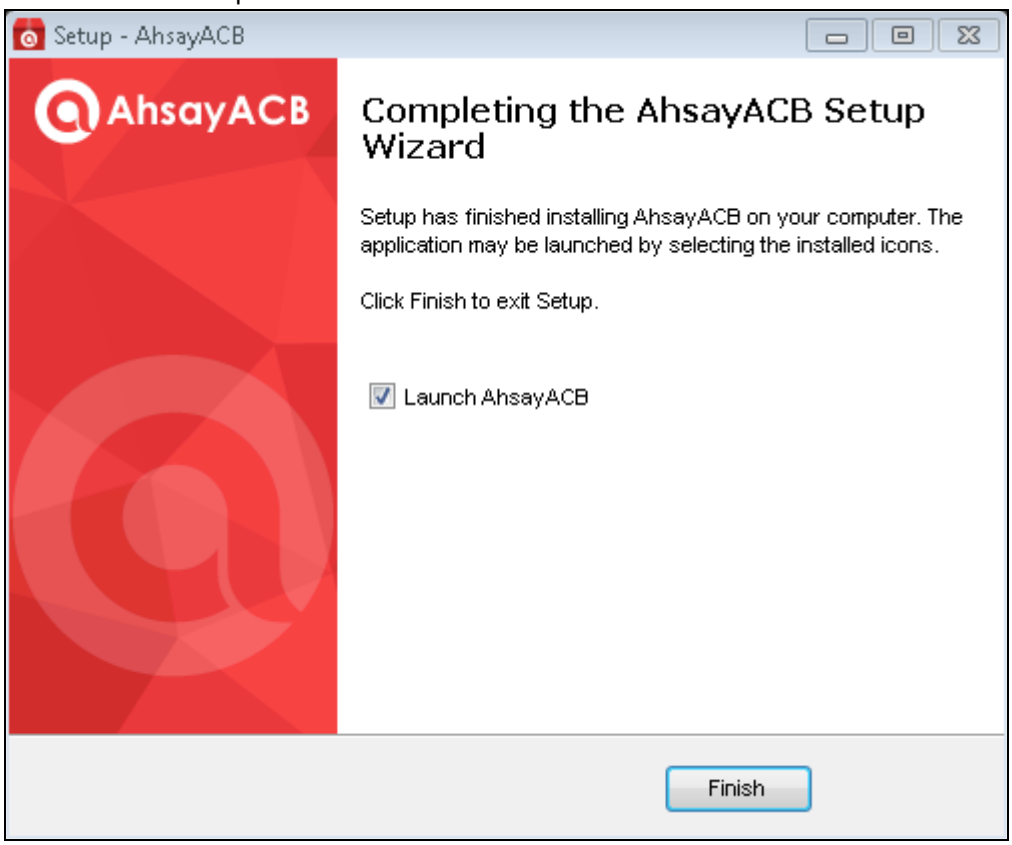
9. Select the program group to which the software will be installed. Then, click **Next** to proceed.



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



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

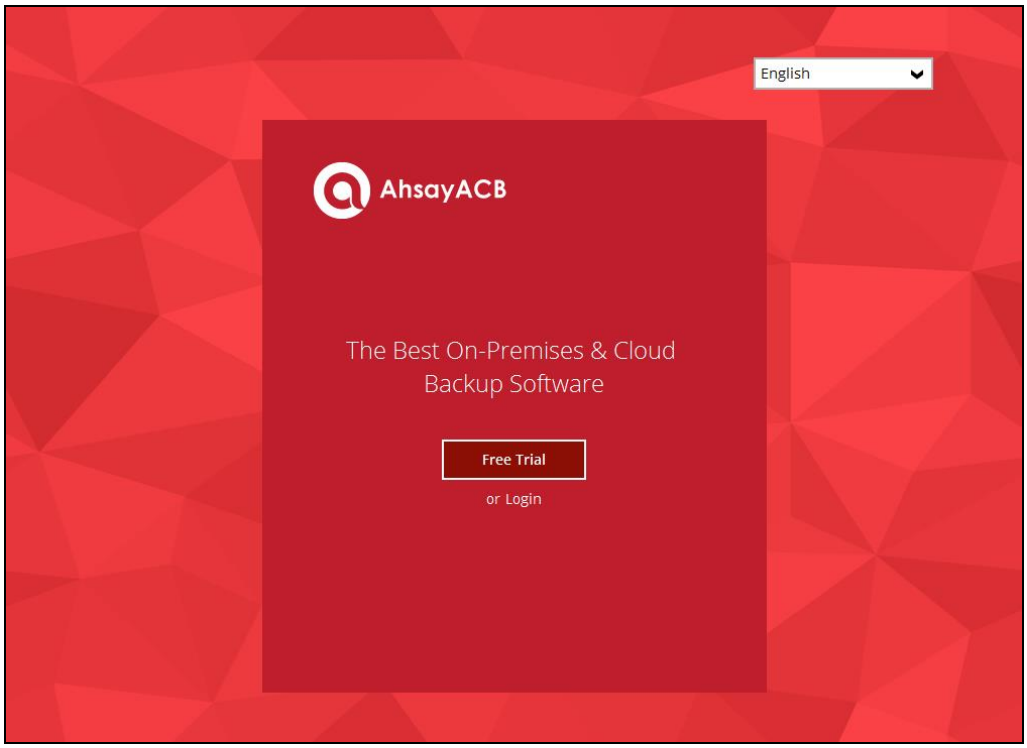


6 Start AhsayACB

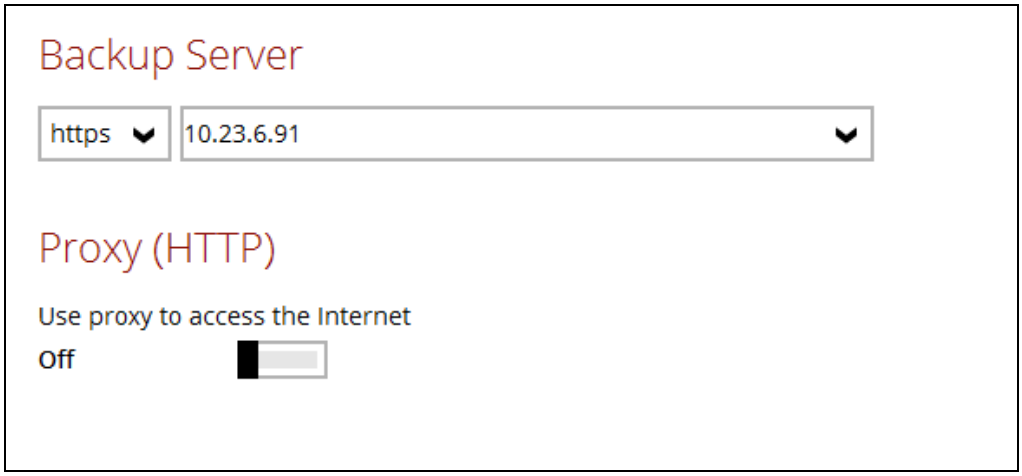
Login to AhsayACB

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

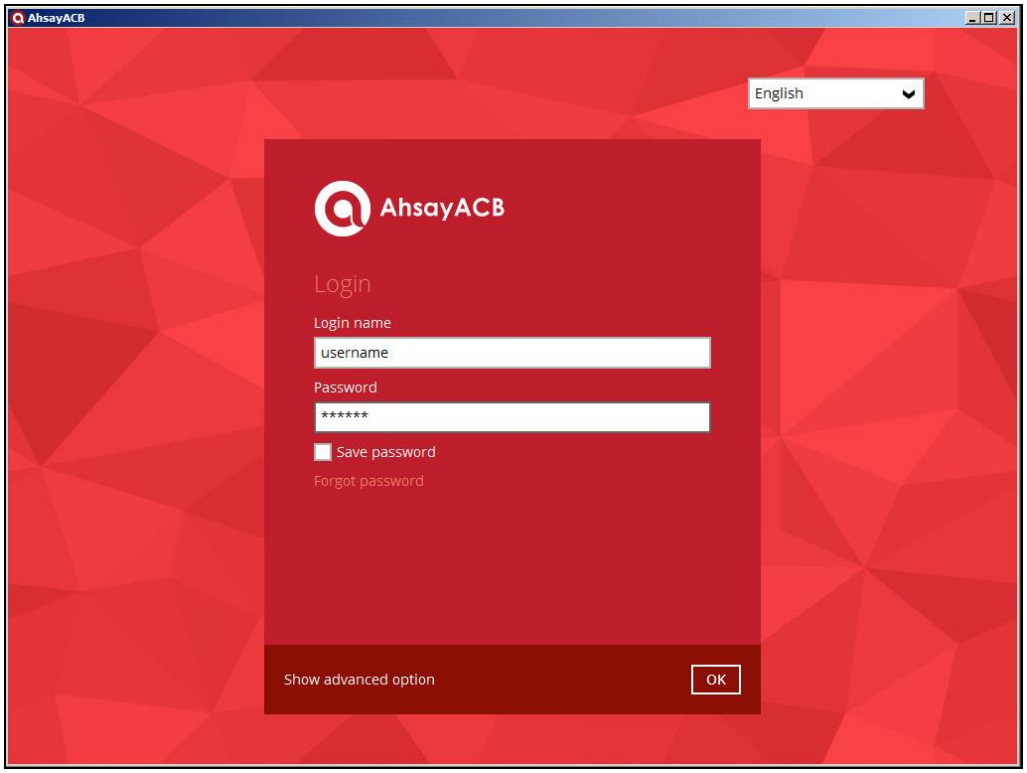
2. The Free Trial Registration menu may be displayed when you login for the first time. Click **Login** if you already have an AhsayACB account, or click **Free Trial** to register for a trial backup account.



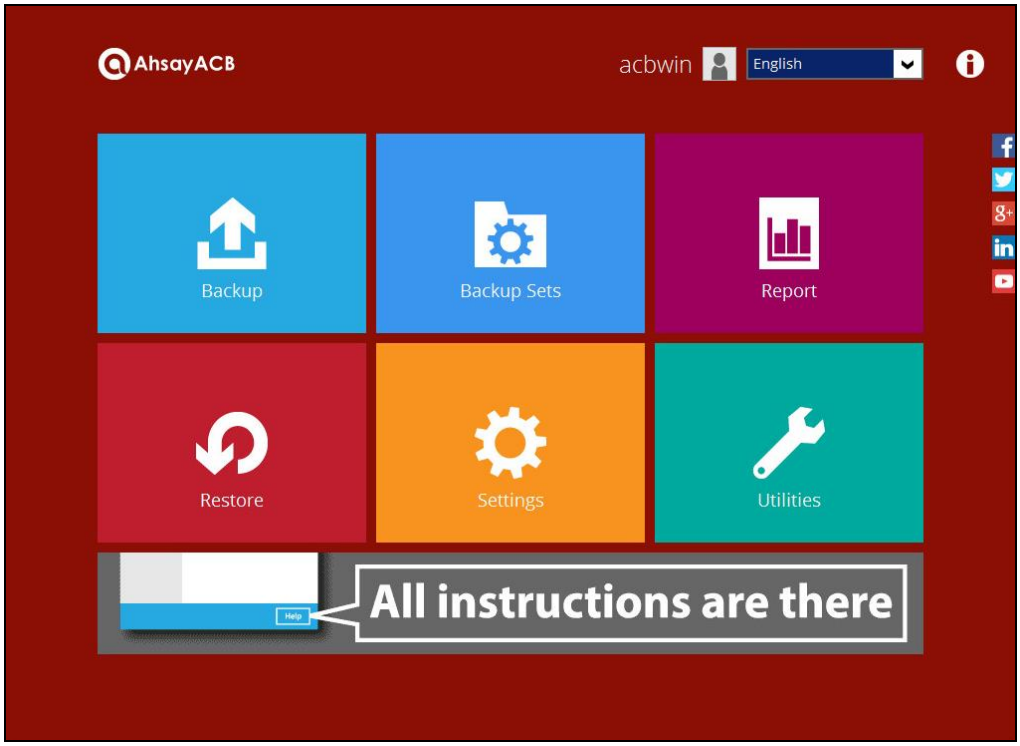
3. Click **Show advanced option** to enter the backup server settings provided by your backup service provider. Then, click **OK** to save the changes.



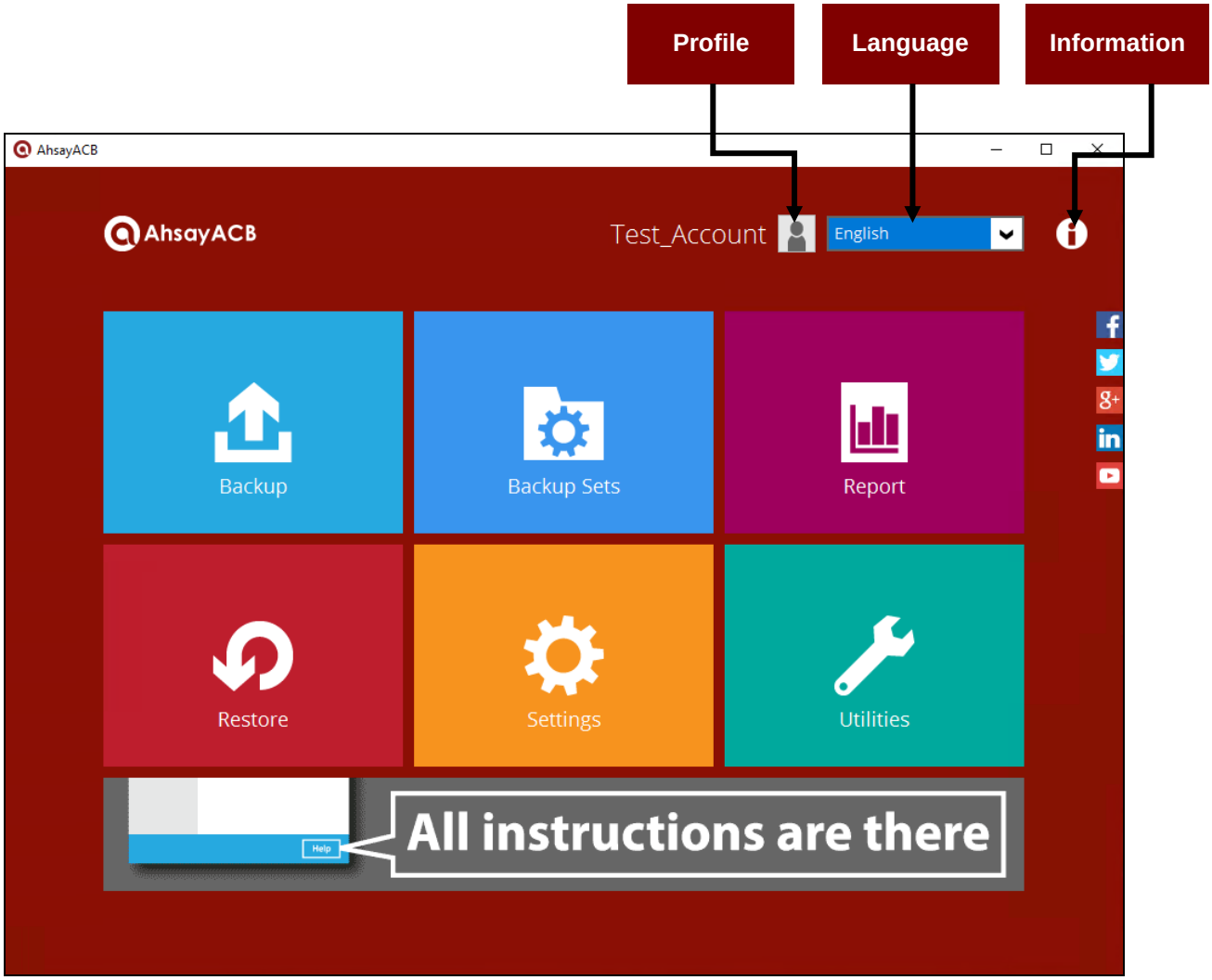
4. Enter the login name and password of your AhsayACB account provided by your backup service provider. Then, click **OK** to login.



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



7 AhsayACB Overview

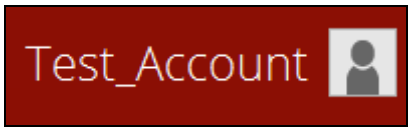


AhsayACB main interface has nine (9) icons that can be accessed by the user, namely:

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

Profile

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

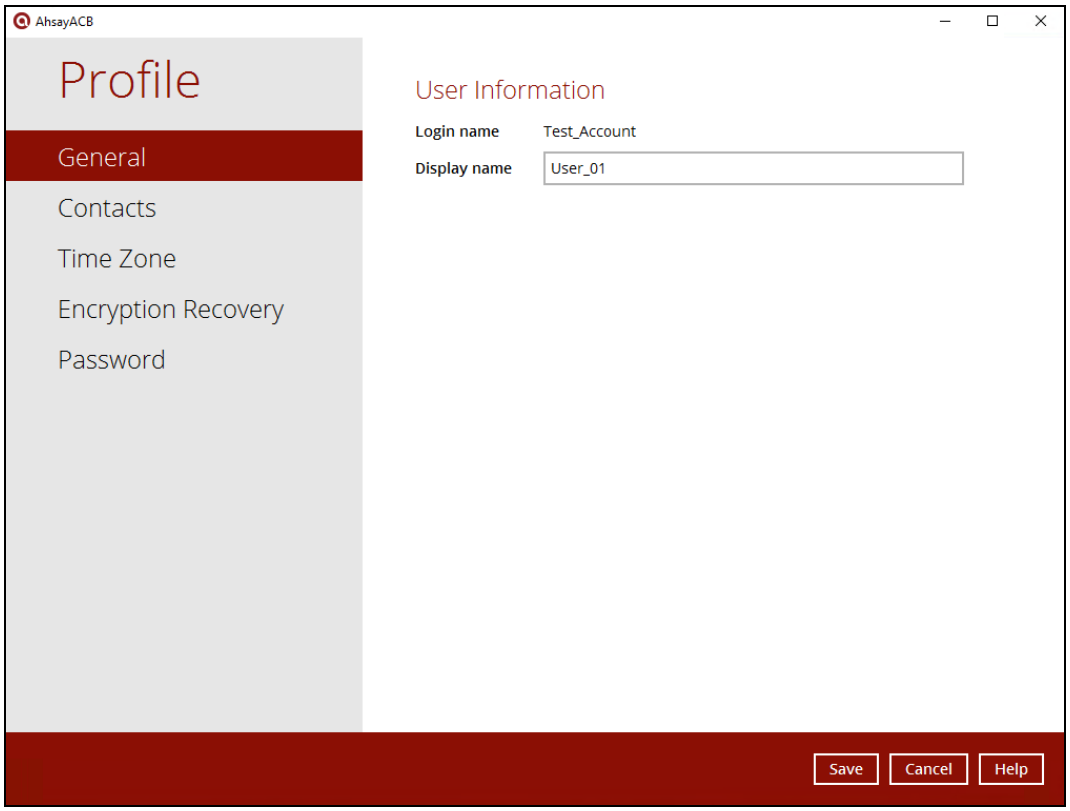


There are five (5) available features:

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

General

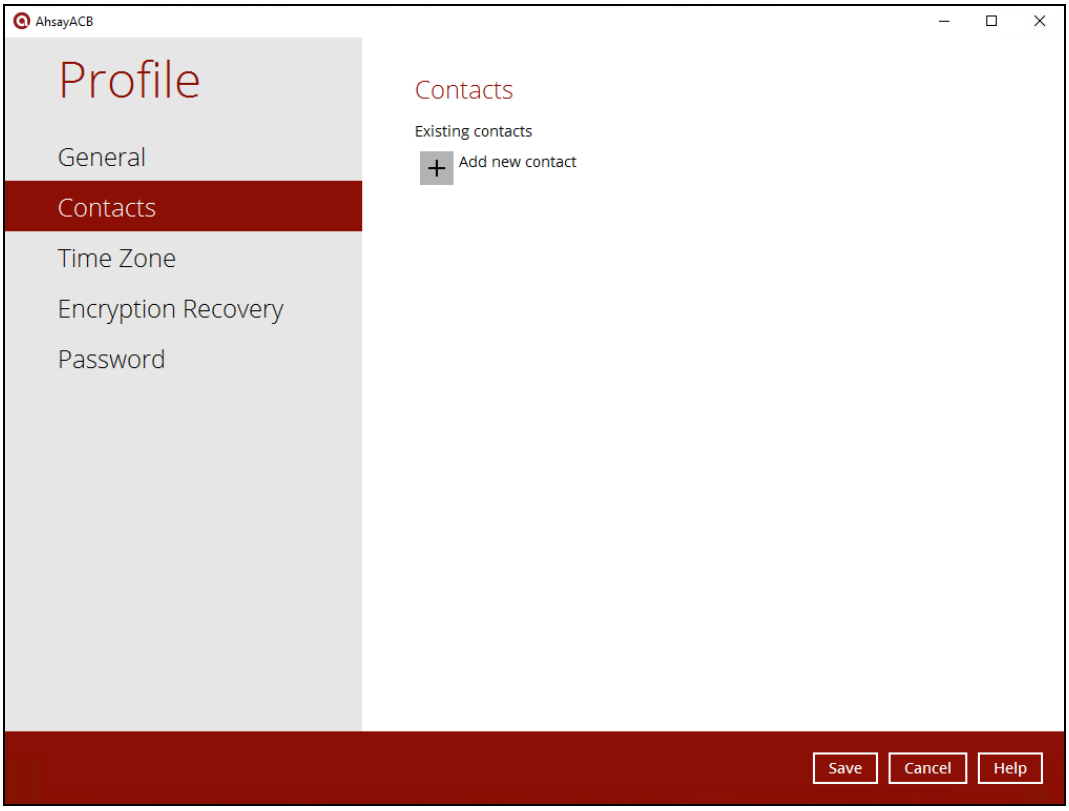
The General tab displays the user's information.



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

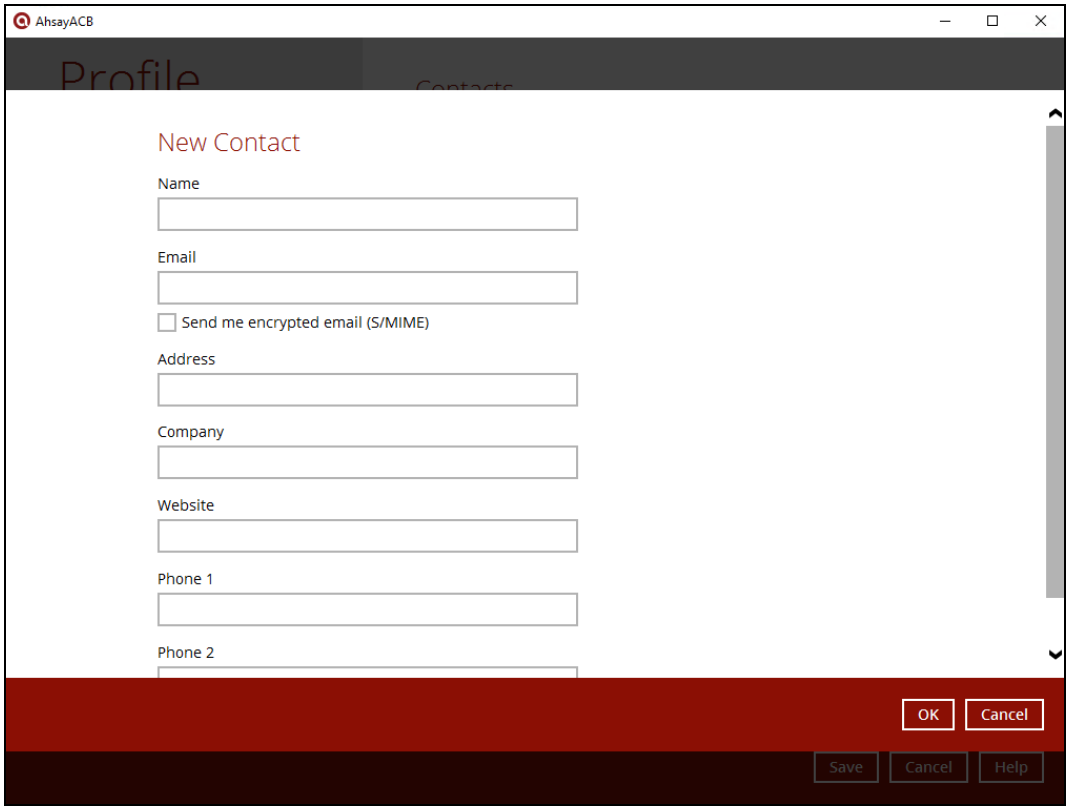
This refers to the contact information of the user. You can also add multiple contacts or modify an existing contact information. Having this filled up will help in sending backup and daily reports and even recovered backup set encryption key in case it was forgotten or lost.



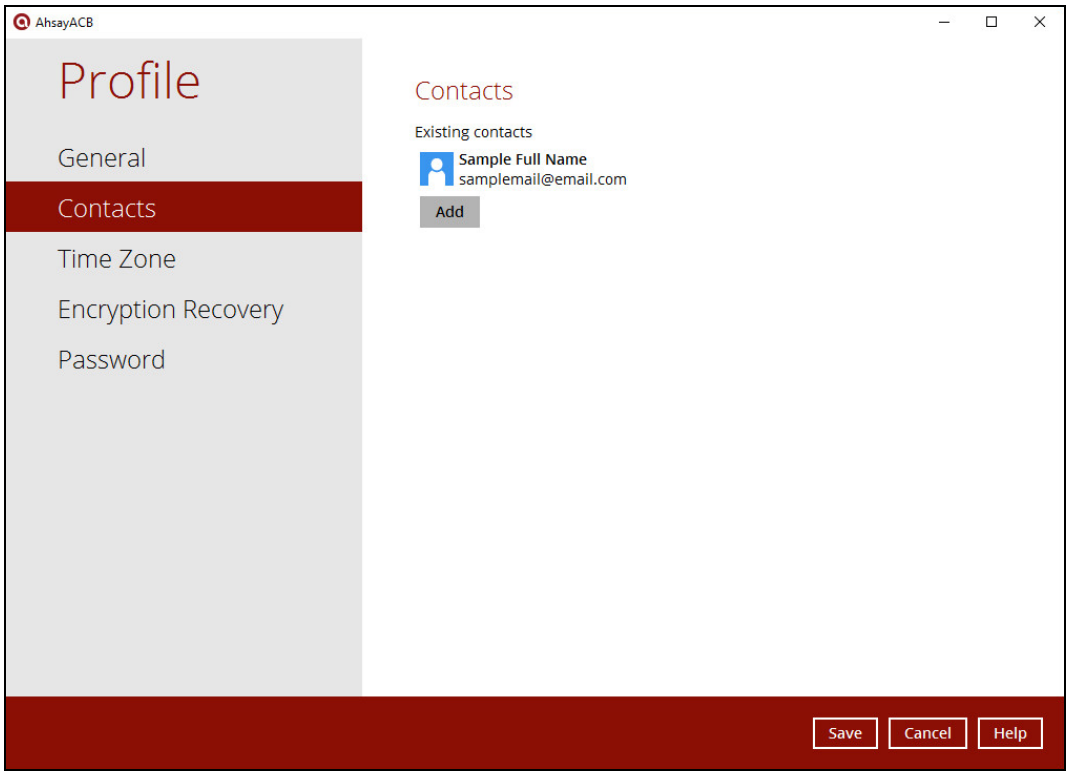
To add a new contact, follow the instructions below:

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

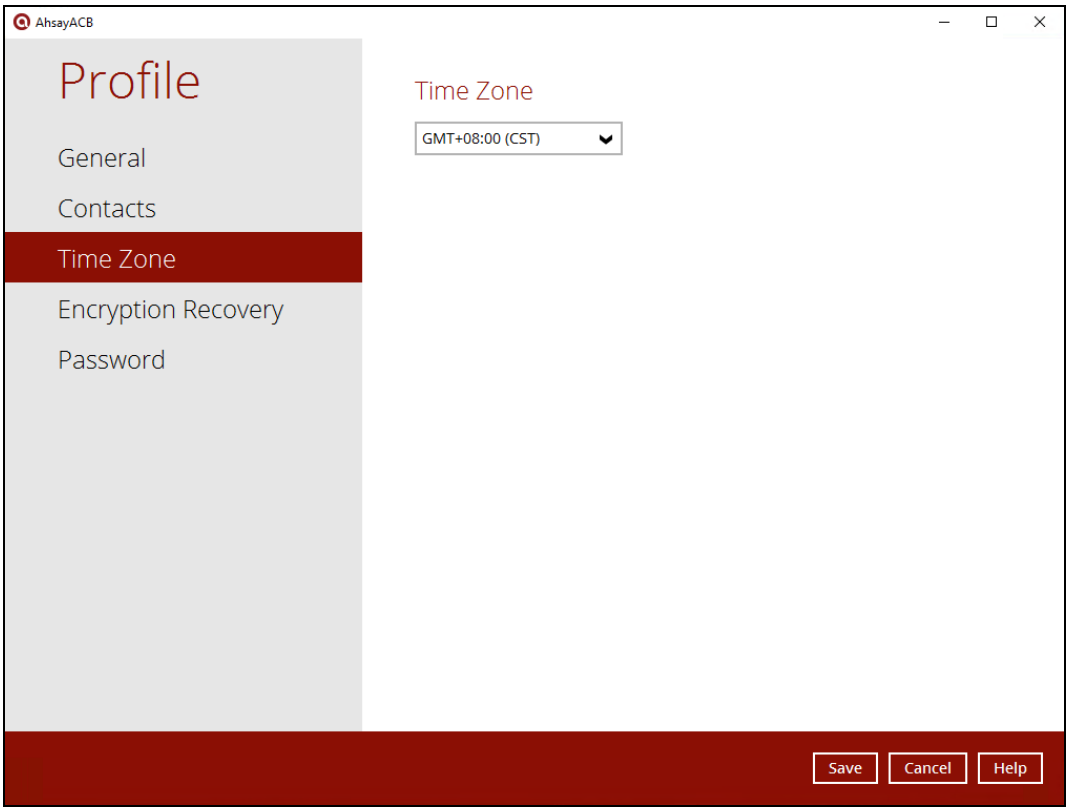


3. Click the [Save] button to store the contact information.



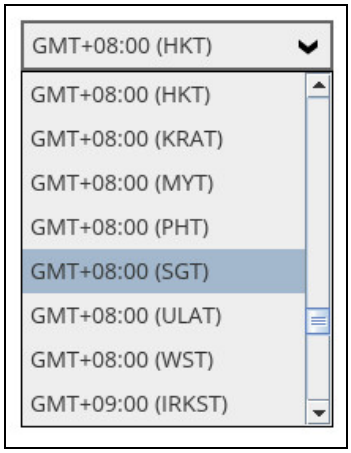
Time Zone

The time zone indicated.



To modify the time zone, follow the instructions below:

1. Select from the dropdown list.

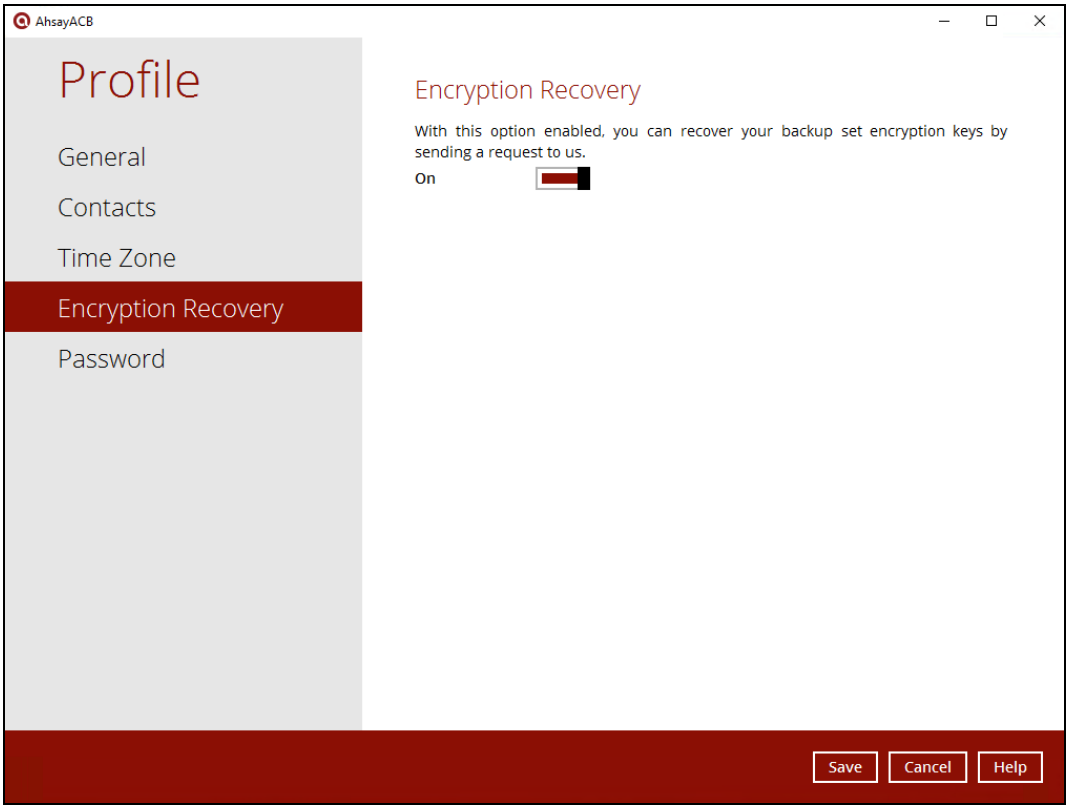


2. Click the [Save] button to save the updated time zone.

Encryption Recovery

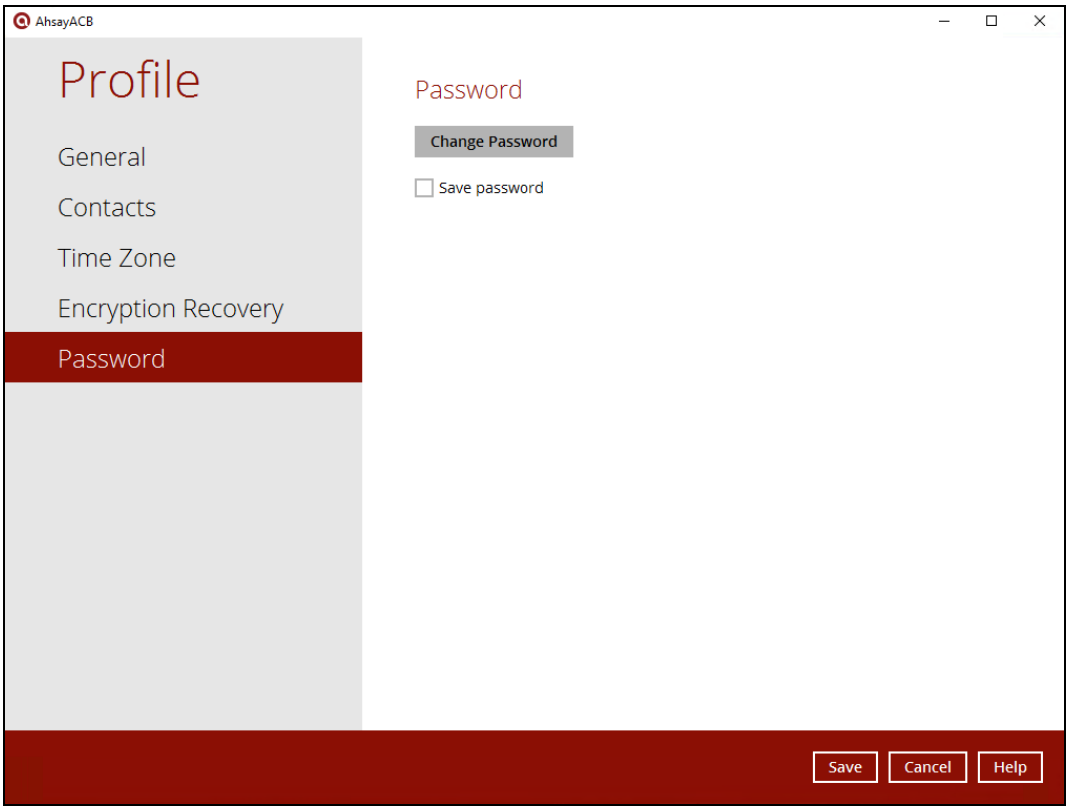
Backup set encryption key can be recovered by turning this feature on.

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



Password

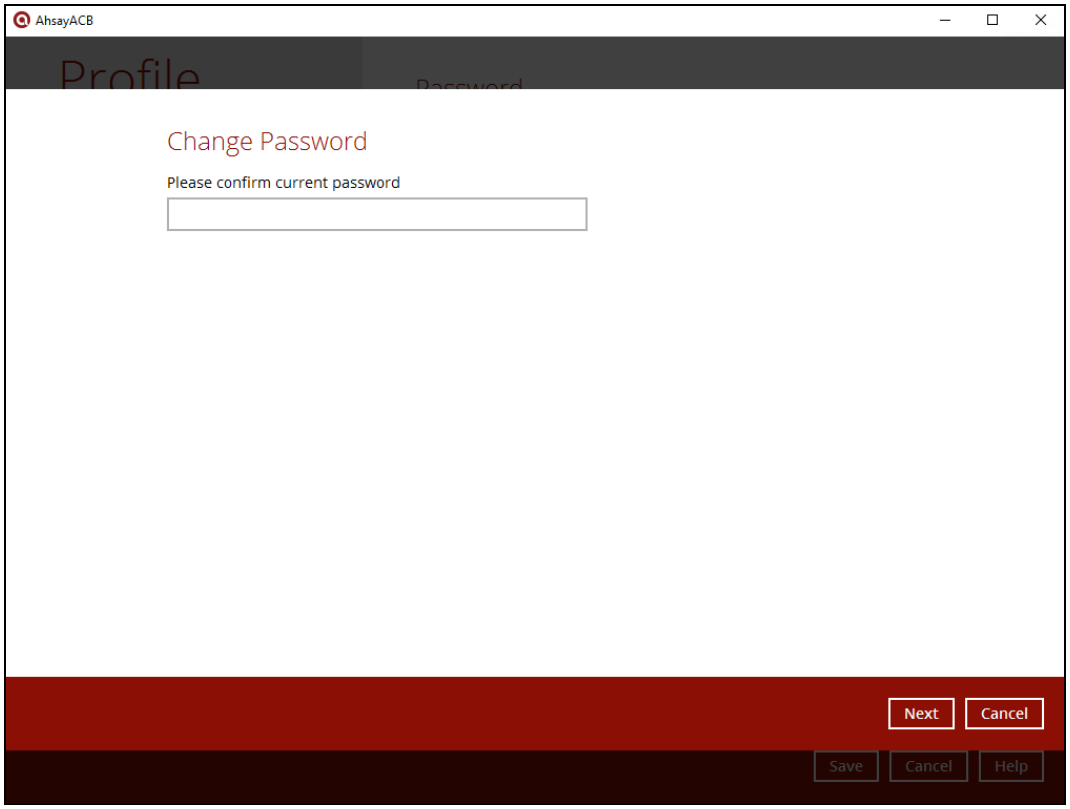
Login password can be modified anytime. Tick the [Save Password] box to bypass the password entry upon opening AhsayACB.



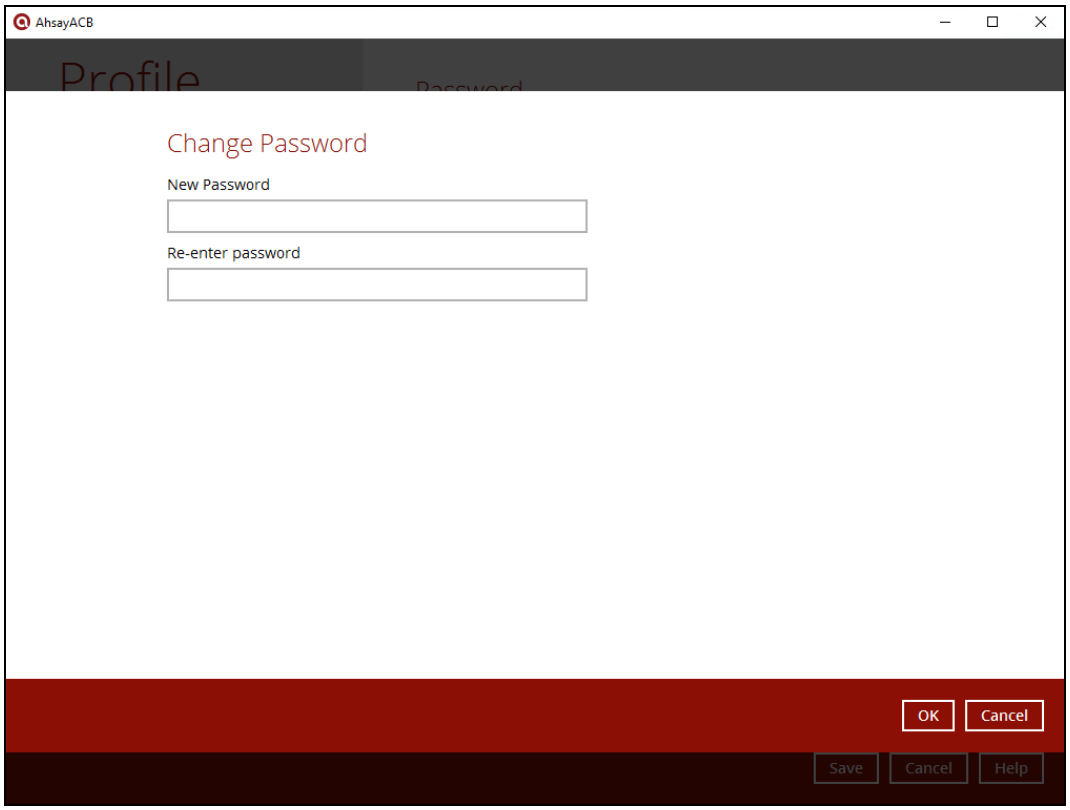
To modify the password, follow the instructions below:

1. Click the [Change Password] button.

2. Enter the current password.



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

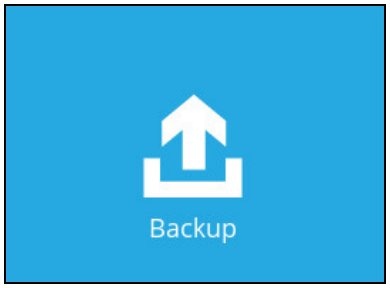
The list of available languages depends on the backup service provider.

Information

The information icon displays the product version and system information of the machine where AhsayACB 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.

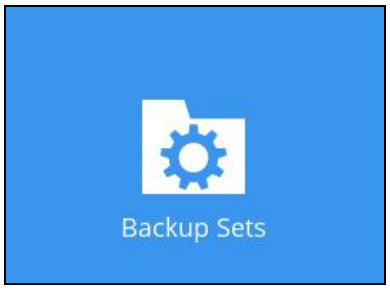
These are the supported Backup Modules and links to their corresponding user guides:

- File
- Cloud File

  User Guide – Cloud File Backup and Restore for Windows
- Windows System

  User Guide – Windows System Backup and Restore
- Office 365

  User Guide – Office 365 Backup and Restore for Windows



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

Backup Set Settings

AhsayACB is designed as a home user backup solution, the backup requirements are more basic compared to AhsayOBM Business or Enterprise Users. It is reflected in the AhsayACB user interface design with the removal of some settings from the user interface, to simplify and streamline the configuration of AhsayACB backup sets.

This the list of configurable settings under the Backup Sets:

- General
- Source
- Backup Schedule
- Destination
- Reminder
- Others
    - Retention Policy
    - Temporary Directory
    - Volume Shadow Copy
    - Open Direct
    - Encryption

While these are the available features of AhsayACB that users can still access and configure through the AhsayCBS User Web Console.

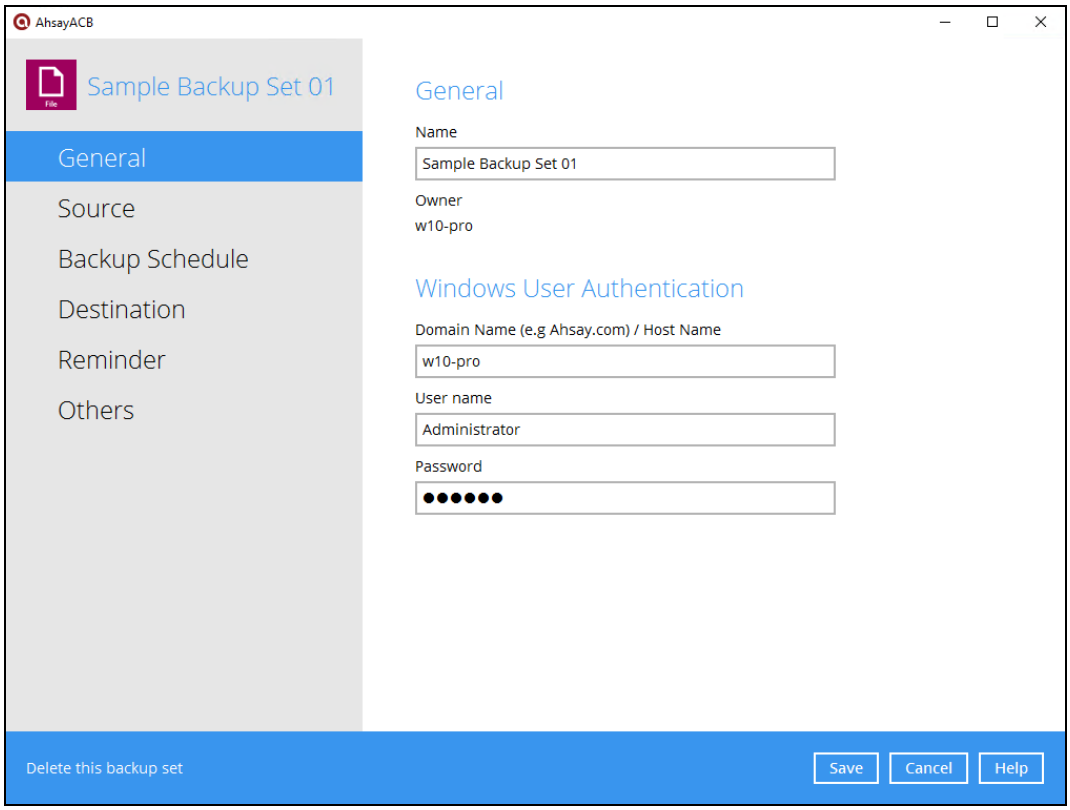
- In-File Delta
- Bandwidth Control
- Follow Link
- Compression Type
- Continuous Backup

NOTE

For more details on the limitations of the backup set settings before proceeding to backup and restore, refer to **Chapter 2 Preparing for Backup and Restore – Limitations**.

General

This allows the user to modify the name of the backup set.



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

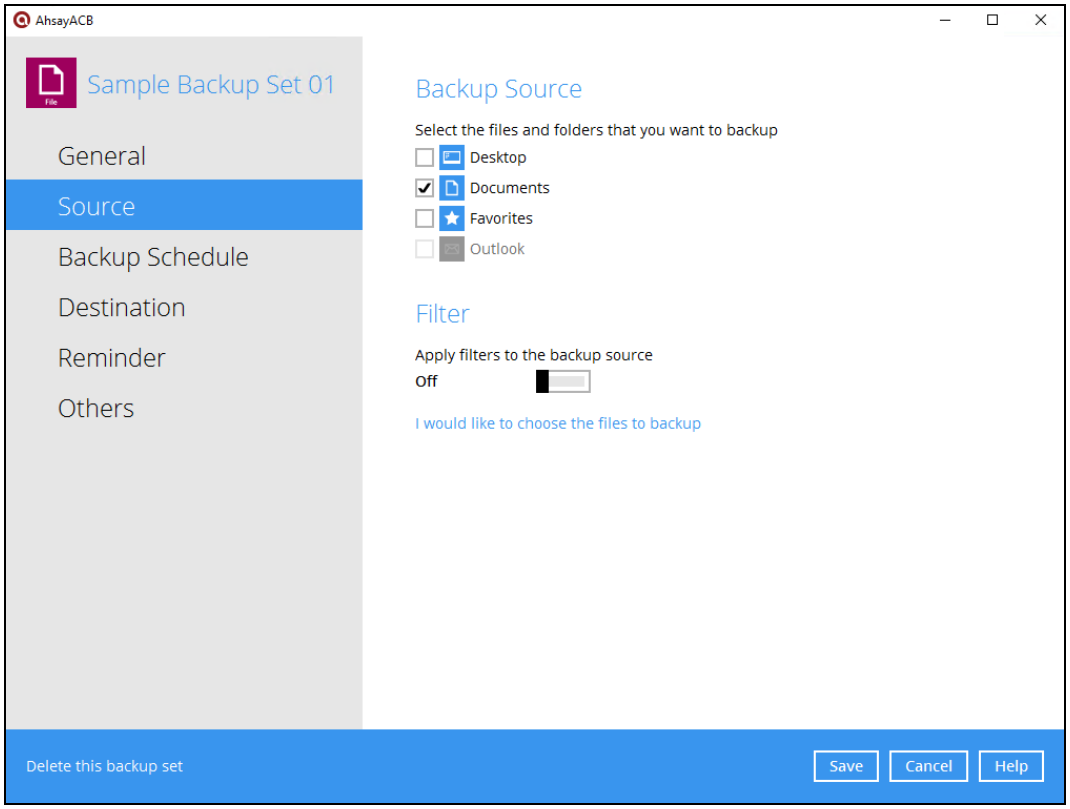
1. Enter the new backup set name on the Name field.
2. Click the [Save] button to save the updated backup set name.

To modify the windows user authentication, follow the instructions below:

1. Enter the new:
    - Domain Name
    - User Name
    - Password
2. Click the [Save] button to save the new windows user credentials.

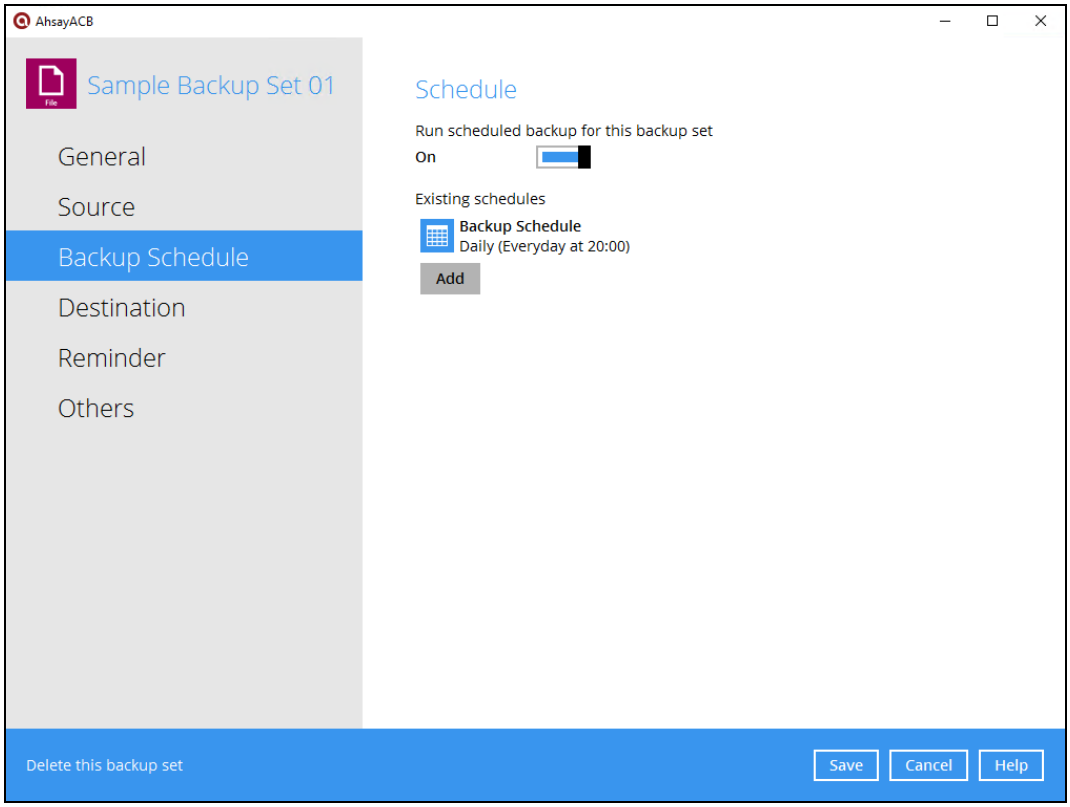
Source

This allows the user to select the files and/or folders that they would like to backup. To know more about filtering, please check this document [AhsayOBM v7 Backup Source File Filter Guide](#)**.**



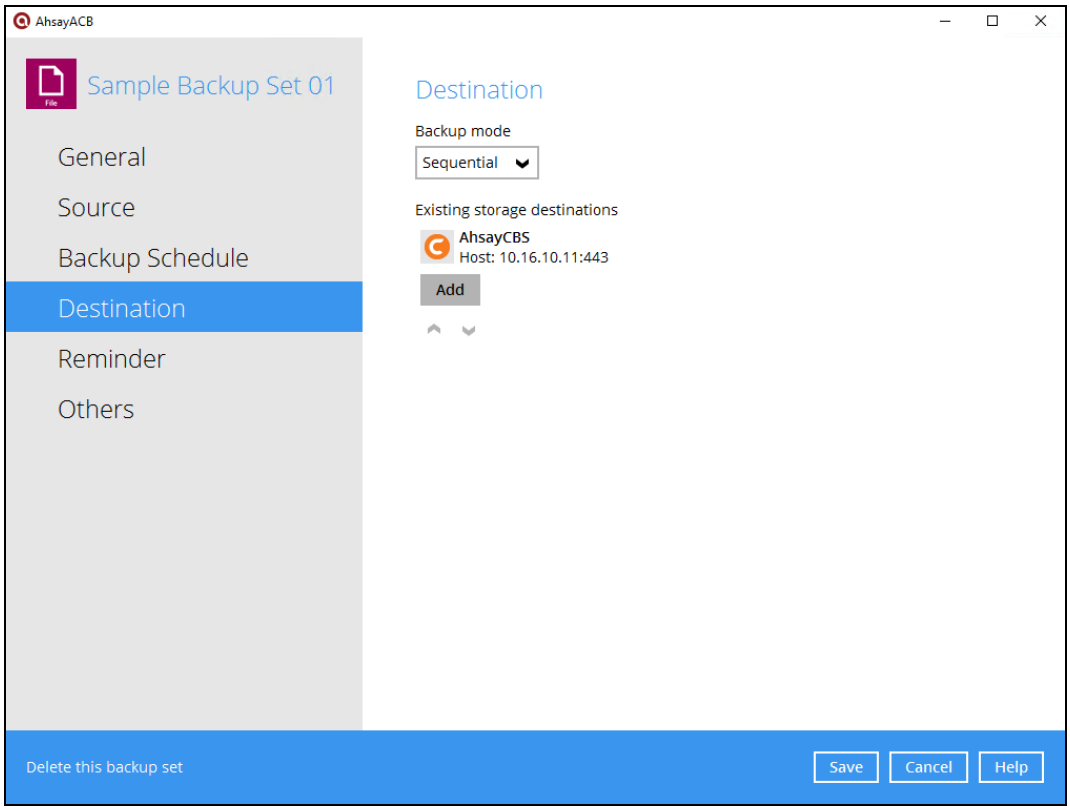
Backup Schedule

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 on Chapter 10 Configure Backup Schedule for Automated Backup.



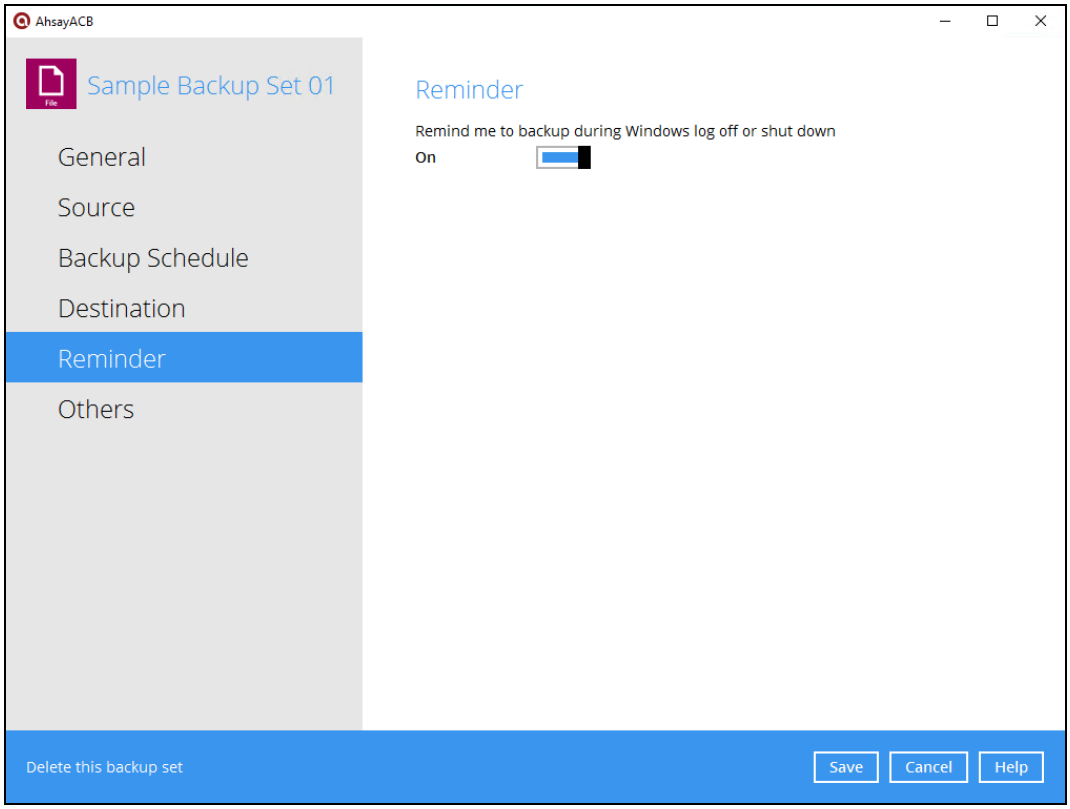
Destination

This allows the user to view the current backup mode and existing storages and add additional storage destinations.



Reminder

This allows the user to enable the Windows log off or shut down reminder setting where a backup confirmation menu will appear, notifying the user to backup before logging out of the system or shutting the Windows.



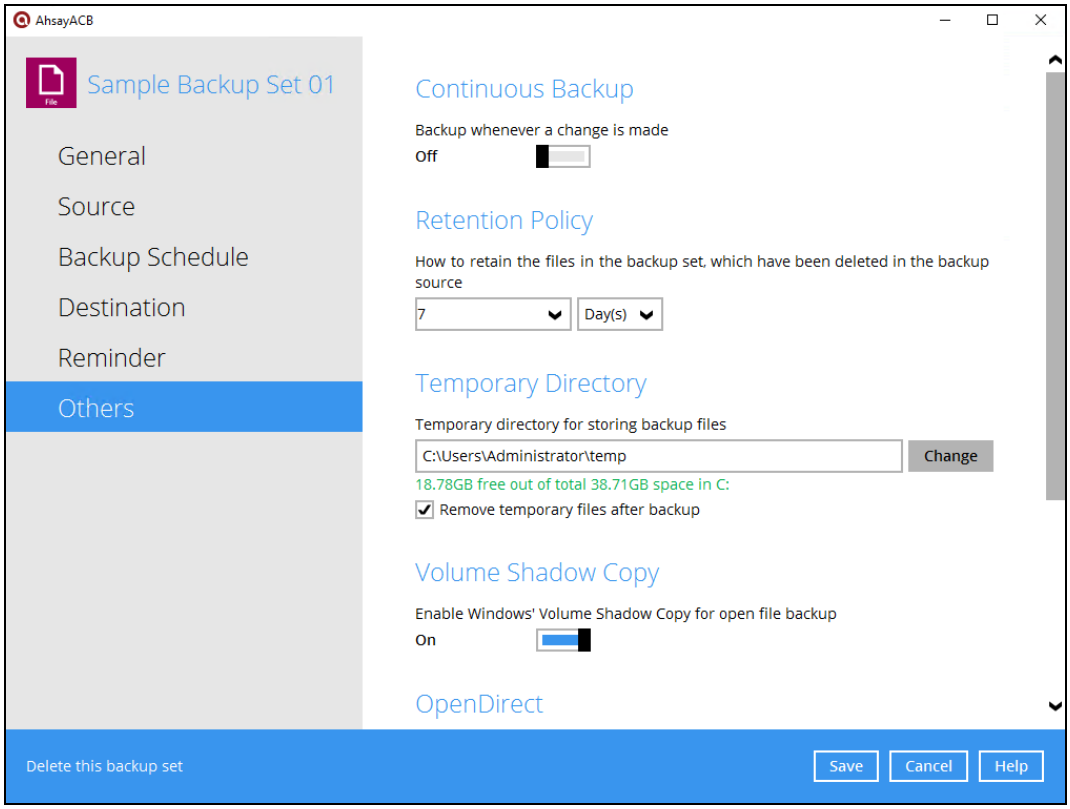
To configure the Windows log off or shutdown reminder, follow the instructions below:

1. Slide the lever to the right to turn on the reminder.
2. Click the [Save] button to save the settings.

Others

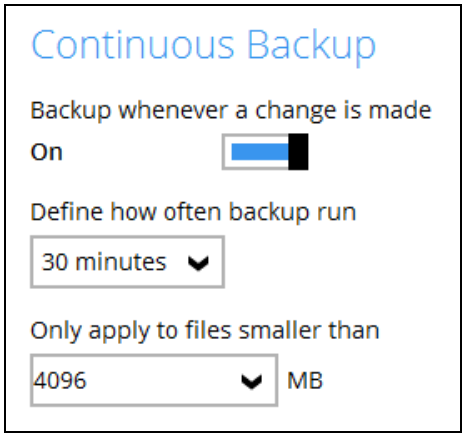
These are the list of other backup set settings that can be configured.

- Continuous Backup
- Retention Policy
- Temporary Directory
- Volume Shadow Copy
- OpenDirect
- Encryption



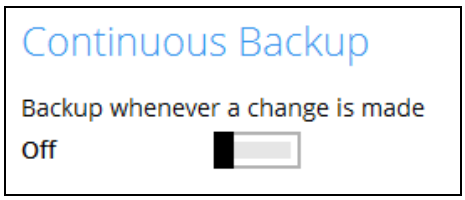
Continuous Backup

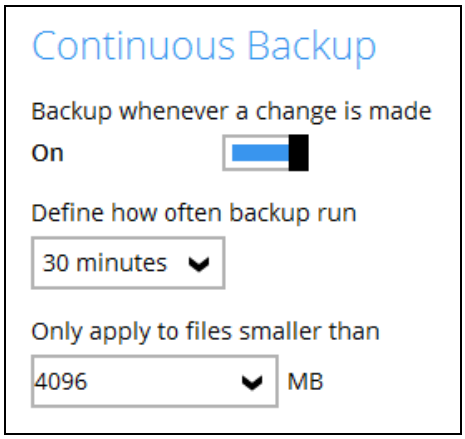
This allows the user to configure the continuous backup job and set time interval.



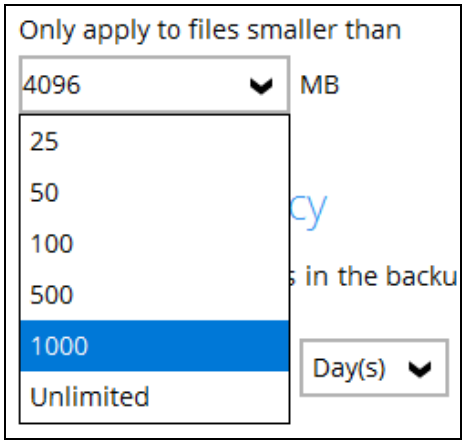
To configure the continuos backup, follow the instructions below:

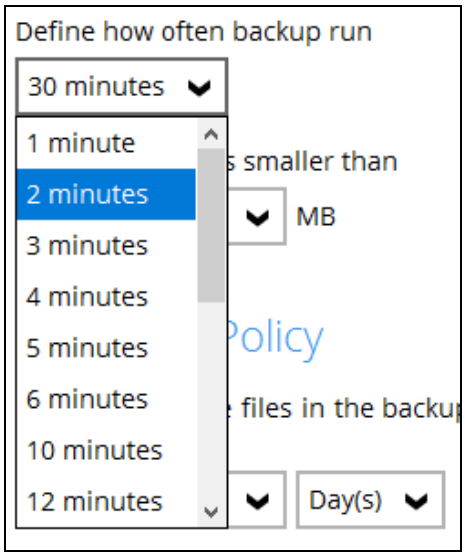
1. Slide the lever to the right to turn on the reminder.





2. Select from the drop-down list on how often the backup will run and apply to files smaller than the indicated.

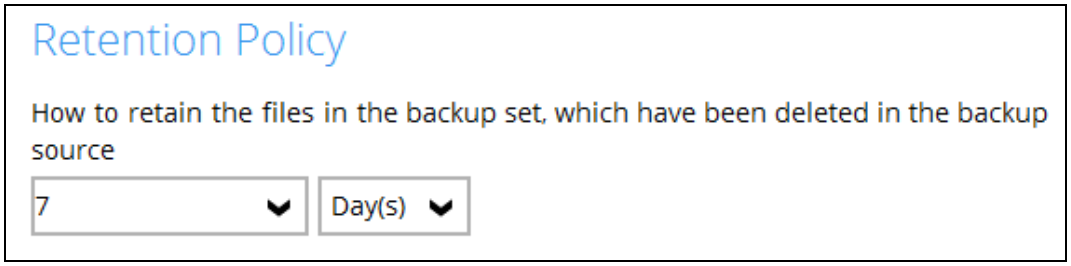


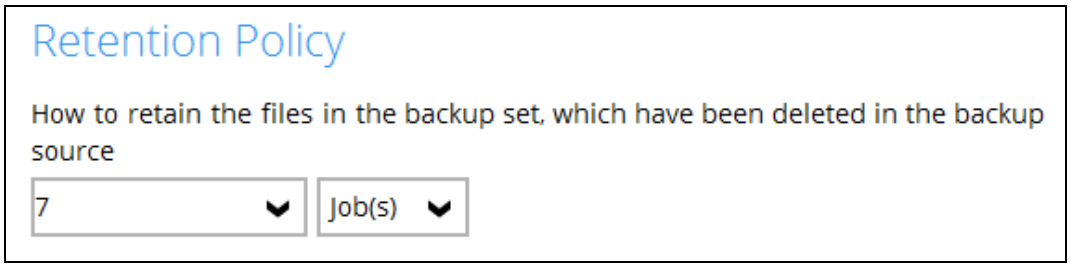


3. Click the [Save] button to save the settings.

Retention Policy

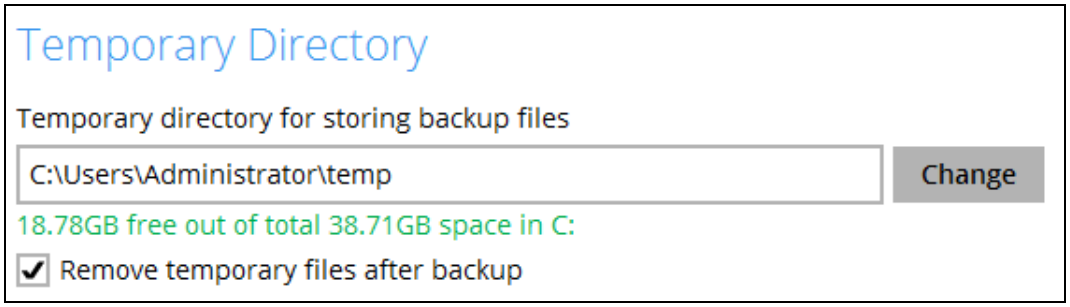
This allows the user to retain the deleted files based on the number of days or jobs.





Temporary Directory

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

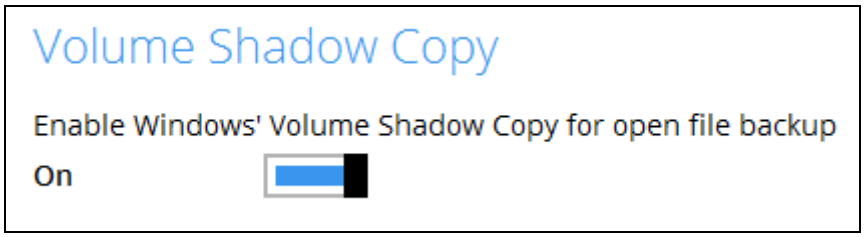


To configure the temporary directory, follow the instructions below:

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.

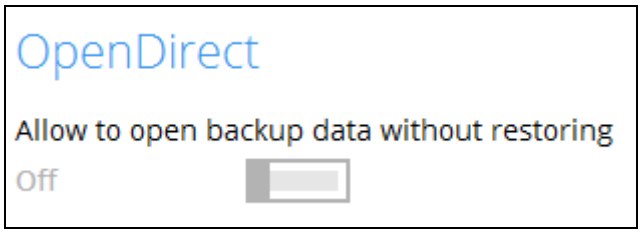
Volume Shadow Copy

This allows the user to create a snapshot to support backup of local files that exclusively opened during the backup process.



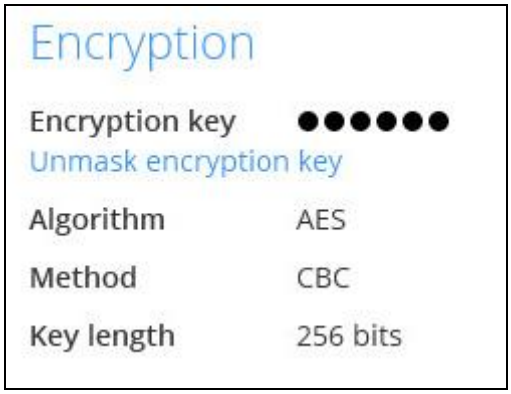
Open Direct

This option can only be enabled during the creation of backup set. For details about OpenDirect restore, please refer to Chapter 8 Create a File Backup Set.



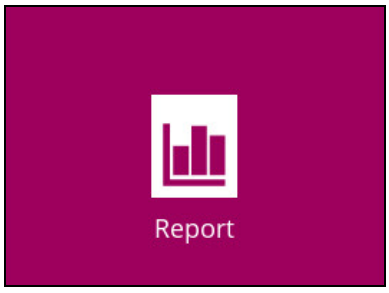
Encryption

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



Report

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



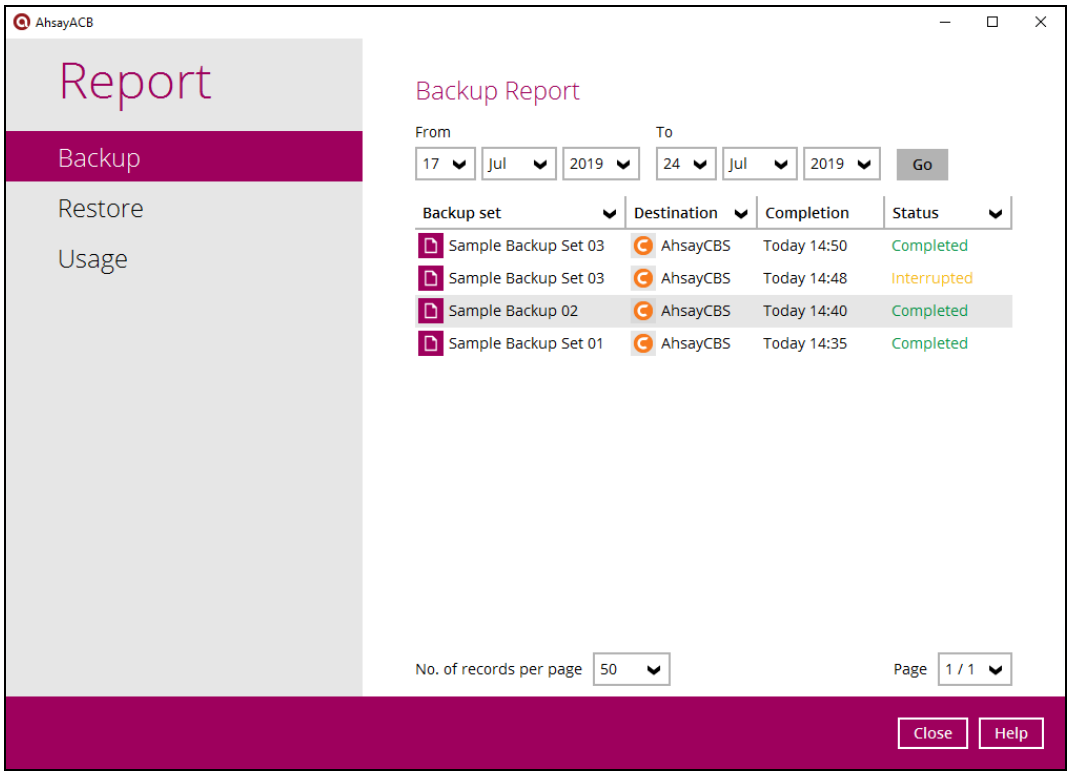
There are three (3) functions available for this feature:

- Backup
- Restore
- Usage

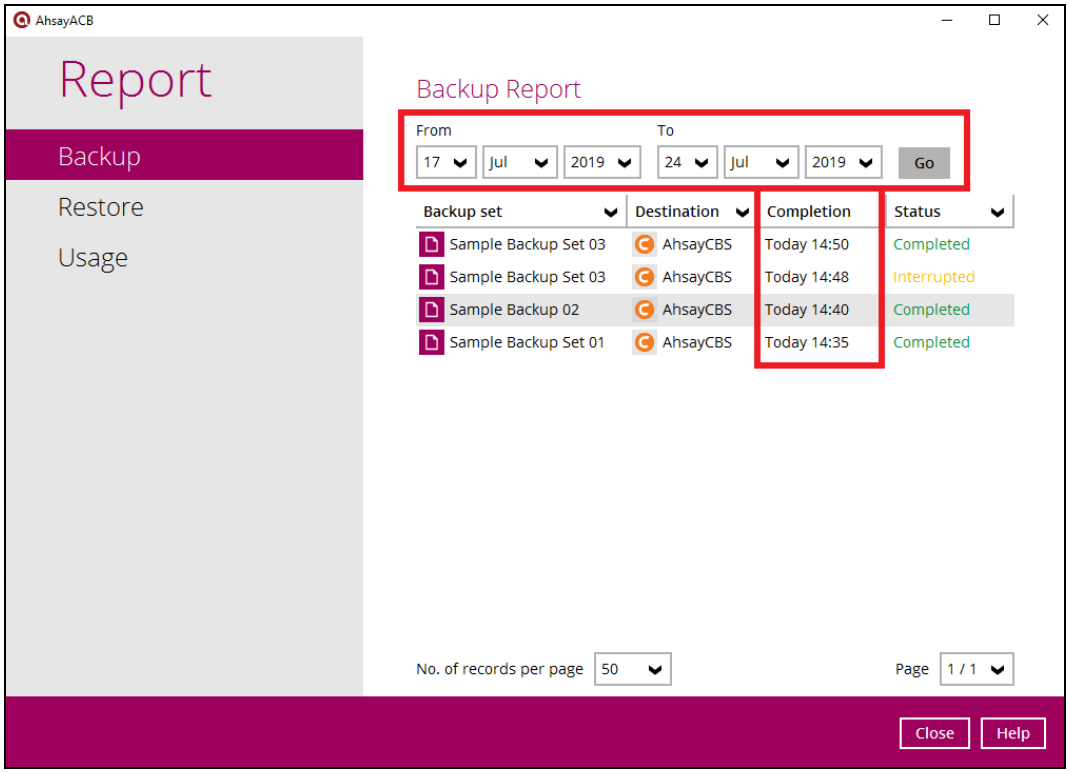
Backup

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

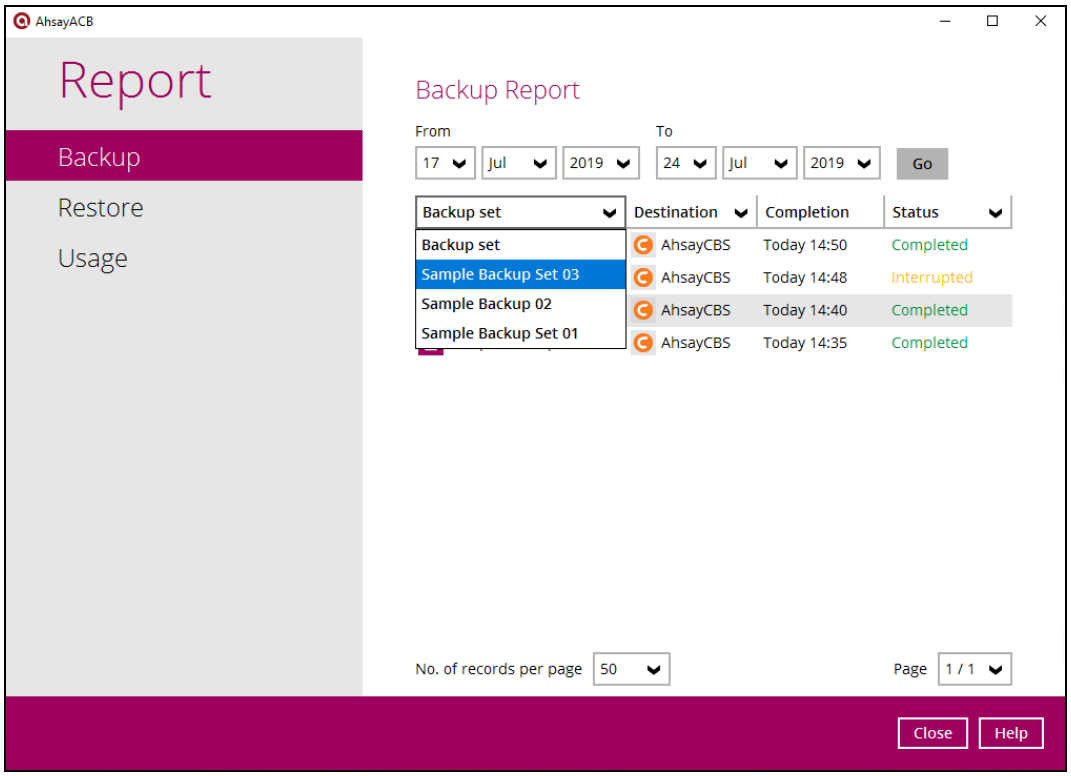
- Date
- Backup Set
- Destination
- Status



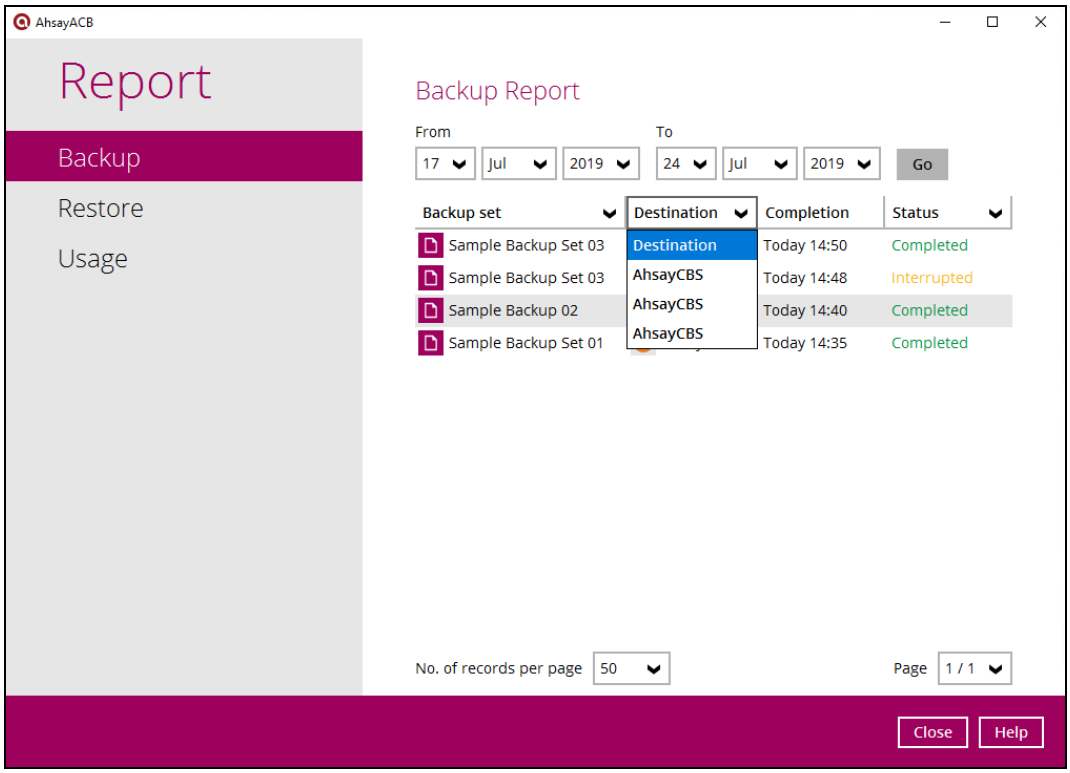
You can filter and view the backup report using the Date filter.



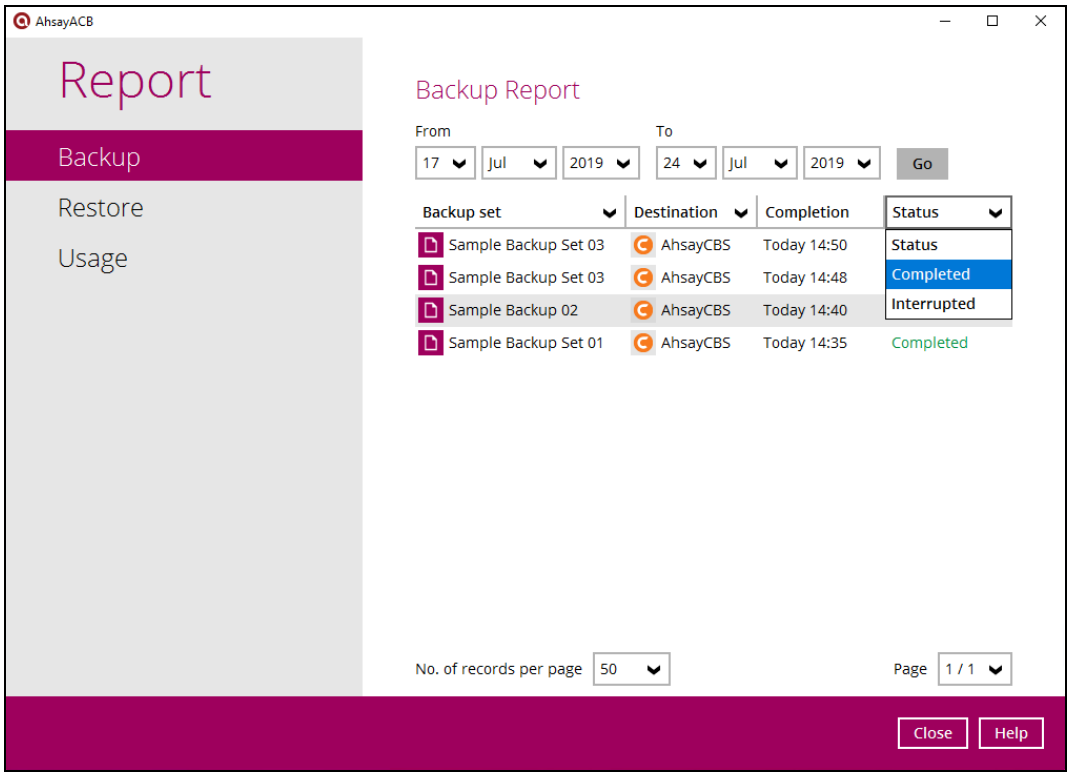
You can filter and view the backup report using the Backup set filter.



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

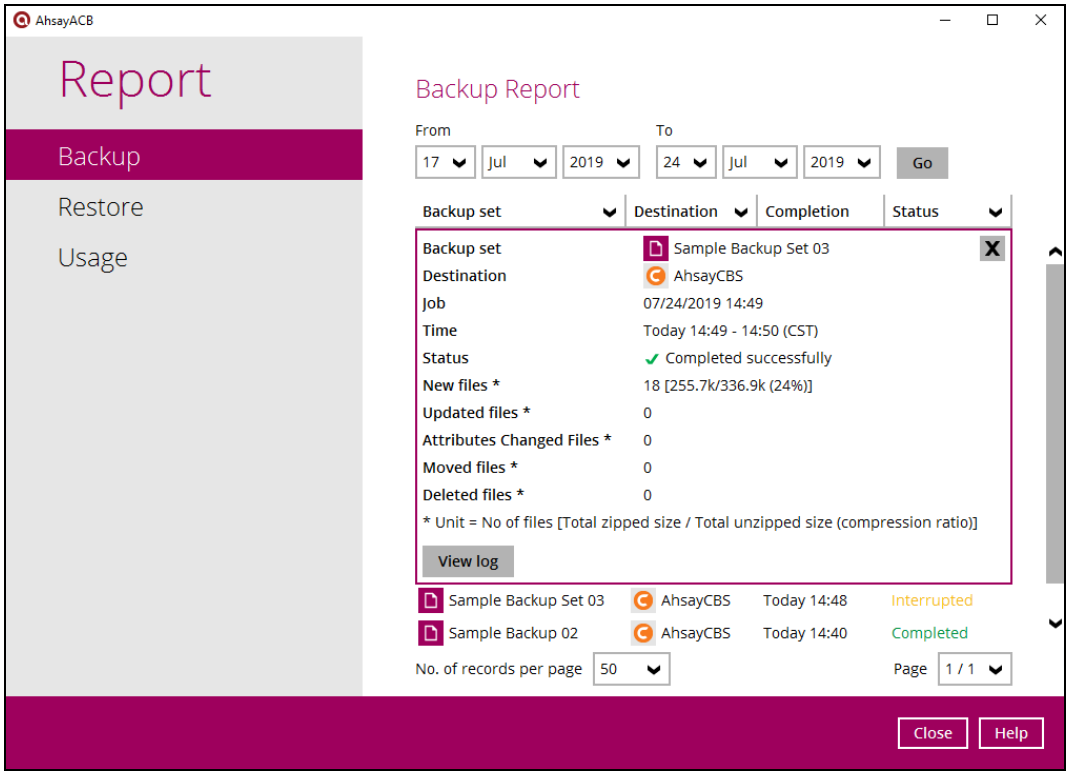


You can filter and view the backup report with the same status using the Status filter.



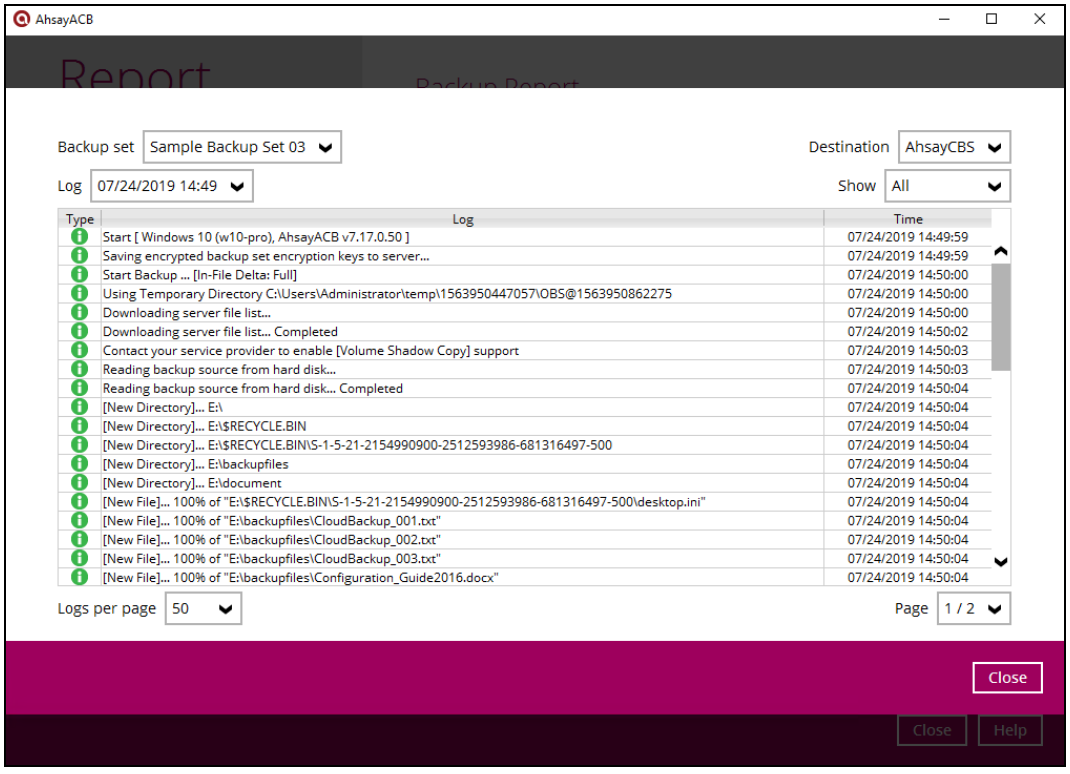
To view the backup log, follow the instructions below:

1. Select and click backup report.



2. Click the [View log] button.

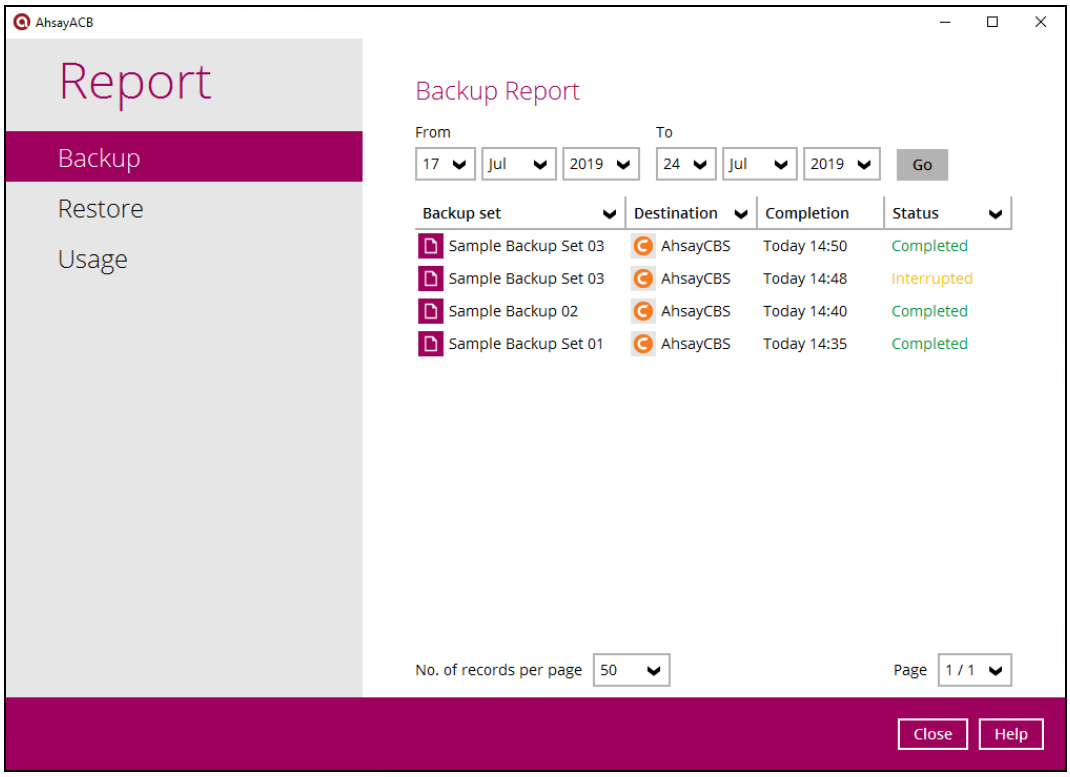
   Backup set, Destination, Log Date and Time, and Status can also be filtered as well as the number of logs per page.



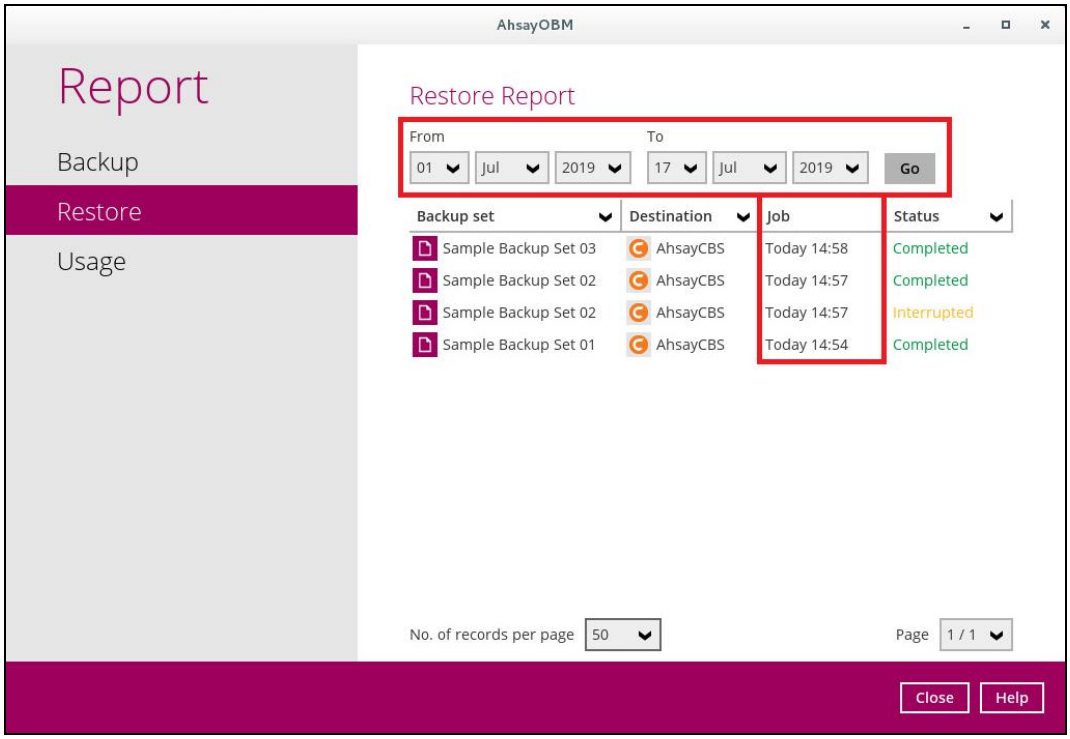
Restore

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

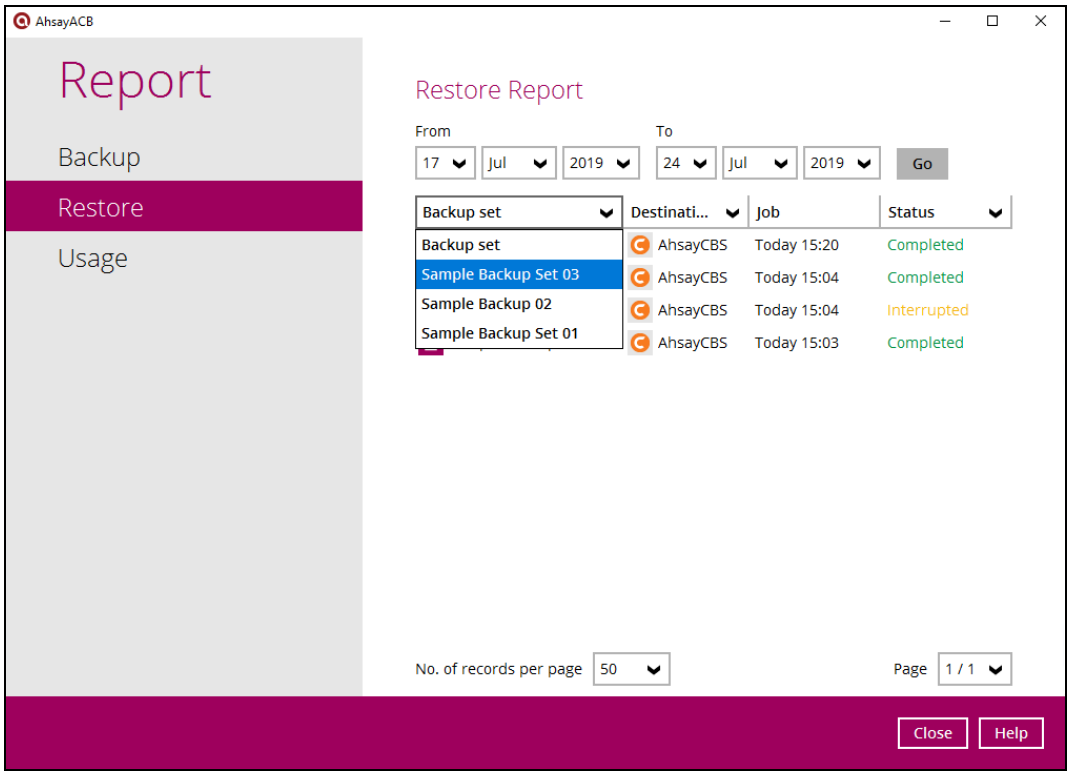
- Date
- Backup Set
- Destination
- Status



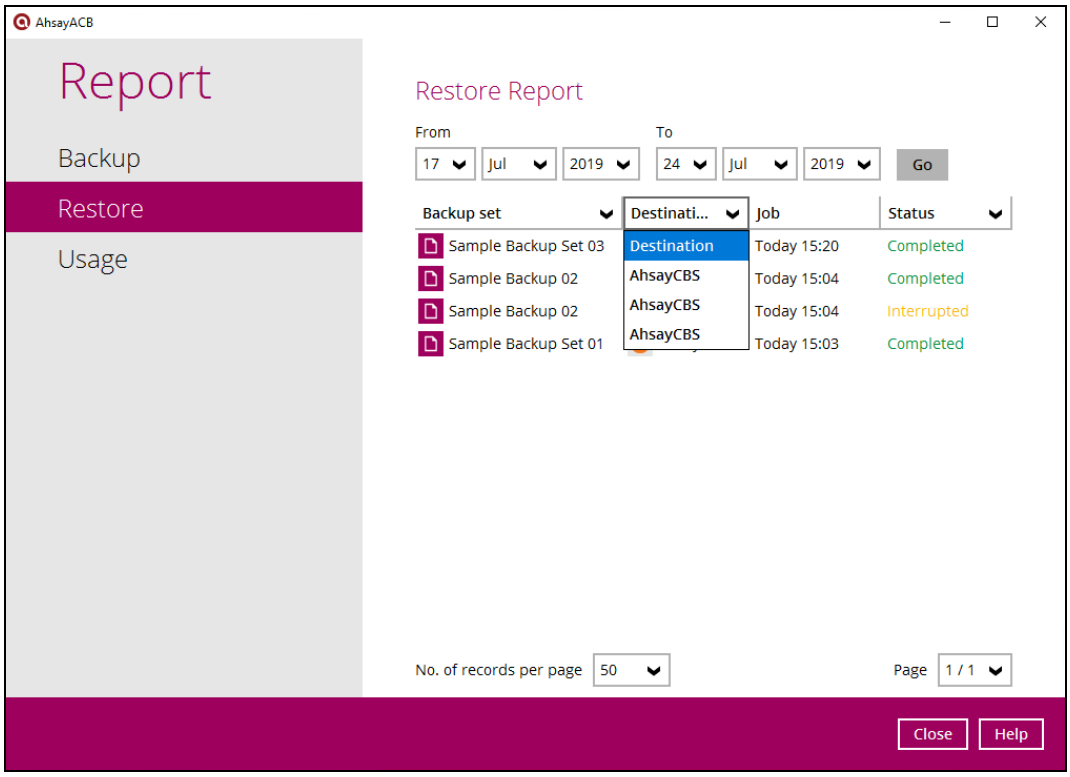
You can filter and view the restore report using the Date filter.



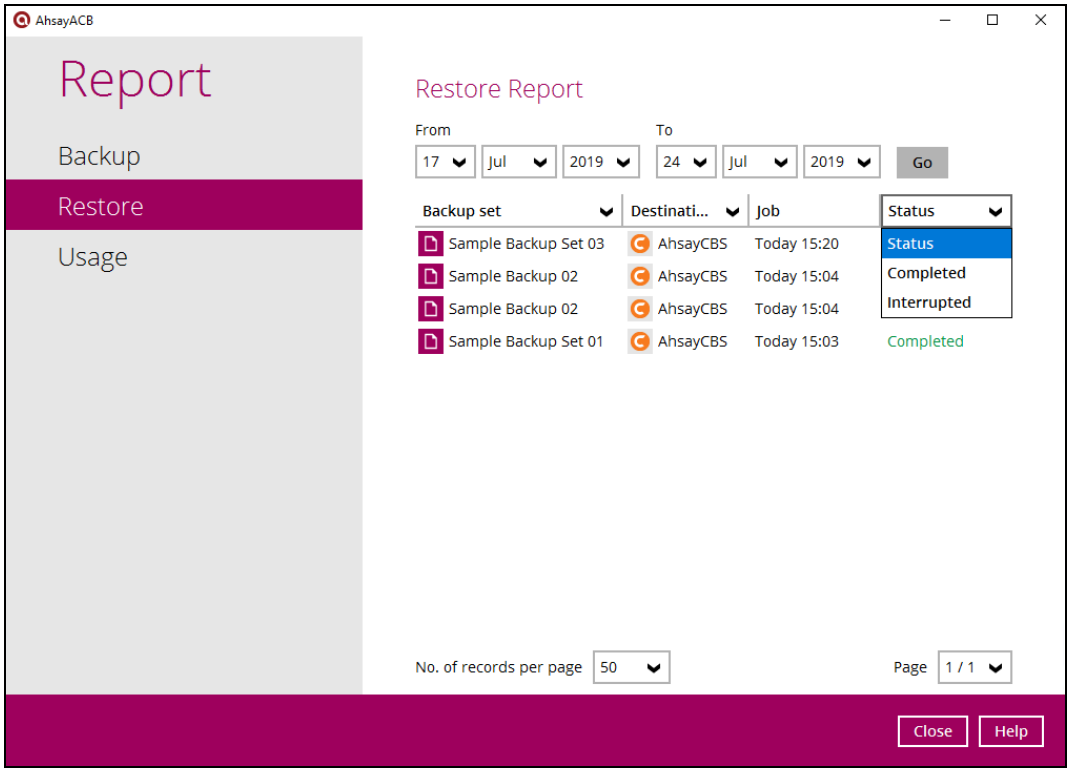
You can filter and view the restore report using the Backup set filter.



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

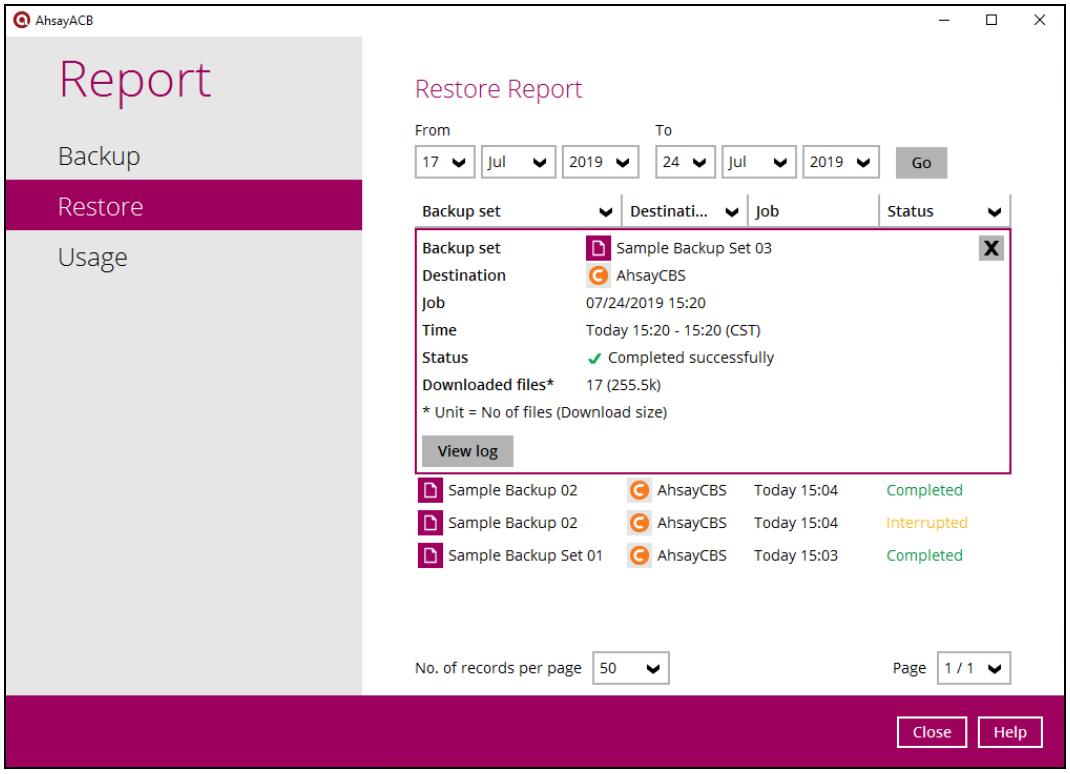


You can filter and view the restore report with the same status using the Status filter.



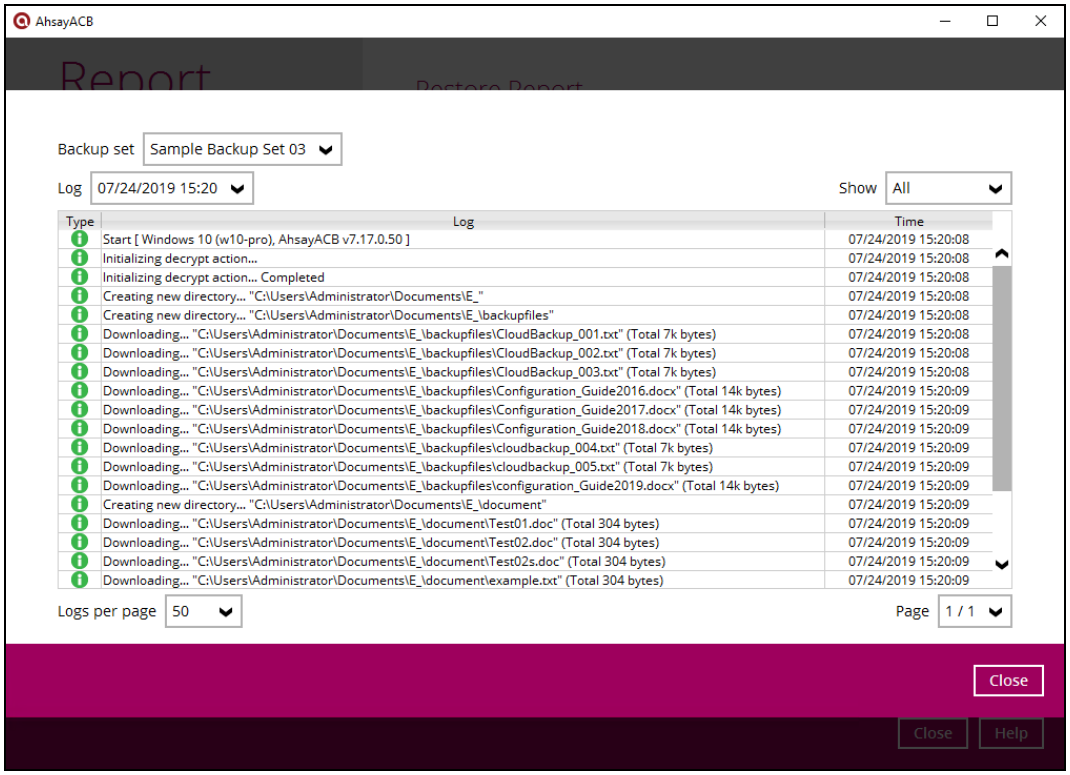
To view the restore log, follow the instructions below:

1. Select and click restore report.



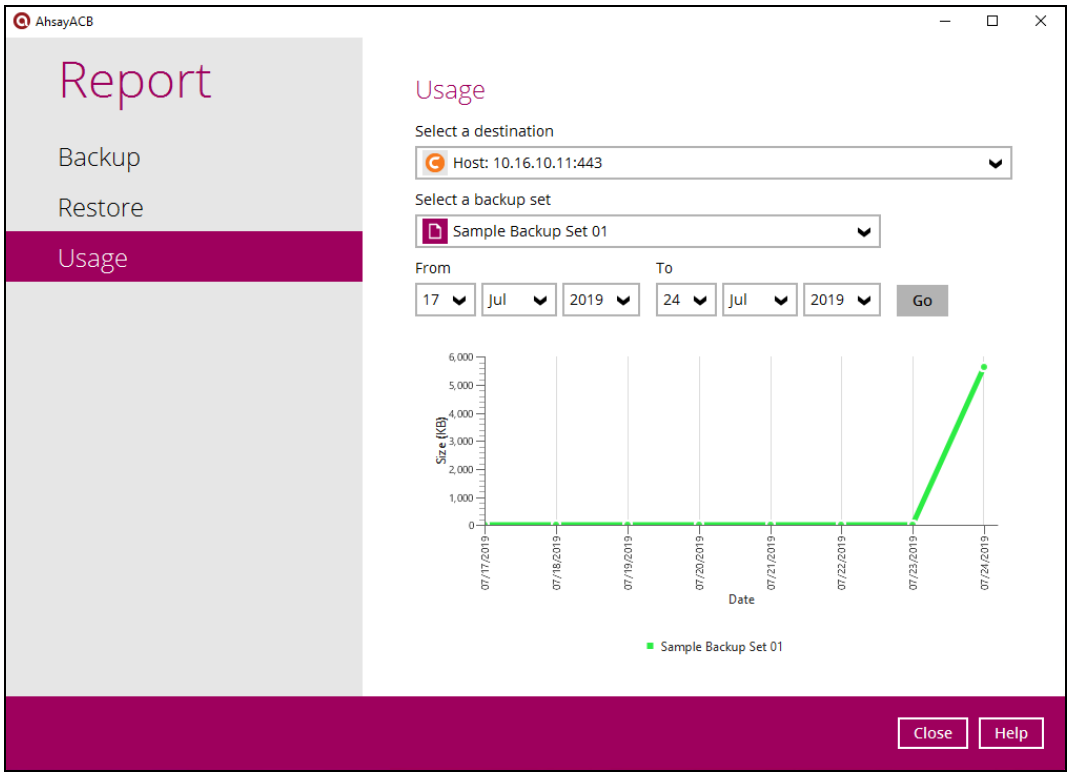
2. Click the [View log] button.

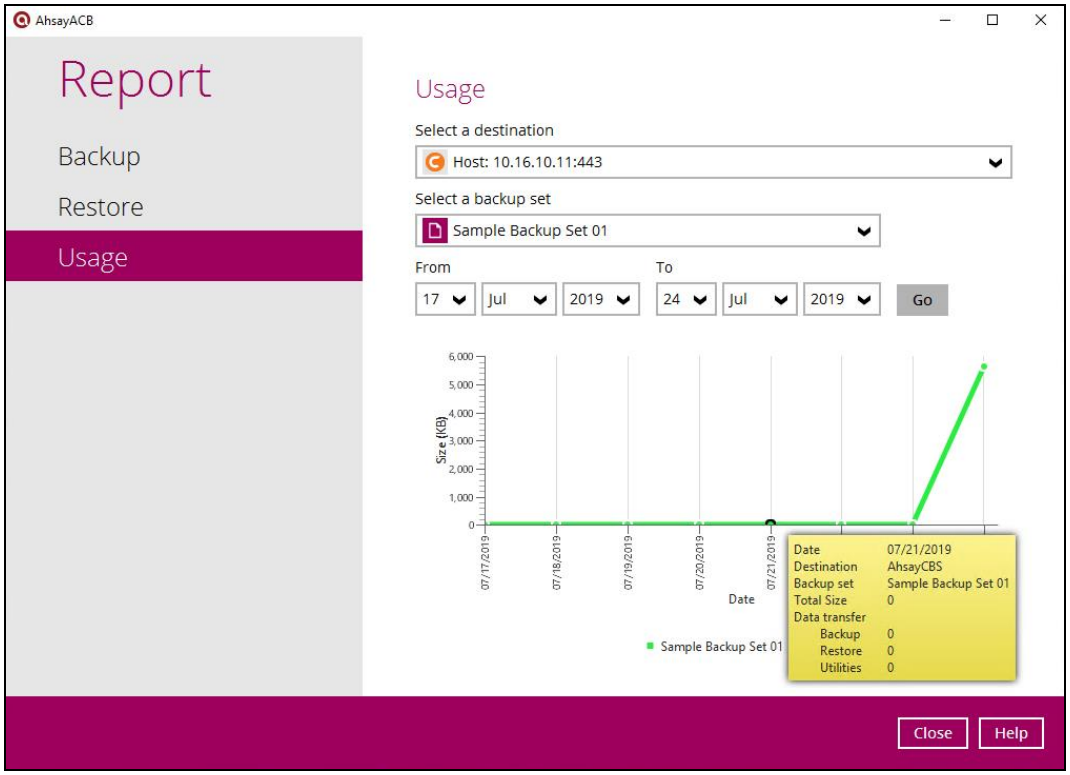
   Backup set, Destination, Log Date and Time, and Status can also be filtered as well as the number of logs per page.



Usage

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





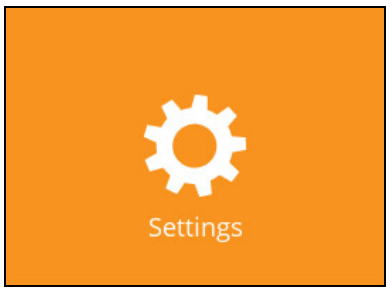
Restore

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

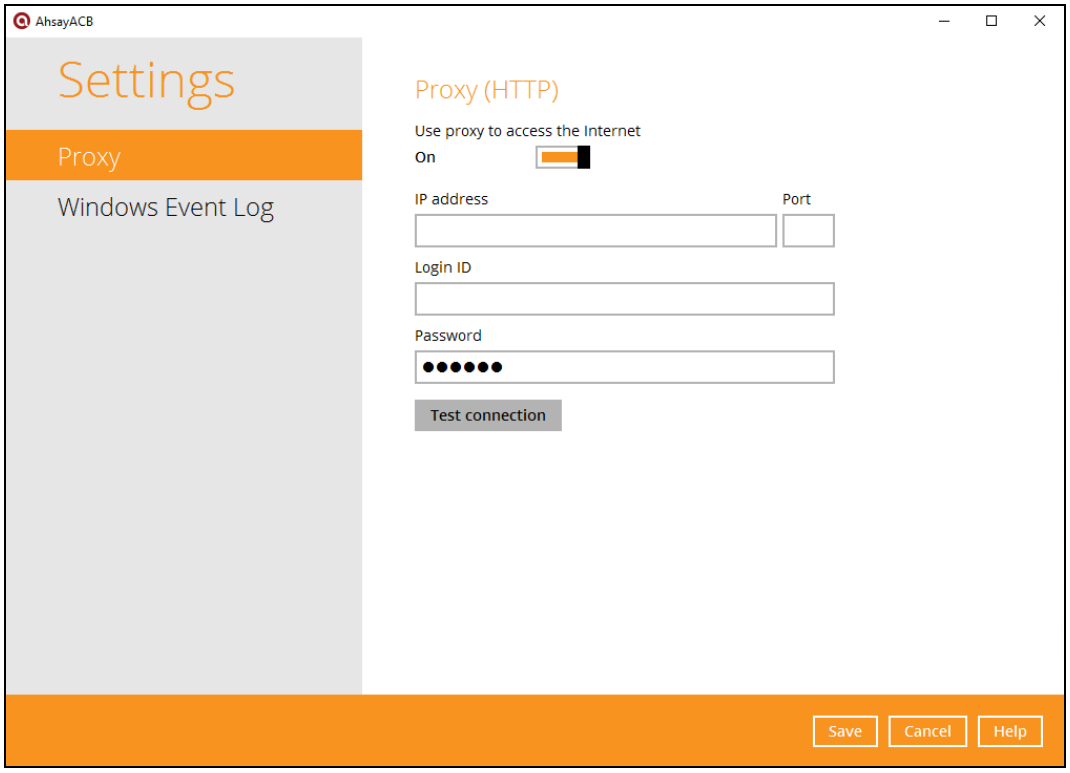
This allows the user to enable the proxy and windows event log.



Proxy

To enable the Proxy Settings, follow the instructions below:

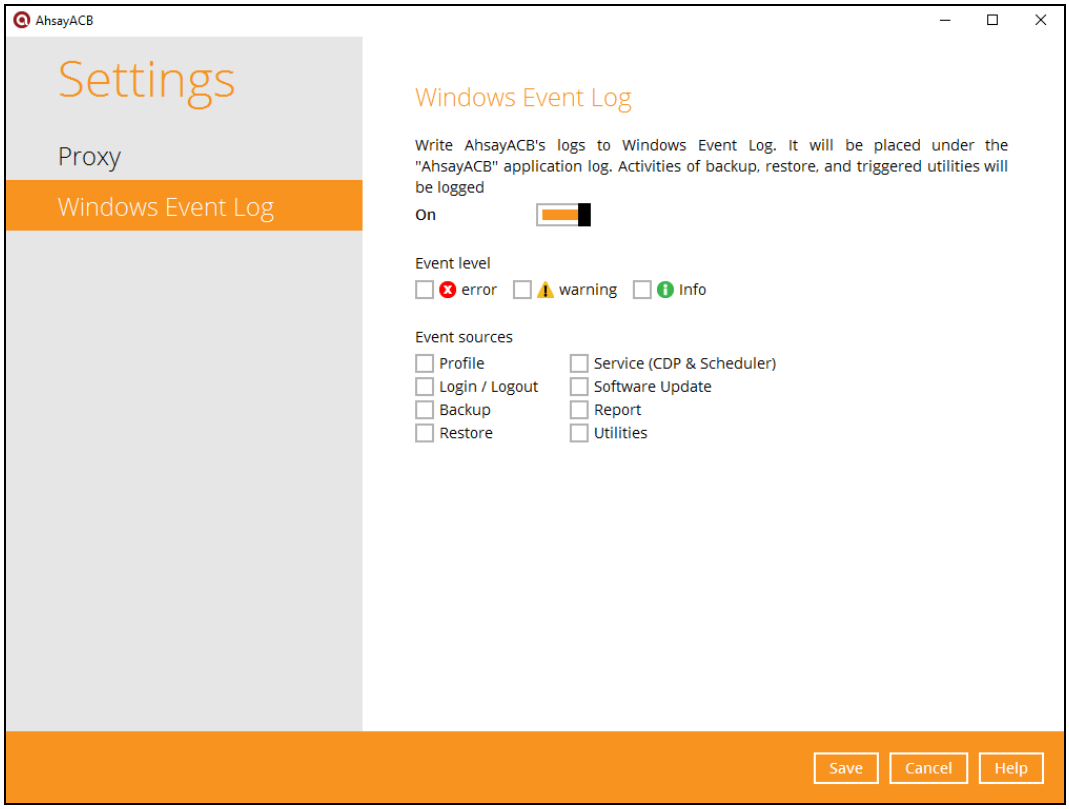
1. Click the [Settings] module.
2. Slide the lever to the right to enable the Proxy Settings.



3. Complete the following fields:
    - IP Address
    - Port
    - Login ID
    - Password
4. Click the [Test Connection] button to validate the connection.
5. Click the [Save] button to store the settings.

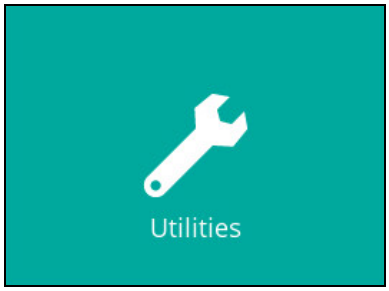
Windows Event Log

This allows the user to enable the Windows event log which logs all the AhsayACB system information and will be written under the Applications and Services Logs. User may access them through the Windows event viewer in the local machine.



Utilities

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



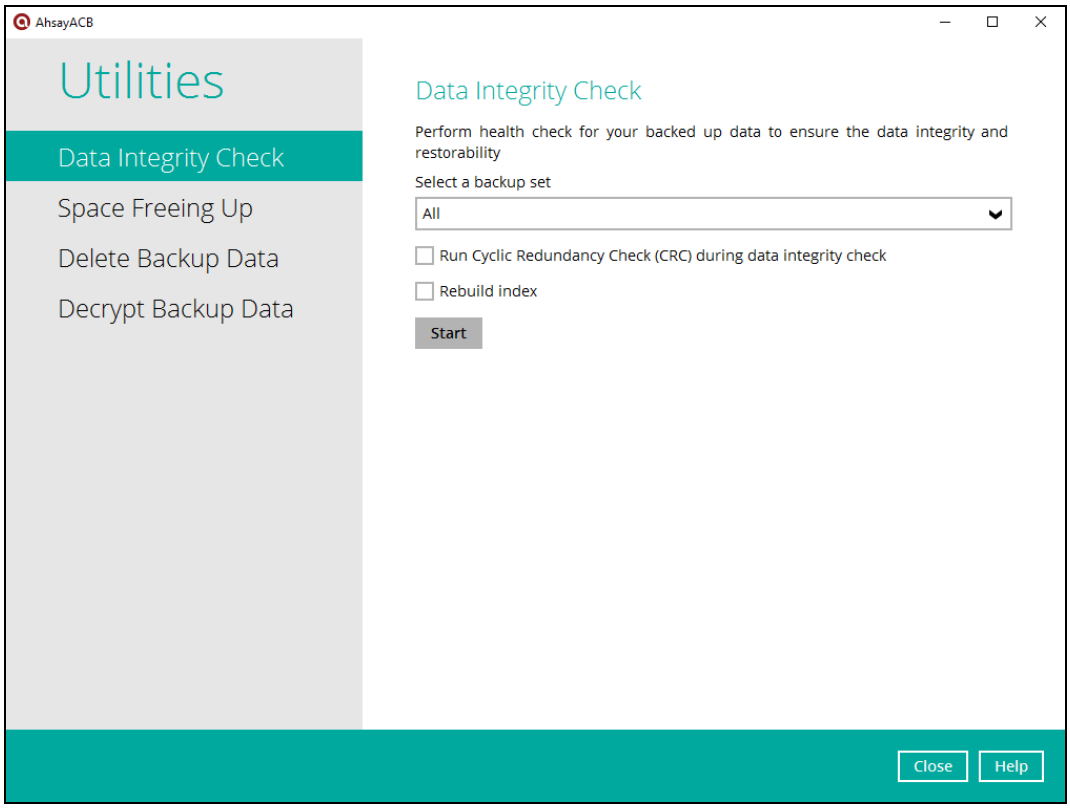
These are the four (4) options available for this feature:

- 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.

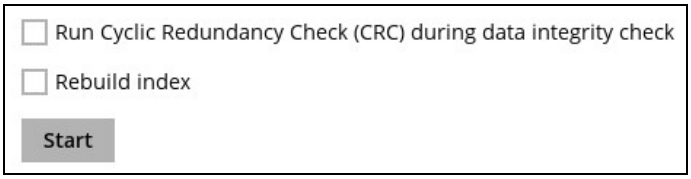
Note: Data Integrity Check can only be started when there is no manual, scheduled or continuous backup job running.



To perform Data Integrity Check, follow the instructions below:

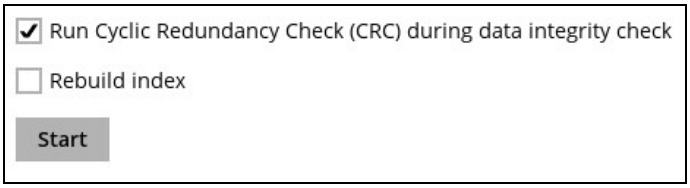
1. There are four (4) options in performing the Data Integrity Check:

Option #1



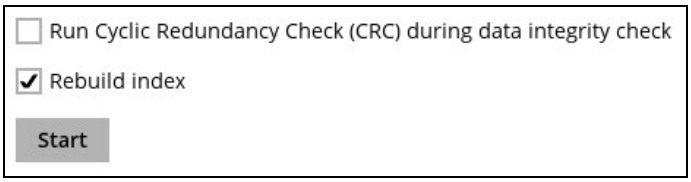
For checking the Index and Data

Option #2



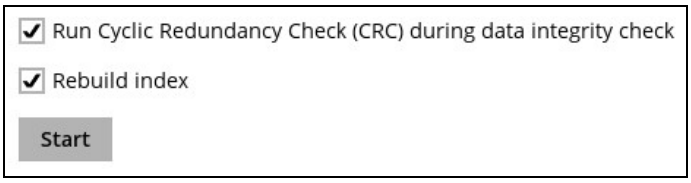
For checking the Index and Integrity of the files against the checksum file generated at the time of the backup job.

Option #3



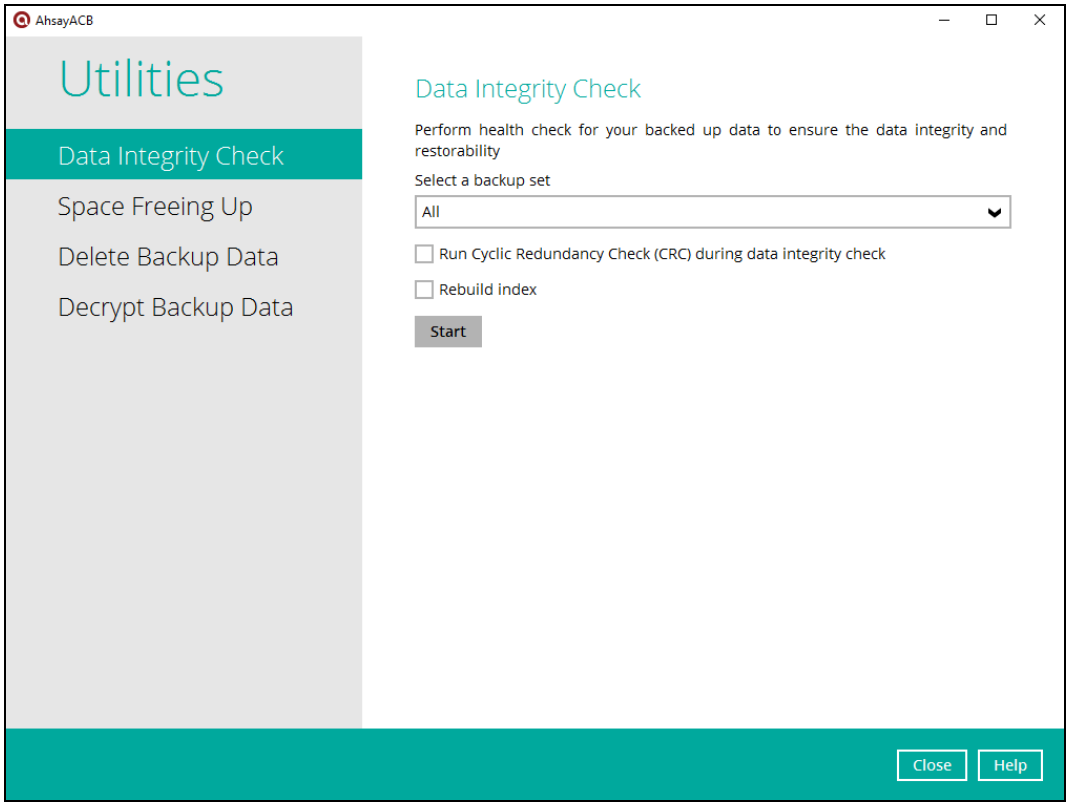
For checking the Index and rebuild the Index.

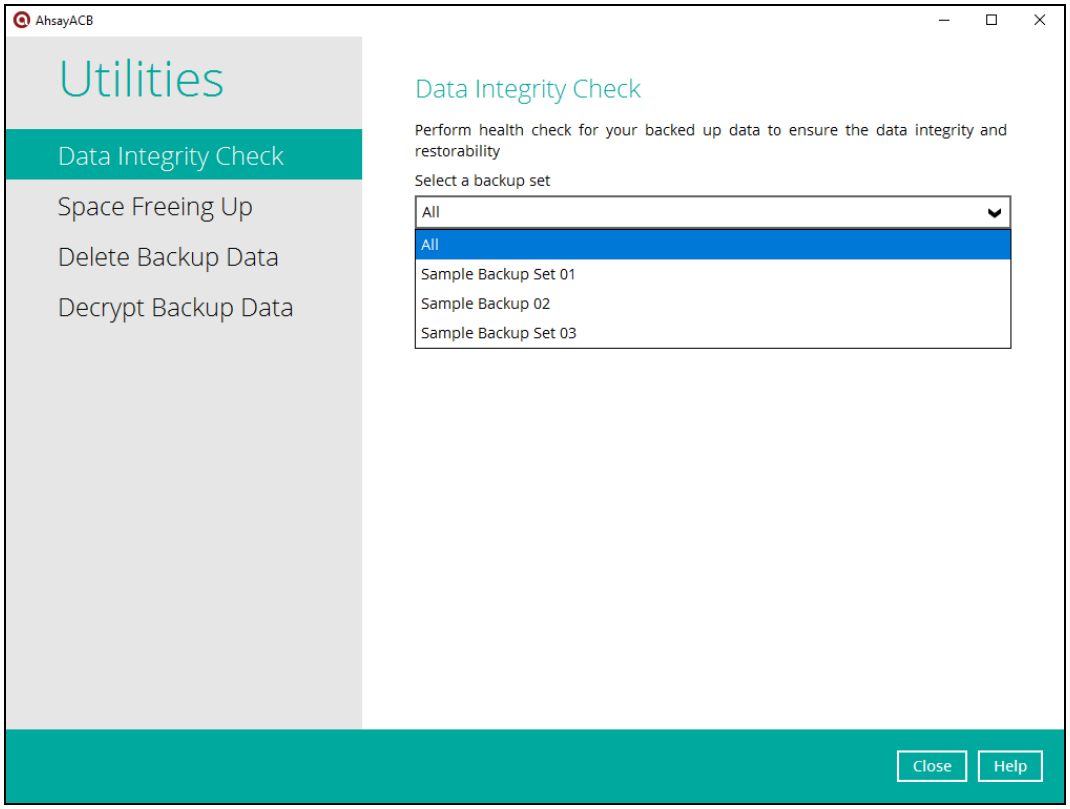
Option #4



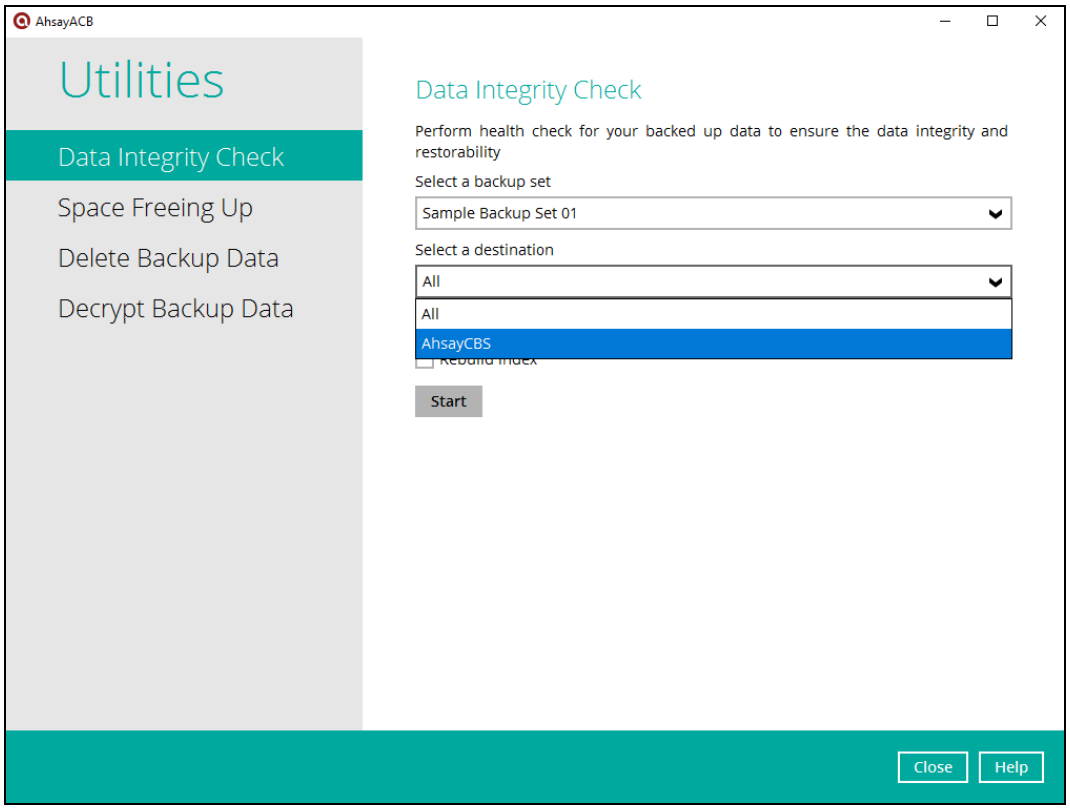
For checking the Index and Integrity of the files against the checksum file generated at the time of the backup job and rebuild Index.

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

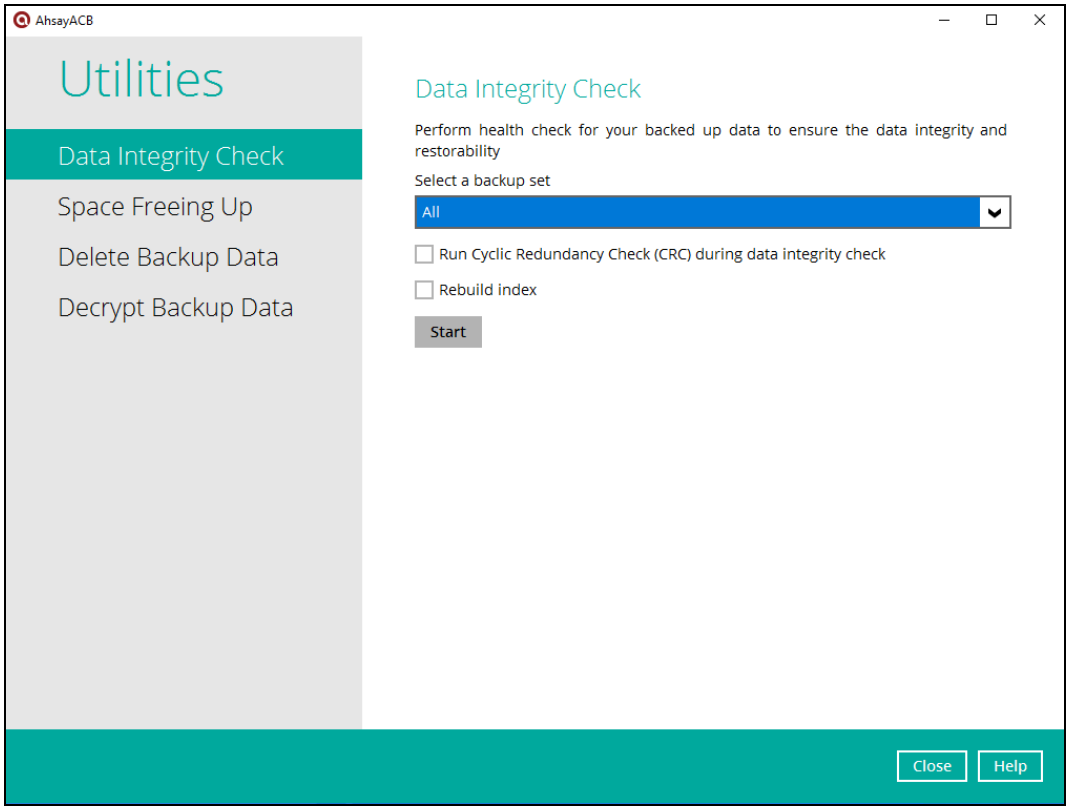




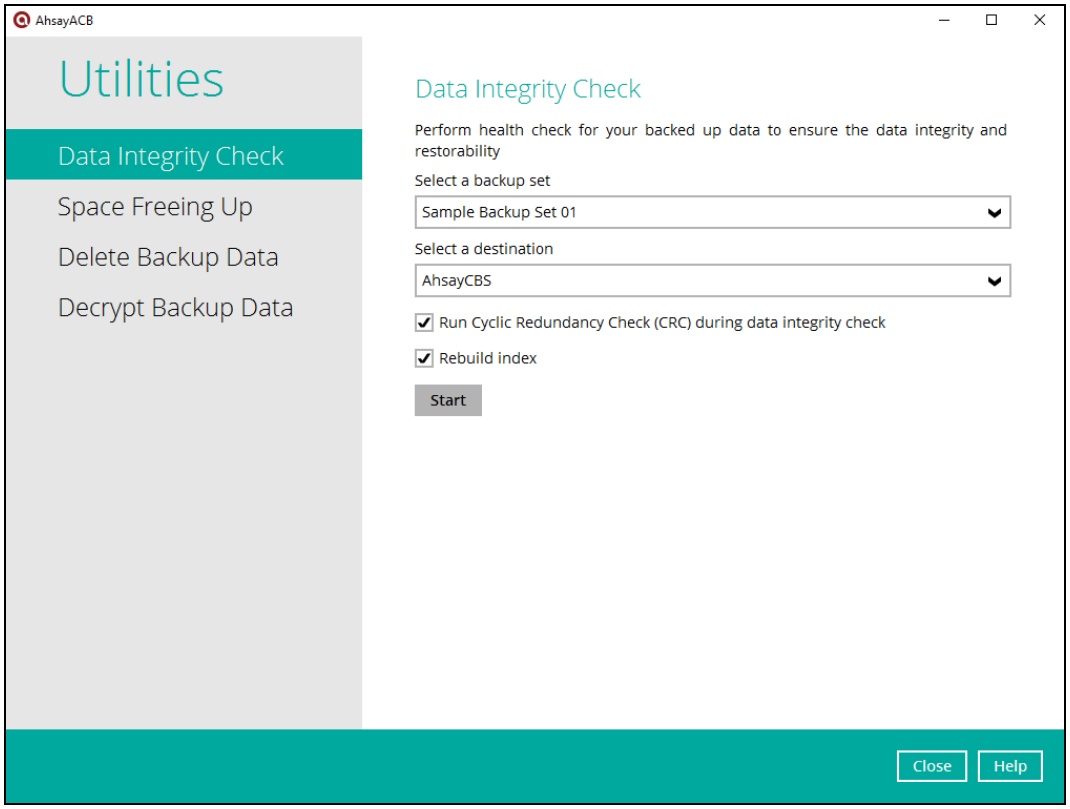
If you select a specific backup set then you will also have to select a specific destination or all destinations.

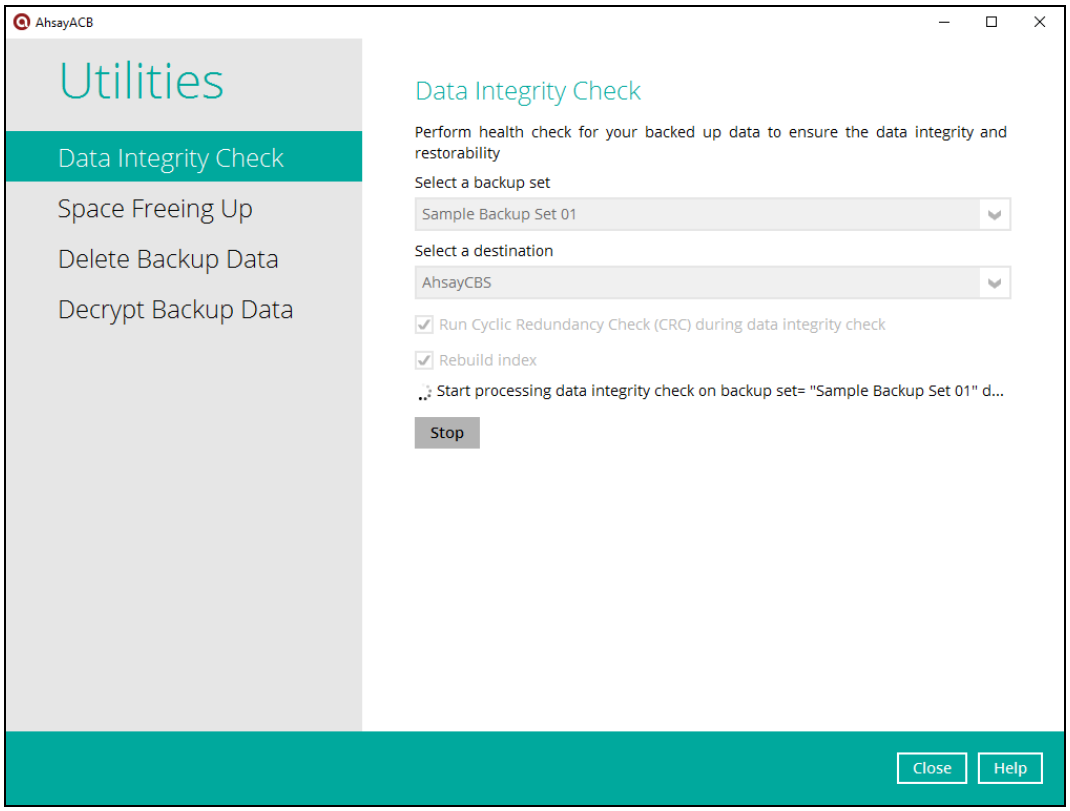


If you select All backup sets then there's no need to select a destination.

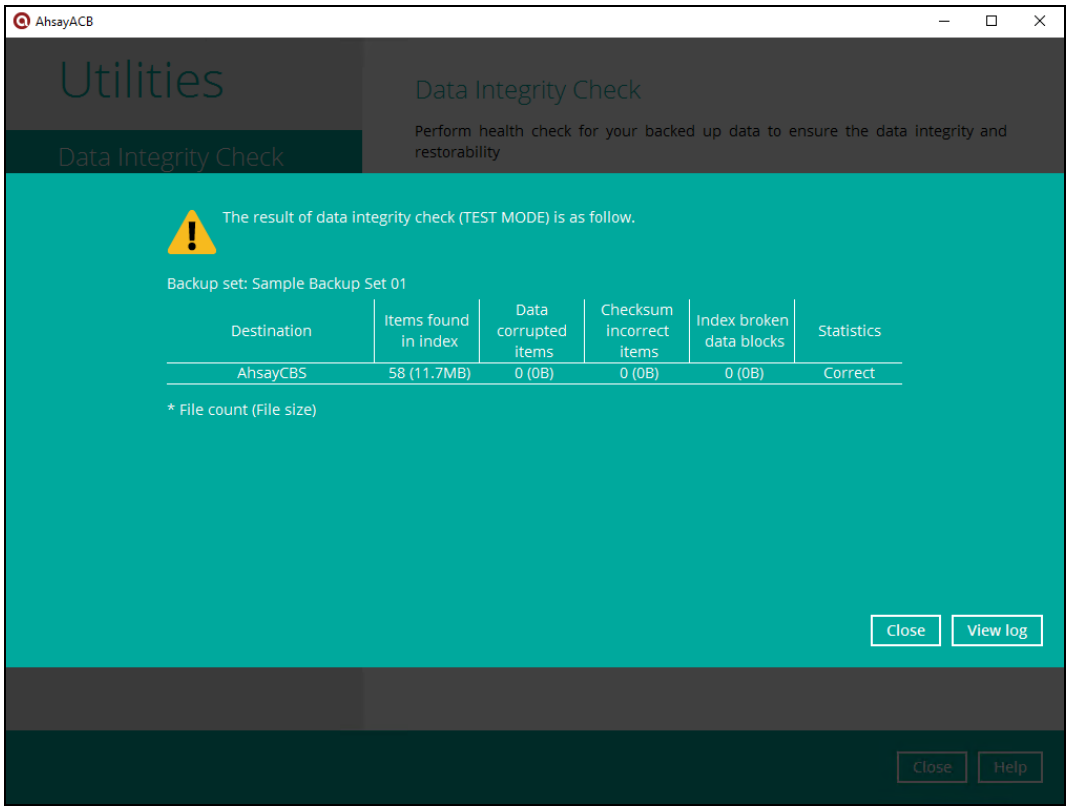


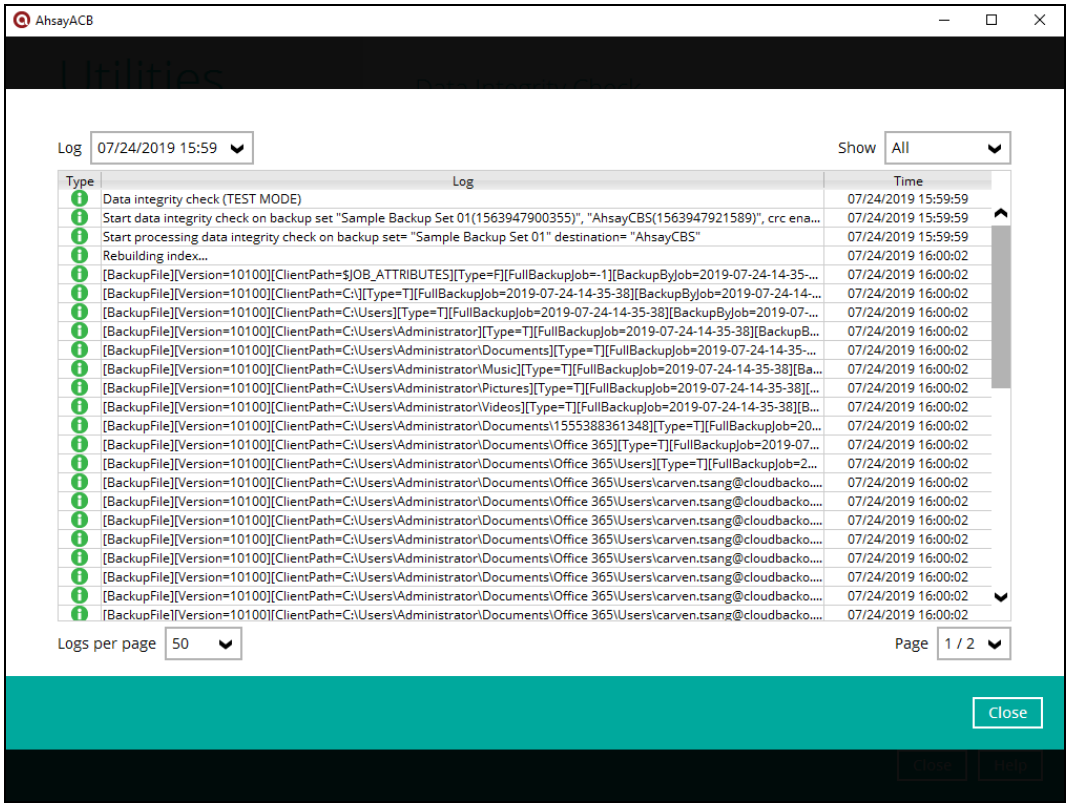
3. Click the [Start] button to perform the data integrity check.





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



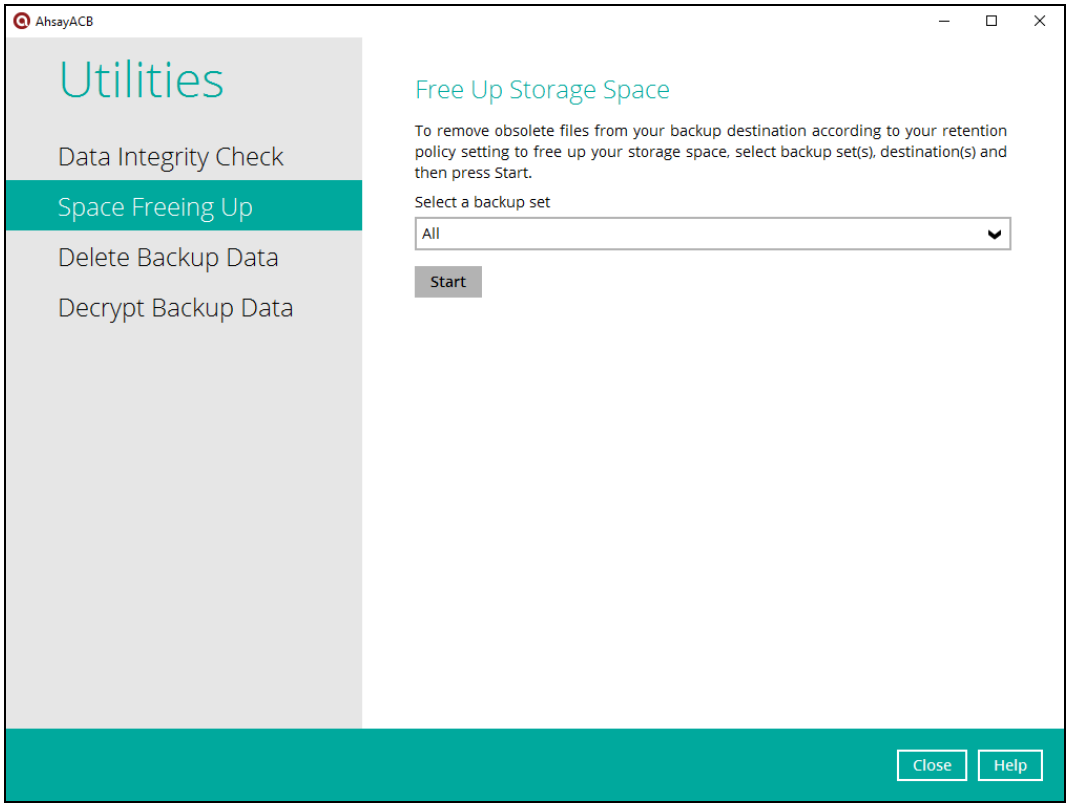


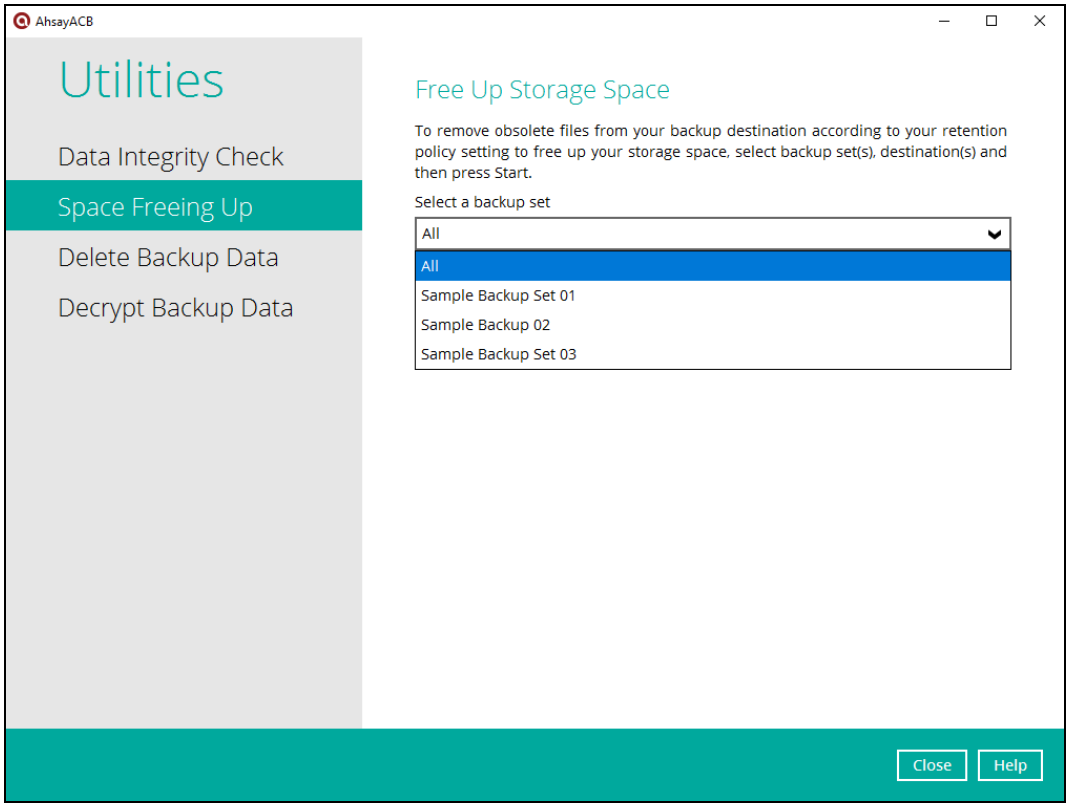
Space Freeing Up

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

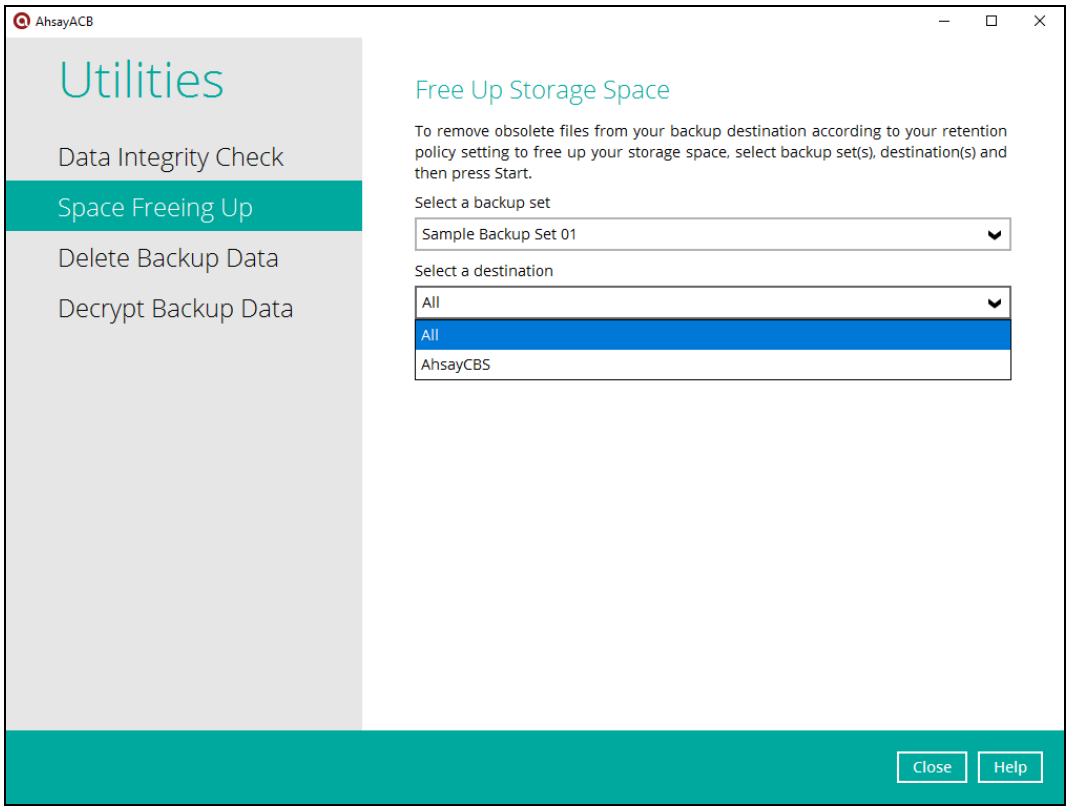
To perform Space Freeing Up, follow the instructions below:

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

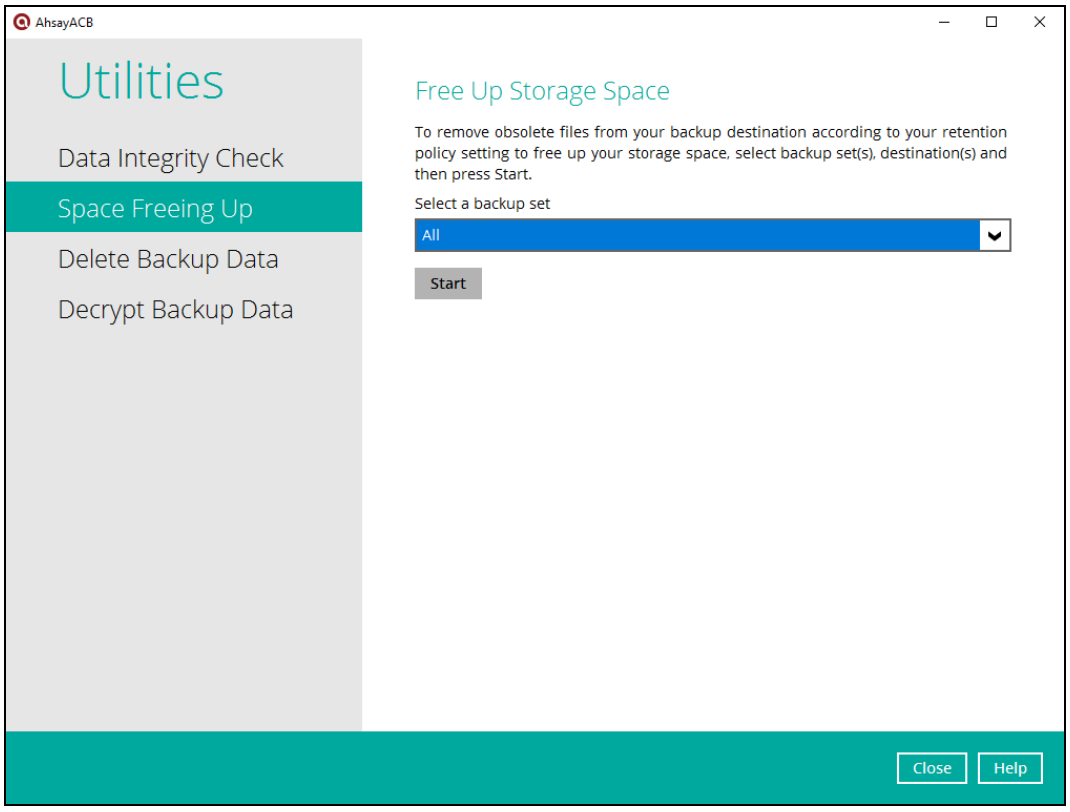




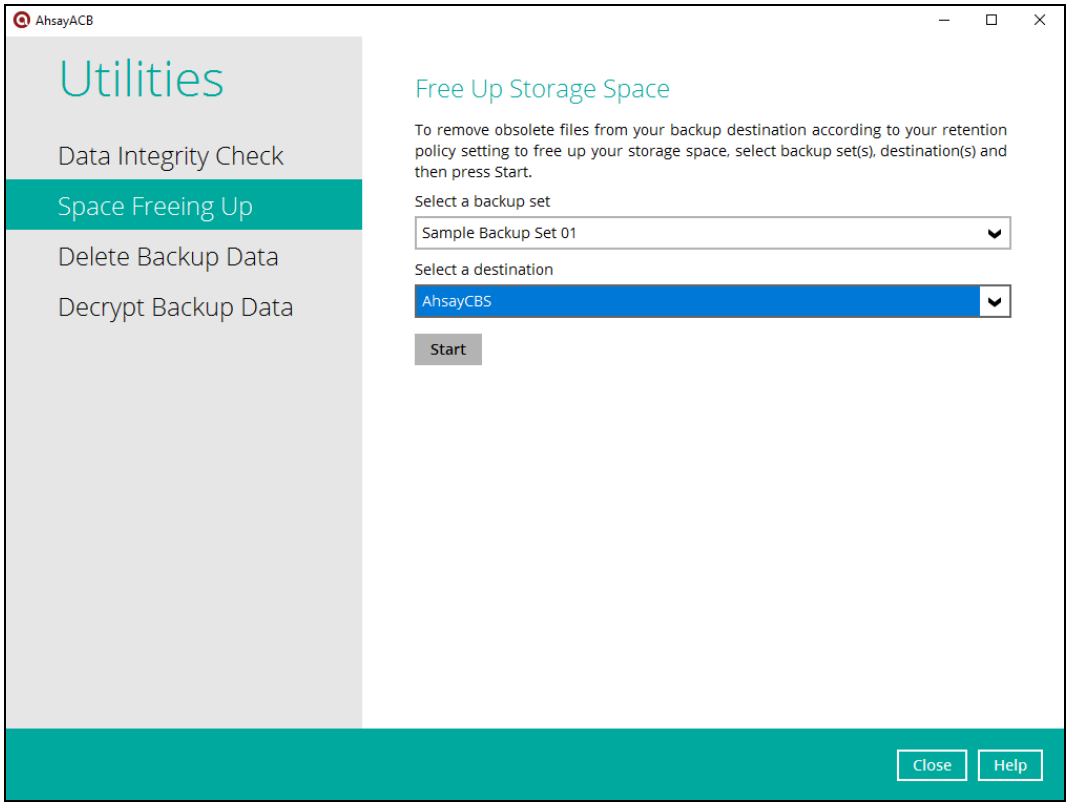
If you select a specific backup set then you will also have to select a specific destination or all destinations.

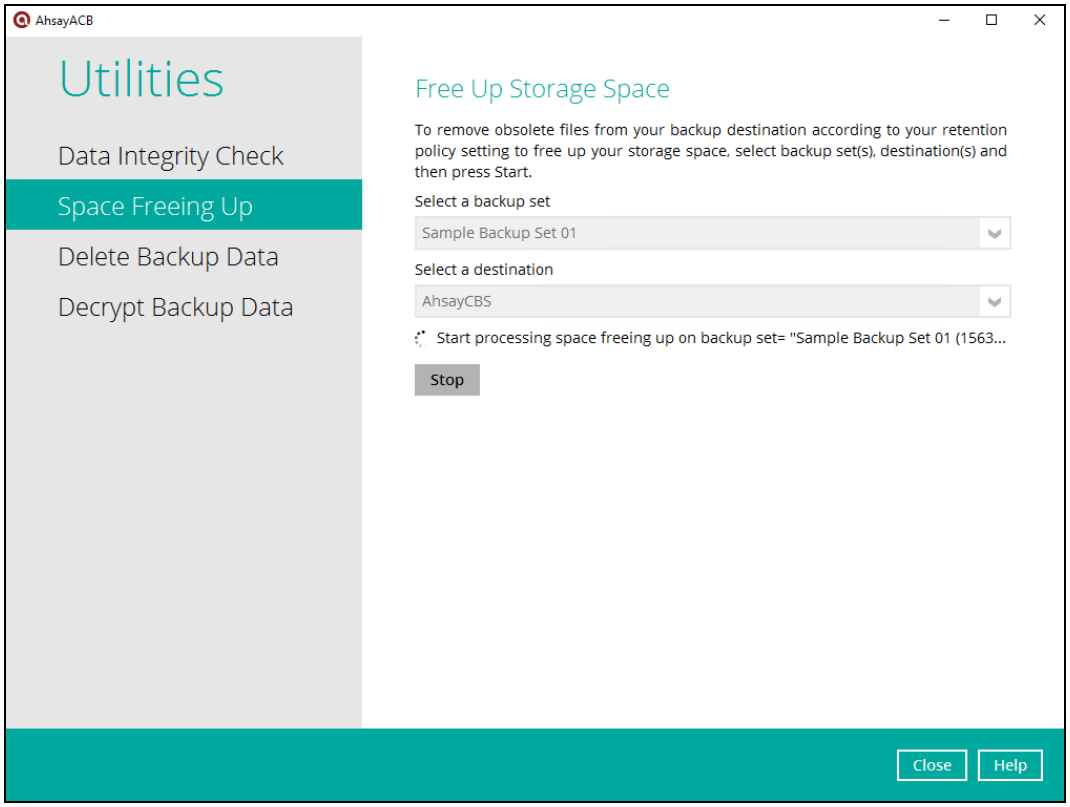


If you select All backup sets then there's no need to select a destination.

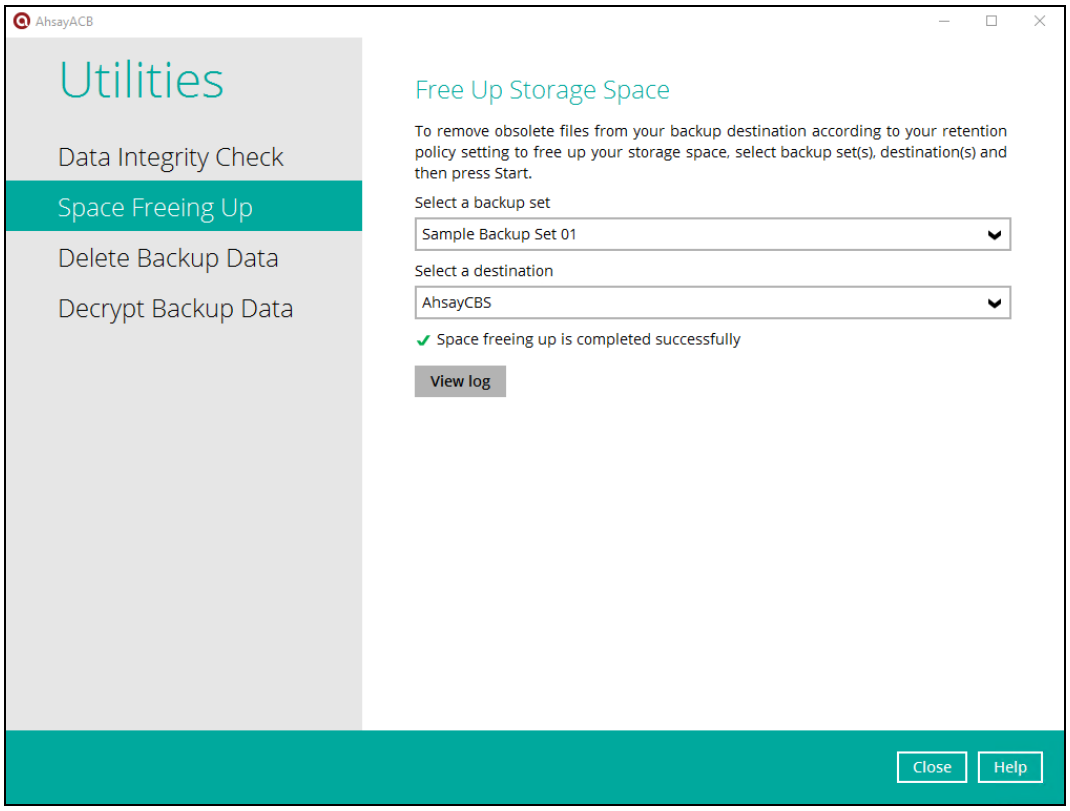


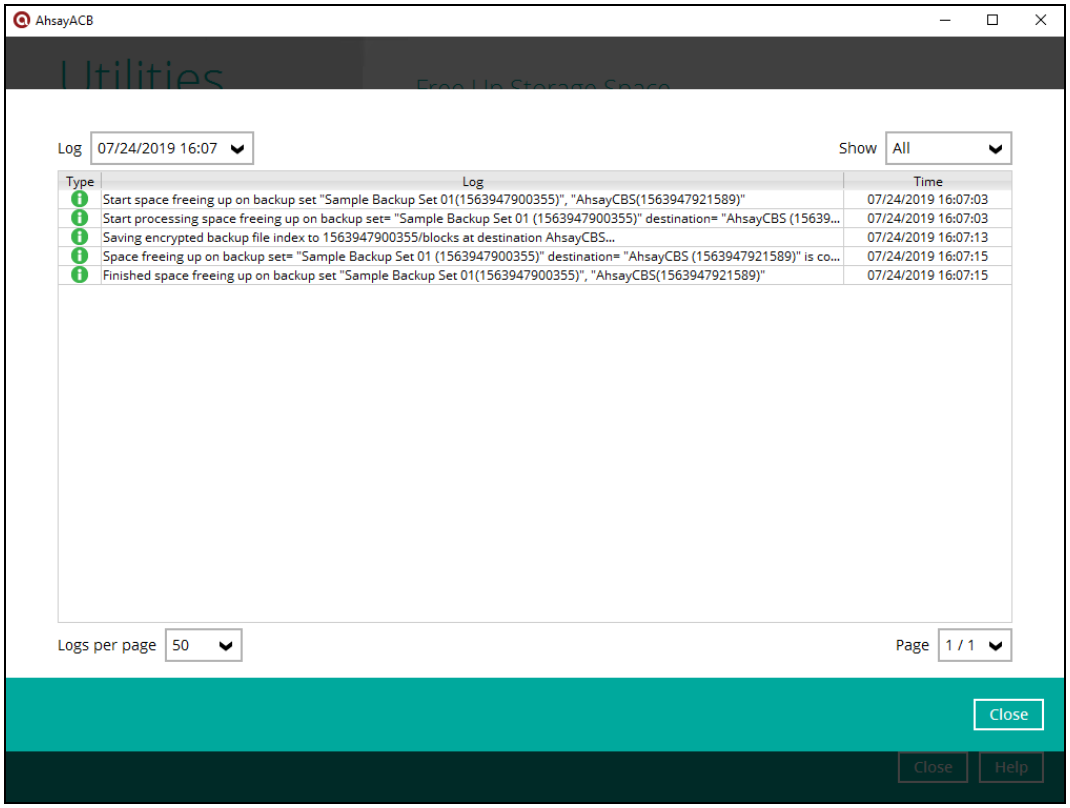
2. Click the [Start] button to perform space free up.





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



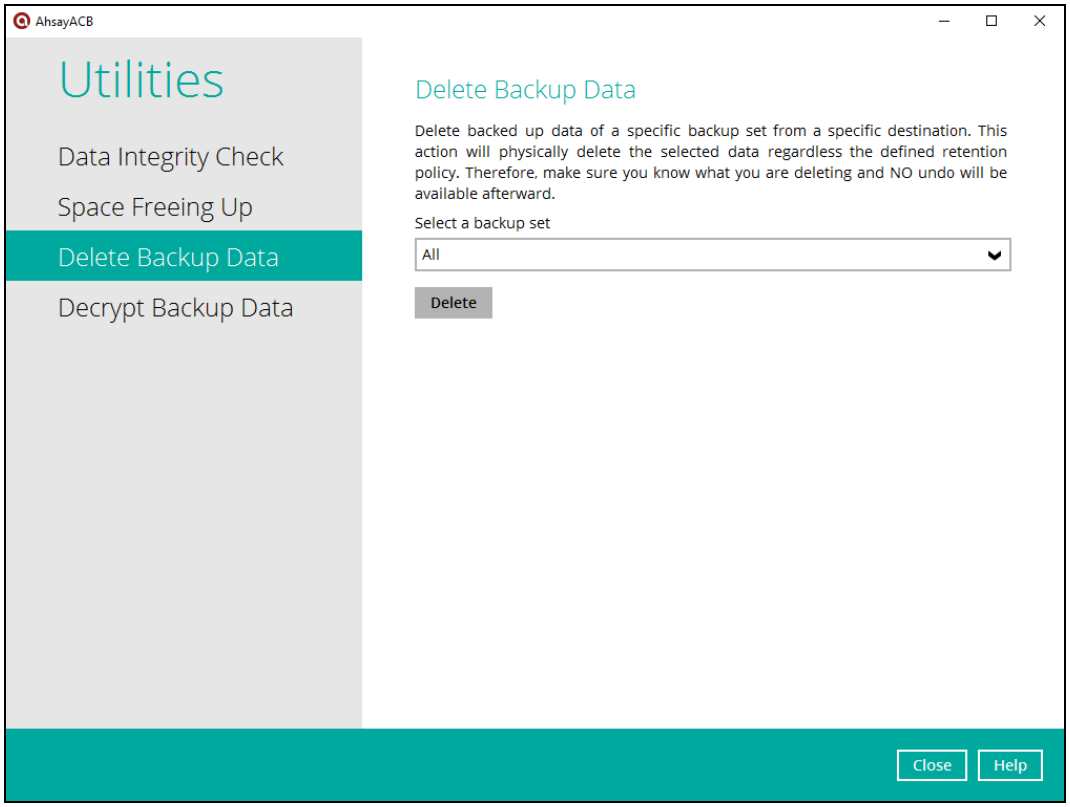


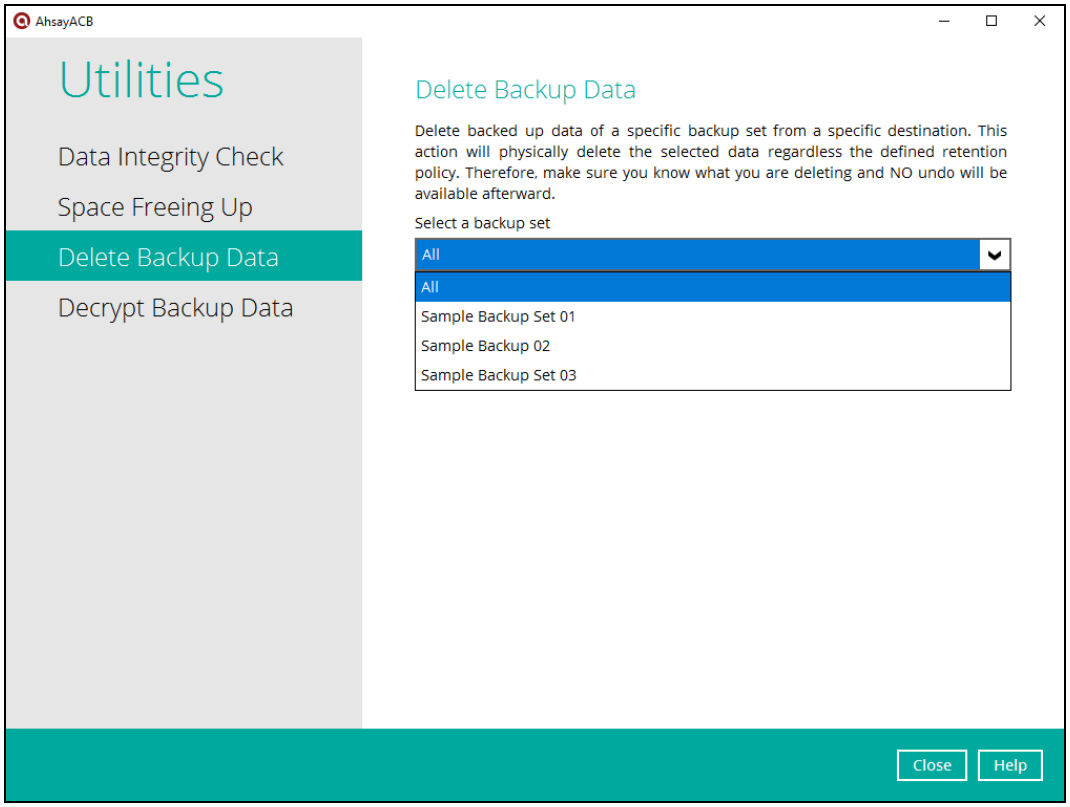
Delete Backup Data

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

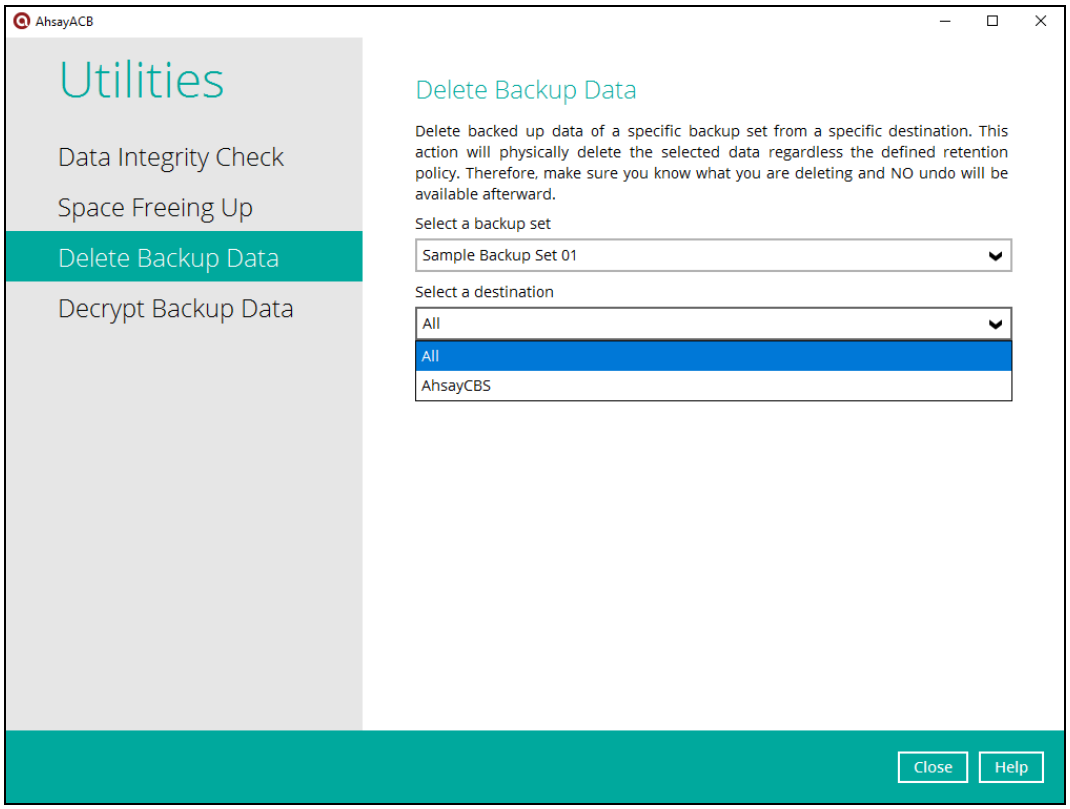
To perform deletion of backup data, follow the instructions below:

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

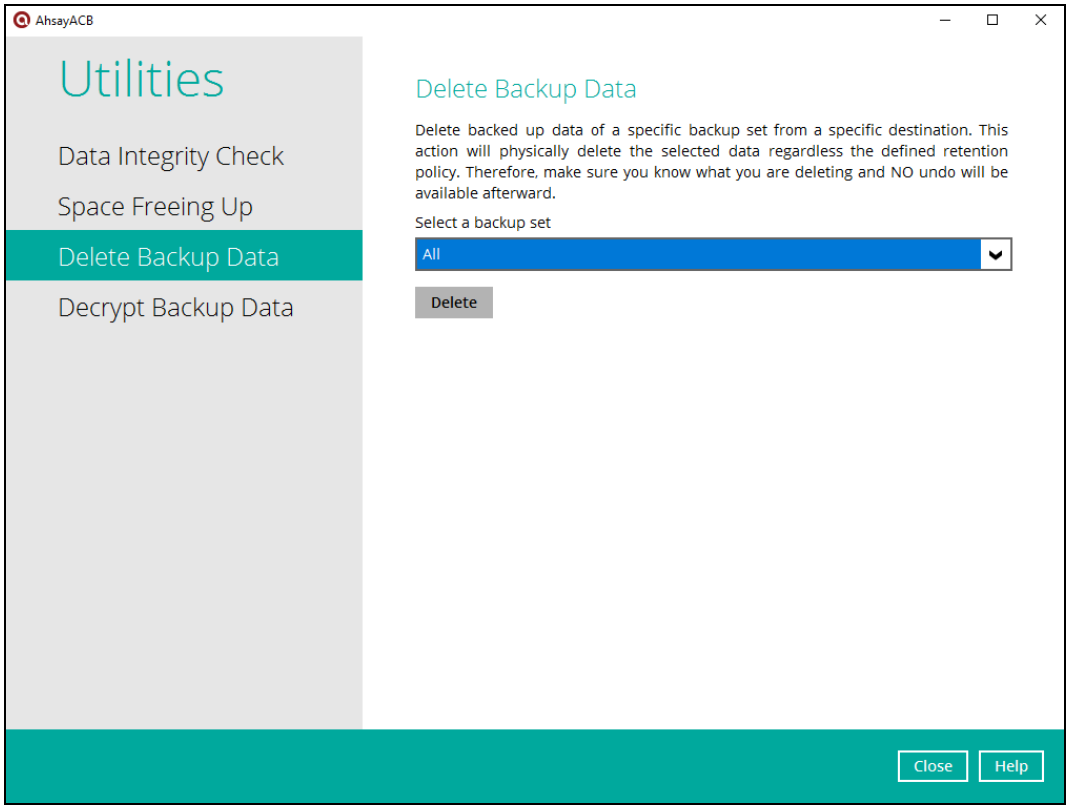




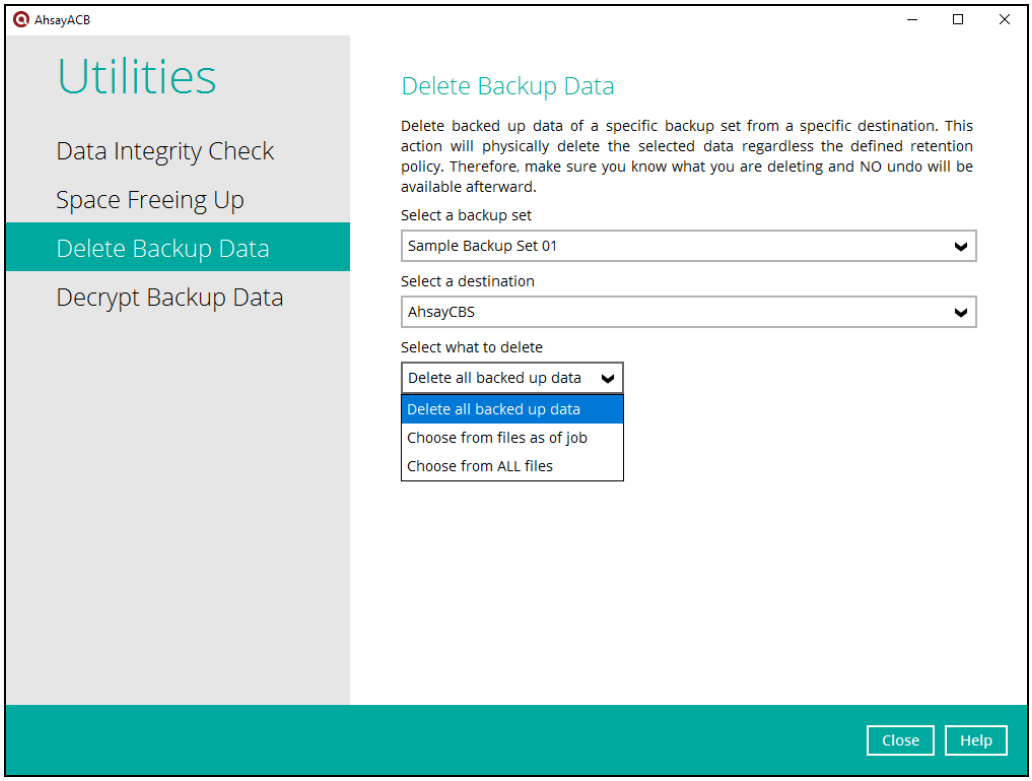
If you select a specific backup set then you will also have to select a specific destination or all destinations.



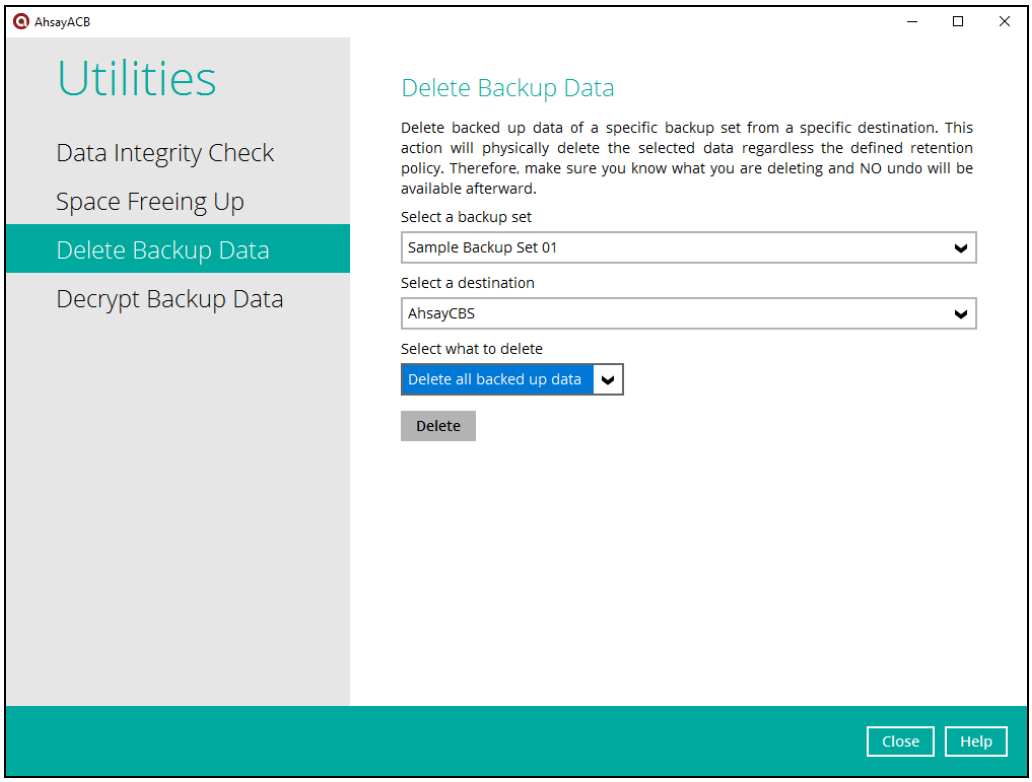
If you select All backup sets then there's no need to select a destination.



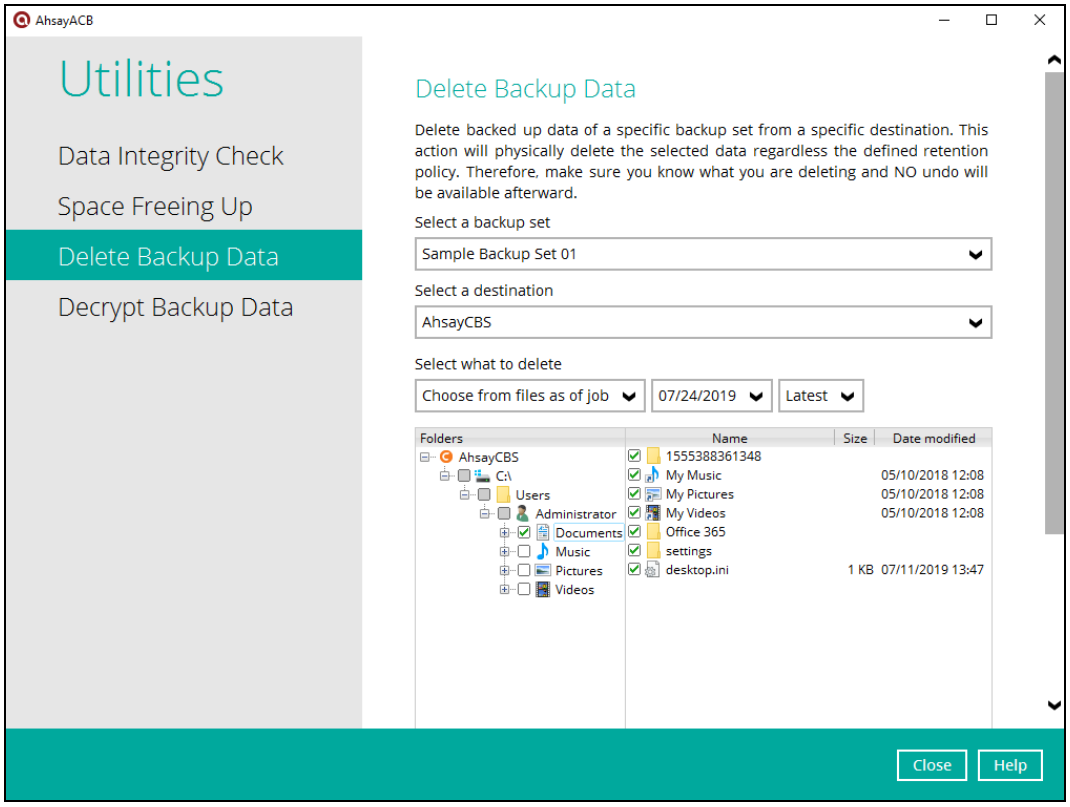
2. There are three (3) options for the type of files you wish to delete.
    - Delete all backed up data
    - Choose from files as of job
    - Choose from ALL files



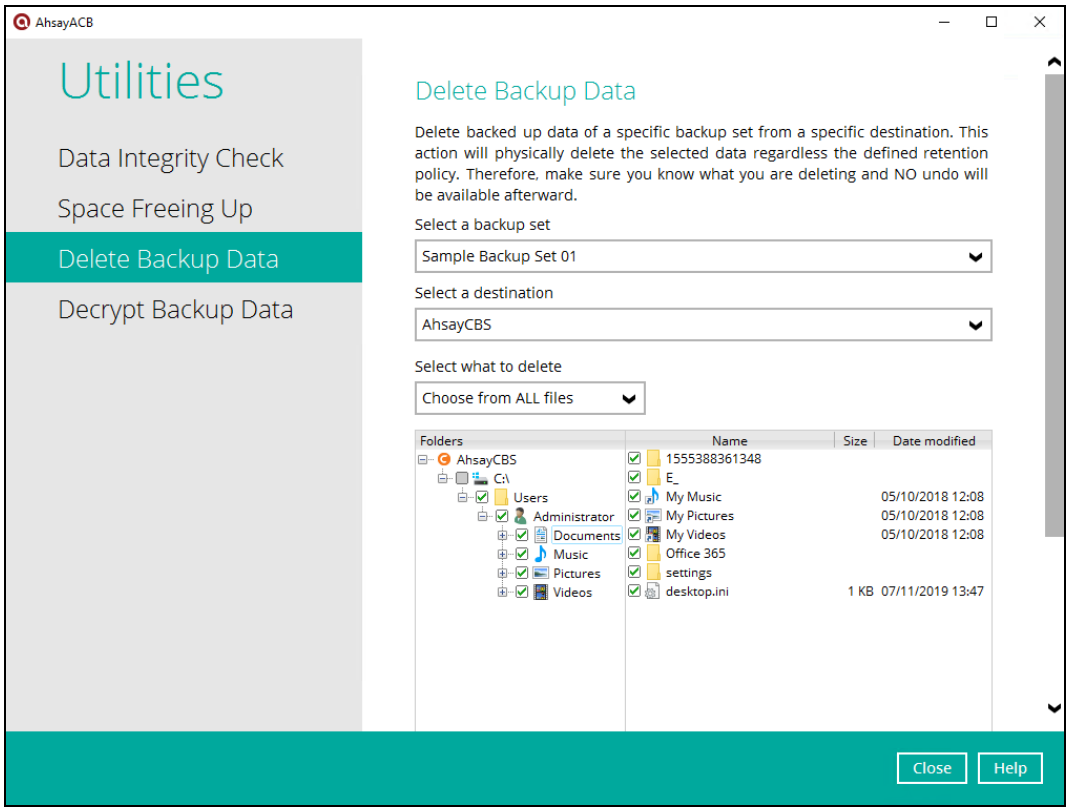
Delete all backed up data, all the data in the selected backup set and destination will be removed.



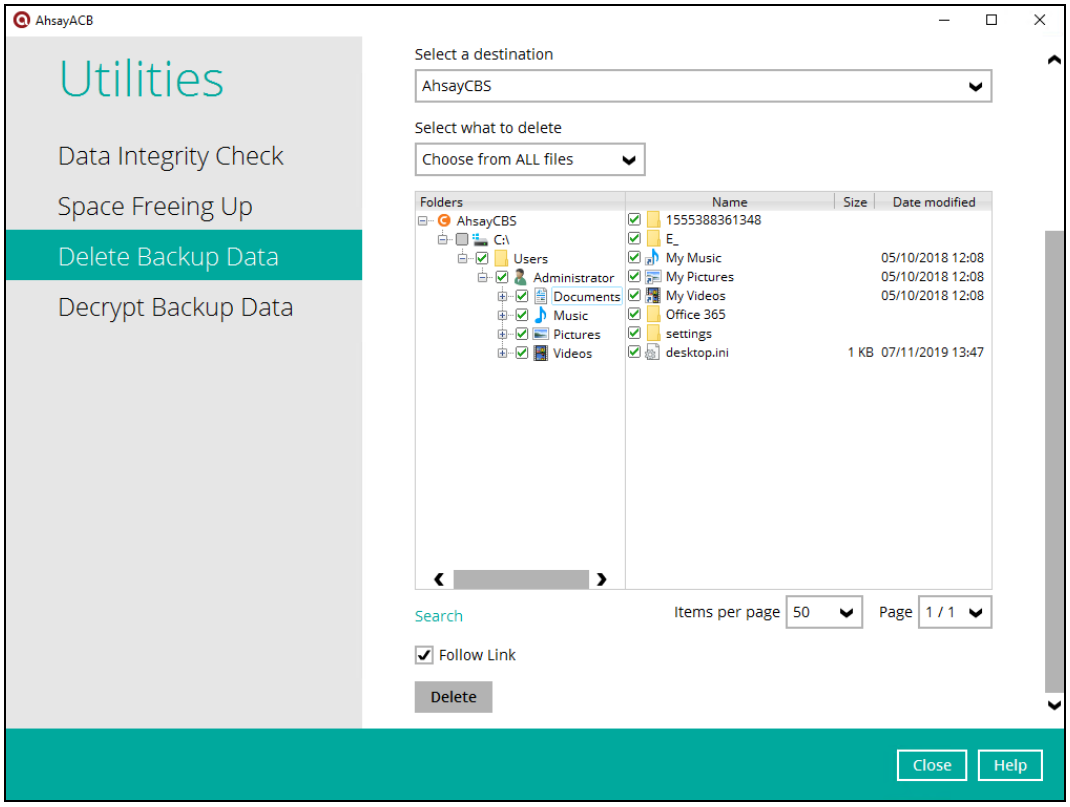
Choose from files as of job, all selected files from a backup snapshot will be removed.

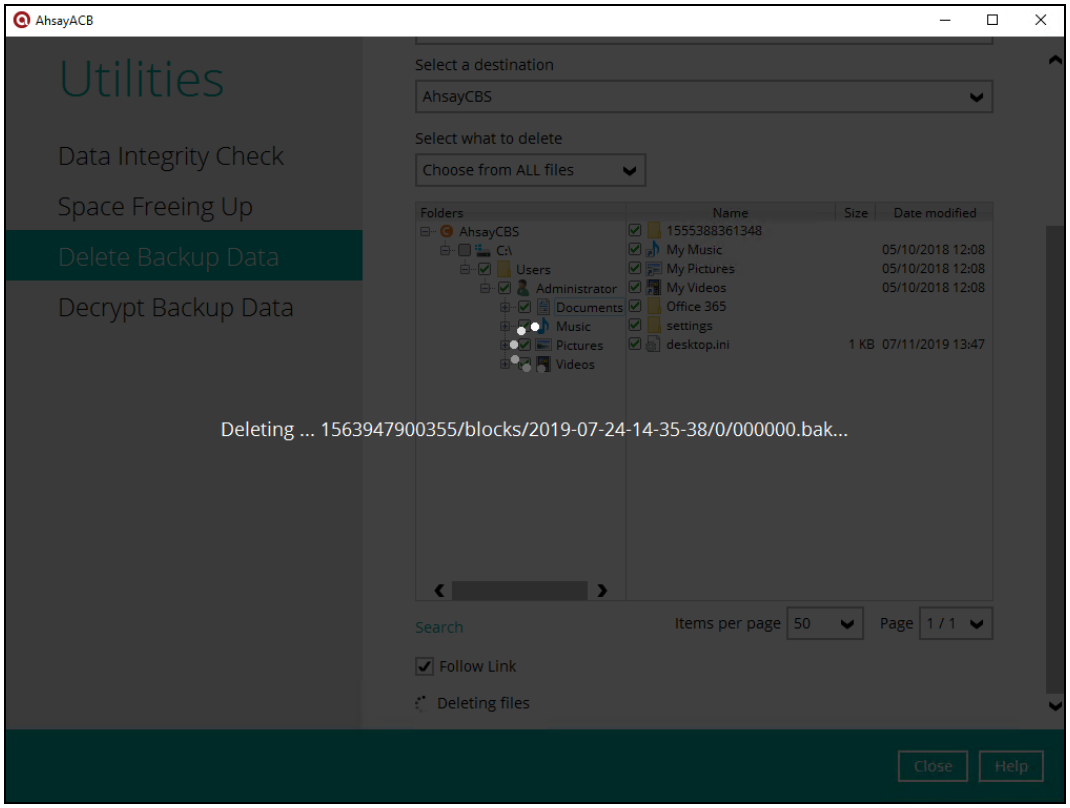


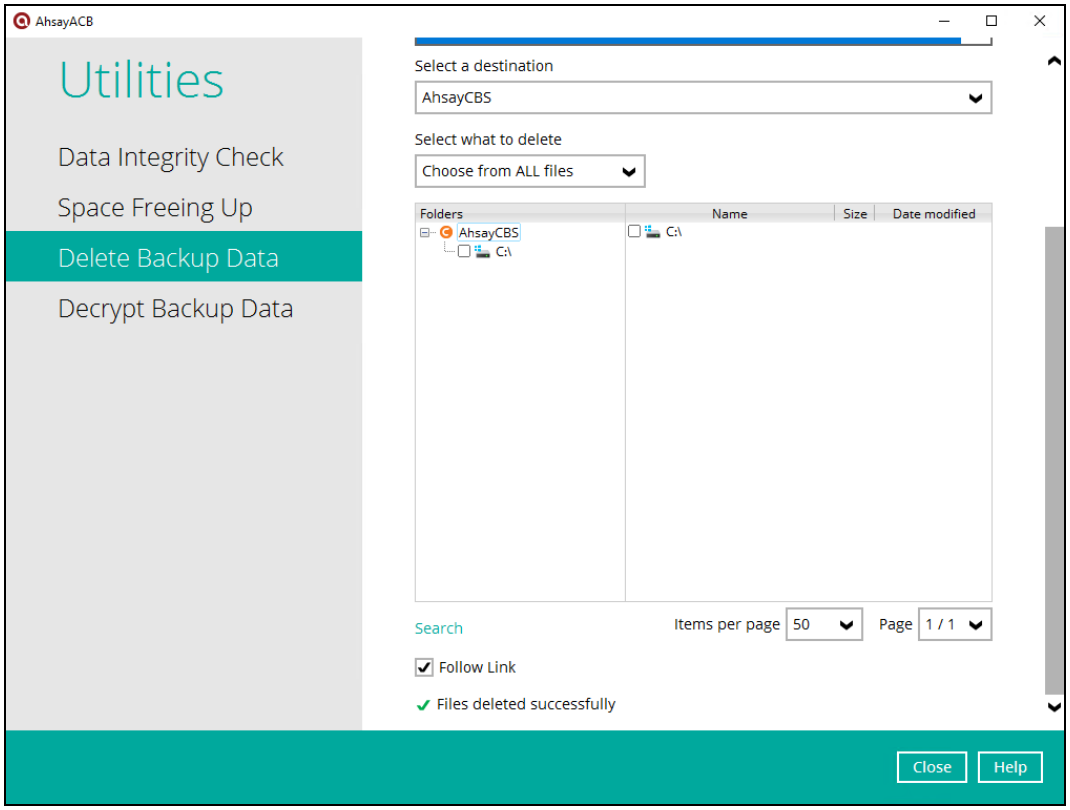
Choose from ALL files, all selected files in the backup set will be removed.



3. Click the [Delete] button to perform deletion of files.

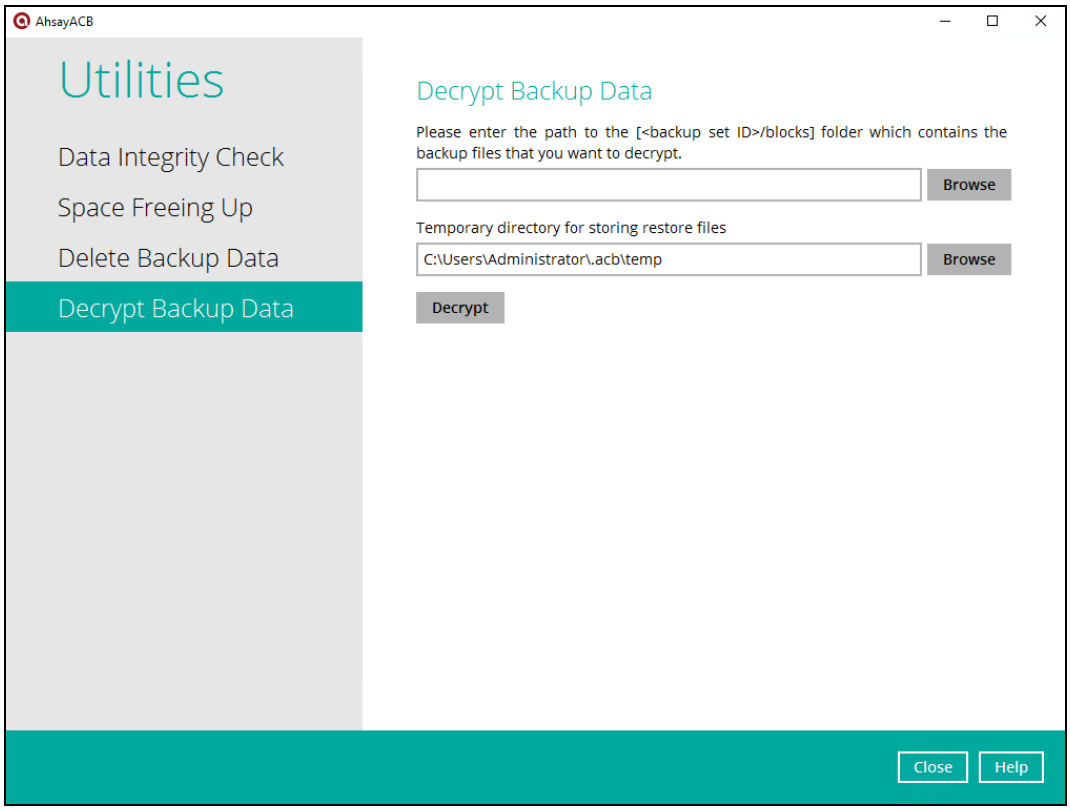





AhsayACB
Utilities
Data Integrity Check
Space Freeing Up
Delete Backup Data
Decrypt Backup Data
Select a destination
AhsayCBS
Select what to delete
Choose from ALL files
Folders
Name
Size
Date modified
AhsayCBS
C:\
C:\
Search
Items per page
50
Page
1 / 1
Follow Link
Files deleted successfully
Close
Help

Decrypt Backup Data

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

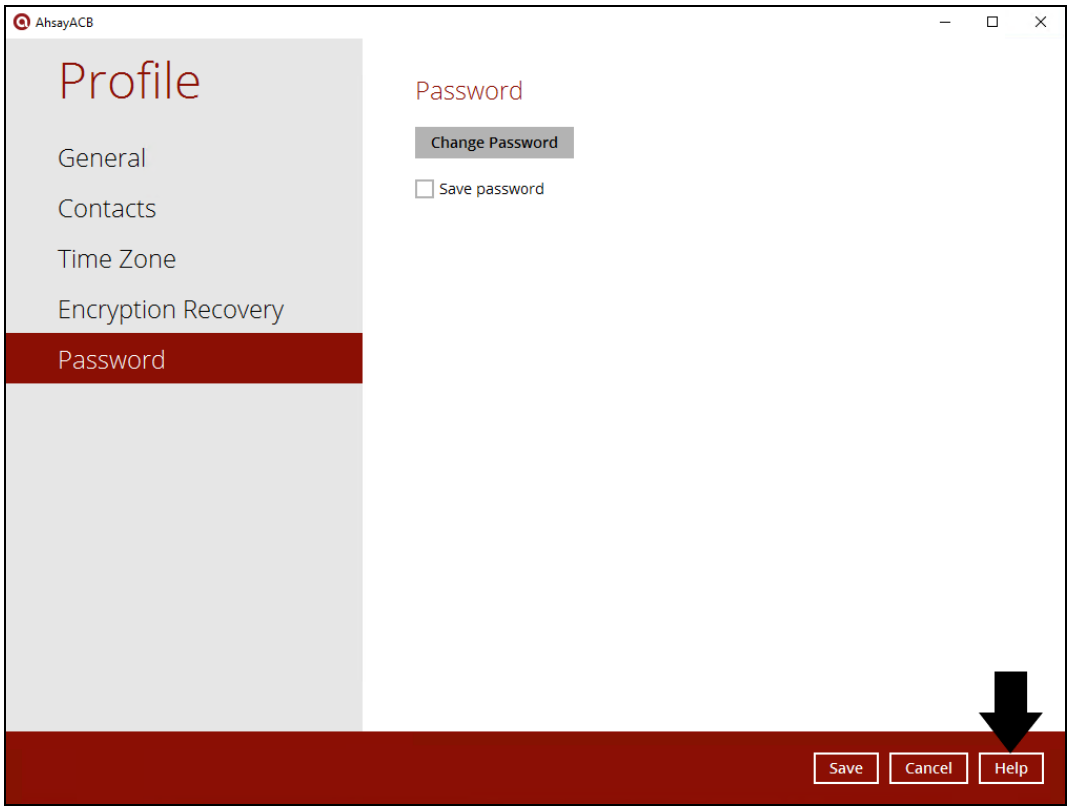


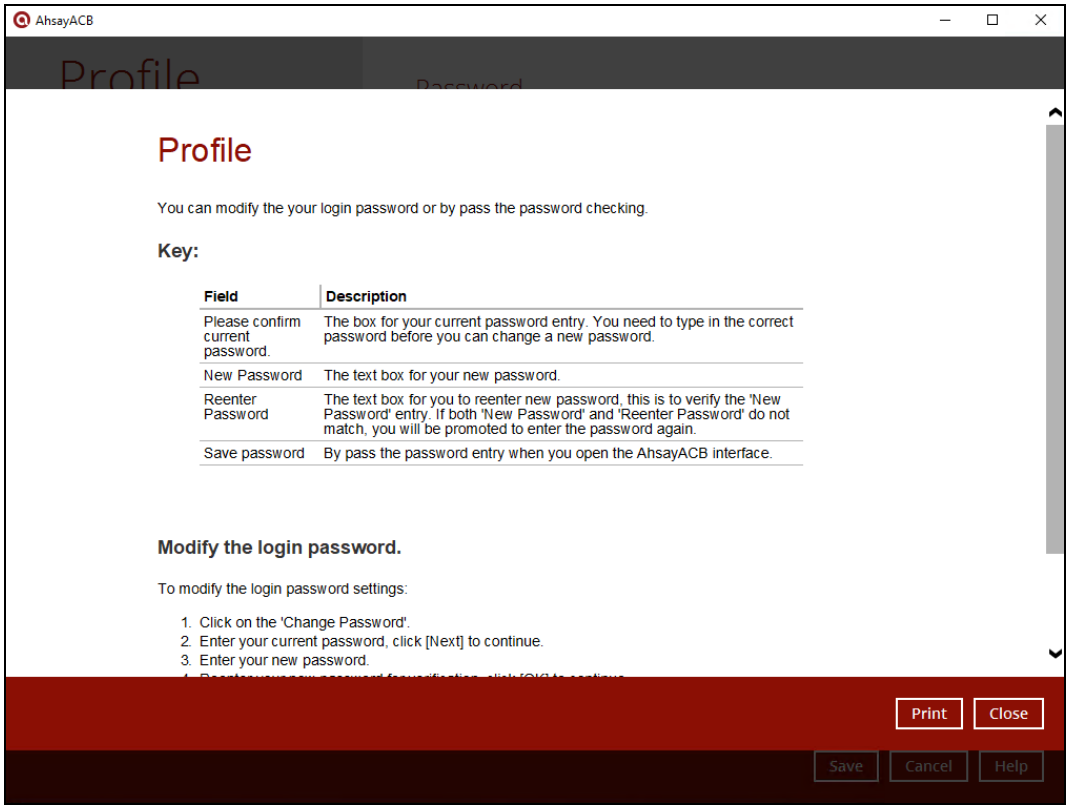
To perform decryption of backup data, follow the instructions below:

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.
3. Click the [Decrypt] button to begin.

Online Help

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

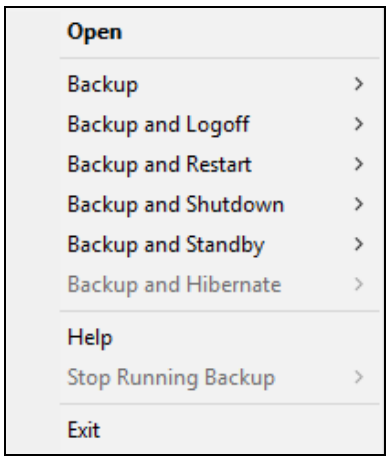




System Tray

This allows the user to see the AhsayACB icon which has a control menu. It is located at the lower right corner of the screen.

Right click the AhsayACB icon to view the control menu:

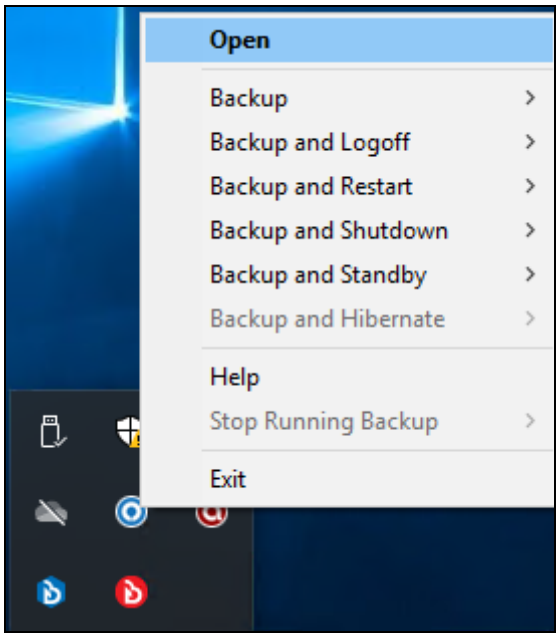


AhsayACB system tray has ten (10) controls:

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

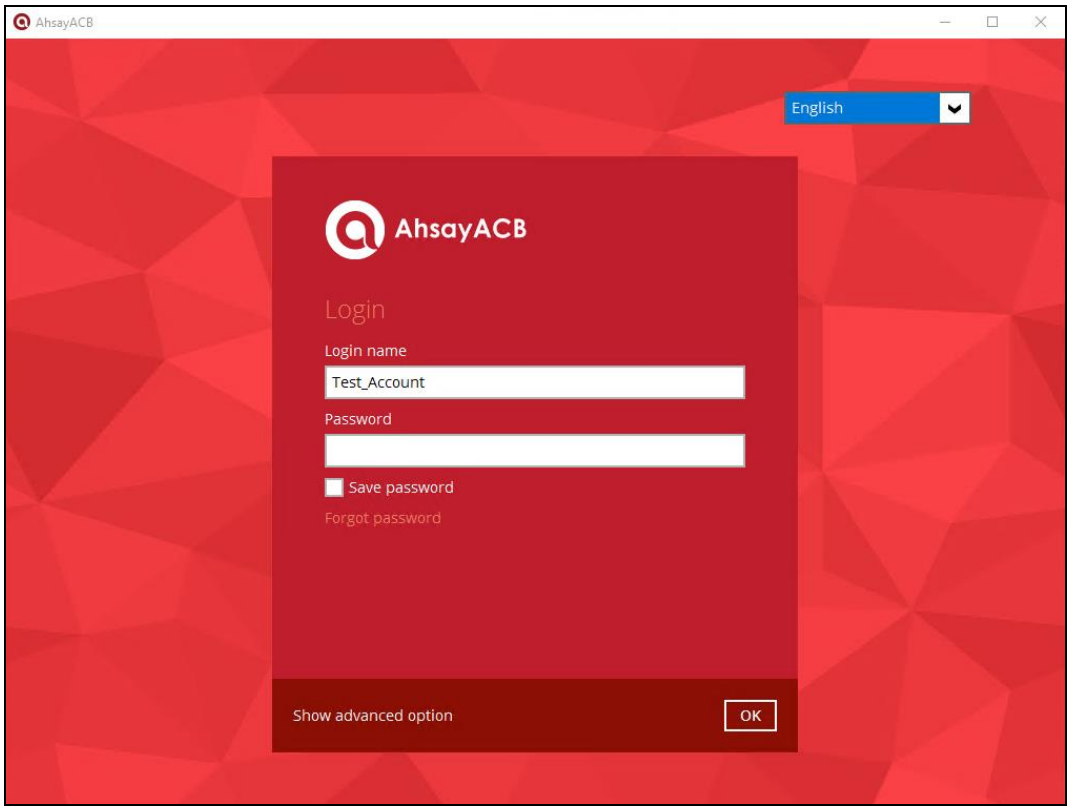
Open

This allows the user to launch and open AhsayACB.



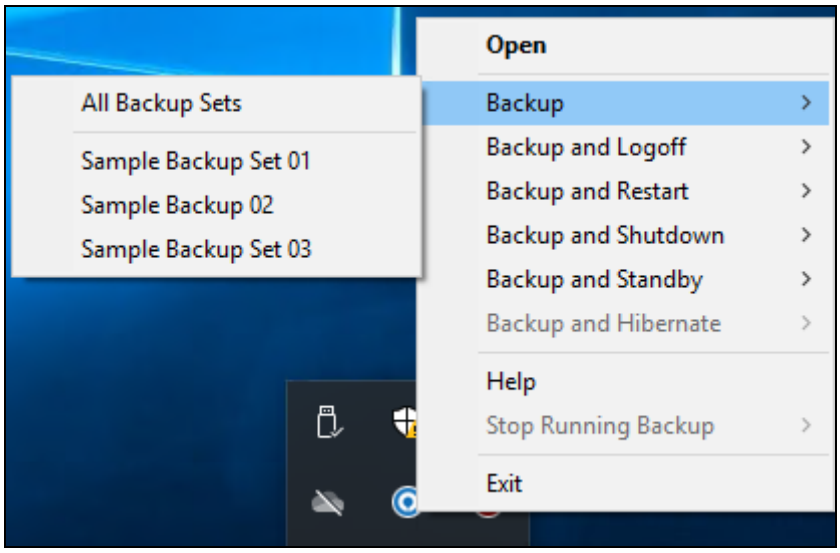
To launch and open AhsayACB via the System tray, follow the instructions below:

1. Right click the AhsayACB icon.
2. Click [Open].
3. AhsayACB will appear.



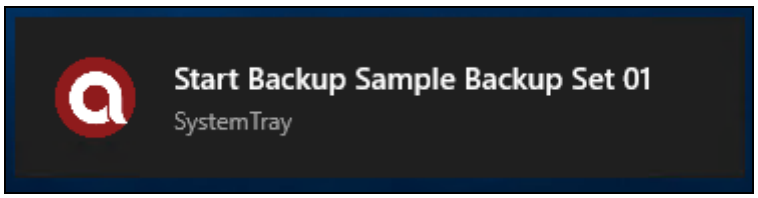
Backup

This allows the user to perform backup without opening AhsayACB.

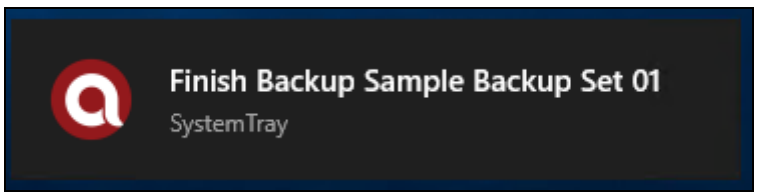


To start the backup via the System tray, follow the instructions below:

1. Right click the AhsayACB icon.
2. Click [Backup].
3. Select a backup set from the available list or select all.
4. A pop-up message will appear stating that the backup is starting to backup.

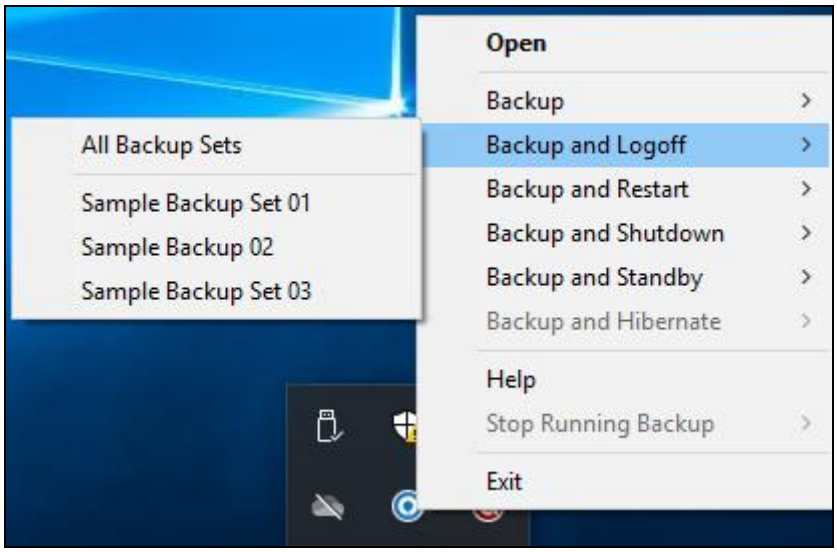


5. After the backup, a pop-up message will appear again stating that the backup is done.



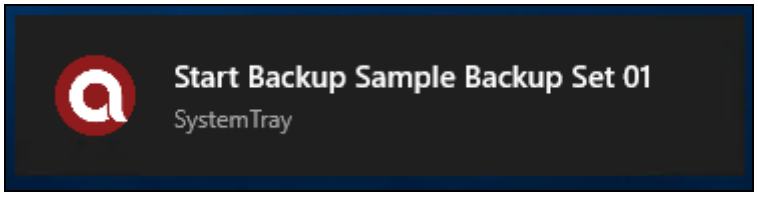
Backup and Logoff

This allows the user to log off from Windows once the backup job is done without opening AhsayACB.

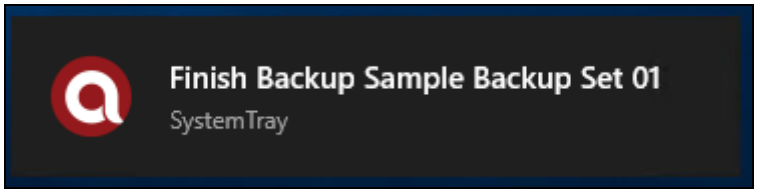


To log off from Windows after the backup job via the System tray, follow the instructions below:

1. Right click the AhsayACB icon.
2. Click [Backup and Logoff].
3. Select a backup set from the available list or select all.
4. A pop-up message will appear stating that the backup is starting to backup.



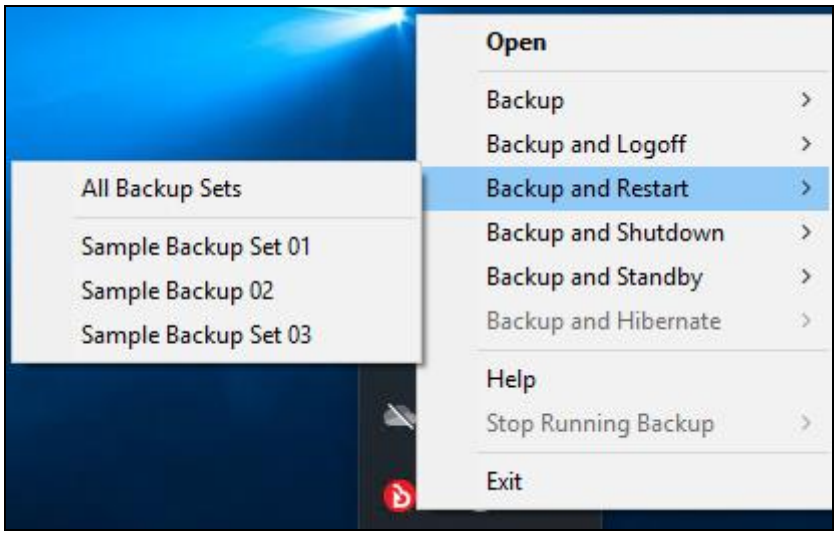
5. After the backup, a pop-up message will appear again stating that the backup is done.



6. Once the backup is done, the User will be automatically logged off from Windows.

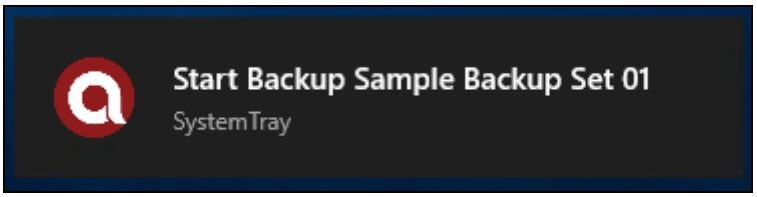
Backup and Restart

This allows the user to restart the machine once the backup job is done without opening the AhsayACB.

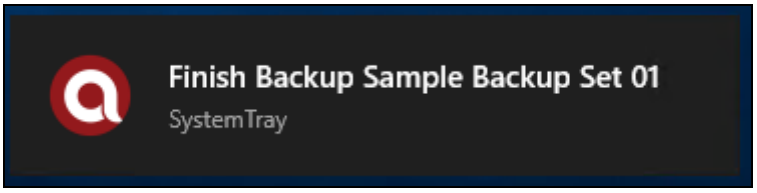


To restart the machine after the backup job via the System tray, follow the instructions below:

1. Right click the AhsayACB icon.
2. Click [Backup and Restart].
3. Select a backup set from the available list or select all.
4. A pop-up message will appear stating that the backup is starting to backup.



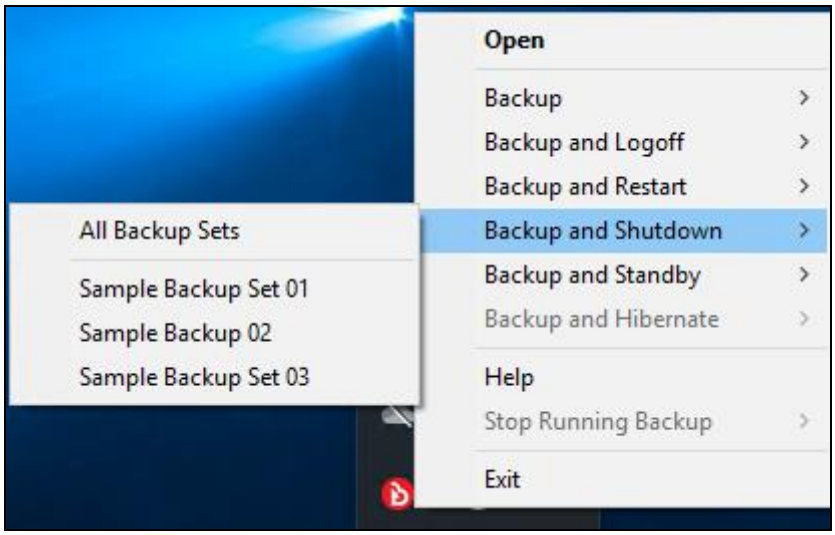
5. After the backup, a pop-up message will appear again stating that the backup is done.



6. Once the backup is done, the machine will restart.

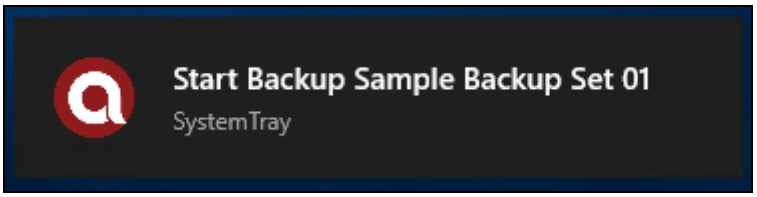
Backup and Shutdown

This allows the user to shut down the machine once the backup job is done without opening AhsayACB.

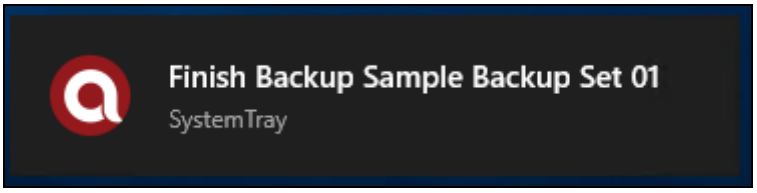


To shut down the machine after the backup job via the System tray, follow the instructions below:

1. Right click the AhsayACB icon.
2. Click [Backup and Shutdown].
3. Select a backup set from the available list or select all.
4. A pop-up message will appear stating that the backup is starting to backup.



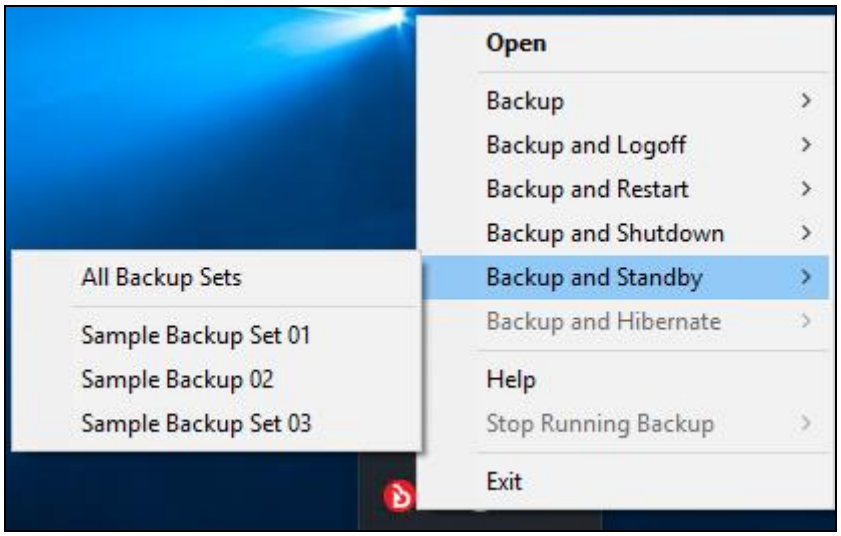
5. After the backup, a pop-up message will appear again stating that the backup is done.



6. Once the backup is done, the machine will shut down.

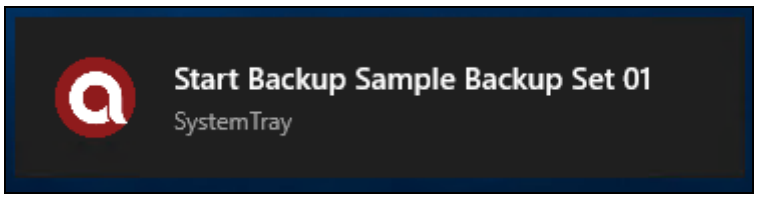
Backup and Standby

This allows the user to stand by the machine once the backup job is done without opening AhsayACB.

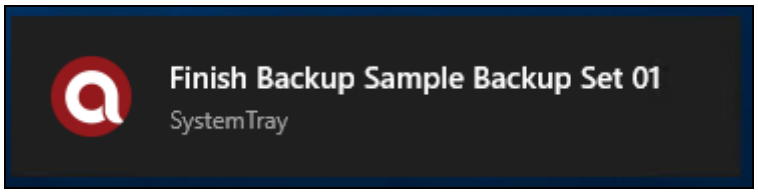


To stand by the machine after the backup job via the System tray, follow the instructions below:

1. Right click the AhsayACB icon.
2. Click [Backup and Standby].
3. Select a backup set from the available list or select all.
4. A pop-up message will appear stating that the backup is starting to backup.



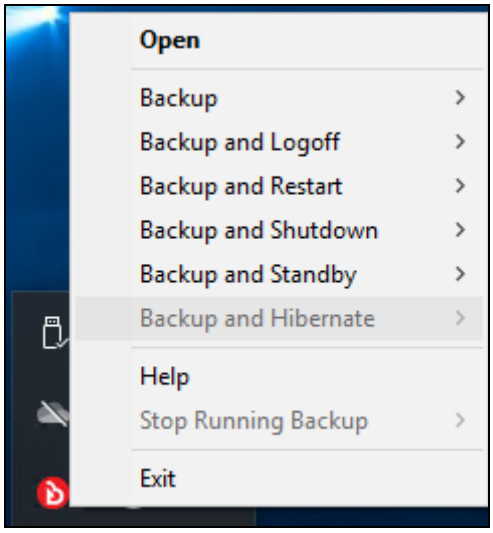
5. After the backup, a pop-up message will appear again stating that the backup is done.



6. Once the backup is done, the machine will standby.

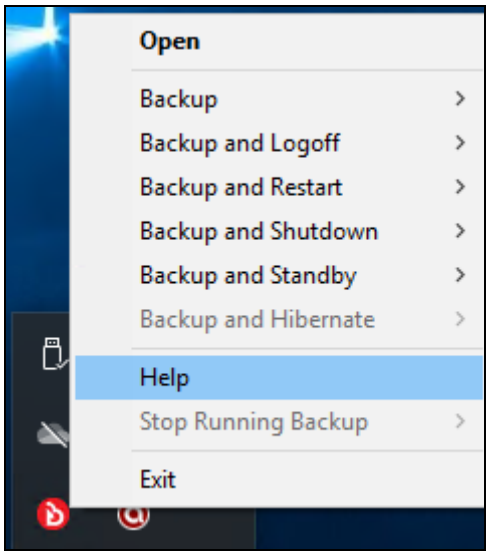
Backup and Hibernate

This allows the user to hibernate the machine once the backup job is done without opening AhsayACB. If the hibernate mode is not available on the windows version you are using then this will be disabled.



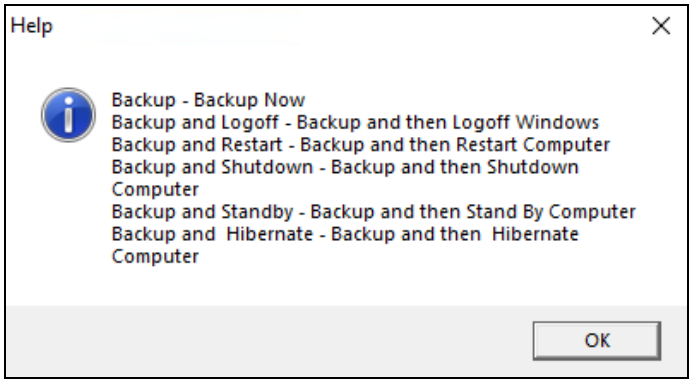
Help

This allows the user to see the list and brief descriptions of the control menu of the System tray.



To see the list and brief descriptions of the control menu of the System tray, follow the instructions below:

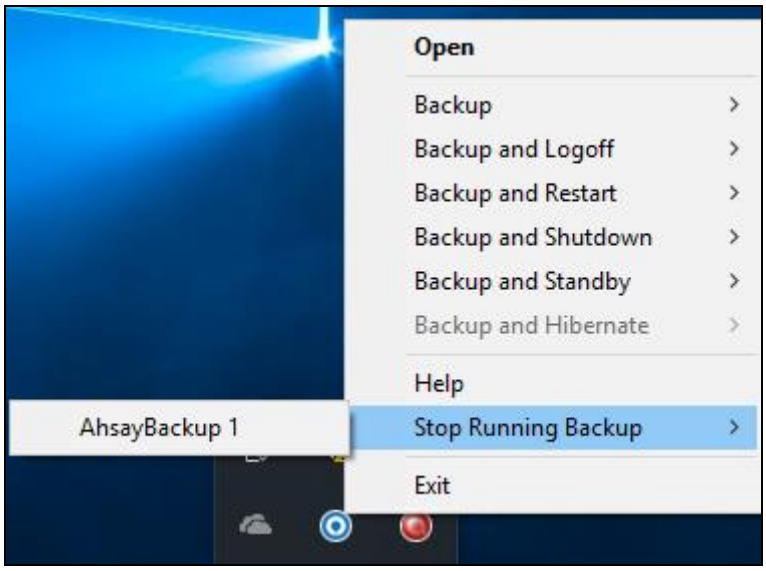
1. Right click the AhsayACB icon.
2. Click [Help].



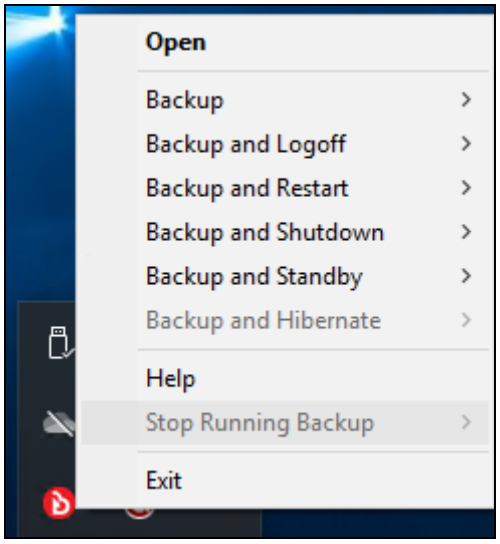
3. Click the [OK] button to exit from the window.

Stop Running Backup

This allows the user to stop the running manual, continuous, or scheduled backup job.

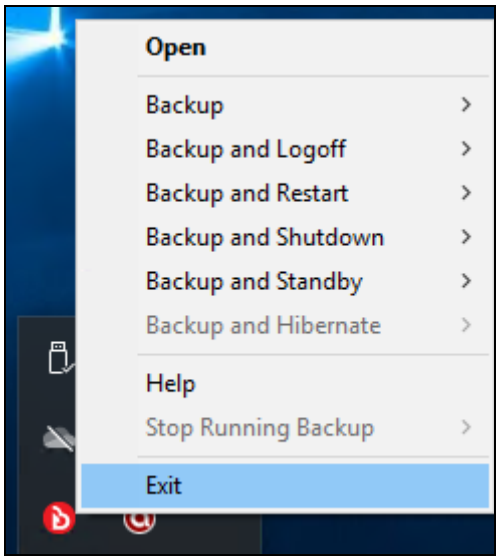


This will be disabled if there's no backup running.



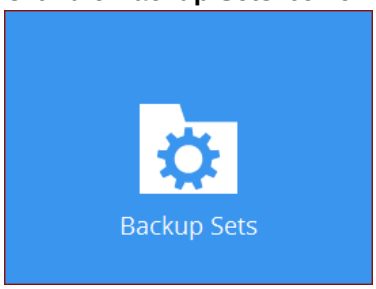
Exit

This allows the user to close the AhsayACB application including the AhsayACB icon at the taskbar.

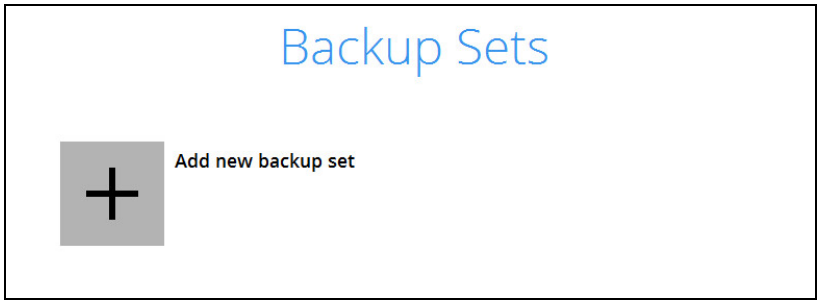


8 Create a Backup Set

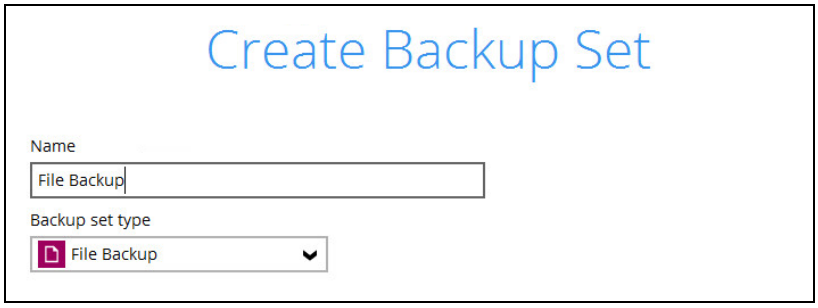
1. Click the **Backup Sets** icon on the AhsayACB main interface.



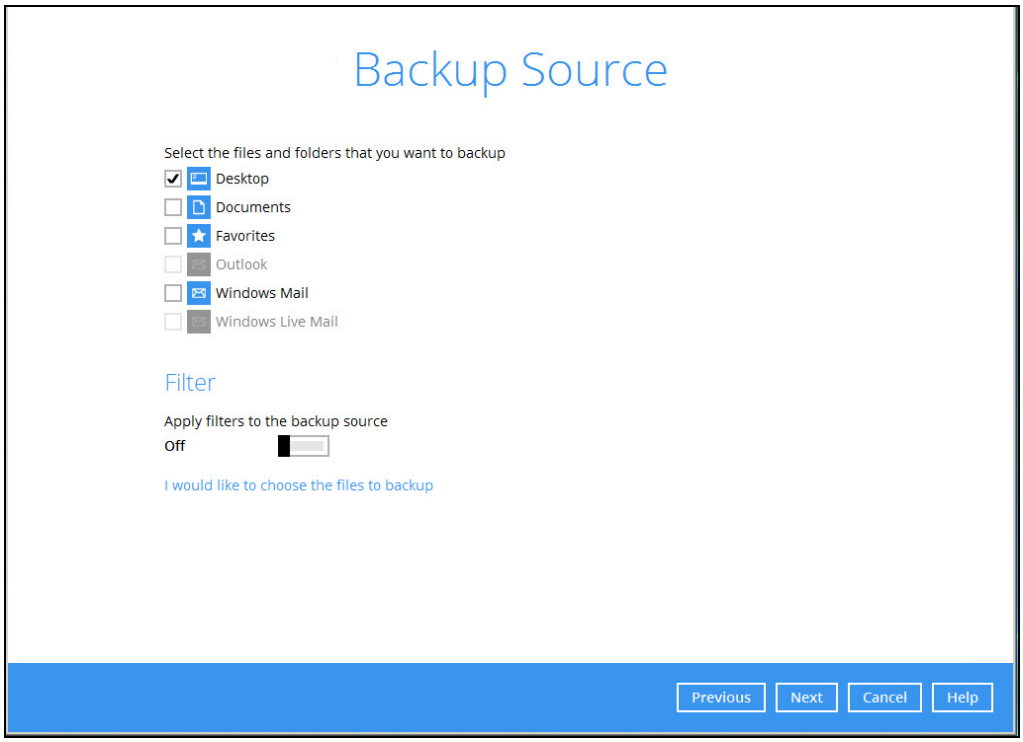
2. Create a new backup set by clicking the "**+**" icon next to **Add new backup set**.



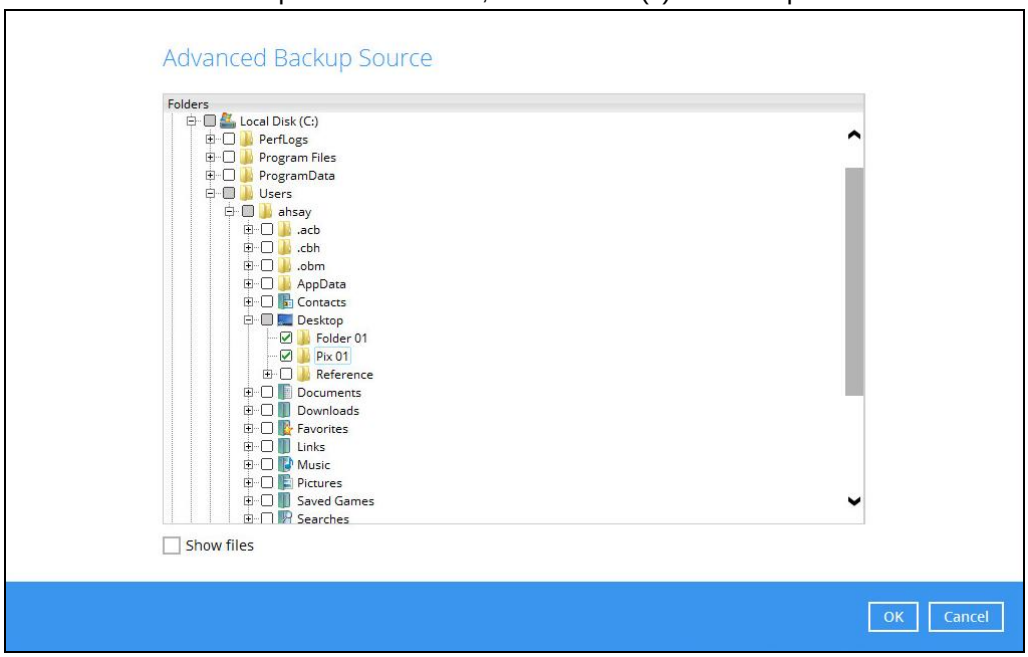
3. When the Create Backup Set window appears, name your new backup set and select the **Backup set type**. Then, click **Next** to proceed.



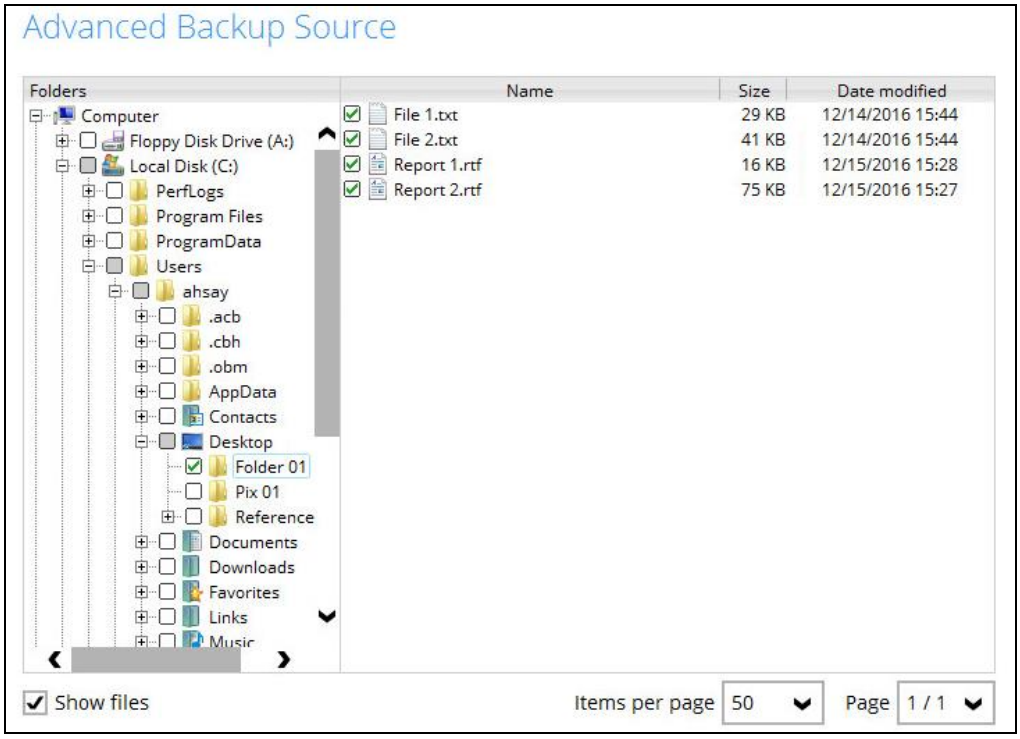
4. In the Backup Source window, select the files and folders for backup. Click **I would like to choose the files to backup** to select individual files for backup.



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



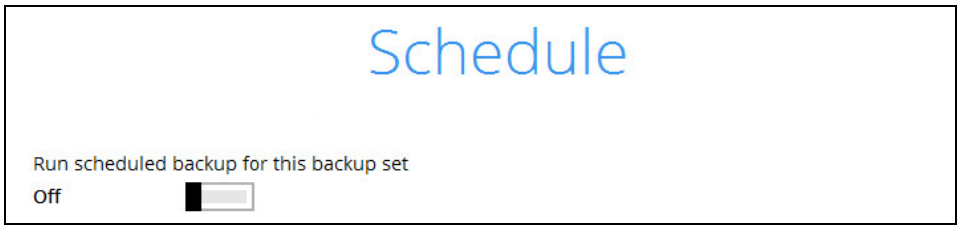
6. Alternatively, if you want to back up only specific files instead of all files in your selected folder(s), select the **Show files** checkbox at the bottom of the screen. A list of files will appear on the right hand side. Select the checkbox(es) next to the file(s) to back up. Then, click **OK**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



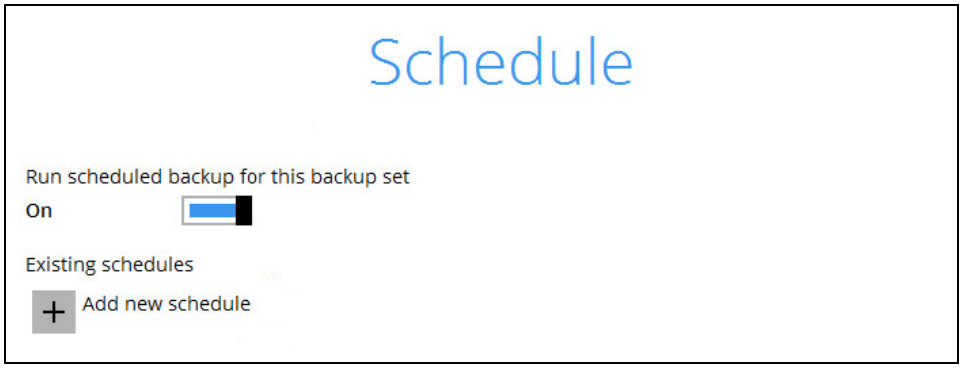
7. In the Backup Source window, click **Next** to proceed.

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.

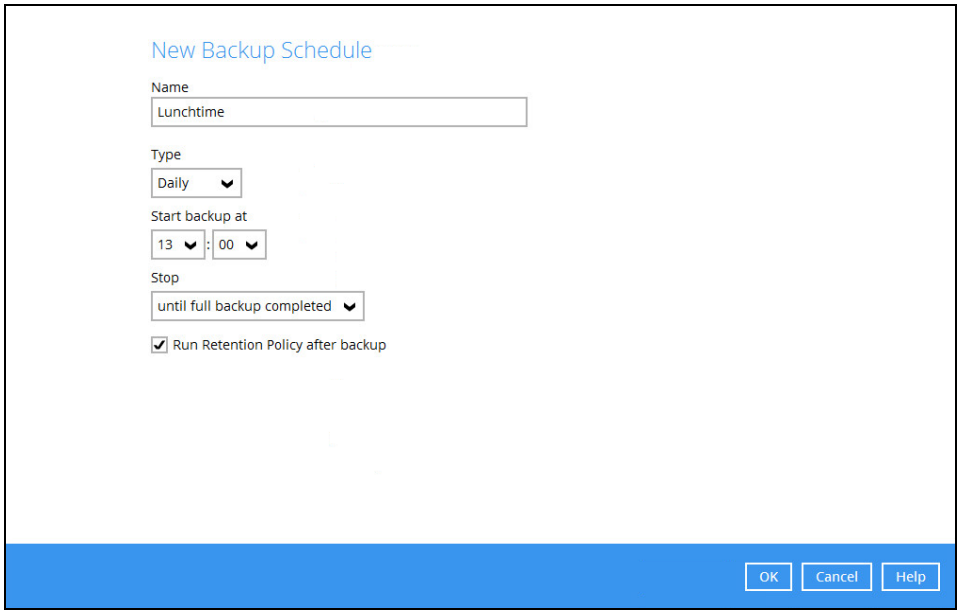
   - You can leave it as is if you want to add a schedule later.



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

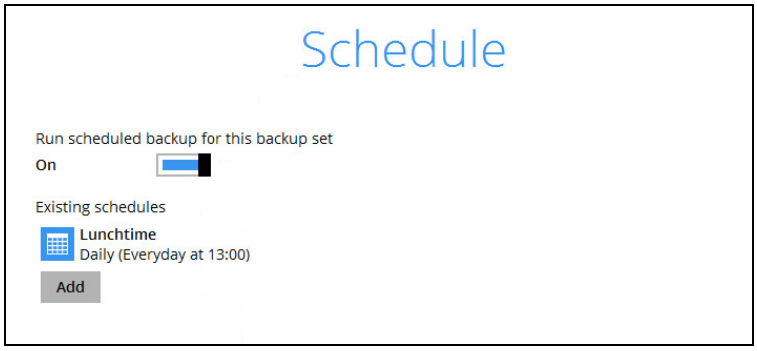


When the New Backup Schedule window appears, specify your backup schedule. Then, click **OK** to save your changes and close the New Backup Schedule window.

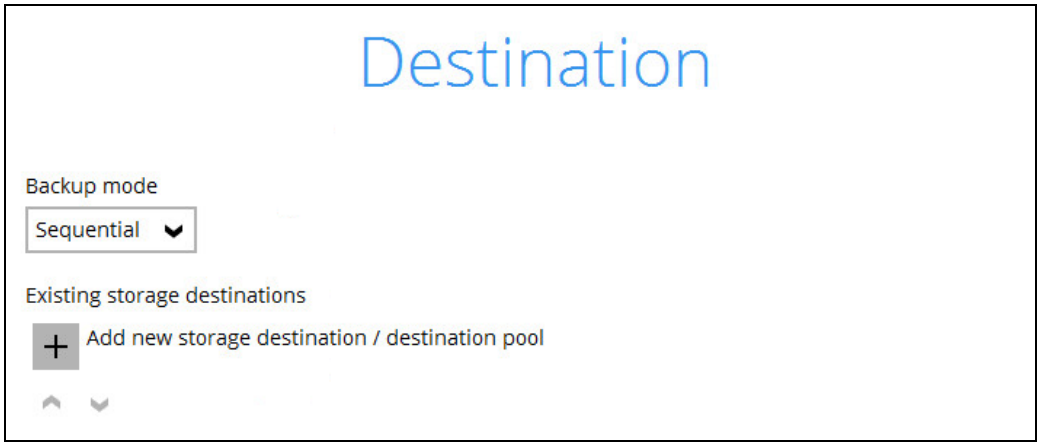


Note: For details about the options from the dropdown menus, please refer to chapter 8 Configure Backup Schedule for Automated Backup.

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.

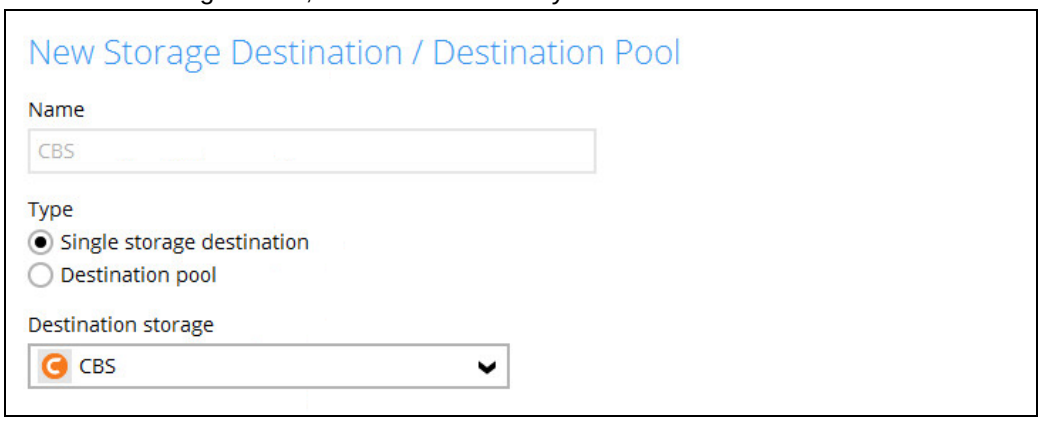


Select the appropriate option from the **Backup mode** dropdown menu.

- **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

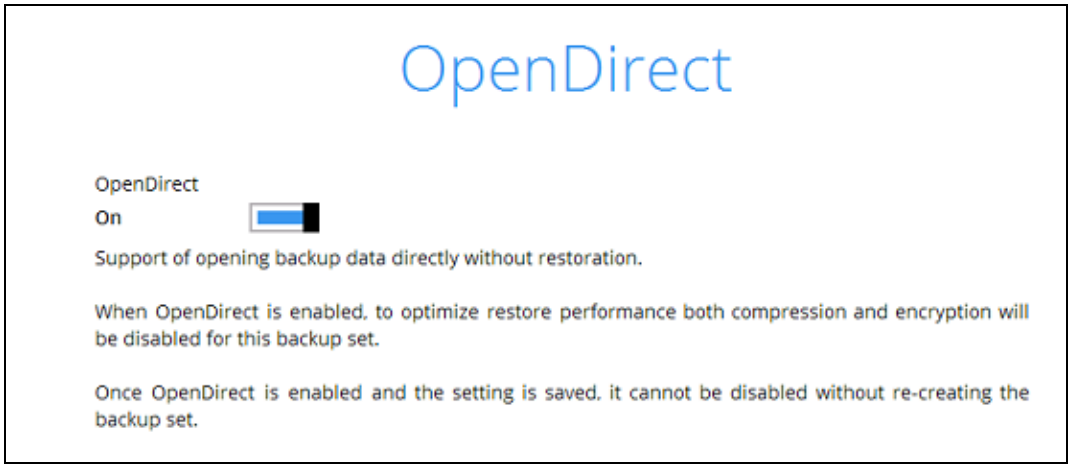
To select a backup destination for the backup data storage, click + next to **Add new storage destination / destination pool**.

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.



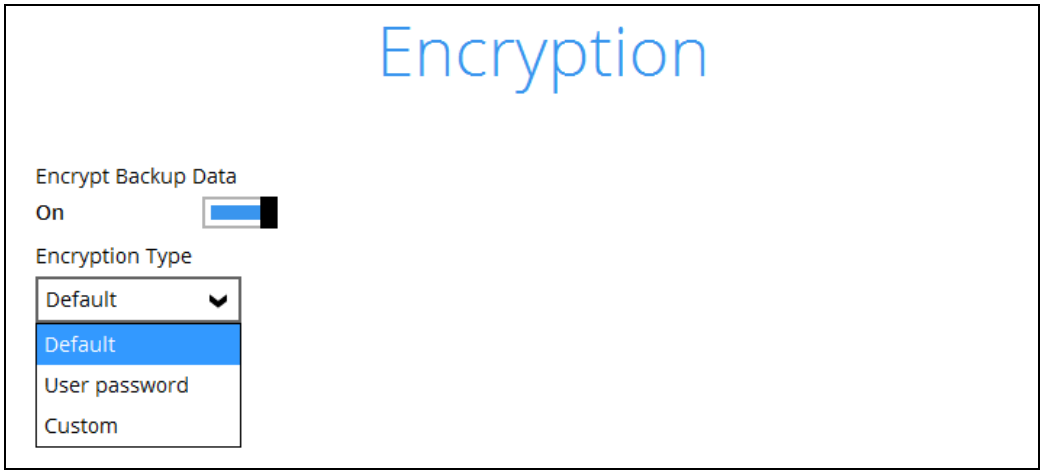
Note

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. 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.

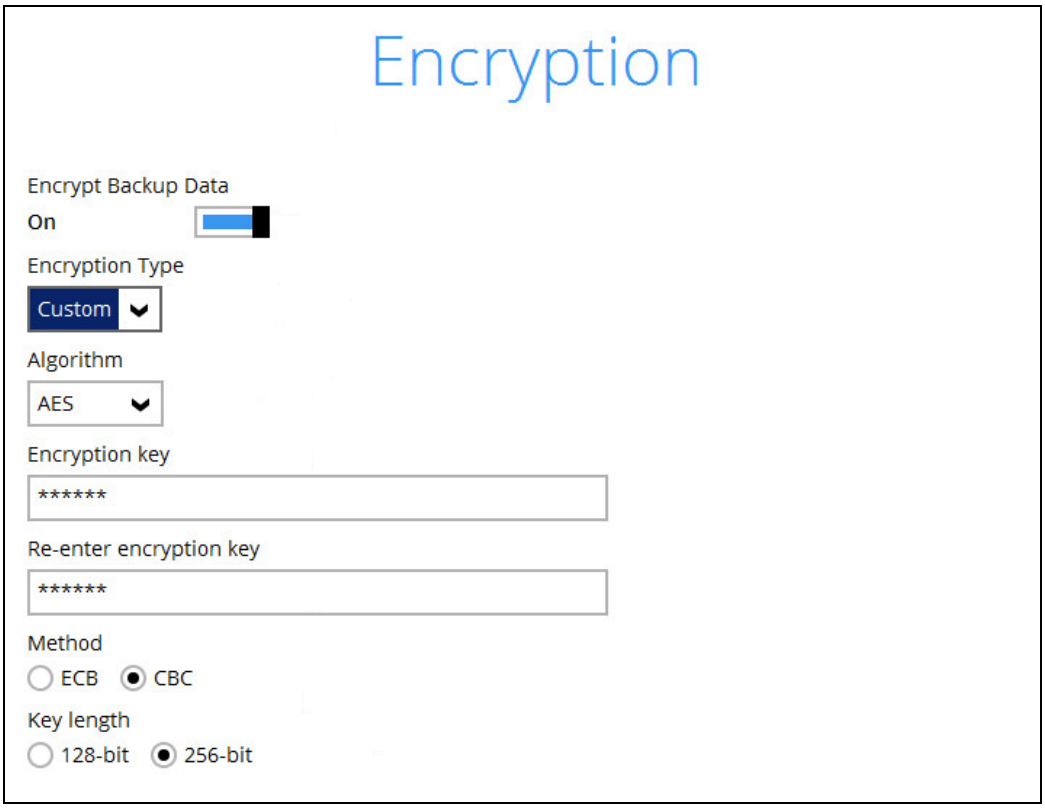


    You can choose from one of the following three Encryption Type options:

    - **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 AhsayACB at the time when this backup set is created. Please be reminded that if you

change the AhsayACB login password later, the encryption keys of the backup sets previously created with this encryption type will remain unchanged.

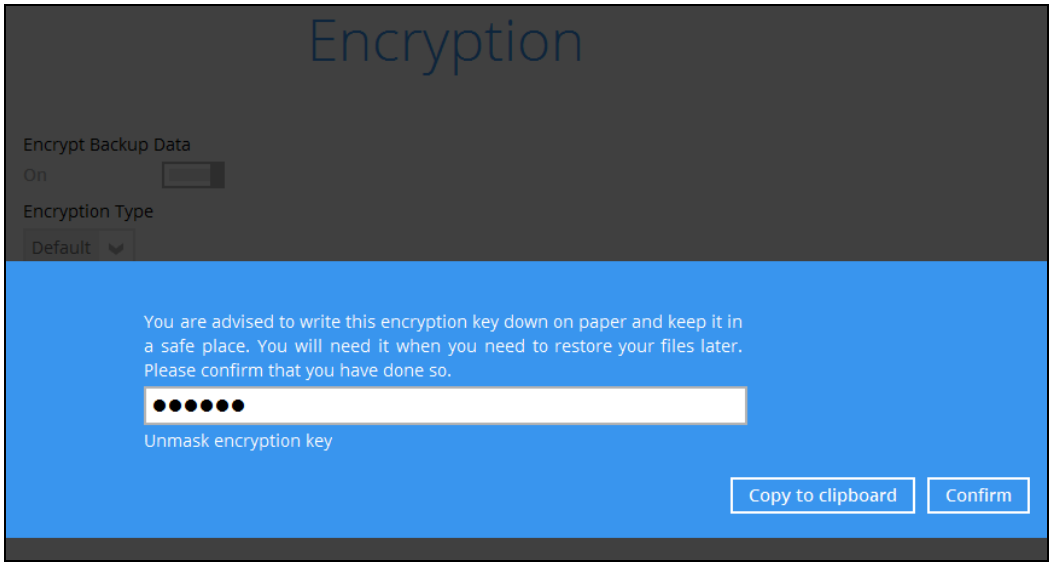
- **Custom** – you can customize your encryption key, where you can set your own algorithm, encryption key, method and key length



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

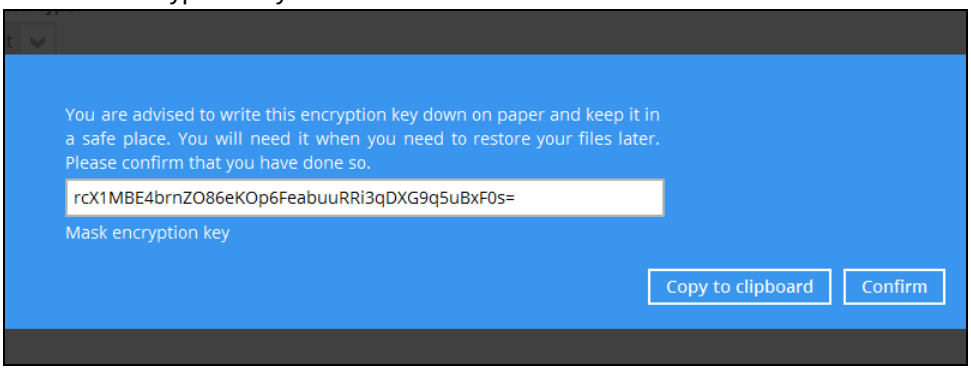
Click **Next** when you are done setting.

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:

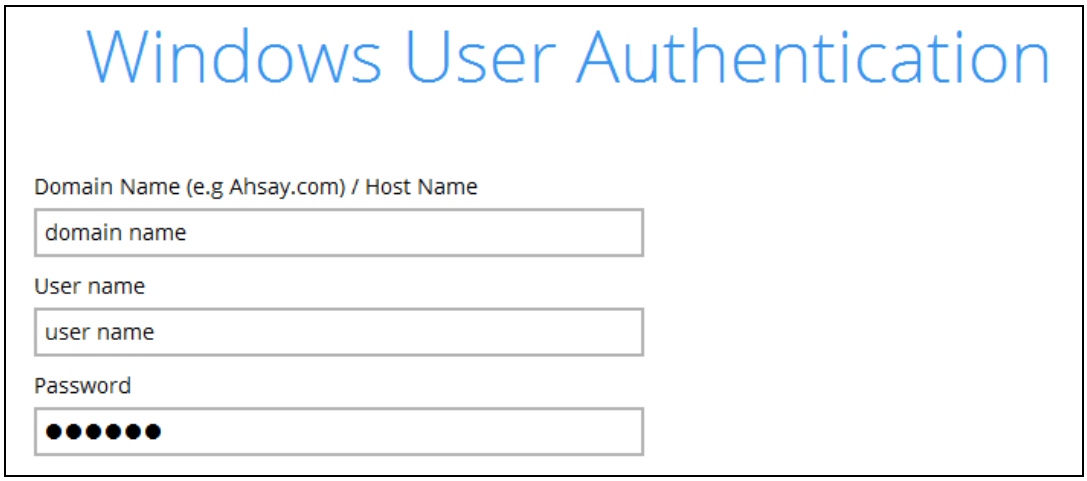
- **Unmask encryption key** – The encryption key is masked by default. Click this option to show the encryption key.



- **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.

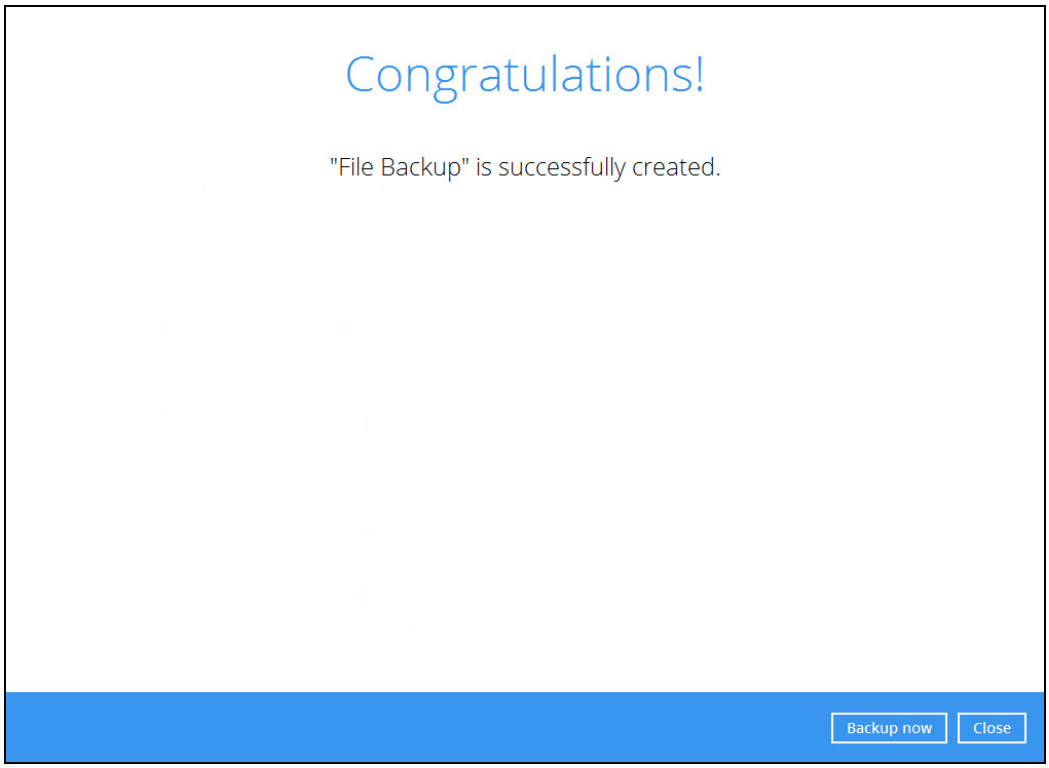
16. The following screen prompts you to enter the Windows login credentials for user authentication, if you have enabled the Schedule Backup feature in step 8.



Note

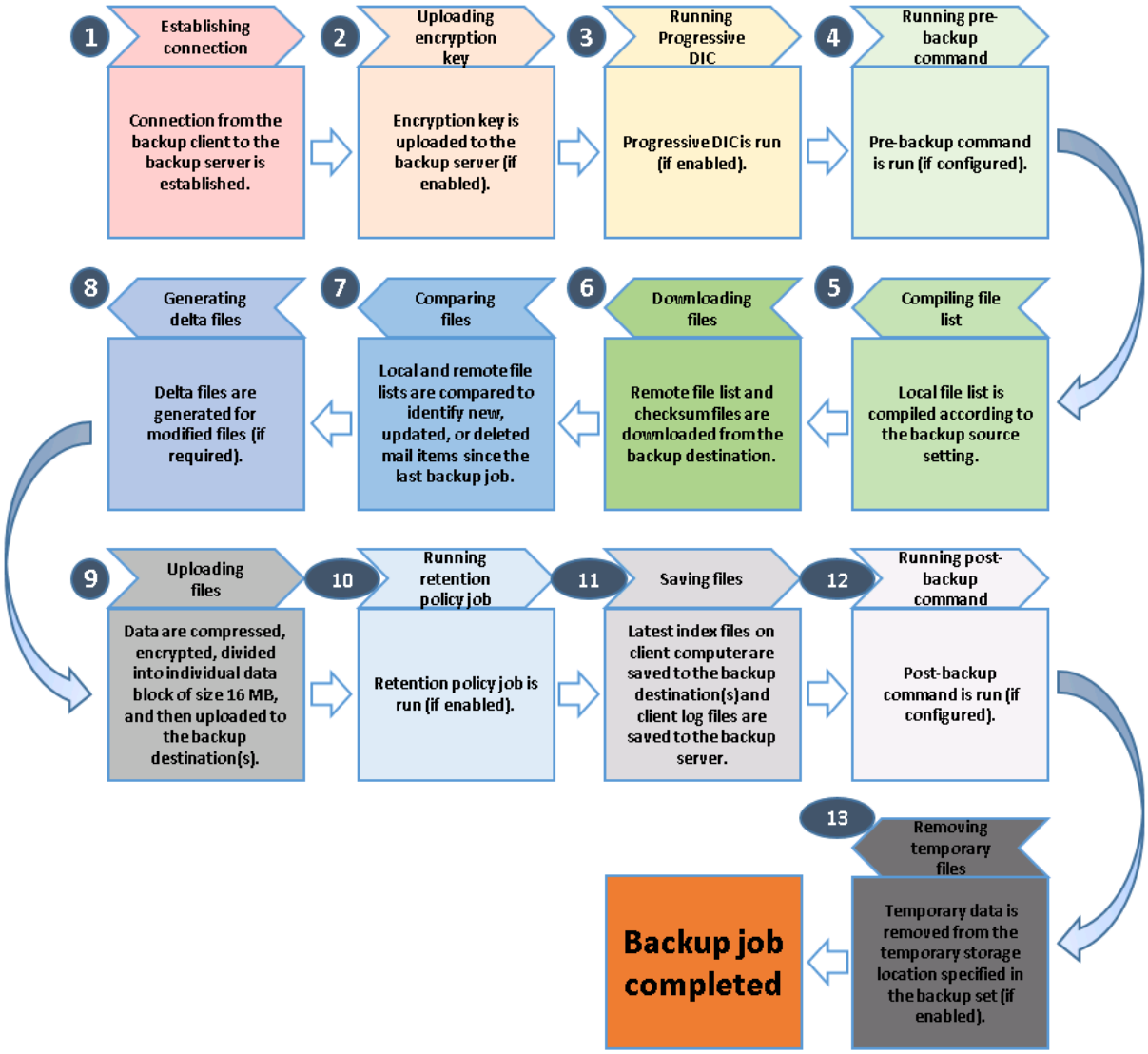
If you have selected to back up individual folder(s) / file(s) on your local computer's drive in step 5, the Windows User Authentication request will be bypassed and therefore the screen shown above will not display even though the Schedule Backup feature has been turned on.

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:



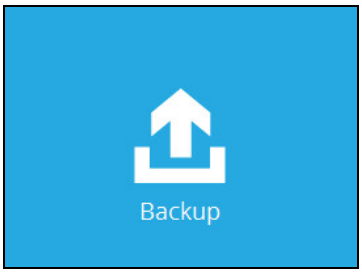
10 Run Backup Jobs

Login to AhsayACB

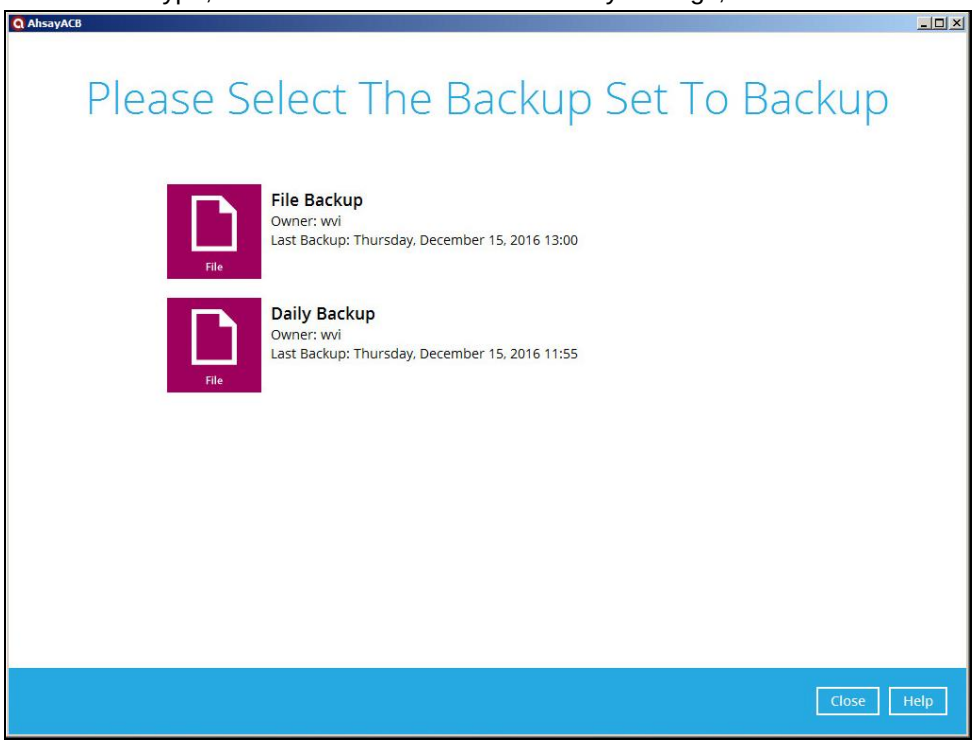
Login to the AhsayACB application according to the instructions in section 5.1 Login to AhsayACB.

Start a Manual Backup

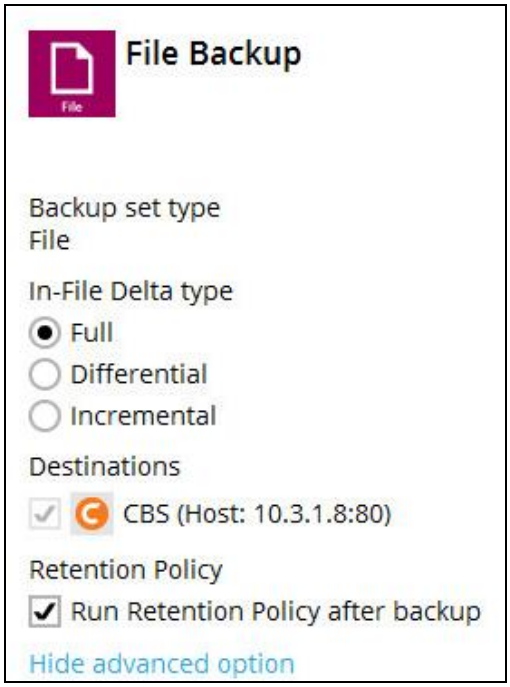
1. Click the **Backup** icon on the main interface of AhsayACB.



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**.

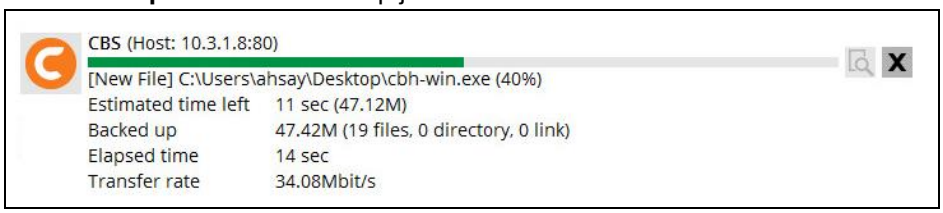


3. When advanced options are shown, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** in the Retention Policy section at the bottom. This will help you save hard disk quota in the long run. In the In-File Delta type section, the following three options are available:

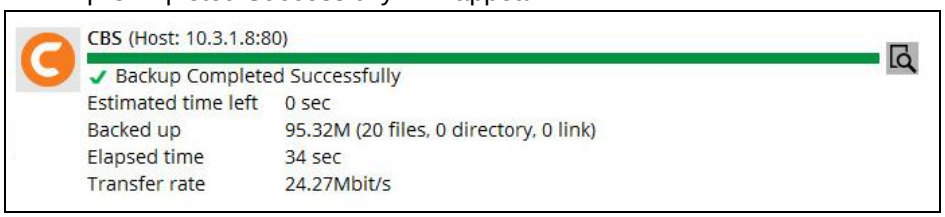


- **Full** – A full backup captures all the data that you want to protect. When you run a backup job for the first time, AhsayACB will run a full backup regardless of the in-file delta setting.
- **Differential** – A differential backup captures only the changes made as compared with the last uploaded 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).

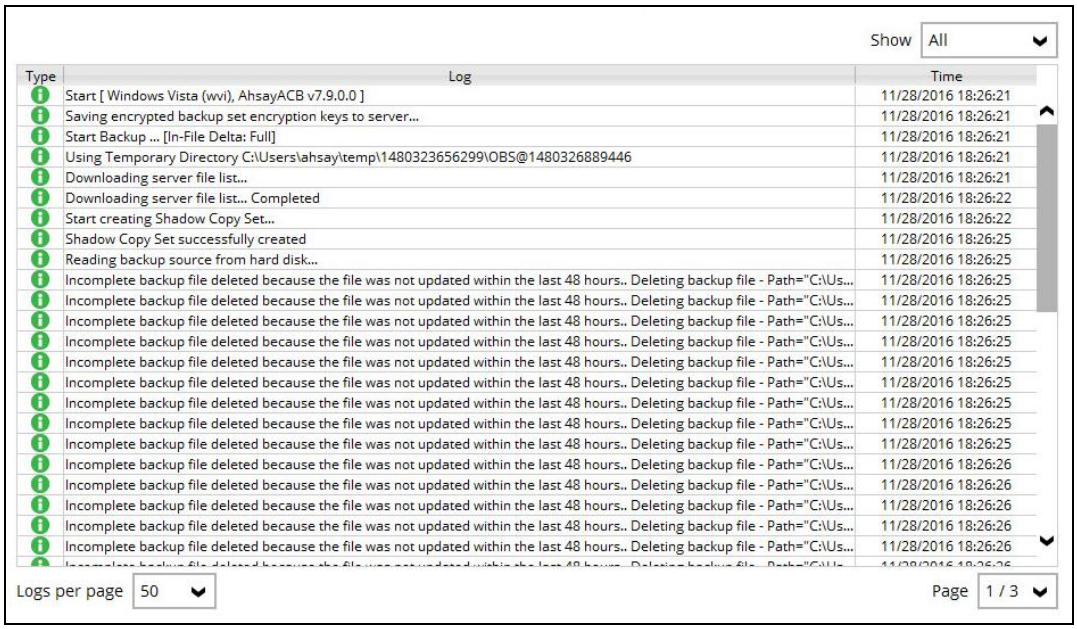
4. Click **Backup** to start the backup job. The status will be shown.



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

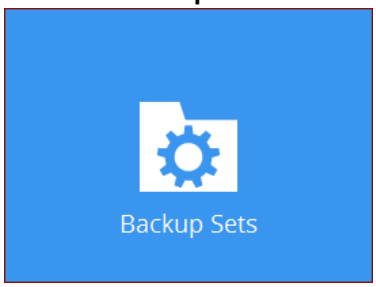


6. You can click the **View** icon on the right hand side to check the log. A window will pop up to show the log. Click **Close** to exit the pop-up window.



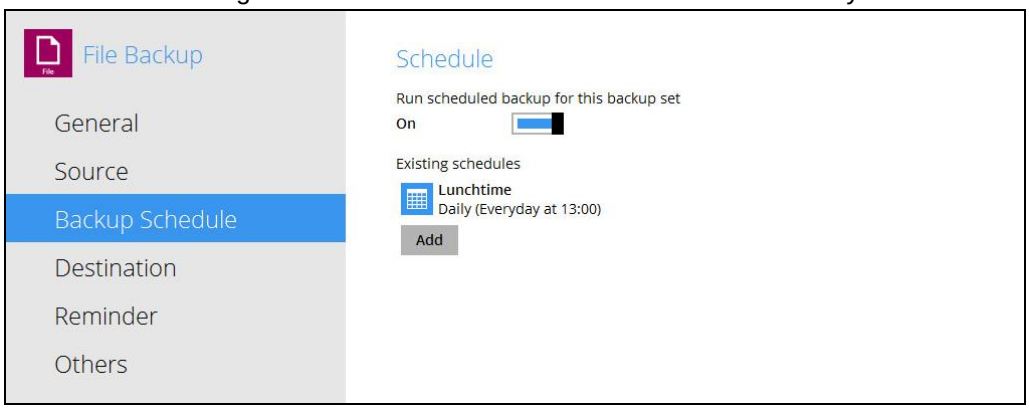
Configure Backup Schedule for Automated Backup

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

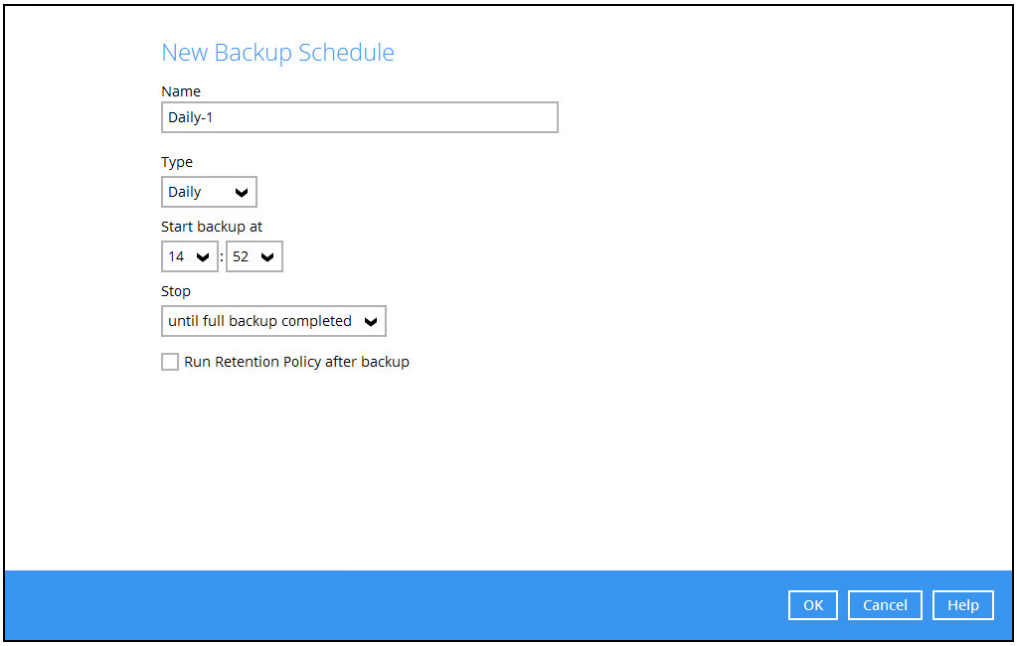


2. All backup sets will be listed. Select the backup set that you would like to create a backup schedule for. A screen will pop up, showing the General tab.

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.

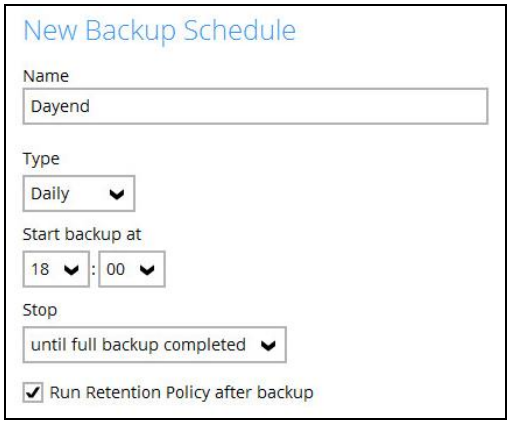


4. Click **Add** to add a backup schedule. The New Backup Schedule window will appear.

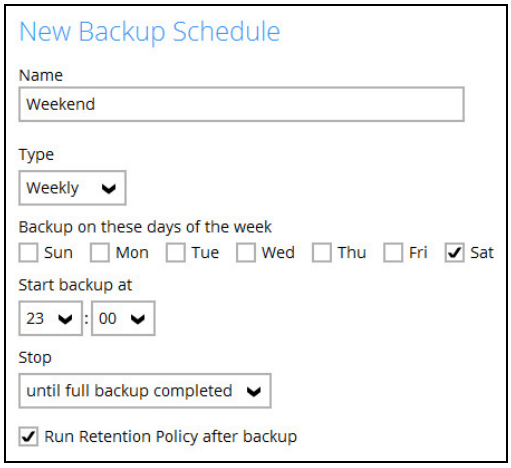


5. In the New Backup Schedule window, you can configure your backup schedule settings. To save hard disk quota in the long run, it is recommended that you tick the checkbox next to **Run Retention Policy after backup** at the bottom. The rest of the setting options will vary by which option you choose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

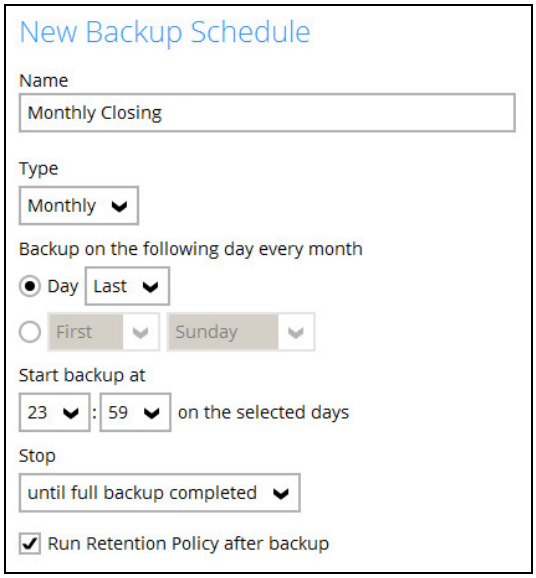
- **Daily** – what time to start the backup job



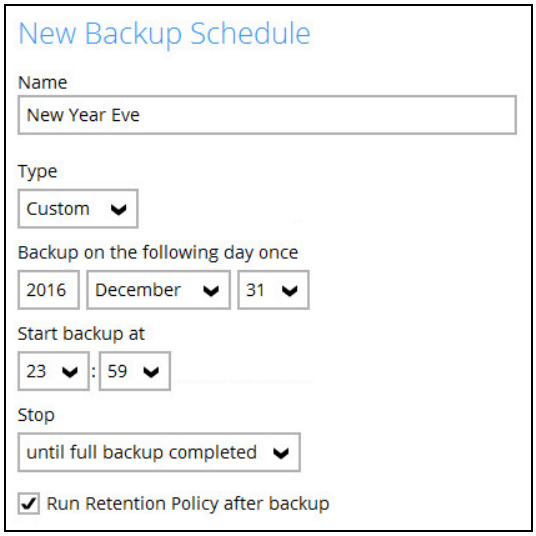
- **Weekly** – which day of the week and what time that day to start the backup job



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

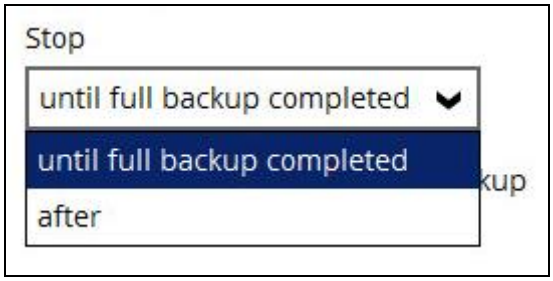


- **Custom** – which date to start a one-off backup job



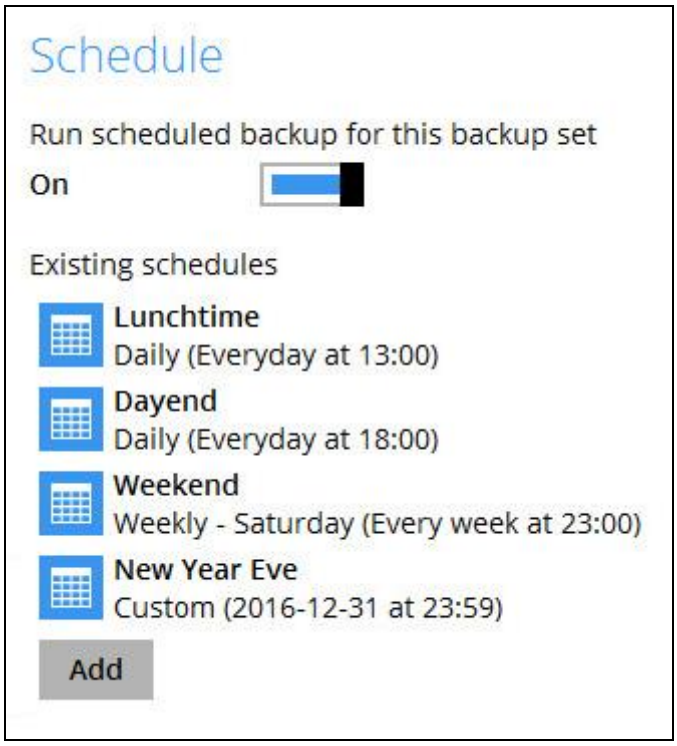
The **Stop** dropdown menu offers two options:

- **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 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.

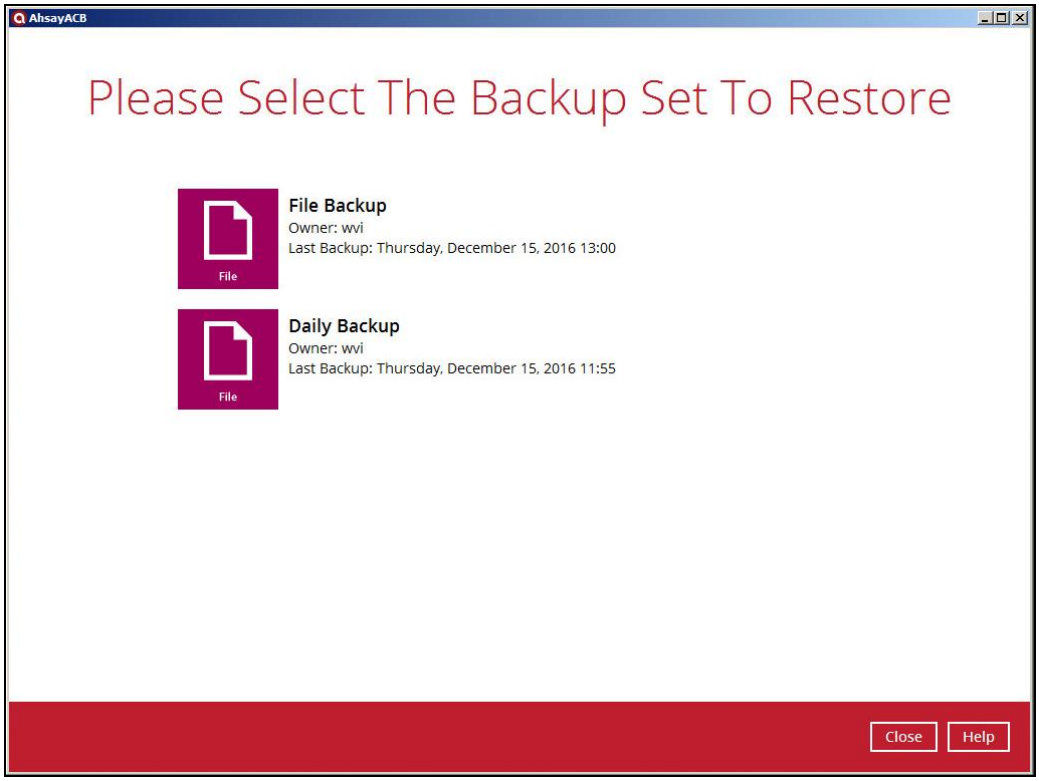
For more details on the differences of the two restore methods, refer to Benefits of using OpenDirect Restore.

Traditional Restore

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

2. Click the **Restore** icon on the AhsayACB 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.



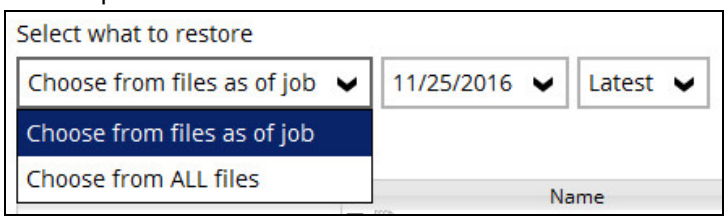
4. Select where you would like to restore your data from.

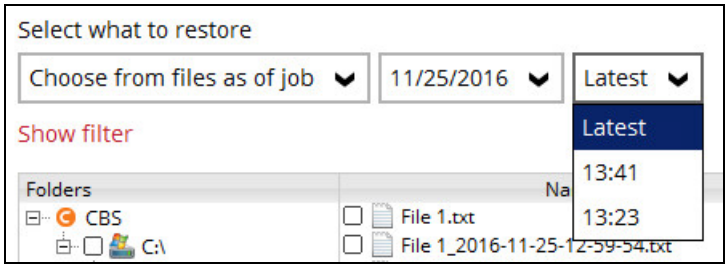
5. Select **Normal restore**.

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:

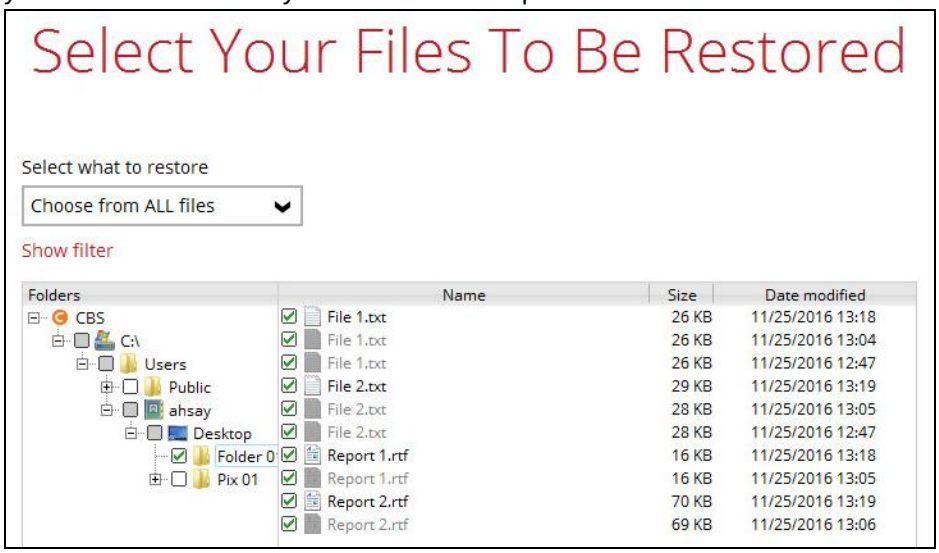
   - **Choose from files as of job** – This option allows you to select a backup version from a specific date and time to restore.



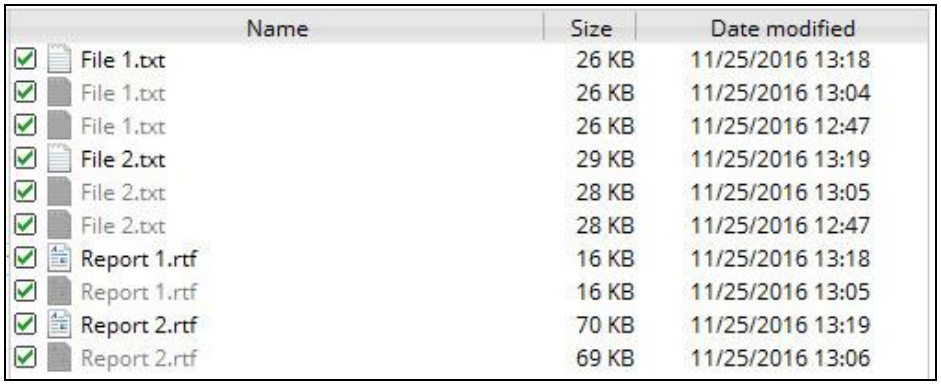


   - **Choose from ALL files** – This option allows you to restore all the available backup versions for this backup set. Among all the available backup versions,

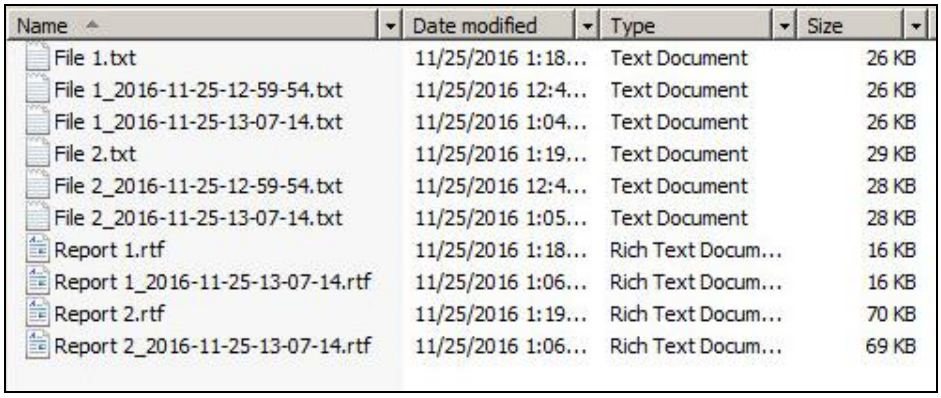
you can even select only some of the backup versions of a file to restore.



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.

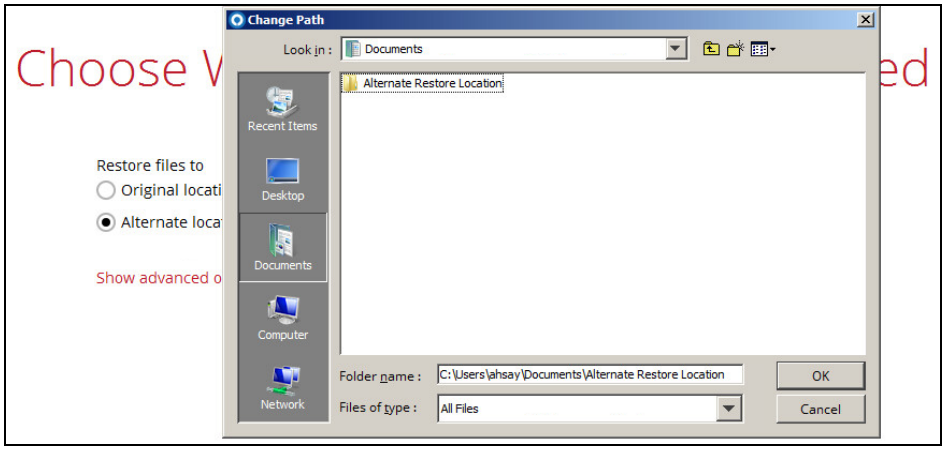


7. Click the **Show files** checkbox to select individual files for restoration. Click **Next** to proceed when you are done with the selections.

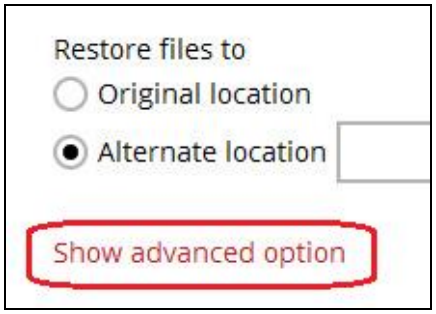
8. Select to restore the files to their **Original location**, or to an **Alternate location**. Then, click **Next** to proceed.

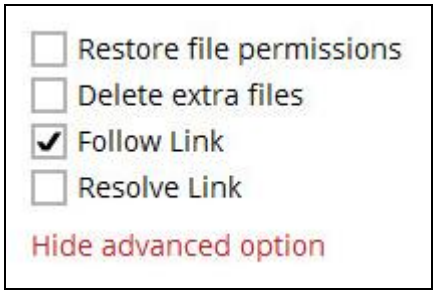
   - **Original location** – The backed up data will be restored to the computer running the AhsayACB under the same directory path as on the machine storing the backup source. For example, if the backup source files are stored under **Users/[User's Name]/Downloads** folder, the data will be restored to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

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



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





- **Restore file permissions**

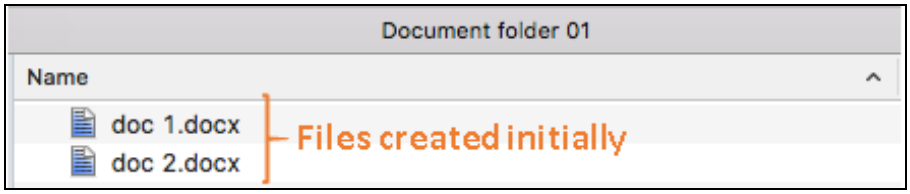
  Restore file permissions are disabled by default. When you perform a file restore on shared files or folders using a shared computer, it is recommended that you enable Restore file permissions by ticking the checkbox so that the files restored will not be fully accessible to everyone using the shared 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.

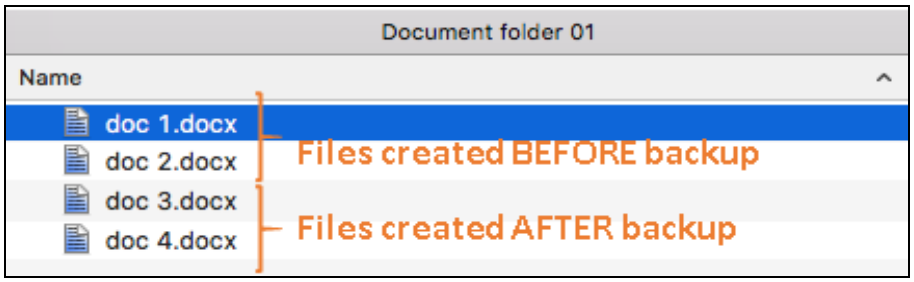
  Example:

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



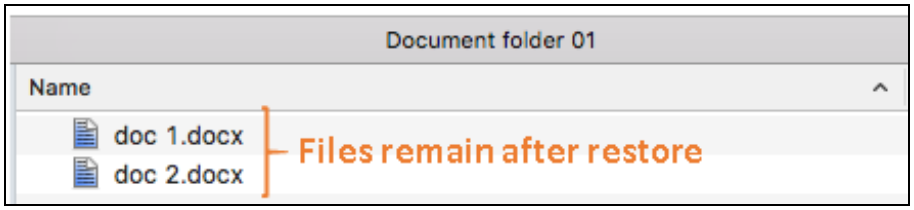
  ii) A backup is performed for folder **Document folder 01**.

  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.

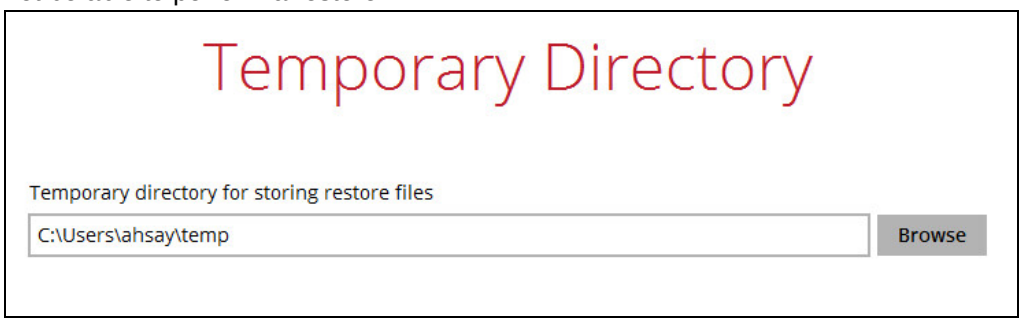
Resolve Link	Behavior
Enabled	Symbolic link or junction point is restored to the alternate location specified, with its target directories and files also restored to the same location in their relative path. Target of the link or junction is updated to the new relative path. In other word, the link or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

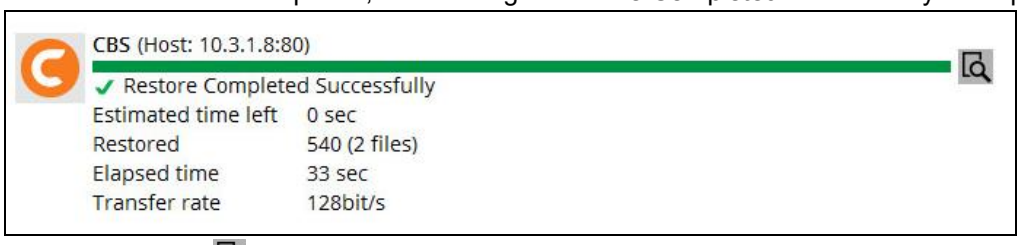
10. Select the temporary directory for storing temporary files, such as delta files, when they are being merged.

    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 AhsayACB, 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.

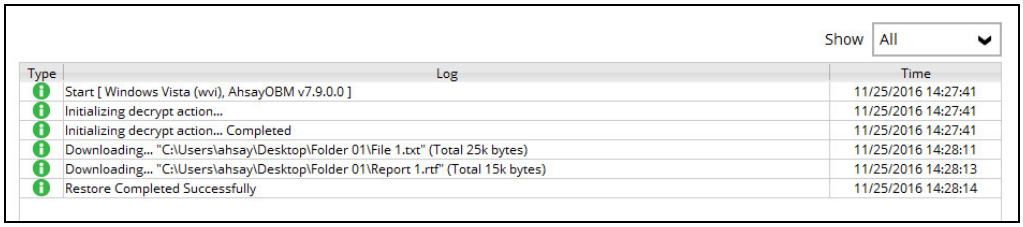


11. Click **Restore** to start the restore. The status will be shown.

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 AhsayACB, 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 the AhsayACB 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)
  https://technet.microsoft.com/en-us/library/security/3033929.aspx

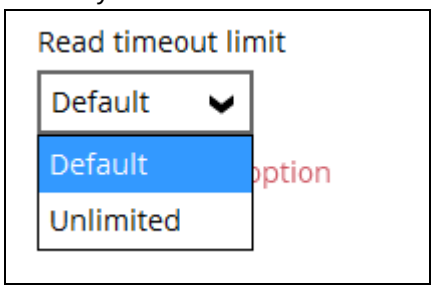
1. Log in to the AhsayACB application according to the instructions in section Login to AhsayACB.
2. Click the **Restore** icon on the AhsayACB main interface.

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 file or image.

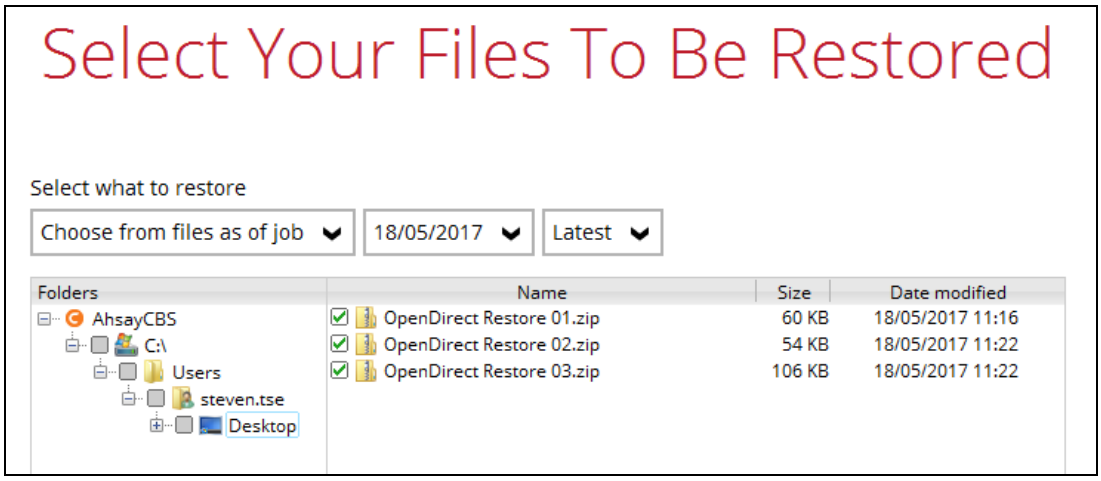
- **Default** – This setting should be suitable for compressed file or image located on a local, removable, or network drive. The time out value is15 seconds.
- **Unlimited** – the connection will not be time out when this is selected. This selection is recommended under the following usage:
  - Backup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

Note

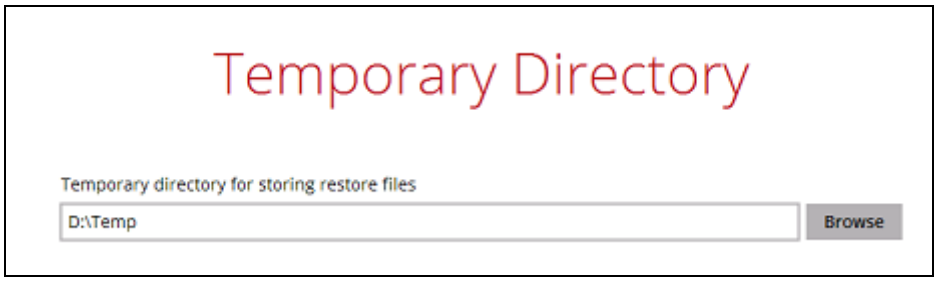
If in doubt or unsure about the compressed file or image size or network stability, it is recommended to use **Unlimited**.

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.

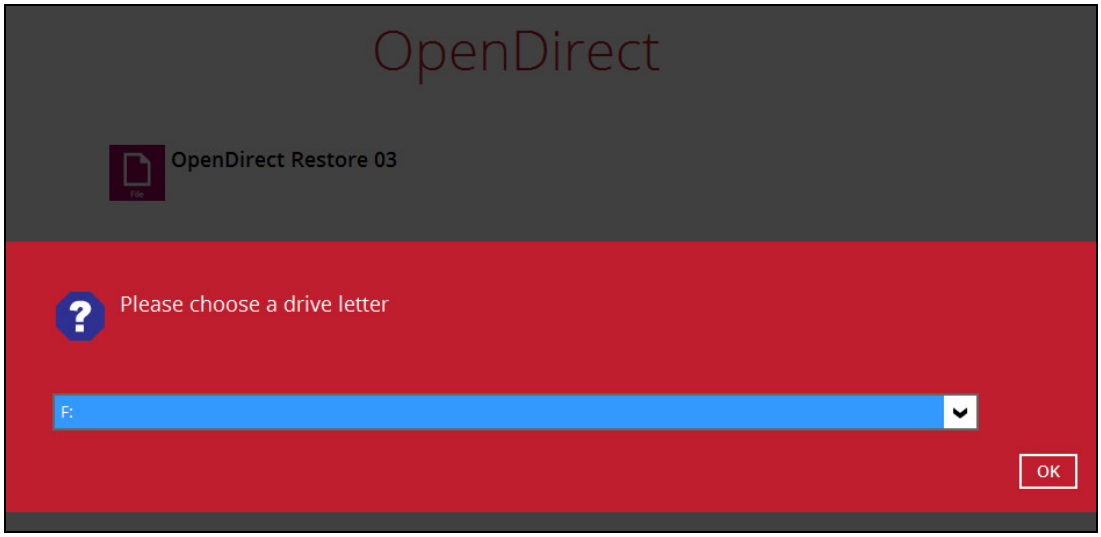


7. Select a temporary directory for storing restore files, then click Restore to start the OpenDirect restore.



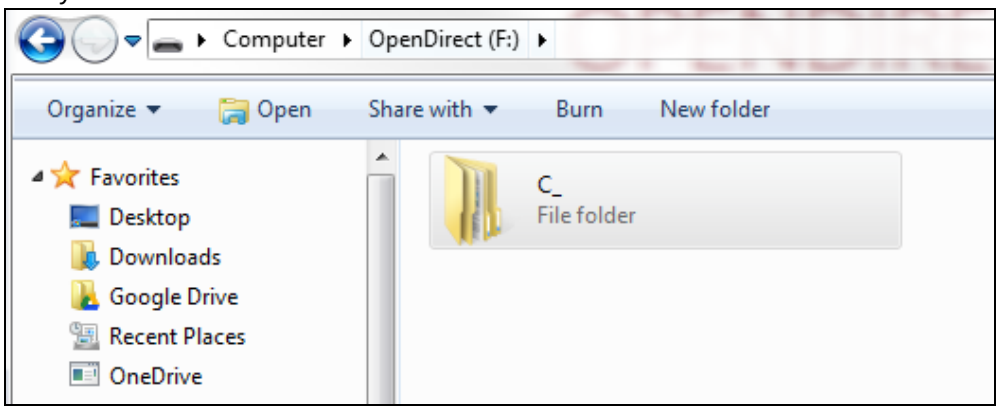
8. Click **Restore** to start the restore. The status will be shown.

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.

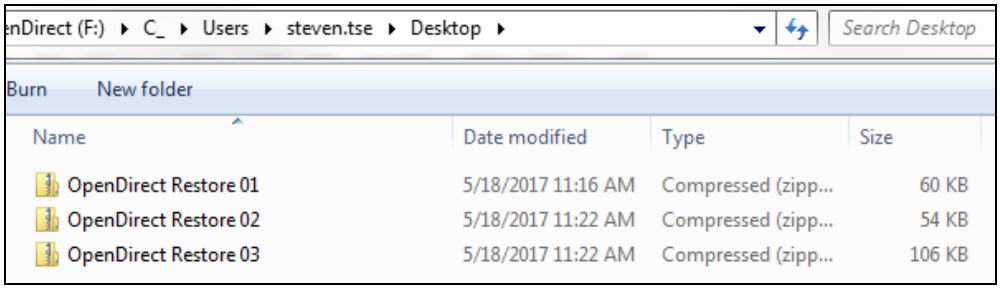


10. The following screen shows when you perform OpenDirect restore for this backup set on this machine for the first time only. Make sure you click **Yes** to confirm mounting the file(s) on this machine. Clicking **No** will exit the restore process.

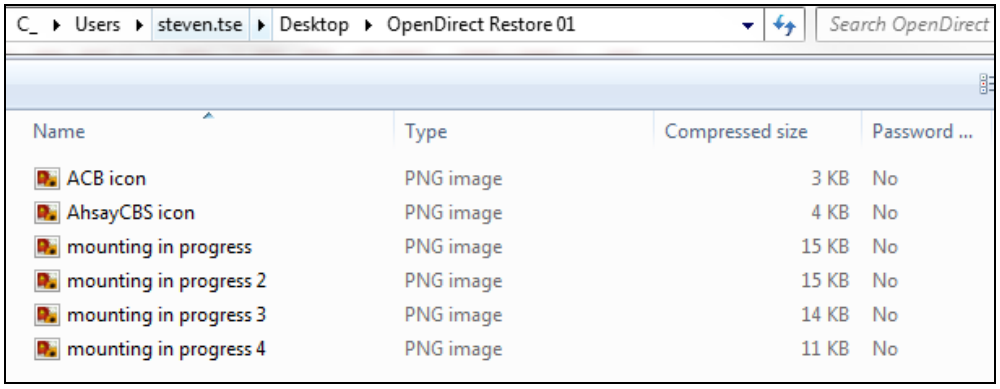
11. The selected drive letter will be mapped and prompted in the Windows Files Explorer with the files you wish to restore shown.



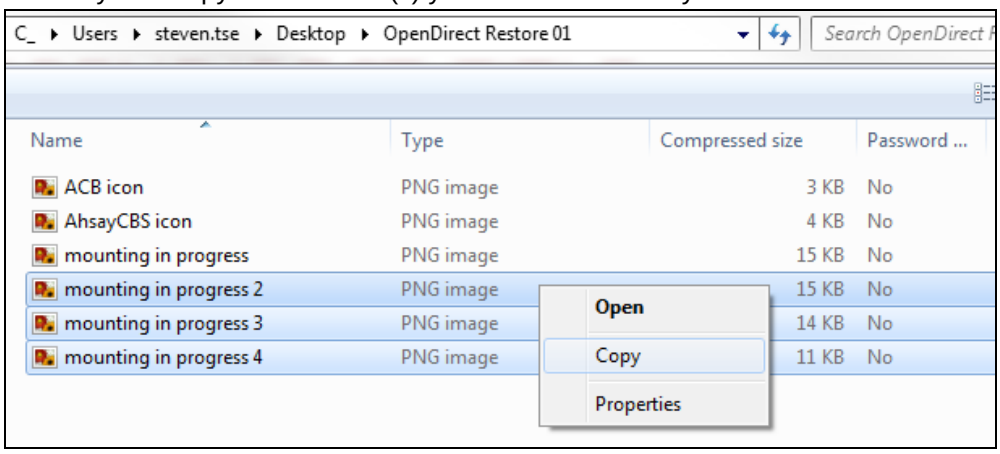
12. You can now click on the files to view them directly from here, which will be in read-only mode.



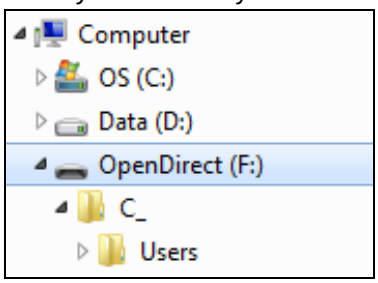
If it is a zipped file, you can directly click on it to see all the individual files inside.



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 AhsayACB.



14. When you have finished restoring the necessary files, you can go back to AhsayACB 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 AhsayACB. In other words, each OpenDirect restore session on AhsayACB 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 AhsayACB.

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

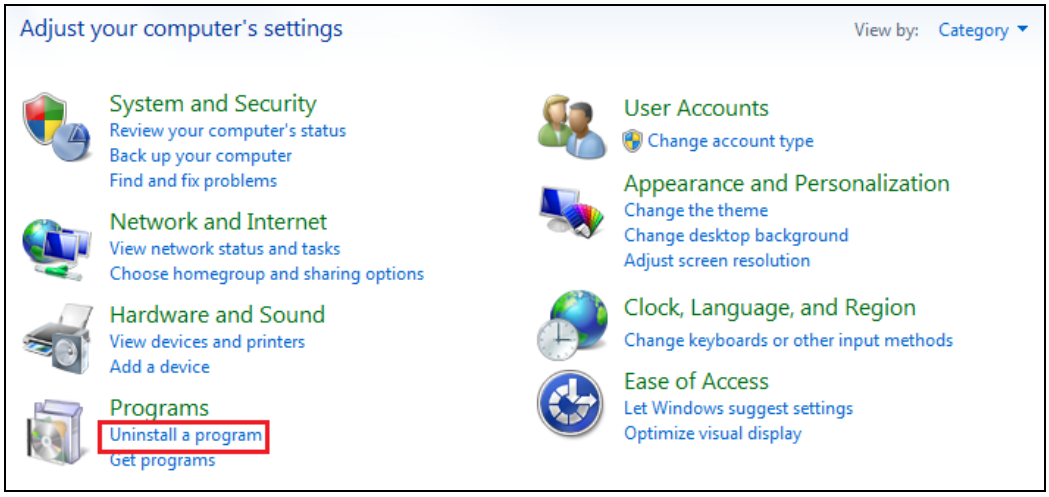
The specific document title as well as the change required/suggestion when contacting us.

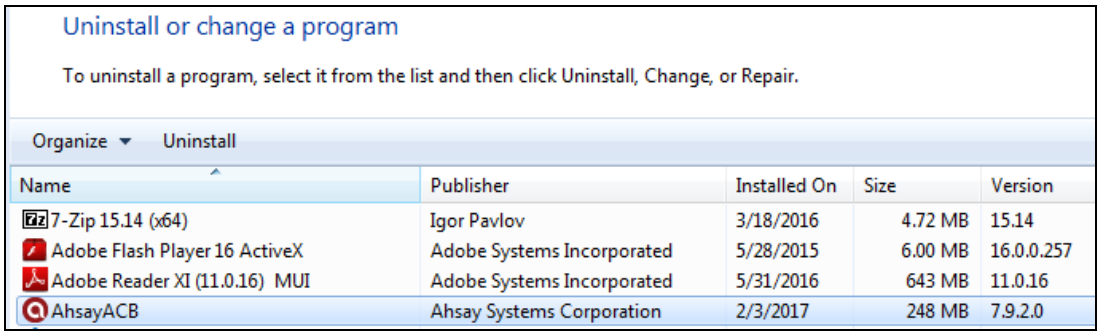
Appendix

Uninstall AhsayACB

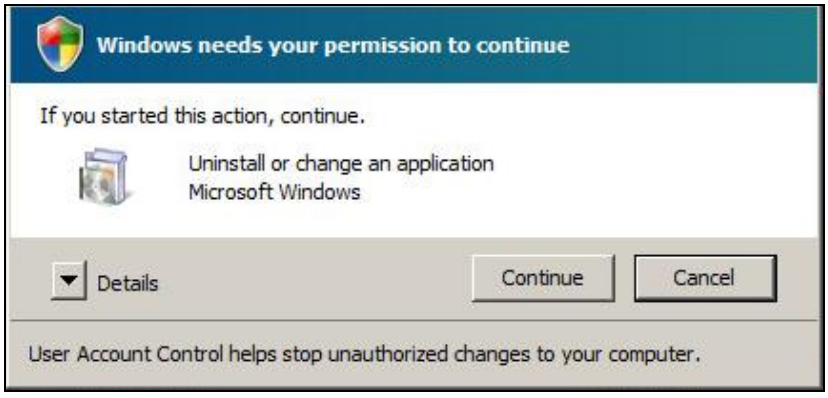
Follow the steps below to uninstall AhsayACB from your Windows.

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

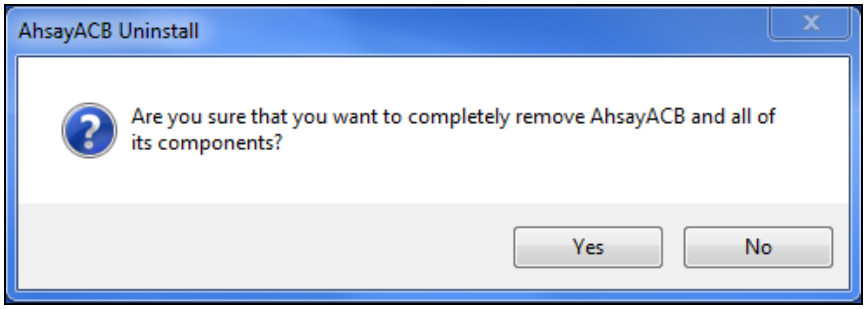




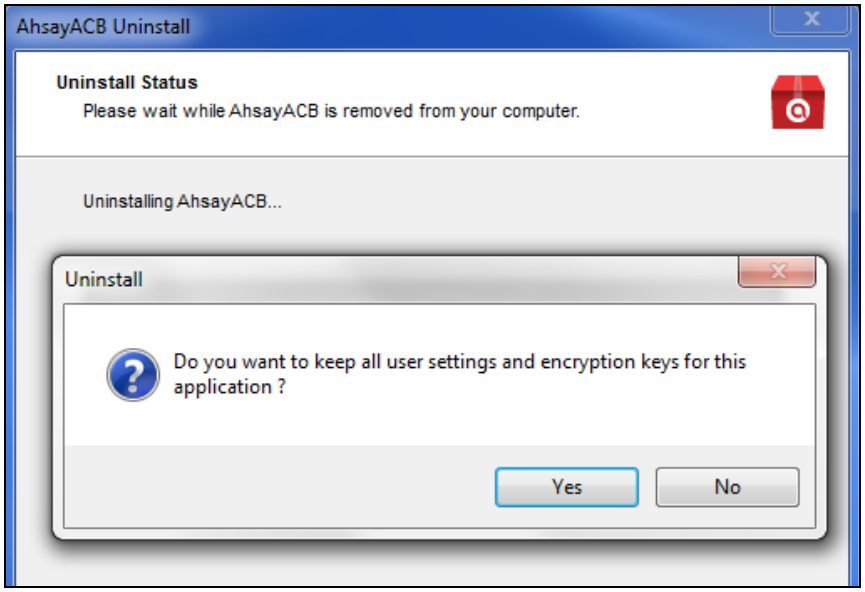
8. The following dialog box will appear only if User Account Control is enabled. Click **Continue** when you see the following message.



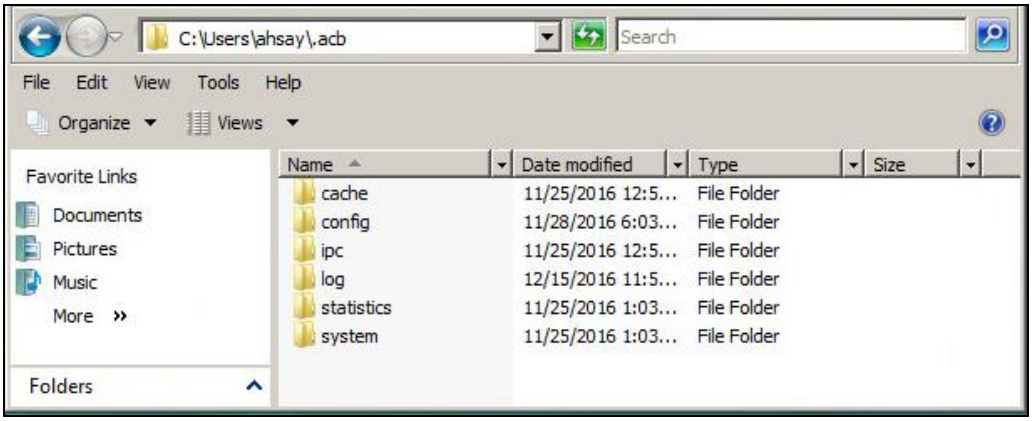
9. Click **Yes** to confirm and proceed with the uninstallation.



10. When you see the following screen:

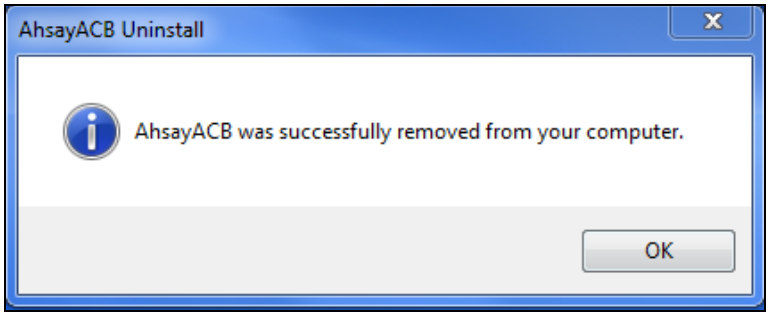
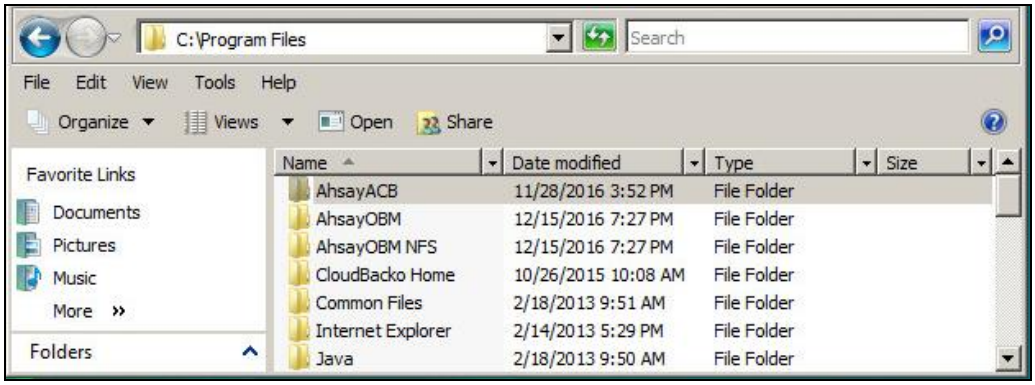


- Choose **Yes** to keep all user settings and the encryption keys associated with the users. If you are likely to install AhsayACB on the same machine in the future again, the user settings, e.g. login details, backup sets and so forth will remain in **C:\Users\[username]\.acb** by default. The screen 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 do not have a separate written record.

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



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